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**SIKAP BELA NEGARA SEBAGAI KONTROL DIRI DALAM
MEMINIMALISIR PERILAKU KECURANGAN DIPANDANG DARI
PERSPEKTIF *FRAUD DIAMOND***

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Abstract

This research aim to test and empirically demonstrate how pressure, opportunity, rationalization, and capacity can influence academic fraud behaviour and how national defense attitudes play a role in moderating such influence. This research is a quantitative study using up to 94 students from S1 Accounting student UPN “Veteran” East Java as samples. The research used SEM PLS with WarpPLS 7.0 software for data analysis. The finding of this research may be used as a resource for universities related to fraud in the university environment, specially in S1 Accounting students and can provide an overview of fraud related to occurring, so that the universities can take determined further action to deal with such matters. Research findings demonstrate that pressure and rationalization have a significant influence on fraud behavior and national defense attitudes can moderate the influence of opportunity against fraud behavior. Opportunity and capability have no significant influence on fraud behavior and national defense attitudes do not moderate the influence of pressure, racinoalization, and capability against fraud behavior.

Keywords: *Accounting Behavior, Academic Fraud, Fraud Diamond, Pancasila*

Abstrak

Penelitian ini memiliki tujuan melakukan pengujian dan memberikan bukti secara nyata terkait bagaimana tekanan, kesempatan, rasionalisasi, dan kapabilitas berpengaruh pada perilaku kecurangan dan bagaimana sikap bela negara berperan dalam memoderasi pengaruh tersebut. Jenis penelitian ini kuantitatif dengan jumlah sampel yang digunakan yaitu 94 mahasiswa dari mahasiswa S1 Akuntansi UPN “Veteran” Jawa Timur. SEM PLS diaplikasikan untuk analisis data dengan *software* WarpPLS 7.0. Riset ini dapat dijadikan sebagai acuan bagi pihak perguruan tinggi terkait dengan masalah kecurangan (*fraud*) di lingkungan perguruan tinggi khususnya pada mahasiswa S1 Akuntansi dan dapat memberikan gambaran terkait *fraud* yang terjadi, sehingga universitas dapat melakukan menentukan dan melakukan tindakan selanjutnya untuk menangani kecurangan akademik tersebut. Hasil penelitian mengungkapkan tekanan dan rasionalisasi berpengaruh signifikan terhadap *fraud behavior* dan sikap bela negara dapat memoderasi pengaruh kesempatan terhadap *fraud behavior*. Namun, kesempatan dan kapabilitas tidak berpengaruh signifikan terhadap *fraud behavior* dan sikap bela negara tidak mampu memoderasi pengaruh tekanan, rasinoalisasi, dan kapabilitas terhadap *fraud behavior*.

Kata Kunci: *Akuntansi Keprilakuan, Fraud Diamond, Kecurangan Akademik, Pancasila*

1. PENDAHULUAN

Perkembangan zaman yang semakin pesat membutuhkan keseimbangan dengan diterapkannya etika dalam setiap tindakan yang dilakukan. Etika merupakan sebuah prinsip moral dan landasan seseorang untuk melakukan tindakan sehingga tindakan tersebut memberikan pujian terhadap dirinya dan meningkatkan martabat dan kehormatan seseorang (Hassan, 2019). Etika yang dijunjung tinggi dapat memungkinkan untuk seseorang berperilaku lebih baik dan menghindari perilaku yang buruk, salah satunya seperti perilaku kecurangan (*fraud*). Menurut Agustina & Pratomo (2019), kecurangan merupakan tindakan yang menimbulkan kerugian bagi banyak orang dan dilakukan secara sengaja.

Profesi yang berhubungan erat dengan etika dan profesionalitas salah satunya adalah akuntan. Akuntan harus menjalankan tugasnya dengan berdasar pada kode etik dan standar yang berlaku untuk menjaga integritasnya (Ikatan Akuntansi Indonesia, 2021). Tugas dan kewajiban yang tidak dijalankan sesuai dengan kode etik dan standarnya dapat menjerumuskan akuntan ke dalam perilaku kecurangan (*fraud*). Menurut *Association of Certified Fraud Examiners* (ACFE) Indonesia (2021), *fraud* berarti penyelewengan jabatan yang disengaja demi keuntungan sendiri melalui penyalahgunaan sumber daya organisasi. Hasil survey pada tahun 2019 yang dilakukan oleh ACFE dengan 239 responden membuktikan bahwa di Indonesia kasus *fraud* yang paling banyak dilakukan yaitu korupsi.

Selain korupsi yang ditemukan di lapisan masyarakat, *fraud* juga ditemukan di lingkungan Pendidikan yang biasa disebut kecurangan akademik. Lingkungan pendidikan merupakan bidang yang sangat penting dalam membantu melahirkan penerus bangsa yang memiliki kualitas yang dapat membantu dalam sebuah aspek kehidupan (Safitri et al., 2023). Pendidikan diharapkan dapat membentuk penerus bangsa yang bukan hanya cerdas di aspek akademik saja, tetapi juga memahami mengenai perilaku yang sesuai dengan etika dan moral.

Mahasiswa akuntansi khususnya merupakan cikal bakal dari profesi akuntan harus dapat memahami kode etik seorang akuntan dan menerapkannya. Namun, pada kenyataannya masih banyak kecurangan akademik yang terlihat di lingkungan mahasiswa. Oleh karena hal tersebut, penelitian awal dilakukan oleh peneliti untuk mengetahui apakah ditemukan perilaku kecurangan akademik yang signifikan di lingkungan perguruan tinggi dengan membagikan kuesioner kepada mahasiswa aktif S1 Akuntansi UPN “Veteran Jawa Timur”. Hasil dari penelitian awal menunjukkan bahwa dari 100 responden yang mengisi, perilaku kecurangan yang banyak dilakukan oleh responden yaitu melakukan kerja sama ketika ujian berlangsung dengan jumlah responden 83 responden dan persentase sebesar 83% yang dapat diketahui melalui tabel 1.

Tabel 1. Hasil penelitian awal

No.	Perilaku Kecurangan	Jumlah Responden		Persentase	
		Pernah	Tidak Pernah	Pernah	Tidak Pernah
1	Melakukan plagiarisme	80	20	80%	20%
2	Melakukan kerja sama saat ujian	83	17	83%	17%
3	Menyontek	69	31	69%	31%
4	Menitip absen	13	87	13%	87%
5	Menggunakan HP saat ujian	39	61	39%	61%

Sumber: Hasil jawaban kuesioner peneliti (2024)

Tindak kecurangan pada mahasiswa diakibatkan oleh faktor-faktor baik dari lingkungannya maupun dari dalam dirinya sendiri (Achmada et al., 2020). Identifikasi faktor penyebab perilaku kecurangan dapat dilihat dari perspektif *fraud diamond theory*. Menurut teori ini, terdapat empat faktor yang dapat digunakan untuk mengidentifikasi *fraud*, yaitu tekanan, kesempatan, rasionalisasi, dan kapabilitas (Wolfe & Hermanson, 2004).

Tekanan memberikan dorongan kepada seseorang untuk melakukan kecurangan. Menurut Oktarina & Ramadhan (2023), tekanan adalah kondisi yang memaksa seseorang untuk melakukan tindakan yaitu *fraud* yang dapat bersumber dari luar maupun dalam. Tekanan di dalam kecurangan yang dilakukan di bidang pendidikan dapat muncul dalam bentuk keinginan atau keharusan mendapatkan nilai dan penghargaan yang tinggi (Susanti et al., 2019). Tekanan dapat memicu seseorang untuk melakukan perilaku kecurangan didukung oleh penelitian Dewi & Pertama (2020) serta penelitian Novita & Jannah (2022) yang menghasilkan tekanan berkontribusi positif yang relevan pada perilaku kecurangan. Namun, pernyataan ini bertentangan dengan Anfas et al. (2019) yang mengungkapkan tekanan tidak berdampak pada perilaku kecurangan.

Kesempatan merupakan hal penting sebagai penyebab terjadinya *fraud*. Hal ini disebabkan apabila pelaku kecurangan tidak mendapatkan peluang untuk bertindak, maka *fraud* tidak akan terjadi (Marfuah et al., 2022). Pernyataan ini didukung dengan hasil penelitian dari Nurdiansyah et al. (2023) dan Sitinjak & Oktris (2022) yang mengungkapkan bahwa kesempatan berkontribusi positif dan signifikan pada perilaku kecurangan. Namun, pernyataan tersebut tidak sesuai dengan penelitian Parengkuan & Pesudo (2023) dan penelitian dari Safitri et al. (2023) yang menjelaskan perilaku kecurangan akademik tidak terpengaruh oleh kesempatan.

Fraud behavior juga disebabkan oleh adanya rasionalisasi. Sifat rasionalisasi memberikan pembenaran mengenai segala hal yang dilakukan dalam pandangan subjektif mahasiswa (Sofa & Susilowati, 2021). Menurut Isaiah et al. (2023), rasionalisasi adalah ketika pelaku kecurangan berusaha untuk membenarkan tindakan kecurangannya. Hal ini diperkuat Nurjanah et al. (2021) dan Amin et al. (2021) dengan riset mereka yang menjelaskan rasionalisasi berdampak positif serta relevan pada perilaku kecurangan akademik. Akan tetapi, pernyataan ini bertentangan dengan penelitian Hidayah & Sholihqin (2022) yang memberikan pernyataan rasionalisasi tidak berdampak terhadap perilaku kecurangan akademik.

Aspek lain yang bisa memengaruhi terjadinya perilaku kecurangan atau *fraud* yaitu kapabilitas. Kapabilitas menurut Wolfe & Hermanson (2004) dalam teorinya, yaitu *Fraud Diamond*, harus dimiliki oleh seseorang ketika orang tersebut akan melakukan *fraud*. Tanpa adanya kapabilitas maka *fraud* tidak akan terjadi. Pernyataan ini berbanding lurus dengan riset Alfian et al. (2021) dan Apsari & Suhartini (2021) yang menyebutkan bahwa kapabilitas memiliki kontribusi yang positif pada perilaku kecurangan akademik. Namun, pernyataan tersebut tidak selaras dengan riset Anfas et al. (2019), yang mengungkapkan perilaku kecurangan akademik tidak terpengaruh oleh kapabilitas.

Perguruan tinggi dapat menerapkan norma dan nilai-nilai Pancasila untuk mencegah adanya perilaku kecurangan di kehidupan universitas. Nilai-nilai moral yang terdapat dalam Pancasila akan memberikan pelajaran bagaimana cara berpikir dan melakukan tindakan sesuai dengan ideologi bangsa (Amyulianthy et al., 2023). Bela negara adalah salah satu

sikap yang bertumpu pada etika dan moral. Bela negara dalam Undang-Undang RI Nomor 3 Tahun 2002 merupakan sikap untuk mempertahankan negara dengan didasari kecintaan dan berdasar pada Pancasila serta Undang-Undang. Sikap bela negara dapat menjadi kontrol untuk seseorang dalam melakukan tindakannya, karena di dalam sikap bela negara tersebut terdapat nilai-nilai Pancasila yang luhur dan bermoral. Oleh sebab itu, peneliti ingin meneliti bagaimana pengaruh *fraud diamond* pada perilaku kecurangan yang terjadi di mahasiswa Akuntansi Universitas Pembangunan Nasional (UPN) "Veteran" Jawa Timur dengan sikap bela negara sebagai pemoderasi.

Penelitian ini memberikan kontribusi khususnya dalam memberikan ilmu dan wawasan mengenai *fraud diamond* dan *fraud behavior*. Selain itu, penelitian ini dapat dijadikan sebuah acuan bagi universitas terkait dengan masalah kecurangan (*fraud*) di lingkungan universitas khususnya pada mahasiswa S1 Akuntansi dan dapat memberikan gambaran terkait *fraud* yang terjadi, sehingga universitas dapat menentukan tindakan selanjutnya untuk menangannya.

2. LANDASAN TEORI

2.1. Theory of Planned Behavior

Penelitian ini didukung oleh teori perilaku terencana atau *theory of planned behavior*. Teori ini digagas oleh Ajzen pada 1991, yang merupakan teori yang berfokus terhadap faktor utama, yaitu niat individu, dalam melakukan suatu perilaku. Teori ini adalah perluasan dari teori perilaku beralasan yang disampaikan oleh Ajzen dan Fishbein pada tahun 1975. Berdasarkan penelitian Ajzen (1991), diungkapkan bahwa niat diasumsikan dapat mengindikasikan motivasi yang memengaruhi suatu perilaku. Menurut Ajzen (2020), terdapat tiga faktor yang dapat memengaruhi niat perilaku, yaitu *attitude toward the behavior*, *subjective norm concerning the behavior*, dan *perceived behavioral control*.

2.2. Fraud Diamond Theory

Selain *theory of planned behavior*, penelitian ini juga menggunakan teori *fraud diamond* yang digagas oleh Wolfe & Hermanson pada 2004. Gagasan ini menyempurnakan teori *fraud triangle* yang digagas oleh Cressey pada 1950-an yang mengungkapkan bahwa untuk mendeteksi kecurangan (*fraud*) terdapat tiga hal. Wolfe & Hermanson (2004) berpendapat bahwa terdapat elemen lagi yang dapat ditambahkan pada teori *fraud triangle* untuk meningkatkan deteksi terhadap adanya *fraud*, yaitu kapabilitas.

Tekanan adalah penyebab yang dapat memicu seseorang untuk bertindak *fraud* (Azzahroh et al., 2020). Menurut Wulansuci & Laily (2022), tekanan dapat diartikan sebagai kondisi yang memaksa seseorang sehingga seseorang tersebut setuju untuk berbuat curang. Wolfe & Hermanson (2004) dalam teorinya menyebutkan, pada proses melakukan tindakan kecurangan, pelaku kecurangan akan berpikir bahwa dia ingin, harus, dan butuh untuk melakukan kecurangan tersebut. Hal ini adalah cerminan dari adanya faktor tekanan pada pelaku tersebut.

Faktor kesempatan sangat membantu seseorang untuk melakukan perbuatan curang. Kesempatan adalah situasi saat pelaku kecurangan dapat menemukan cara untuk melakukan kecurangan dengan memanfaatkan jabatannya tanpa ada yang mengetahui tindakannya (Andrianus et al., 2019). Kesempatan dapat membuka jalan untuk seseorang bertindak

curang. Dalam teori yang digagas oleh Wolfe & Hermanson (2004), kesempatan dapat terbuka karena terdapat kekurangan dari sistem yang bisa disalahgunakan.

Menurut Parengkuan & Pesudo (2023), rasionalisasi adalah kejahatan individual dan pembenaran diri atas tindakan yang dilakukan yang biasanya muncul sebelum melakukan kecurangan. Seseorang yang melakukan kecurangan akademik berpikir bahwa perilakunya adalah hal yang beralasan yang dapat diterima. Adanya anggapan dan pendapat tersebut dapat menimbulkan sikap mewajarkan segala tindakan yang dilakukan dari mahasiswa walaupun tindakan tersebut adalah salah satu bentuk kecurangan.

Menurut Wolfe & Hermanson (2004), seseorang harus memiliki kapabilitas untuk mengetahui adanya kesempatan yang bisa digunakan untuk melakukan kecurangan. Kapabilitas seseorang dalam hal kecurangan akademik merupakan kemampuan merencanakan kecurangan, kemampuan untuk menekan seseorang melakukan kecurangan, kemampuan untuk melakukan tindakan kecurangan, dan kemampuan untuk tetap tenang ketika melakukan kecurangan (Oktarina & Ramadhan, 2023).

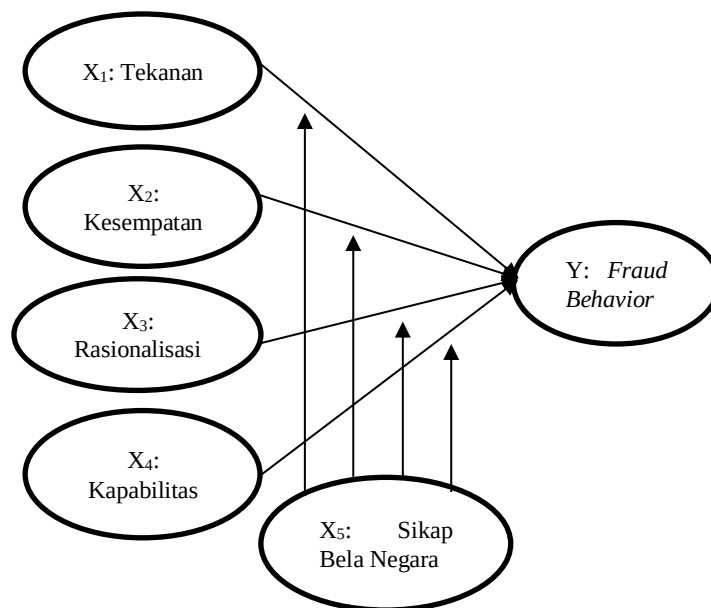
2.3. Sikap Bela Negara

Bela negara merupakan sikap yang wajib diterapkan oleh setiap masyarakat sesuai dengan undang-undang yang berlaku (Yulnelly & Setiyawati, 2022). Menurut Kementerian Pertahanan Republik Indonesia (2018), bela negara adalah semangat rela berkorban demi mempertahankan keutuhan negara yang dilakukan baik dengan harta atau nyawa sekalipun. Bela negara memiliki lima nilai yang harus dilakukan dan diterapkan oleh setiap masyarakat, yaitu cinta tanah air, sadar berbangsa dan bernegara, setia pada Pancasila, rela berkorban, dan mempunyai kemampuan awal bela negara (Yulnelly & Setiyawati, 2022). Sebagai *agent of change*, mahasiswa dapat mengamalkan nilai-nilai tersebut dalam berkontribusi kepada masyarakat sehingga tindakan yang dilakukan sesuai dengan nilai luhur Pancasila.

3. METODE PENELITIAN

Penelitian adalah penelitian kuantitatif dengan populasi mahasiswa aktif S1 Akuntansi UPN “Veteran” Jawa Timur sejumlah 1.484 mahasiswa. Teknik sampling dalam menentukan sampel yang digunakan yaitu *simple random sampling* dan memperoleh sampel sejumlah 94 mahasiswa. *Structure Equation Model* (SEM) dengan *Partial Least Square* (PLS) diterapkan dalam melakukan analisa data dengan bantuan dari program aplikasi WarpPLS 7.0. Data dalam penelitian diperoleh dari jawaban kuesioner oleh responden, sedangkan data sekunder didapatkan dari rujukan seperti jurnal ilmiah, artikel, dan buku.

Hubungan antara variabel independent dan variabel dependen diilustrasikan dalam kerangka konseptual berikut:



Sumber: Peneliti (2023)

Gambar 1. Kerangka Pemikiran

4. HASIL DAN PEMBAHASAN

4.1. Hasil Penelitian

Hasil pengumpulan kuesioner berupa *google form* yang disebar langsung ke responden sejumlah 94. Tabel 1 berikut menampilkan data responden yang berhasil dikumpulkan dari pembagian kuesioner berdasarkan angkatan.

Tabel 1. Responden berdasarkan angkatan tahun masuk

Angkatan	Jumlah Responden yang Mengisi Kuesioner Lengkap	Persentase
2017	0	0%
2018	2	2,1%
2019	2	2,1%
2020	33	35,1%
2021	35	37,2%
2022	9	9,6%
2023	13	13,8%

Sumber: Hasil Kuesioner Peneliti (2024)

Tabel 1 menyajikan jumlah responden yang paling banyak berpartisipasi yaitu angkatan 2021 dengan persentase 37,2%.

4.1.1. Uji Validitas Konvergen

Tabel 2. Hasil *outer loading* (Tahap 1)

Variabel	Indikator	Loading	P value
Tekanan (X ₁)	X _{1.1}	0.768	<0.001
	X _{1.2}	0.545	<0.001
	X _{1.3}	0.493	<0.001
	X _{1.4}	0.879	<0.001
Kesempatan (X ₂)	X _{2.1}	0.667	<0.001
	X _{2.2}	0.755	<0.001
	X _{2.3}	0.631	<0.001
	X _{2.4}	0.515	<0.001
	X _{2.5}	0.649	<0.001
	X _{2.6}	0.762	<0.001
	X _{2.7}	0.791	<0.001
	X _{2.8}	0.552	<0.001
Rasionalisasi (X ₃)	X _{3.1}	0.717	<0.001
	X _{3.2}	0.781	<0.001
	X _{3.3}	0.870	<0.001
	X _{3.4}	0.820	<0.001
Kapabilitas (X ₄)	X _{4.1}	0.467	<0.001
	X _{4.2}	0.722	<0.001
	X _{4.3}	0.854	<0.001
	X _{4.4}	0.541	<0.001
Sikap Bela Negara (X ₅)	X _{5.1}	0.760	<0.001
	X _{5.2}	0.814	<0.001
	X _{5.3}	0.712	<0.001
	X _{5.4}	0.904	<0.001
	X _{5.5}	0.898	<0.001
	X _{5.6}	0.711	<0.001
	X _{5.7}	0.692	<0.001
	X _{5.8}	0.881	<0.001
	X _{5.9}	0.869	<0.001
	X _{5.10}	0.825	<0.001
<i>Fraud Behavior</i> (Y)	Y _{1.1}	0.363	<0.001
	Y _{1.2}	0.629	<0.001
	Y _{1.3}	0.741	<0.001
	Y _{1.4}	0.875	<0.001
	Y _{1.5}	0.859	<0.001
	Y _{1.6}	0.848	<0.001

Sumber: Data diolah peneliti (2024)

Validitas konvergen menunjukkan bahwa indikator saling berkorelasi positif apabila nilai *outer loading* >0,70 dan nilai *average variance extracted* (AVE) >0,50 (Sholihin & Ratmono, 2021:44-45). Berdasarkan Tabel 2 terlihat bahwa masih terdapat indikator-indikator yang belum memenuhi kriteria karena nilai *outer loading* yang dimiliki masih <0,70. Oleh sebab itu, dilakukan pengujian lagi dengan mengeliminasi indikator-indikator yang belum memenuhi kriteria.

Tabel 3. Hasil *outer loading* (Tahap 2)

Variabel	Indikator	Loading	P value
Tekanan (X ₁)	X _{1.1}	0.912	<0.001
	X _{1.4}	0.912	<0.001
Kesempatan (X ₂)	X _{2.2}	0.784	<0.001
	X _{2.6}	0.896	<0.001
	X _{2.7}	0.882	<0.001
Rasionalisasi (X ₃)	X _{3.1}	0.717	<0.001
	X _{3.2}	0.781	<0.001
	X _{3.3}	0.870	<0.001
	X _{3.4}	0.820	<0.001
Kapabilitas (X ₄)	X _{4.2}	0.849	<0.001
	X _{4.3}	0.849	<0.001
Sikap Bela Negara (X ₅)	X _{5.1}	0.770	<0.001
	X _{5.2}	0.819	<0.001
	X _{5.3}	0.716	<0.001
	X _{5.4}	0.913	<0.001
	X _{5.5}	0.904	<0.001
	X _{5.6}	0.718	<0.001
	X _{5.8}	0.879	<0.001
	X _{5.9}	0.867	<0.001
	X _{5.10}	0.814	<0.001
Fraud Behavior (Y)	Y _{1.3}	0.781	<0.001
	Y _{1.4}	0.880	<0.001
	Y _{1.5}	0.867	<0.001
	Y _{1.6}	0.867	<0.001

Sumber: Data diolah peneliti (2024)

Tabel 3 menyajikan hasil bahwa semua indikator telah sesuai dengan kriteria dengan nilai *outer loading* >0,70. Hal tersebut menunjukkan setiap indikator yang diaplikasikan telah valid.

Tabel 4. Nilai AVE

Variabel	AVE
Tekanan (X_1)	0,832
Kesempatan (X_2)	0,732
Rasionalisasi (X_3)	0,638
Kapabilitas (X_4)	0,720
Sikap Bela Negara (X_5)	0,681
<i>Fraud Behavior</i> (Y)	0,722

Sumber: Data diolah peneliti (2024)

Tabel 4 memperlihatkan bahwa seluruh variabel yang terdapat di penelitian ini telah memenuhi syarat nilai AVE, yaitu $>0,50$. Hal ini berarti setiap konstruk telah menjelaskan lebih dari setengah indikator-indikatornya.

4.1.2. Uji Validitas Diskriminan

Validitas diskriminan dinilai menggunakan nilai *cross loading* dan akar kuadrat AVE. Tabel 5 berikut merupakan hasil dari pengujian.

Tabel 5. Nilai *cross loading*

	TEK	KES	RAS	KAP	BLNG	FBHV
$X_{1.1}$	0.912	0.089	0.002	0.090	0.069	-0.151
$X_{1.4}$	0.912	-0.089	-0.002	-0.090	-0.069	0.151
$X_{2.2}$	0.072	0.784	0.227	-0.028	-0.055	-0.093
$X_{2.6}$	-0.136	0.896	0.113	0.023	0.004	-0.012
$X_{2.7}$	0.074	0.882	-0.316	0.002	0.044	0.095
$X_{3.1}$	0.579	-0.042	0.717	-0.116	-0.005	0.051
$X_{3.2}$	0.124	-0.021	0.781	0.190	0.030	-0.407
$X_{3.3}$	-0.320	0.080	0.870	-0.040	0.129	0.085
$X_{3.4}$	-0.284	-0.028	0.820	-0.036	-0.160	0.252
$X_{4.2}$	-0.263	0.012	0.002	0.849	0.055	0.060
$X_{4.3}$	0.263	-0.012	-0.002	0.849	-0.055	-0.060
$X_{5.1}$	0.087	-0.133	-0.107	-0.065	0.770	-0.064
$X_{5.2}$	0.021	-0.092	0.099	-0.069	0.819	0.091
$X_{5.3}$	0.166	-0.242	-0.074	0.273	0.716	-0.176
$X_{5.4}$	-0.051	0.064	0.019	0.081	0.913	-0.009
$X_{5.5}$	-0.044	0.021	-0.011	0.046	0.904	0.065
$X_{5.6}$	0.065	-0.185	-0.033	0.249	0.718	-0.069
$X_{5.8}$	-0.076	0.048	0.029	-0.131	0.879	0.074
$X_{5.9}$	-0.076	0.153	-0.005	-0.136	0.867	0.082
$X_{5.10}$	-0.039	0.284	0.060	-0.186	0.814	-0.044
$Y_{1.3}$	-0.380	0.049	0.034	0.061	0.060	0.781
$Y_{1.4}$	-0.034	-0.011	0.124	-0.095	0.088	0.880
$Y_{1.5}$	0.172	0.023	-0.168	-0.001	-0.044	0.867
$Y_{1.6}$	0.205	-0.057	0.011	0.042	-0.099	0.867

Sumber: Data diolah peneliti (2024)

Berdasar pada Tabel 5 dapat dilihat nilai *cross loading* yang tertera pada setiap indikator memiliki nilai lebih rendah dari nilai *outer loading*-nya. Hal ini berarti standar validitas diskriminan telah terpenuhi.

Tabel 6. Nilai akar kuadrat AVE setiap variabel

	TEK	KES	RAS	KAP	BLNG	FBHV
TEK	0.912	0.194	0.607	0.002	-0.182	0.570
KES	0.194	0.856	0.444	0.108	-0.134	0.326
RAS	0.607	0.444	0.799	0.132	-0.177	0.577
KAP	0.002	0.108	0.132	0.849	0.229	0.044
BLNG	-0.182	-0.134	-0.177	0.229	0.825	-0.017
FBHV	0.570	0.326	0.577	0.044	-0.017	0.850

Sumber: Data diolah peneliti (2024)

Tabel 7. Nilai akar kuadrat AVE pada efek moderasi

	BLNG*TEK	BLNG*KES	BLNG*RAS	BLNG*KAP
BLNG*TEK	1.000	0.134	0.452	0.097
BLNG*KES	0.134	1.000	0.520	0.197
BLNG*RAS	0.452	0.520	1.000	0.268
BLNG*KAP	0.097	0.197	0.268	1.000

Sumber: Data diolah peneliti (2024)

Tabel 6 dan Tabel 7 menyajikan bahwa nilai akar kuadrat AVE setiap variabel dan pada efek moderasi memiliki nilai yang lebih besar pada tiap-tiap konstruk daripada korelasinya dengan konstruk lain. Hal ini menunjukkan bahwa validitas diskriminan yang dimiliki sudah baik.

4.1.3. Uji Reliabilitas

Tabel 8. Nilai *composite reliability*

Variabel	Composite Reliability
Tekanan (X ₁)	0,908
Kesempatan (X ₂)	0,891
Rasionalisasi (X ₃)	0,875
Kapabilitas (X ₄)	0,837
Sikap Bela Negara (X ₅)	0,950
<i>Fraud Behavior</i> (Y)	0,912

Sumber: Data diolah peneliti (2024)

Reliabilitas dapat diukur menggunakan nilai dari *composite reliability*. Reliabilitas dinyatakan baik ketika nilai *composite reliability* >0,70 (Apsari & Suhartini, 2021). Tabel 8 menampilkan nilai *composite reliability* setiap konstruk yang sudah >0,70. Hal tersebut dapat diartikan data yang digunakan terbukti reliabel untuk digunakan.

4.1.4. Uji Model Struktural (*Inner Model*)

Model struktural dapat dinilai dengan pengukuran *R-square* (R^2) dan *Q-square* (Q^2). Nilai R^2 berada di rentang 0 sampai dengan 1 dengan semakin tinggi nilai akan mengindikasikan akurasi prediktif yang semakin tinggi pula (Sholihin & Ratmono, 2021:54-55). Sedangkan nilai Q^2 harus memiliki nilai >0 sehingga model struktural dapat disebut memiliki relevansi yang prediktif.

Tabel 9. Nilai R^2 dan Q^2	
<i>Fraud Behavior</i> (Y)	
R-Square (R^2)	0,389
Q-Squared (Q^2)	0,526

Sumber: Data diolah peneliti (2024)

Berdasarkan Tabel 9 nilai R^2 dan Q^2 menunjukkan angka lebih dari nol. Hal ini berarti akurasi dan relevansi prediktif model struktural dapat dikatakan baik. Variabel *fraud behavior* dipengaruhi oleh tekanan, kesempatan, rasionalisasi, kapabilitas, dan sikap bela negara sebagai pemoderasi sebesar 38,9%. Sedangkan sebanyak 51,1% disebabkan oleh hal lain yang belum dibahas dalam riset ini.

4.1.4. Uji Hipotesis

Uji hipotesis dijalankan melalui pengujian koefisien jalur (*path coefficient*) dengan memperhatikan nilai dari p (*p values*). Tingkat signifikansi dari nilai probabilitas (*p-value*) yaitu 5%. Hasil pengujian ditunjukkan pada Tabel 10 berikut.

Tabel 10. Nilai <i>Path Coefficient</i> dan P-Value			
Pengaruh	<i>Path coefficient</i>	P-Value	Hasil
TEK -> FBHV	0,320	<0.001	Diterima
KES -> FBHV	-0,009	0,465	Ditolak
RAS -> FBHV	0,380	<0.001	Diterima
KAP -> FBHV	0,157	0,058	Ditolak
BLNG*TEK->FBHV	0,150	0,067	Ditolak
BLNG*KES->FBHV	-0,175	0,039	Diterima
BLNG*RAS->FBHV	0,001	0,498	Ditolak
BLNG*KAP->FBHV	0,109	0,139	Ditolak

Sumber: Data diolah peneliti (2024)

Berdasar pada Tabel 10, nilai p-value pada pengaruh tekanan terhadap *fraud behavior* dan pengaruh rasional pada *fraud behavior* menunjukkan nilai $<0,001$ yang telah memenuhi kriteria yaitu kurang dari 5%. Hal ini berarti tekanan dan rasionalisasi berdampak signifikan terhadap *fraud behavior*. Namun, pengaruh kesempatan dan kapabilitas terhadap *fraud behavior* tidak menunjukkan nilai yang signifikan. Nilai ini ditunjukkan pada besarnya p-value masing-masing secara berurutan yaitu 0,465 dan 0,058 yang belum memenuhi kriteria yaitu $<5\%$.

Sedangkan pada setiap efek moderasi, dapat dilihat bahwa sikap bela negara hanya dapat memoderasi pengaruh kesempatan terhadap *fraud behavior*. Hal tersebut dapat ditunjukkan dengan melihat nilai p-value yaitu sebesar 0,039 yang memenuhi kriteria yaitu $<5\%$. Nilai *path coefficient* yang ditunjukkan bernilai negatif yaitu sebesar -0,175 yang berarti sikap bela negara bersifat memperlemah pengaruh kesempatan terhadap *fraud behavior* (Solimun et al., 2017). Sikap bela negara tidak dapat memoderasi pengaruh tekanan, rasionalisasi, dan kapabilitas pada *fraud behavior* karena p-value yang dimiliki $>5\%$.

4.2. Pembahasan

4.2.1. Pengaruh Tekanan Terhadap *Fraud Behavior*

Tabel 10 menunjukkan bahwa tekanan memiliki kontribusi yang berarti terhadap *fraud behavior* atau perilaku kecurangan. Hal ini berarti tekanan terbukti menjadi penyebab terjadinya perilaku kecurangan akademik. Pernyataan ini sependapat dengan teori *fraud diamond* yang mengungkapkan bahwa tekanan (*pressure*) termasuk pemicu *fraud*.

Hasil dari penelitian dan jawaban kuisioner responden, rata-rata responden memiliki tekanan terkait dengan nilai Indeks Prestasi yang ingin dicapai. Indeks Prestasi menjadi hal yang sangat diperhitungkan oleh mahasiswa karena menjadi salah satu tolak ukur dalam menilai seseorang. Tuntutan untuk meraih Indeks Prestasi yang tinggi baik sebagian besar datang dari lingkungan sekitar termasuk orang tua atau wali mahasiswa tersebut. Mahasiswa yang merasa tertekan dapat melakukan bermacam-macam cara untuk meraih Indeks Prestasi yang tinggi termasuk berlaku curang. Hasil ini sependapat dengan Akib et al. (2023) dan Wardani & Saputri (2023) yang menyatakan tekanan memberikan kontribusi yang signifikan pada perilaku kecurangan.

4.2.2. Pengaruh Kesempatan Terhadap *Fraud Behavior*

Hasil uji hipotesis memperlihatkan kesempatan tidak memiliki kontribusi yang berarti terhadap *fraud behavior*. Hasil ini mencerminkan bahwa kesempatan bukan termasuk faktor utama penyebab terjadinya perilaku kecurangan. Hal ini tidak selaras dengan teori *fraud diamond* yang menyampaikan kesempatan termasuk dari empat faktor utama yang mendorong individu melakukan perilaku kecurangan.

Mayoritas responden berpendapat bahwa mereka pernah melihat teman mereka melakukan kecurangan akademik. Adanya teknologi yang cepat dan canggih menjadi kesempatan besar bagi mereka untuk melakukan perilaku kecurangan seperti plagiarisme. Namun, kesempatan tersebut tidak dapat mendorong mereka untuk bertindak curang. Hal tersebut dapat terjadi karena responden lebih berhati-hati karena adanya *punishment* yang berlaku bagi pelaku kecurangan dan adanya pengawasan yang ketat terkait dengan pengerjaan tugas yang diberikan. Selain itu, kesempatan yang dimiliki tidak dapat mendorong seseorang untuk bertindak curang karena adanya faktor religiusitas dari individu itu sendiri yang dapat berperan sebagai penghalang untuk melakukan kecurangan karena terdapat nilai-nilai keagamaan yang mempengaruhi seseorang untuk berperilaku (Apsari & Suhartini, 2021). Penelitian ini berbanding lurus dengan penelitian Safitri et al. (2023) dan Parengkuan & Pesudo (2023) yang mengungkapkan bahwa kesempatan tidak memiliki kontribusi yang signifikan pada perilaku kecurangan.

4.2.3. Pengaruh Rasionalisasi Terhadap *Fraud Behavior*

Berdasarkan pengujian hipotesis, terdapat kontribusi signifikan dari rasionalisasi terhadap *fraud behavior*. Hal ini selaras dengan teori *fraud diamond* yang menyampaikan bahwa rasionalisasi termasuk penyebab munculnya perilaku kecurangan. Hasil penelitian memperlihatkan bahwa rata-rata responden melakukan perilaku kecurangan sebab orang lain pada umumnya juga melakukan kecurangan tersebut.

Rasionalisasi memberikan perasaan yang aman bagi pelaku kecurangan. Sikap ini memberikan pandangan bagi mereka bahwasannya melakukan perilaku kecurangan merupakan hal yang normal dan lumrah untuk dilakukan. Riset ini selaras dengan hasil riset Shafina et al. (2021) dan Utami & Adiputra (2021) yang menjelaskan bahwa rasionalisasi memiliki kontribusi positif dan berarti pada perilaku kecurangan.

4.2.4. Pengaruh Kapabilitas Terhadap *Fraud Behavior*

Kapabilitas tidak memiliki kontribusi yang berarti terhadap *fraud behavior* dalam penelitian ini. Hal ini berarti kemampuan seseorang tidak dapat mendorong secara langsung untuk bertindak curang. Hasil ini bertolak belakang dengan pernyataan teori *fraud diamond* yang menyatakan bahwa tanpa adanya kapabilitas kecurangan tidak dapat dilakukan.

Rata-rata responden memiliki rasa percaya diri yang kuat dalam memberikan pengaruh kepada orang lain dan mampu mengatur emosi diri dengan baik. Namun, kemampuan tersebut tidak dapat memotivasi mereka untuk melakukan perbuatan curang. Hal ini dapat disebabkan oleh adanya sistem akademik yang lebih kuat atau karena adanya sikap religius yang dimiliki sehingga mereka takut untuk menyalahgunakan kemampuannya untuk hal-hal yang tidak baik. Hasil riset ini berbanding lurus dengan riset yang dijalankan oleh Anfas et al. (2019) dan Andrianus et al. (2019) yang mengungkapkan kapabilitas tidak berkontribusi yang relevan pada perilaku kecurangan.

4.2.5. Pengaruh Sikap Bela Negara dalam Memoderasi Pengaruh Tekanan, Kesempatan, Rasionalisasi, dan Kapabilitas Terhadap *Fraud Behavior*

Hasil pengujian hipotesis menunjukkan bahwa sikap bela negara mampu memoderasi kontribusi kesempatan terhadap *fraud behavior*. Hal ini berarti sikap bela negara dapat memperlemah kontribusi kesempatan pada perilaku kecurangan akademik. Hasil penelitian membuktikan bahwa rata-rata responden mempunyai keyakinan terhadap Pancasila yang menjadi ideologi negara dan pedoman hidup bangsa. Sikap yakin akan Pancasila ini dapat meminimalisir seseorang untuk perilaku kecurangan akademik walaupun ada banyak peluang untuk berbuat curang. Hal ini sependapat Amyulianthy et al. (2023) yang berpendapat bahwa Pancasila sebagai nilai luhur dapat memperlemah faktor-faktor penyebab perilaku kecurangan akademik.

Pengujian hipotesis yang dilakukan juga menunjukkan bahwa sikap bela negara tidak dapat memoderasi kontribusi tekanan, rasionalisasi, dan kapabilitas terhadap *fraud behavior*. Rata-rata responden memiliki rasa hormat, toleransi, dan yakin pada Pancasila sebagai bentuk dari sadar berbangsa dan bernegara. Namun, sikap ini tidak sejalan dengan tindakan kecurangan akademik yang masih terjadi. Hal ini dapat disebabkan oleh faktor eksternal seperti tekanan atau sikap pembenaran diri yang lebih tinggi untuk melakukan kecurangan.

Selain itu, faktor lain seperti niat juga dapat mempengaruhi seseorang untuk bertindak curang. Pernyataan ini sependapat dengan pernyataan *theory of planned behavior*

menyatakan bahwa tindakan dari individu didasarkan oleh niat. Penelitian ini tidak didukung oleh Amyulianthy et al. (2023) yang mengungkapkan pada penelitiannya bahwa sikap bela negara yang tercermin dari nilai-nilai Pancasila dapat memperlemah pengaruh tekanan, kesempatan, dan rasionalisasi pada perilaku kecurangan akademik.

5. KESIMPULAN

Penelitian ini memiliki capaian untuk melakukan pengujian dan memberikan bukti terkait pengaruh *fraud diamond* pada perilaku kecurangan dengan sikap bela negara menjadi pemoderasi. Berdasarkan penelitian dan pengujian dapat ditarik kesimpulan bahwa tekanan dan rasionalisasi berkontribusi pada perilaku kecurangan. Akan tetapi, kesempatan dan kapabilitas tidak berkontribusi secara relevan pada perilaku kecurangan akademik. Sikap bela negara sebagai variabel moderasi mampu memoderasi dan bersifat memperlemah kontribusi kesempatan pada perilaku kecurangan akademik. Namun, belum bisa memoderasi kontribusi tekanan, rasionalisasi, dan kapabilitas pada perilaku kecurangan akademik.

Peneliti berikutnya dapat memodifikasi variabel-variabel penelitian agar hasil penelitian dapat lebih berkembang seperti mengubah variabel moderasi dengan variabel lain. Implikasi bagi responden diharapkan dapat lebih meningkatkan sikap bela negara sebagai kontrol diri agar tidak melakukan perilaku kecurangan walaupun terdapat kesempatan untuk melakukannya.

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THE INFLUENCE OF CSR DISCLOSURE, ENVIRONMENTAL PERFORMANCE, AND INTERNAL CORPORATE GOVERNANCE ON THE ACHIEVEMENT OF SUSTAINABLE DEVELOPMENT GOALS

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Abstract

Sustainable Development Goals (SDGs) require the involvement of various roles to support their achievement, especially from the business world. The research is aimed at examining the influence of CSR disclosure, environmental performance and Internal Corporate Governance on achieving the SDGs. The sample selected was 99 basic industrial and chemical companies listed on the Indonesia Stock Exchange (BEI) in the 2018-2022 period using the purposive sampling method. Data analysis uses unbalanced panel data regression analysis with the Eviews 12 application. The results of this research show that CSR disclosure in quantity and quality, environmental performance, and CEO non-duality, which are indicators of Internal Corporate Governance, have a significant effect on achieving the SDGs. On the other hand, other indicators of Internal Corporate Governance, namely board independence and board presence and the control variables of this research, namely size and leverage, do not have a significant effect on achieving the SDGs. Even though there is an influence between CSR disclosure, environmental performance and Internal Corporate Governance on the achievement of the SDGs, there are several factors that cause the influence of Internal Corporate Governance to not be maximized

Keywords: Sustainable Development Goals (SDGs), CSR Disclosure, Environmental Performance, Internal Corporate Governance, Non-Duality CEO

1. INTRODUCTION

The United Nations (UN) through its general assembly on September 25, 2015 established the formulation of world development after 2015 in the form of Sustainable Development Goals (SDGs) (Saz-Gil et al., 2020). The SDGs contain 17 interconnected goals and in order for no one to be left behind, it is important for all countries to achieve all of them by 2030 (UNSDG, 2022). The seventeen goals focus on economic, social and environmental issues as the cornerstone of sustainable development to protect the future of the planet and people (Nylund et al., 2022). In the few years after the establishment of the SDGs, there is a phenomenon that occurs in developing countries included in the Global South Countries, namely the persistence of problems regarding poverty, hunger, and health (Abusaada & Elshater, 2023). Based on UN FCFSSC data (2022), Indonesia is one of 77 countries included in the Global South Countries. In relation to this phenomenon, the national poverty rate in Indonesia in 2022 was 9.57% and it is projected that 26.36 million

people still live in poverty (BPS, 2023). Not only that, in 2022, Indonesia also ranked as the country with the second highest hunger rate in ASEAN after Laos with a GHI (Global Hunger Index) score of 17.9 (Welthungerhilfe, 2022).

Based on the SDG Index and Report in 2022, Indonesia ranked 82nd out of 163 countries for the achievement of SDGs and still faces more or less the same problems as in previous years, namely in the implementation of several SDG goals (numbers 2, 3, 11, 14, 15, 16, and 17) (Sachs et al., 2022). The challenge faced by Indonesia in its goal of achieving the SDGs is the lack of involvement from non-governmental roles (Morita et al., 2020). Meanwhile, the SDGs, which are aimed at all countries in the world, require the involvement of various roles in it, not only governments and institutions, but also civil society, non-profit organizations, and are specifically intended to be an encouragement for the business world (Naciti et al., 2022). According to Di Vaio et al. (2020), companies have an important role and can determine the achievement of the 17 goals in the SDGs because companies are the main drivers of sustainable economic development and many companies around the world today have connected their strategies and internal business practices with the goals of the SDGs.

This study will discuss the influence of CSR disclosure, environmental performance, and internal corporate governance on the achievement of SDGs. This research is based on legitimacy, stakeholder, and agency theories. Legitimacy theory examines the efforts of companies to meet the expectations of the wider community in order to be said to be operating 'legitimately' (Deegan, 2014). Companies that make CSR disclosures, obtain good environmental performance ratings, and have good Internal Corporate Governance mechanisms can also gain support from society, so that companies can operate optimally and achieve more SDGs goals. Where legitimacy theory addresses the expectations of society in general, stakeholder theory provides a view that refers more to a specific group in society, namely the stakeholder group in the company (Deegan, 2014). Stakeholder theory states that companies have many stakeholders such as employees, customers, suppliers, and the environment (Monteiro et al., 2023). Stakeholder theory takes into consideration the disclosure of CSR and the achievement of environmental performance so that companies can show the extent to which they have built more value to stakeholder groups in order to achieve the SDGs.

Efforts to integrate activities related to SDGs goals in the company cannot be separated from the role of those who regulate the company's strategy. Internal corporate governance mechanisms related to the board of directors play an important role in determining the company's compliance with the SDGs because directors are responsible for the company's strategy in terms of sustainability practices (Ferrero & Meca, 2020). However, there is little literature on the impact of implementing sustainability practices that shows that internal corporate governance characteristics contribute to the achievement of the SDGs (Rosati & Faria, 2019).

Ferrero & Meca (2020) explains that the company's internal governance mechanisms, namely CEO non-duality and board independence (independent directors) have a positive effect on the company's contribution to achieving SDGs, while board attendance has no effect on the company's contribution to achieving SDGs. While other research by Setyawan et al. (2022) explains that board size and sustainability committee have a positive effect on SDGs, while the presence of independent directors (board independence) and the presence

of women on the board of directors (board diversity) have no positive effect on SDGs. According to Helfaya & Aboud (2023), Additional research is needed on governance, sustainability, and SDGs. This study will discuss the quantity and quality of CSR disclosures, environmental performance, and internal corporate governance consisting of CEO non-duality, board independence, and board attendance towards the achievement of SDGs. Therefore, this research is expected to fill the gaps and inconsistencies in the results of previous studies.

The object of this research is basic and chemical industry companies listed on the Indonesia Stock Exchange (IDX) for the period 2018-2022. The basic industry and chemical sector itself is the sector that disclosed the second most SDGs goals in Indonesia under the financial sector in 2015 after the establishment of the SDGs (Alfiah & Arsjah, 2021). Not only that, companies in the basic and chemical industry sector have also consistently been the main contributors to the national GDP from 2021 to the third quarter of 2022 (Kemenperin, 2022). However, behind these gains there are still problems from companies in the basic and chemical industry sector on social and environmental issues. One example is PT Long Xim Logam, which was proven to have discharged waste into the river in 2020 and again caused pollution to residents' waterways due to a leak in the sewage channel in 2021 (Gelora Jatim, 2021). The selection of the object period of this study for five years (2018-2022) is with the consideration that the data in this period can reflect the latest phenomena related to the achievement of SDGs in Indonesia which occurred in 2022 and is the result of the achievement of SDGs starting from three years after its establishment to seven years after its establishment. In addition, during this period companies in Indonesia began to disclose CSR in sustainability reports with the regulation by the Financial Services Authority through POJK No.51 of 2017.

This study is focused on examining the positive impact of CSR disclosure in both quantity and quality on the attainment of SDGs. Additionally, it aims to explore the favorable effect of environmental performance on the achievement of SDGs. Lastly, it seeks to analyze the influence of internal corporate governance, including CEO non-duality, board independence, and board attendance, on the attainment of SDGs. The research offers both theoretical and practical benefits. The theoretical benefits include serving as a point of reference for legitimacy, stakeholder, and agency theories, as well as contributing to the field of social responsibility accounting, particularly in the basic and chemical industry sector, environmental performance, internal corporate governance, and SDGs. On the other hand, the practical benefits of this research are valuable for companies in providing insights into the impact of CSR disclosures, environmental performance, and internal corporate governance mechanisms on the achievement of SDGs. Additionally, it can serve as a valuable reference for further refined research by other scholars.

2. LITERATURE REVIEW

2.1. Legitimacy Theory

Legitimacy theory raises the assumption that to achieve a successful company operation, requires managerial parties to ensure that their company has operated in accordance with societal expectations and is said to be a company that is considered "legitimate" (Deegan, 2019). A company is considered "legitimate" if it can fulfill the social contract by ensuring

that its operations meet the expectations of society at large by operating within its boundaries and norms (Lakhani et al., 2022). According to Deegan (2014) The social contract is a way for society to explain how the company should run its operations. In relation to this research, legitimacy theory can be used as a benchmark regarding the company's efforts to meet public expectations for the achievement of SDGs by disclosing CSR, achieving environmental performance, and good Internal Corporate Governance mechanisms in the company.

2.2. Stakeholder Theory

Stakeholder theory states that companies must create value for all stakeholders, not just shareholders, to ensure their long-term success (Freeman, 1984). The value that companies can provide to their stakeholders includes assets, information, and performance. In relation to this study, stakeholder theory takes into consideration CSR disclosure and the achievement of good environmental performance so that companies can demonstrate the extent to which they have built more value to stakeholder groups through the achievement of SDGs. In a further contribution, by demonstrating the social and environmental commitment and legitimacy of the company to stakeholders, the company can also increase the achievement of the SDGs (Rosati & Faria, 2019).

2.3. Agency Theory

Jensen & Meckling (1976) explain that this theory comes from the agency relationship that exists in the company, where the agency relationship is a contract in which one or more people (principal) involve other people (agent) to authorize the agent to make decisions. The company is formed from a collection of contracts (nexus of contracts) between the owner of economic resources (principal) and the manager (agent) as the party who controls these economic resources. One of the concepts based on agency theory is corporate governance. According to Wikartika & Akbar (2020), corporate governance arises because of agency problems. This agency problem occurs due to a conflict of interest between the principal and the agent, where there is a separation of ownership and control and both parties work for their own interests (Antwi, 2021). According to Suharyono et al. (2023), agency theory is also the basis that the company's board of directors has a vital role in every company activity. In relation to this research, agency theory can be a perspective for evaluating indicators of Internal Corporate Governance in efforts to achieve SDGs.

2.4. Sustainable Development Goals (SDGs)

The SDGs were formulated to replace the Millennium Development Goals (MDGs) that took effect in 2000-2015 and aim to continue solving pending problems or existing inequalities (Hummel & Szekely, 2022). Unlike the Millennium Development Goals (MDGs) which focus on developing countries, the SDGs are aimed at all countries without any difference and each country has the same obligation to implement its 17 goals to help solve global problems (Erin et al., 2022). In addition, while the MDGs only consist of eight goals, the SDGs consist of 17 goals, 169 targets, and 241 indicators. According to Bappenas/PPN (2019), to facilitate implementation and monitoring in Indonesia, the 17 goals and 169 targets of the SDGs are grouped into four pillars, namely:

- a. The social development pillar, including objectives 1, 2, 3, 4 and 5.
- b. The economic development pillar, including goal numbers 7, 8, 9, 10 and 17.

- c. The environmental development pillar, including goal numbers 6, 11, 12, 13, 14, and 15.
- d. The law and governance development pillar, including goal number 16.

2.5. Corporate Social Responsibility (CSR)

CSR or corporate social responsibility began to develop in the early 1950s as an idea in the literature and was expanded in the 1960s in response to the problems and desires of modern society towards companies at that time (Agudelo et al., 2019). CSR is a form of corporate action towards society, community, and the environment both within and beyond what is legally required by the company (Shu & Chiang, 2020). CSR practices are outlined in the form of a report called a sustainability report (SR). Sustainability reporting is the reporting of economic, environmental and social policies, impacts and performance of the organization, and its products in the context of sustainable development (Kamaliah, 2020). The scope of CSR reporting covers a variety of topics including social issues, philanthropy, sustainability, environmental issues, as well as a set of terminology that can continue to change to reflect these concepts and companies are not only profitable, but also responsible for economic, social, and environmental issues (ElAlfy et al., 2020). The purpose of disclosing CSR activities in sustainability reports is to boost the company's reputation and image (Syairozi, 2019). Not only related to stakeholders, CSR disclosure will provide benefits to the company internally and externally.

2.6. Environmental Performance

Environmental performance is a company's effort to preserve the environment and reduce the negative impacts of its business activities (Tahu, 2019). Since 2002, the Indonesian Ministry of Environment and Forestry (KLHK) has created a Company Performance Rating Program in Environmental Management (PROPER) to assess the environmental performance that companies have implemented (Widyowati & Damayanti, 2022).

2.7. Internal Corporate Governance

Corporate governance is a mechanism to deal with stakeholders by giving them equal authority to minimize agency conflicts, where this governance is not only aimed at directors and investors, but also with employees, suppliers, customers, and most importantly, with the community and society as a whole (Asghar et al., 2020). Corporate governance consists of external mechanisms, such as market pressures and internal mechanisms, which are related to the ownership structure of the company (Ferrero & Meca, 2020). In Internal Corporate Governance, the Board of Directors is the main mechanism and oversees the management and implementation of regulations in the company (Khan et al., 2022).

2.8. Research Framework

This research is based on legitimacy, stakeholder, and agency theories. Legitimacy theory is closely related to CSR disclosure. Permatasari & Setyastrini (2019) explain the phenomenon of CSR disclosure in developing countries, that companies tend to disclose social and environmental information voluntarily because it is in line with legitimacy theory. The company will have a good reputation in front of stakeholders and society. Thus, the

company has the opportunity to gain support for a longer period of time or also called to achieve sustainability. Likewise, the achievement of the company's environmental performance shows how the company's operations from the beginning to the final impact on the environment have met the applicable criteria so as not to cause harm to society and show that the company has operated in accordance with environmental concerns. A good Internal Corporate Governance mechanism helps the company to maintain its legitimacy because it shows that the company is managed properly and responsibly. Thus, the company can more easily obtain resources and gain support to achieve the SDGs.

Stakeholder theory explains the creation of corporate value through assets, information, and performance to stakeholders. According to Ofoegbu et al. (2018), to survive and perform well, companies need a good relationship with stakeholders and one way to maintain this relationship is to provide information through voluntary social and environmental disclosures to gain support and connections with partners. Disclosure of environmental and social topics in the annual report is an important condition for a company to respond to the increasing information needs of its stakeholders so that the company gains stakeholder trust and engagement in the long term (Monteiro et al., 2023). The disclosure of social and environmental topics is carried out by the company through CSR disclosure and also information about the results of achieving good environmental performance of the company.

Agency theory is the theoretical basis for Corporate Governance which arises from the agency problem between the principal and the agent (Wikartika & Akbar, 2020), Agency problems occur due to a conflict of interest between the principal and the agent, where there is a separation of ownership and control which causes both parties to work for their respective interests (Antwi, 2021). Agency theory helps in implementing various governance mechanisms to control the actions of the agent as the managing party in the company. Corporate Governance helps create a conducive environment for companies to realize efficient and sustainable growth (Wikartika & Akbar, 2019). In today's corporate governance planning, it is imperative to implement the SDGs goals and requires structural measures from the board of directors in its planning (Naciti et al., 2022).

3. RESEARCH METHOD

This study uses a causal design to investigate the relationship between corporate social responsibility disclosure (independent variable) and an index for sustainable development goals (dependent variable). Data on environmental performance, governance, leverage, and company size were also collected for each company (n=99) from 2018-2022. Panel data regression analysis will be used to examine these relationships.

4. RESULT AND DISCUSSION

4.1. Research Result

4.1.1. Sample Characteristics

The criteria and number of samples selected in this study are as follows:

Table 5. Sampling Criteria

No.	Criteria	Number of Companies					Total
		2018	2019	2020	2021	2022	
1.	Companies included in the basic and chemical industry sector listed on the IDX for the period 2018-2022.	73	78	79	87	91	408
2.	Companies that did not publish annual reports and sustainability reports in the period 2018 to 2022.	(4)	(4)	(4)	(1)	(2)	(15)
3.	Companies that did not receive a PROPER rating from 2018 to 2022.	(49)	(52)	(46)	(55)	(57)	(259)
4.	Companies that do not address the SDGs in their annual report and sustainability report.	(7)	(7)	(10)	(6)	(5)	(32)
Total Sample							99

Source: Secondary data processed by researchers (2024)

4.1.2. Data Analysis Results

a. Descriptive Statistical Analysis

Table 6. Descriptive Statistical Test Results

Variabel	N	Minimum	Maksimum	Mean	Standard Deviation
CSRD Quantity (X1a)	99	27	40	37,19	3,46
CSRD Quality (X2b)	99	30	50	35,89	4,29
Environmental Performance (X2)	99	2	4	3,15	0,52
<i>Non-duality CEO</i> (X3a)	99	0	1	0,60	0,49
Board Independence (X3b)	99	0	0,40	0,10	0,10
Board Attendance (X3c)	99	7	16	12,23	1,09
Leverage (X4)	99	0,07	8,12	1,15	1,17
Size (X5)	99	11,13	25,56	16,38	2,11
SDGs (Y)	99	0,23	0,94	0,52	0,18

Source: Eviews 12 data processing

Basic and chemical industry companies have the highest quantity CSR disclosure index of 40 in the period 2018-2022, while the lowest quantity CSR disclosure index is 27. The average value of quantity CSR disclosure is 37.19, which means that basic and chemical industry sector companies can be said to be good because they explain the content related to CSR disclosure in more than one page. Basic and chemical industry companies have a quality CSR disclosure index with the highest value of 50 in the period 2018-2022, while

the lowest quality CSR disclosure index is 30. The average value of the quality CSR disclosure index is 35.89. This means that companies in the basic and chemical industry sector are said to be good because they explain the content related to CSR disclosure in quality using sentences, numbers, and financial units.

The company's environmental performance is measured using the PROPER rating which has an average of 3.15 in the observation period 2018-2022. It can be concluded that the environmental performance of companies in the basic and chemical industry sector can be said to be good because the value of 3.15 shows that the majority of companies get a blue rating, which means that the company has made environmental management efforts based on applicable regulations regulated by the Ministry of Environment and Forestry (KLHK). Internal Corporate Governance is measured using CEO non-duality, board independence, and board attendance. CEO non-duality which shows the condition where there is no concurrent position between the chairman of the board of directors and commissioners has an average value of 0.60. This shows that around 60% of industrial and chemical sector companies do not have a chairman of the board of directors who concurrently serves as a commissioner. Board independence shows the proportion of independent directors in the composition of the board of directors. The lowest proportion is 0, which means that the company has no independent directors, while the highest proportion is 0.40. The average value of the proportion of independent directors in basic industry and chemical sector companies is 0.10.

This shows that there are still few companies that have independent directors in the composition of the board of directors. Board attendance shows the number of board meetings during the year. The lowest frequency of meetings is at a value of 7, while the highest frequency is at a value of 16. The average value of the number of board meetings a year is 12.23. This shows that companies in the basic and chemical industry sector have conducted at least 1 meeting per month, in accordance with corporate governance rules. Size or company size is measured using the natural logarithm of the company's total assets. From the results of data processing, the largest company size is owned by PT Indah Kiat Pulp & Paper in 2018 amounting to 25.57 and the smallest company size is owned by PT Lion Metal Works in 2022 amounting to 11.13. The average company size is 16.38 with a standard deviation of 2.11.

Leverage is the company's solvency ratio as measured using total debt divided by total equity. This measurement has an average of 1.15 and a standard deviation of 1.17. It can be concluded that if the average value is smaller than the standard deviation, then the distribution of leverage data of basic and chemical industry sector companies is not good because there are some outlier data (data that is much different from other data). The highest leverage value is owned by PT Waskita Beton Precast in 2020 amounting to 8.12 and the lowest leverage value is owned by PT Indonesia Fireboard Industry in 2021 amounting to 0.07. SDGs are measured using the SDG Index which shows the ratio of SDGs disclosure by companies to the 17 SDGs goals, so the maximum value is 1. The lowest SDGs index is 0.23 and the highest index is 0.94. The average SDGs index is 0.52, which indicates that basic and chemical industry sector companies have disclosed half of the 17 SDGs goals.

4.1.3. Panel Data Regression Model Test

a. Chouw Test Results

Table 7. Chouw Test Results

Effect Test	Model Estimation	Constant Value	Probability Value	Selected Model
Cross-section F	FEM- CEM	0,05	0,0000	FEM

Source: Eviews 12 data processing

b. Hausman Test Results

Table 8. Hausman Test Results

Effect Test	Model Estimation	Constant Value	Probability Value	Selected Model
Cross-section random	FEM- CEM	0,05	0,1603	FEM

Source: Eviews 12 data processing

c. Lagrange Multiplier Test Results

Table 9. Lagrange Multiplier Test Results

Effect Test	Model Estimation	Constant Value	Probability Value	Selected Model
Breusch-Pagan	FEM- CEM	0,05	0,0001	FEM

Source: Eviews 12 data processing

Based on the three model test results, the regression model chosen for unbalanced panel data in this study is the Random Effect Model (REM).

4.1.4. Classical Assumption Test

a. Multicollinearity Test

Table 10. Multicollinearity Test Correlation

	CSRQ Quantity	CSRQ Quality	Environmental Performance	Non-Duality Ceo	BI	BA	LEV	SIZE
CSRQ Quantity	1.00	0.48	0.27	0.17	-0.29	0.09	0.02	0.14
CSRQ Quality	0.48	1.00	0.36	0.11	-0.15	0.09	0.10	0.06
Environmental Performance	0.27	0.36	1.00	0.11	-0.01	-0.06	-0.18	0.30
Non-Duality Ceo	0.17	0.11	0.11	1.00	-0.24	0.17	0.04	0.02
BI	-0.29	-0.15	-0.01	-0.24	1.00	-0.17	0.09	-0.09
BA	0.09	0.09	-0.06	0.17	-0.17	1.00	0.12	-0.00
LEV	0.02	0.10	-0.18	0.04	0.09	0.12	1.00	-0.10
Size	0.14	0.06	0.30	0.02	-0.09	-0.01	-0.10	1.00

Source: Eviews 12 data processing

Based on this table, none of the correlations between the independent variables have a value greater than 0.85. This means that in this regression model there is no multicollinearity or in this model there is no correlation between the independent variables.

4.1.5. Panel Data Regression Analysis Model

$$Y_{it} = -0.630 + 0.012 \cdot X_{1a} + 0.009 \cdot X_{1b} + 0.0823 \cdot X_2 + 0.131 \cdot X_{3a} + 0.006 \cdot X_{3b} + 0.001 \cdot X_{3c} - 0.013 \cdot X_4 - 0.001 \cdot X_5 + \varepsilon_{it}$$

The panel data regression equation is summarized as follows:

- A constant of -0.630 indicates that with no changes in the independent variables, the dependent variable (SDGs) is -0.630.
- The CSR quantity coefficient is 0.012, implying a 1-unit increase in CSR quantity raises SDGs by 0.012, assuming other variables are constant. The CSR quality coefficient is 0.009, meaning a 1-unit increase in CSR quality raises SDGs by 0.009 under the same conditions.
- The environmental performance coefficient is 0.0823, suggesting a 1-unit increase in environmental performance raises SDGs by 0.0823, with other variables constant.
- For corporate governance, the CEO non-duality coefficient is 0.131, indicating a 1-unit increase raises SDGs by 0.131. The Board Independence coefficient is 0.006, and the Board Attendance coefficient is 0.001, meaning respective 1-unit increases raise SDGs by 0.006 and 0.001, with other variables unchanged.
- The leverage coefficient is -0.013, indicating a 1-unit increase decreases SDGs by 0.013, while the size coefficient is -0.01, suggesting a 1-unit increase decreases SDGs by 0.01, with other variables held constant.

4.1.6. Hypothesis Testing

- T-Test

Table 11. T Test Results

Variable	Coefficient	ValueT-statistic	t table	Significance Value
CSR quantity	0.012	3.381	1.984	0.001
CSR Quality	0.009	3.146	1.984	0.002
Environmental Performance	0.082	2.898	1.984	0.004
Non-duality CEO	0.131	4.517	1.984	0.000
Board Independence	0.006	0.053	1.984	0.957
Board Attendance	0.001	0.114	1.984	0.909
Leverage	- 0.013	- 1.104	1.984	0.272
Size	- 0.001	- 0.152	1.984	0.879

Source: Eviews 12 data processing

The regression analysis results indicate the following:

- 1) First Hypothesis: Both quantitative and qualitative CSR disclosures positively impact SDGs, with significance levels of 0.001 and 0.002, and t-statistics (3.381 and 3.146) exceeding the t-table value of 1.984. Thus, this hypothesis is accepted.

- 2) Second Hypothesis: Environmental performance also positively affects SDGs, with a significance level of 0.004 and a t-statistic of 2.898, confirming acceptance of this hypothesis.
- 3) Third Hypothesis: Internal corporate governance impacts SDGs positively. CEO non-duality is significant (0.000) with a t-statistic of 4.517, leading to acceptance. However, board independence (0.957) and board attendance (0.909) are not significant, as their t-statistics (0.053 and 0.114) are below 1.984, resulting in rejection of these variables.
- 4) Control Variables: Leverage (0.272) and size (0.879) do not affect SDGs, with t-statistics of -1.104 and -0.152, respectively, both not significant.

b. F-Test

Table 12. F Test Results

F-statistics	F-Statistic Probability
8.476	0.000

Source: Eviews 12 data processing

The F test results indicate that the F-statistic value is 8.476, which exceeds the F-table value of 2.042. This suggests that the independent variables—CSR disclosure, environmental performance, and internal corporate governance—collectively influence the achievement of SDGs.

c. Determination Coefficient Test

Table 13. Determination Coefficient Test

R-squared	Adjusted R-squared	Standard Error of Regression	Durbin-Watson
0.429	0.379	0.087	1.281

Source: Eviews 12 data processing

Based on these results, it is shown that the adjusted r-squared value is 0.379 or 37.9%. This indicates that 37.9% of SDGs variables are directly influenced by CSR disclosure, environmental performance, and internal corporate governance represented by CEO non-duality and indirectly influenced by board independence and board attendance. Meanwhile, 62.1% of the SDGs variable is influenced by other variables that are not discussed further in this study.

4.2. Discussion

4.2.1. The Effect of CSR Disclosure on Achievement of Sustainable Development Goals

Based on the research results, CSR disclosure in quantity and quality has a positive influence on the achievement of SDGs. The higher the CSR disclosure both in quantity and quality, the higher the achievement of SDGs of basic and chemical industry companies. Staniškienė & Stankeviciute (2018) stated that clearly stated quantity indicators will

optimize the measurement of environmental and economic aspects of CSR disclosure while measurement of social aspects requires a balance between quantity and quality indicators.

This result is in line with stakeholder theory that CSR disclosure will bridge the interests of the company towards stakeholders. Companies attempt to address the different interests of stakeholders regarding economic, environmental, and social resource issues by targeting appropriate stakeholder engagement through CSR disclosure in sustainability reporting (Kealy, 2020). Measurement and disclosure of CSR against the SDGs helps businesses to better engage stakeholders, improve sustainable decision-making, and strengthen contributions to the SDGs (Galeazzo et al., 2023).

This study suggests companies disclose CSR activities to gain social approval, aligning with legitimacy theory. By showing social and environmental responsibility, these disclosures can help achieve the SDGs, as supported by other research (Abdurrahman et al. (2022); Yuliasih & Susetyo (2020))

4.2.2. The Effect of Environmental Performance on Achieving Sustainable Development Goals

Based on the research results, environmental performance has a positive influence on the achievement of SDGs. The higher the PROPER rating, which shows that the better the environmental performance of a company, the achievement of SDGs from basic and chemical industry companies will also increase. The environmental development pillar of the SDGs contains six goals, which is the most compared to the goals in the other four development pillars, where environmental factors are the main focus to support the achievement of the SDGs themselves.

These results are in line with legitimacy theory that companies that have good environmental performance will gain legitimacy from society. This form of legitimacy is obtained through the PROPER rating given by the Ministry of Environment and Forestry (KLHK). PROPER encourages companies to always carry out improvements in the company's environmental performance by disclosing all forms of activities regarding broader sustainable development goals (Kustina & Hasanah, 2020).

Good environmental performance will strengthen the company's relationship with stakeholders. Based on stakeholder theory, achieving good environmental performance is one way to fulfill its responsibilities to stakeholders. Obtaining support from these stakeholders encourages the achievement of SDGs by the company. The results of this study are in accordance with Ibrahim et al. (2023) which states that environmental performance has a positive effect on SDGs. While the results of this study are not in accordance with Yuliasih & Susetyo (2020).

4.2.3. The Effect of Internal Corporate Governance on Achieving Sustainable Development Goals

Based on the research results, Internal Corporate Governance represented by CEO non-duality, board independence, and board attendance shows a different influence on the achievement of SDGs. CEO non-duality has a positive influence on the achievement of SDGs, which means that the achievement of SDGs by basic and chemical industry sector companies will increase if there is no dual position by the same individual as chairman of the board of directors as well as commissioner. The results of this study are in line with

legitimacy theory and agency theory. Findings by Wijethilake & Ekanayake (2020) menunjukkan bahwa apabila terjadi CEO duality yang merupakan kondisi kebalikan dari non-CEO duality within the company may result in a negative relationship with legitimization by others of the company. In terms of agency theory, CEO non-duality can increase transparency and clear leadership (Sivathaasan N & Achchuthan S, 2014). Thus, the non-duality of the CEO or the absence of concurrent positions between the chairman of the board of directors and the commissioner will increase the legitimacy obtained by the company because there is a clear separation of authority in the structure of the board of directors as the party making sustainability decisions in the company that encourages the achievement of the SDGs. This result is in accordance with research by Ferrero & Meca (2020) which states that CEO non-duality has a positive effect on SDGs.

Board independence has no influence on the achievement of SDGs. Board independence as measured by the proportion of independent directors to the total number of directors has no effect on the achievement of SDGs because not all companies in the basic and chemical industry sector have independent directors in the board of directors structure. This is due to the fact that in 2018 the Indonesia Stock Exchange (IDX) removed the obligation of companies to have at least one independent director which was previously regulated through POJK Number 33 / POJK.04 / 2014. According to Ardillah (2022), This lack of role of independent directors results in decisions being more influenced from within the company. In addition, independent directors pay little attention to sustainability reporting, especially in traditional economies where information retrieval is based on financial information alone (Ardillah, 2022). This research is in accordance with Setyawan et al. (2022) and Ardillah (2022) which states that board independence has no effect on the achievement of SDGs and is not in accordance with research by Ferrero & Meca (2020).

Board attendance has no influence on the achievement of SDGs. The reason why board attendance as measured by the number of board meetings per year does not show a significant influence on the achievement of SDGs can occur because the average sample of basic and chemical industry companies holds twelve board meetings a year, but with a different number of disclosures of SDGs goals per company. This happens because based on POJK Number 33 / POJK.04 / 2014, companies listed on the Indonesia Stock Exchange (IDX) are required to hold meetings at least once every month so that the same average value is obtained from the number of meetings of basic and chemical industry companies after carrying out these obligations. The results of this study are in line with Setyawan et al. (2022) which states that board attendance has no effect on the achievement of SDGs.

4.2.4. The Effect of Leverage on Achieving Sustainable Development Goals

Based on the research results, the leverage control variable has no influence on the achievement of SDGs. Leverage as measured using the debt to equity ratio (DER) represents the relationship between the amount of long-term debt of a company and the amount of capital owned by the company. The greater the DER ratio, reflecting the lower solvency so that the company's ability to pay its debts is low, and vice versa (Silanno & Loupatty, 2021). The cause of leverage does not affect the achievement of the SDGs, because based on the following UNTCAD (2021), Debt management is an obstacle in supporting the achievement of SDGs in developing countries. In addition, the leverage value of basic and chemical industry companies also shows the existence of outliers (data whose values are significantly

different from other data) so that the overall solvency of the company varies. The results of this study are in accordance with Ferrero & Meca (2020) which states that leverage as a control variable has no effect on the achievement of SDGs..

4.2.5. The Effect of Size on Achieving Sustainable Development Goals

Based on the research results, the control variable size or company size represented by the natural logarithm of the company's total assets has no influence on the achievement of SDGs. The reason why size has no effect on the achievement of SDGs is because the basic and chemical industry company sector consists of a fairly wide distribution of company sizes and companies with larger sizes do not always disclose more SDGs goals than smaller companies. The results of this study are in accordance with Ferrero & Meca (2020) which states that size as a control variable has no effect on the achievement of SDGs.

5. CONCLUSION

The study investigated how CSR disclosure, environmental performance, and internal governance affect achieving SDGs in Indonesian basic and chemical companies (2018-2022). The investigation found that CSR disclosure, good environmental performance (PROPER rating), and having a CEO with no other leadership roles (CEO non-duality) positively impact achieving SDGs. Other governance aspects and company size/leverage did not have a significant effect. The study suggests focusing on these three factors (CSR disclosure, environmental performance, CEO non-duality) for companies aiming to improve their contribution to SDGs.

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CIMORY DAIRY LAND PRIGEN TOURIST DESTINATION WITH LEISURE PARK CONCEPT IN CATTLE FARMING IN PASURUAN

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Abstract

Cimory Dairy Land Prigen, located in Pasuruan Regency, East Java, carries the concept of a leisure park with a focus on cattle farming. This concept attracts various groups, ranging from families to tourists who are interested in the milk production process and farm life. This study aims to examine the application of the leisure park concept in Cimory Dairy Land Prigen, as well as its impact on visitor education and the local economy. This research also aims to identify development strategies that can increase the attractiveness and benefits of this destination. This research used a descriptive qualitative approach with data collection methods through in-depth interviews, direct observation, and document analysis. Interviews were conducted with managers, staff, and visitors, while observations were made to understand visitor interactions with existing facilities. Data were analyzed through reduction, presentation, and conclusion drawing to provide a comprehensive picture of the implementation of the leisure park concept in Cimory Dairy Land Prigen. The results showed that Cimory Dairy Land Prigen successfully implemented the leisure park concept well. This destination offers various educational and recreational activities such as farm tours, milking, and interaction with farm animals. Adequate infrastructure and supporting facilities such as restaurants and souvenir shops add to the convenience of visitors. The positive impact on the local economy is also evident from the support for micro, small and medium enterprises around the tourism area.

Keywords: Tourism Destination, Cimory Dairy Land Prigen, Recreation Park

1. INTRODUCTION

Cimory Dairy Land Prigen, located in Pasuruan Regency, East Java, is one of the tourist destinations that carries the concept of leisure park with a focus on cattle farming. This destination offers a unique experience that combines education, recreation and nature in one place. With a soothing mountain backdrop, Cimory Dairy Land Prigen provides an ideal atmosphere for a vacation with family and friends. One of the main attractions of Cimory Dairy Land Prigen is the opportunity for visitors to learn about the process of cow milk production from start to finish. Starting from raising dairy cows, milking process, to processing milk into various dairy products, visitors can see firsthand and even participate in some activities. This education is not only interesting for children but also for adults who want to know more about cattle farming and the dairy industry (Prastawa, 2020).

In addition to education, Cimory Dairy Land Prigen also offers various recreational facilities that can be enjoyed by all family members. There is a children's play area equipped with various safe and fun rides. The spacious and green park also provides a place to relax while enjoying the beautiful natural scenery. Visitors can take a walk around the farm, interact with the animals, or simply enjoy the fresh air (Khasbiya et al., 2018). Cimory Dairy Land Prigen is also famous for its high-quality dairy products. Here, visitors can taste a

variety of fresh milk products, yoghurt, cheese, and various milk-based snacks made directly on site. These products are not only delicious but also healthy as they are produced with high hygiene and quality standards. It is no wonder that many visitors make dairy products from Cimory Dairy Land a must-have souvenir.

Another unique feature of Cimory Dairy Land Prigen is the integration of the concept of animal husbandry and tourism, which successfully creates a holistic and fun experience. The management of this place fully understands the importance of providing useful education as well as exciting entertainment. Therefore, various programs and activities are designed in such a way that visitors not only get entertainment but also valuable knowledge. Activities such as cheese-making workshops, farm tours and dairy-based cooking classes are in high demand (Nofiyanti, 2018). In addition, Cimory Dairy Land Prigen also plays an important role in developing the tourism sector in Pasuruan. With this destination, many tourists come to Pasuruan and have a positive impact on the local economy. Micro, small and medium enterprises (MSMEs) around the tourist area also benefit from the increased number of visitors. Thus, Cimory Dairy Land Prigen is not only a popular tourist destination but also contributes to the welfare of the local community (Hergert & Morris, 1989).

Cimory Dairy Land Prigen is a perfect example of how a leisure park concept that combines education and recreation can be successfully implemented. This destination offers a different and memorable experience for visitors, both in terms of education, entertainment, and culinary. With all its uniqueness and advantages, it is not surprising that Cimory Dairy Land Prigen has become one of the favorite tourist destinations in East Java, especially for those who want to enjoy the beautiful rural atmosphere while getting valuable educational experiences.

The novelty of this research lies in the application of the leisure park concept that combines education and recreation in the context of cattle farming at Cimory Dairy Land Prigen, Pasuruan. This research highlights how this tourist destination not only offers an entertainment experience, but also provides education about the milk production process and daily life on a cattle farm. By presenting various interactive activities such as farm tours, milking, and animal feeding, Cimory Dairy Land Prigen creates an educational as well as fun experience for visitors. This research also identifies the positive impact of this destination on the local economy, especially in supporting micro, small and medium enterprises (MSMEs) around the tourist area. The approach used in this research, which is descriptive qualitative, provides an in-depth understanding of the implementation of the leisure park concept in the field of cattle farming, which is a unique and innovative combination in the tourism sector in Indonesia.

2. RESEARCH METHODS

This research uses a descriptive qualitative approach to deeply understand the concept and implementation of Cimory Dairy Land Prigen as a leisure park-based tourist destination in the field of cattle farming in Pasuruan. The research location was Cimory Dairy Land Prigen, Pasuruan, East Java, which was chosen because it is one of the well-known tourist destinations that combines the concept of leisure park with cattle farming. The data sources of this research consisted of primary data and secondary data. Primary data was obtained through in-depth interviews with managers, staff, and visitors of Cimory Dairy Land Prigen.

Secondary data consisted of official documents, annual reports, brochures, official websites, and relevant literature on leisure park and cattle farming (Prastawa, 2020).

Data collection techniques included semi-structured interviews, on-site observation, and collection of related documentation. Interviews were conducted to obtain in-depth information about the concept, implementation, and visitor experience. Observations were made to see the operation of the cattle farm and leisure park as well as the interaction between visitors and the facilities. Documentation was collected and analyzed to support this research. The collected data were analyzed through the steps of data reduction, data presentation, and conclusion drawing. Data reduction is done to simplify the data obtained, data presentation in the form of narratives, tables, or diagrams, and drawing conclusions based on the results of data analysis that has been presented, as well as providing relevant recommendations (Porter, 2001).

3. RESULTS AND DISCUSSION

3.1. Research Results

3.1.1. Application of Leisure Park Concept in Cimory Dairy Land Prigen

Cimory Dairy Land Prigen, located in Pasuruan, East Java, has successfully implemented the leisure park concept in cattle farming, making it an attractive and educational tourist destination. The leisure park concept implemented at Cimory Dairy Land Prigen integrates elements of education, recreation and direct interaction with cattle farming, creating a unique experience for visitors of all ages.

a. Design and Infrastructure

The implementation of the leisure park concept begins with adequate design and infrastructure. The Cimory Dairy Land Prigen area is designed with visitors' comfort and safety in mind. There are various zones devoted to various activities, such as the cow milking area, children's play area, and an educational zone that explains the milk processing process. Well-organized paths facilitate access between zones, while large green areas add a natural and refreshing impression. Supporting facilities such as restaurants, cafes and souvenir shops are also available, offering a variety of dairy products from the farm itself. The rustic and agricultural theme of the building design gives it an authentic feel, making visitors feel like they are truly in a beautiful farm environment.

b. Activities and Attractions

One of the main attractions of Cimory Dairy Land Prigen is the variety of activities and attractions on offer. Visitors can take a farm tour guided by experienced staff. On this tour, they are introduced to various aspects of cattle farming, from the rearing to the milking process. Visitors are also given the opportunity to try their hand at milking a cow, a very exciting experience especially for children. In addition, there is an animal interaction area where visitors can feed and interact with cows as well as other animals such as goats and rabbits. This activity is not only fun, but also educational, providing knowledge about farm animals and the importance of animal welfare. The education zone at Cimory Dairy Land Prigen is equipped with various information about the milk processing process, from milking

to the final product. Visitors can see firsthand the process of making dairy products such as yogurt and cheese, as well as taste the fresh processed products.



Source: Processed by researchers, 2024

Figure 1. Supporting facilities of Cimory Dairy Land Prigen

c. Management and Operations

The management of Cimory Dairy Land Prigen is very professional, prioritizing visitor comfort and satisfaction. Daily management includes maintaining the cleanliness and security of the tourist area, as well as providing adequate facilities for visitors. Friendly and knowledgeable staff are ready to help and provide information needed by visitors. The operational policies implemented also include sustainability aspects. The cattle farm at Cimory Dairy Land Prigen implements sustainable agricultural practices, ensuring animal welfare and environmental sustainability. In addition, the use of modern technology in the milk processing process ensures efficiency and high product quality.

3.1.2. Impact on Tourism and Local Economy

Tourism development can have a significant impact on the local economy, with effects on both economic and socio-cultural aspects of the community. Studies on destinations such as Kampung Naga (Zunaidi et al., 2022), Bergville (Zunaidi et al., 2022), and Sindu Kusuma Edupark (Rahmasari et al., 2022) highlight varied outcomes. While tourism can boost local economies by creating jobs, increasing income, and improving infrastructure, it can also lead to income inequality, lack of skills required for full benefit realization, and congestion issues. The influence of the tourism sector goes beyond economic factors, affecting socio-cultural aspects and environmental sustainability (Nepomnyashchyy et al., 2022). To ensure sustainable development, it is crucial for local communities, tourism authorities, and the private sector to collaborate effectively, involving locals in decision-making, providing necessary training, and promoting responsible tourism practices.

a. Increased Number of Visitors

The development of Cimory Dairy Land Prigen as a leisure park-based tourist destination has had a significant impact on increasing the number of visitors in the Pasuruan region. Prior to the transformation into a leisure park, visits to this area were more limited and usually only attracted tourists who had a special interest in the cattle farming industry. However, after the leisure park concept was implemented, the attractiveness of this destination increased rapidly. The more complete facilities and more diverse activities are able to attract various segments of tourists, ranging from families, students, to the nature

lovers community. Statistical data shows a significant spike in the number of visitors, especially on weekends and holiday seasons, which in turn increases Pasuruan's popularity as a major tourist destination.

b. Local Revenue

The economic impact of the development of Cimory Dairy Land Prigen is also very visible on local income. An increase in the number of tourists visiting directly correlates with an increase in spending in related sectors, such as accommodation, restaurants, transportation, and shopping. Tourists who visit Cimory Dairy Land Prigen not only spend their time inside the leisure park area, but also explore the surrounding area, stay at local hotels, and enjoy Pasuruan's culinary specialties. This provides multiple economic benefits for local residents involved in these sectors. In addition, the presence of souvenir shops and local products within the tourist area provides opportunities for local MSMEs to market their products, so that the wheels of the local economy turn faster and wider.

c. Employment Opportunities

One very important positive impact of the development of Cimory Dairy Land Prigen is the creation of new jobs. With the increase in tourism activities, the demand for labor in various sectors also increases. New jobs are not only created in the daily operations of the leisure park, such as tour guides, cleaners, and administrative staff, but also in supporting sectors such as hospitality, transportation, and food services. These impacts provide direct benefits to the surrounding communities by lowering unemployment rates and improving their living standards. Training and skills development programs organized by the management also help improve the quality of local human resources, so that they can contribute more optimally in the growing tourism industry.

d. Social and Cultural Impact

In addition to the obvious economic impacts, the development of Cimory Dairy Land Prigen also has significant social and cultural impacts. With the increasing number of tourists, interactions between local residents and visitors from different cultural backgrounds have intensified. This opens up opportunities for positive cultural exchange, where local communities can introduce their traditions, customs and local wisdom to tourists. On the other hand, local communities can also learn and take inspiration from cultural practices and new ideas brought by visitors. Educational activities held at Cimory Dairy Land Prigen, such as farm tours and workshops on milk processing, also provide educational benefits for visitors, especially children and students, who get a fun and informative out-of-class learning experience.

e. Challenges and Solutions

The development of Cimory Dairy Land Prigen tourist destination with the concept of leisure park in the field of cattle farming in Pasuruan presents a number of challenges that require strategic and innovative solutions. These challenges include operational, environmental, social and sustainability aspects.

a) Operational Aspects

1) Operational Challenges

One of the main challenges in managing Cimory Dairy Land Prigen is ensuring that daily operations run smoothly, especially in managing the interaction between visitors and farm animals. Managing operations involving live animals requires special attention to animal health and welfare. In addition, facilities such as cages, feeding areas, and milking parlors must always be in good condition to ensure the safety and comfort of both animals and visitors.

2) Operational Solutions

To overcome this challenge, the management of Cimory Dairy Land Prigen applies strict Standard Operating Procedures (SOP) in animal care and facility maintenance. Periodic training for staff on animal care and handling emergency situations is also conducted to ensure they are prepared to deal with various conditions. In addition, the management also works closely with veterinarians to conduct routine check-ups and provide necessary medical care for the farm animals.

b) Environmental Aspects

1) Environmental Challenges

The presence of thousands of visitors every month poses significant environmental challenges, including waste management, air pollution and land degradation. Heavy tourist activity can lead to an increase in organic and inorganic waste, which if not managed properly, can pollute the surrounding environment.

2) Environmental Solutions

As a solution, Cimory Dairy Land Prigen implements an integrated waste management program. Organic waste from animals and visitors is processed into compost that can be used for local agricultural purposes. Meanwhile, inorganic waste such as plastic and paper are collected separately and recycled. The management also conducts reforestation in the surrounding area to prevent erosion and maintain the balance of the ecosystem.

c) Social Aspects

1) Social Challenges

Interactions between visitors and local communities can lead to various social problems. The presence of large numbers of tourists can disrupt the daily lives of local residents and lead to conflicts of interest. In addition, visitors' knowledge and understanding of animal husbandry and conservation is often minimal, which can lead to irresponsible behavior towards farm animals.

2) Social Solutions

To address this social challenge, Cimory Dairy Land Prigen initiated an education and community engagement program. The program includes educational activities designed to raise visitors' awareness of the importance of animal welfare and sustainable farming practices. In addition, the management also holds dialog forums with local residents to ensure that the presence of this tourist destination provides economic and social benefits for

them. For example, local residents are given the opportunity to participate in economic activities such as the sale of local products in the tourist area.

3.2. Discussion

3.2.1. Application of Leisure Park Concept in Cimory Dairy Land Prigen

The Leisure Park concept is a type of tourist destination designed to provide recreational and leisure activities for visitors. Leisure parks often incorporate natural and cultural elements, such as parks, gardens and historical landmarks, to create a pleasant and relaxing environment. Leisure parks can be designed using a variety of architectural styles, including Neo-Vernacular Architecture, which emphasizes integration with the local natural and cultural context (Rahman & Ginting, 2020). In the context of urban areas, Leisure Parks can also serve as spaces for "hipster recreation" that cater to the preferences of affluent and trendy individuals, often in areas experiencing gentrification (Rich & Sharpe, 2024).

Leisure Parks can be integrated with other tourist attractions, such as agritourism farms, to offer a diverse range of activities and experiences. Overall, Leisure Parks are designed to improve the quality of life for tourists and local residents by providing spaces for recreation, relaxation and fun. Cimory Dairy Land Prigen is one of the leading tourist destinations in Pasuruan that carries the leisure park concept with a focus on cattle farming. This place offers a variety of interesting educational and recreational activities for visitors.

Table 1. SWOT analysis of Cimory Dairy Land Prigen

Strengths	Weaknesses
1. Unique combination of education and recreation 2. Interactive experience with farm animals 3. Support for local MSMEs 4. Improve community understanding of cattle farming	1. Dependence on weather 2. Limited land capacity 3. Complex operational management 4. Environmental challenges
Opportunities	Threats
1. Increased interest in educational tourism 2. Development of additional facilities 3. Cooperation with educational institutions 4. Digital marketing to reach more visitors	1. Competition with other tourist destinations 2. Negative impact on local communities 3. Changes in regulations related to livestock and tourism 4. Economic fluctuations affecting visitor purchasing power

Source: Processed by researchers, 2024

Cimory Dairy Land Prigen has strengths in terms of strategic location in Prigen which is easily accessible to tourists from various regions. The uniqueness of the concept of cattle farm-based tourism with complete facilities such as farm tours, direct interaction with animals, and milking activities makes it a special attraction. The existence of educational facilities that present the process of milk production from the beginning to become a product ready for consumption adds more value. One of the disadvantages faced is the dependence

on the weather. As an outdoor destination, tourism activities in Cimory Dairy Land Prigen are highly influenced by uncertain weather conditions, especially rain that can disrupt visitor activities. In addition, the limited land capacity can limit the number of visitors, especially during the holiday season.

Opportunities that can be utilized include the increasing public interest in educational and nature tourism. Tourism trends that focus on unique and educational experiences provide great opportunities for Cimory Dairy Land Prigen to grow. Partnerships with schools and other educational institutions for educational tourism programs are also opportunities that can be developed. Threats include competition with other tourist destinations that also offer similar concepts. In addition, changes in government regulations related to the tourism industry and the environment may affect the operation and sustainability of this tourist spot. (Zogning, 2017).

Within the framework of market orientation, Cimory Dairy Land Prigen should focus on understanding the needs and wants of the market. According to Hulley, market orientation involves three main components: customer orientation, competitor orientation, and cross-functional coordination. Cimory Dairy Land Prigen should actively listen to feedback from visitors to continuously improve the quality of services and facilities. In addition, a deep understanding of competitors' strategies and advantages can help in developing a sustainable competitive advantage. Coordination between various departments within the organization is also crucial to ensure all operational aspects run well and in accordance with the strategies that have been set (Suraweera et al., 2004).

Agency theory highlights the relationship between owners and managers (agents) in an organization. At Cimory Dairy Land Prigen, it is important to ensure that management acts in accordance with the interests of owners and other stakeholders. The implementation of an appropriate incentive system can help align managers' interests with company goals. For example, providing performance-based incentives to managers can motivate them to achieve higher operational and financial targets. In addition, transparency and effective communication between owners and management are important to reduce conflicts of interest and ensure decisions are aligned with the company's vision and mission (Jensen, 1994).

Porter's value chain analysis identifies the main and supporting activities that can create value for customers. In Cimory Dairy Land Prigen, the main activities include inbound logistics (procurement of feed and farm equipment), operations (cattle farming process and milk production), outbound logistics (distribution of dairy products), marketing and sales (promotion and sales of tourist tickets), and service (visitor services during visits). Supporting activities include procurement, technology development, human resource management, and firm infrastructure (Porter's, 1985).

Each of these activities should be optimized to create maximum value for visitors. For example, the use of advanced technology in the farming process can improve the efficiency and quality of dairy products. Good human resource management ensures employees are highly skilled and motivated to provide the best service to visitors. Adequate and comfortable infrastructure also contributes to a positive tourism experience.

3.2.2. Impact on Tourism and Local Economy

Cimory Dairy Land Prigen tourist destination in Pasuruan with the concept of a leisure park based on cattle farming has a significant impact on tourism and the local economy. Cimory Dairy Land Prigen has several key strengths that support its attractiveness as a tourist destination. The strategic location in Pasuruan, good accessibility, and a widely recognized brand as a producer of dairy products add to the attractiveness of tourists. In addition, the leisure park concept that combines education and recreation provides a unique added value. Good infrastructure, complete facilities, and interactive programs such as farm tours, milking, and direct interaction with cows make the tourist experience more interesting and educational. Weaknesses faced by Cimory Dairy Land Prigen include dependence on the weather, as most activities are conducted outdoors. In addition, the high cost of operating and maintaining the animals can be a financial burden. There are also challenges in maintaining the health of the animals and the cleanliness of the tourism area, which if not managed well can damage the image and attract complaints from visitors.

Leisure parks that focus on developing environmentally friendly tourism can increase public awareness of the importance of nature conservation and animal protection. This can help increase public awareness in protecting the environment and reduce the negative impacts of tourism activities (Sulistyo et al., 2023). There are many opportunities that can be utilized by Cimory Dairy Land Prigen. The increasing trend of educational tourism and agro-tourism provides great market potential. Collaboration with schools and educational institutions can increase the number of student visits. Development of milk derivative products and souvenirs can increase revenue. In addition, with the increasing awareness of local and environmentally friendly products, Cimory can develop sustainable programs that can attract more visitors. Key threats include competition from similar tourist destinations, changes in government policies related to agribusiness and tourism, and potential disease outbreaks that could affect animal health. Extreme climate change can also affect operations and visitor comfort.

The market orientation approach underscores the importance of understanding market needs and wants. Cimory Dairy Land Prigen has successfully identified market segments interested in farm-based educational and recreational tourism. By continuously conducting market research and customizing its offerings according to customer preferences, Cimory can increase visitor loyalty and expand its customer base. The implementation of market orientation also encourages managers to continue to innovate in the programs and services offered, ensuring a relevant and satisfying tourism experience. In the context of agency theory, it is important to consider the relationship between Cimory Dairy Land Prigen's management and its stakeholders, including owners, employees and the local community. This theory highlights the need for alignment of interests between agents (management) and principals (owners/shareholders). Effective management at Cimory should ensure that business operations run efficiently and transparently, reducing potential conflicts of interest. Active engagement with the local community, such as providing employment and supporting micro-enterprises, can increase support and cooperation from the community, which in turn strengthens the business' position in the local market (Misra, 2020).

Porter's value chain analysis helps identify the main and supporting activities that create value for visitors at Cimory Dairy Land Prigen. Main activities such as inbound logistics (procurement of milk raw materials), operations (cattle farming and milk production),

outbound logistics (distribution of dairy products), marketing and sales (promotion of tourism and products), and service (services to visitors) must be optimized to improve efficiency and quality of service. Supporting activities such as infrastructure, human resource management, technology, and raw material procurement also need to be well managed to support the main activities (Amadi & Owolabi, 2024). By integrating each element in the value chain, Cimory can improve its competitiveness and provide a better experience for visitors. For example, by optimizing the use of technology in the production process and farm management, Cimory can improve product quality and operational efficiency. Investing in employee training will also improve customer service, which is crucial in the tourism industry.

3.2.3. Challenges and Solutions

Cimory Dairy Land Prigen has a strong appeal as a cattle farm-based tourist destination, combining elements of education and recreation. Complete and modern facilities are the main strengths that attract various segments of visitors. The existence of supportive natural resources, such as vast land and good air quality, is also a plus point. On the other hand, weaknesses that need to be addressed include operational management that may not be optimal. For example, problems in managing livestock waste, which can have an impact on the surrounding environment if not handled properly. In addition, the lack of employee training and development could affect the quality of service to visitors.

A big opportunity for Cimory Dairy Land Prigen is the growing trend of educational and experiential tourism. In addition, local government support for the development of the tourism and livestock sectors could provide opportunities for assistance and incentives. Technological developments also provide opportunities to promote this tourist destination through various digital platforms. Threats include competition with similar tourist destinations in the East Java region and Indonesia in general. Climate fluctuations and potential disease outbreaks in livestock are also risks that must be anticipated. Rapid changes in traveler preferences also demand constant innovation (Pop et al., 2021).

The market-oriented approach requires Cimory Dairy Land Prigen to always focus on the needs and wants of visitors. By understanding market preferences, managers can develop more interesting and relevant tourism programs. For example, offering interactive farm tour packages or special events such as milk and cheese festivals. By being market-oriented, this tourist destination can retain and attract more visitors.

Agency theory emphasizes the relationship between owners and managers in running a business. It emphasizes the need for mechanisms to align stakeholder interests and mitigate problems such as information asymmetry (Bellavitis et al., 2023). In addition, the agency theory perspective on corporate social responsibility (CSR) underscores how CSR can be a manifestation of agency problems and how good governance practices can help mitigate these problems, leading to higher CSR ratings in companies (Pranawaningsih & Anas, 2021). Overall, the influence of agency theory on corporate governance is evident in promoting transparency, accountability, and effective stakeholder management to improve organizational performance and sustainability. In the context of Cimory Dairy Land Prigen, it is important to ensure that managers who run operations have incentives that are aligned with the owners' objectives. This can be achieved through a fair and performance-based

compensation system, so that managers are motivated to improve operational efficiency and visitor satisfaction (Hulley et al., 2018).

Porter's value chain analysis helps in identifying key and supporting activities that can create added value for visitors (Hu et al., 2023). Key activities such as farm management, milk production, and visitor interaction should be optimized. This includes innovations in milking techniques, cleanliness of pens, and quality of dairy products produced. Supporting activities such as information technology, human resource management, and infrastructure should also be improved to effectively support the main activities. Using the SWOT approach and agency theory, managers need to conduct regular evaluations of the operational management system. For example, establish a data-driven monitoring and evaluation system to ensure efficiency in farm management and visitor services. Managers should be given clear performance targets and appropriate incentives to achieve these targets.

Based on Porter's value chain analysis, employee training and development are important supporting activities. Cimory Dairy Land Prigen should invest more in training programs to improve employees' skills in various aspects, from farm management to customer service. Regular training and professional certification will improve service quality and visitor experience. Environmentally friendly livestock waste management is a challenge that must be overcome to preserve the surrounding environment. Possible solutions include efficient and environmentally friendly waste treatment systems, such as biogas from livestock waste. This not only reduces the negative impact on the environment but also produces alternative energy that can be utilized (Porter's, 1985).

Adopting market orientation, Cimory Dairy Land Prigen must continue to innovate in the products and services it offers. This could include the development of unique dairy products, more interactive tourism experiences, and engaging educational programs. Using feedback from visitors to make continuous improvements is also very important. Utilize digital technology to promote Cimory Dairy Land Prigen more widely and effectively. The use of social media, interactive websites, and mobile applications can help attract more visitors. Creative and data-driven marketing campaigns will also increase awareness and interest in this tourist destination (Jensen & Smith, 2000).

4. CONCLUSION

The application of the leisure park concept in Cimory Dairy Land Prigen has succeeded in creating an interesting educational and recreational experience for visitors. This destination not only provides entertainment but also useful education, and supports the local economy. Further development through product and service innovation and utilization of digital technology is expected to increase the attractiveness and benefits of this destination. This research provides significant practical implications for tourist destination managers and the local economy. Tourism destination managers can utilize the leisure park concept model implemented by Cimory Dairy Land Prigen as an example in developing interesting and interactive educational tourism. Adequate design and infrastructure, as well as interactive programs such as farm tours and educational activities, can increase tourist attractiveness and provide a richer experience for visitors. In addition, Cimory Dairy Land Prigen shows that tourist destinations can have a positive impact on the local economy through the

empowerment of micro, small and medium enterprises (MSMEs) and the absorption of local labor, which improves the welfare of the surrounding community.

Theoretically, this research underscores the importance of an approach that combines education and recreation in the development of tourist destinations. The application of the leisure park concept in Cimory Dairy Land Prigen emphasizes the relevance of market orientation theory and agency theory. The market orientation approach shows the importance of understanding market needs and preferences to develop relevant and satisfying tourism programs. Meanwhile, agency theory highlights the need for alignment of interests between management and stakeholders to ensure efficient and transparent business operations. The implementation of these strategies can improve visitor loyalty and the operational performance of tourist destinations.

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PEER TO PEER LENDING : GENERATION Z ATTRACTION FACTORS AND FUTURE IMPLICATIONS

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Abstract

This study is about the factors of behavioral intention to borrow from the perspective of Generation Z toward peer-to-peer lending. This study applied primary data by collecting surveys distributed to Gen Z on Java Island. The sample used was 44 male respondents and 110 female respondents. Factors that influence borrowing intention were tested with SEM PLS 4.0. The research shows that the variables of utilitarian value, risk perception, and financial literacy are significant to the behavioral intention of Peer To Peer Lending. In addition, the findings show that the variables of convenience and safety do not determine behavioral intention in Peer To Peer Lending. This research also explores how financial technology, such as peer-to-peer lending, can facilitate Generation Z's access to finance. The implications of this research highlight the importance of financial knowledge and planning for Gen Z for its future. These findings provide insights for fintech companies to design products and services that suit Generation Z's specific preferences and needs. The target market for peer-to-peer lending companies needs to be adjusted in their marketing strategies.

Keywords: Behavioral Intention, Financial Technology, Generation Z, Peer To Peer Lending

1. INTRODUCTION

Peer to Peer Lending (P2PL) is part of the fintech revolution that provides alternative funding in the financial industry (Alexander & Karametaxas, 2021). P2PL is considered more inclusive and efficient than conventional loans (Tampubolon, 2019). Official OJK data as of October 2023 states that are 101 companies registered with OJK, with the majority of customers (54%) being Gen Z (OJK 2024). Gen Z faces threats related to high debt ratios, lack of financial awareness, debt dependency, fraud and data security risks, and the future negative impact of Gen Z SLIK. Gen Z is actively adopting P2PL with total loans of IDR28,524 billion as of February 2024 (Statistik P2P Lending Periode Februari 2024, n.d.). This study explores the factors that determine Gen Z's intention to borrow through P2PL based on the UTAUT theory. It also analyzes the extent to which these factors influence Gen Z's intention to use P2PL services. This research also explains the utilitarian value as the dominant factor in Gen Z's behavioural involvement in P2PL.

The characteristics of FoMO (Fear of Missing Out) result in impulsive behavior towards financial needs based on unnatural trends (S. 2023). The OJK Minisite states that Gen Z grew up with digital technology, so they use P2PL platforms to meet their financial needs. According to (Larrimore et al., 2011), P2PL applications include loan description information to convince the lender of the loan's importance and the prospect of repaying

it. Researchers argue that Gen Z's debt intention does not depend on the risk of default but on the degree of acceptance of the use of information technology. Instead, the ease of application encourages Gen Z to behave pityingly so that the loan application is realized. Previous research findings (Michels, 2012) in the United States showed that more unverifiable voluntary disclosures in the loan list affect the loan interest rate. The author explains that borrowers may not know that voluntary disclosures can reduce interest expense and are reluctant to mislead disclosures for interest expense reduction.

Previous research by (Kurniawan, 2019); (Sunardi et al., n.d.) and (Susanti et al., 2020) explained that the intention to use the P2PL system in Indonesia is influenced by several factors, namely trust relationships, risk perceptions, perceived ease, and perceived benefits. (U et al., 2022) proves that trust factors and risk perceptions of the system can influence Mongolian people to borrow funds. In addition, previous research by (Hermansson & Jonsson, 2021) and (Putri et al., 2023) proved that financial literacy and security factors determine the intention to use. Little research focuses on the behavior of Gen Z as the primary user of P2PL.

This study aims to investigate the factors determining the intention to borrow funds through P2PL for Gen Z based on the Unified Theory of Acceptance and Use of Technology (UTAUT) theory. The assumption is that Gen Z behavioral intention is based on perceived elements that facilitate the use of the application. Performance Expectancy is the user's perception regarding the extent to which the use of technology will increase performance in achieving goals. Supported by the results of previous research by (Septiani et al., 2020), farmers are concerned with easy access to funding, and (Kurniadi et al., 2021) transaction efficiency is needed to increase productivity. Effort Expectancy refers to the user's perception of the extent to which technology is considered easy and uncomplicated. As well as (Kurniadi et al., 2021) (Septiani et al., 2020) ease greatly encourages lenders to adopt P2PL, and a detailed explanation of the system and mechanism is essential. Social Influence shows the Influence of the user's environment in promoting or inhibiting the use of technology. In line with the findings, being in the social climate of active P2PL users will encourage its use. Facilitating Conditions refer to environmental factors that can reduce or hinder the use of technology. The extent to which P2PL customization and assistance can affect usage intentions (Kurniadi et al., 2021). On the other hand, researchers argue that the utilitarian value factor will extensively explain Gen Z in terms of the usefulness of P2PL and that these four elements can influence or contribute.

This article is organized in the literature review section, which explains the UTAUT theory and its practice in Indonesia. This is followed by hypothesis development, detailing the research methods and results, and concluding with conclusions, limitations, and suggestions.

2. THEORETICAL FOUNDATION

2.1. Unified Theory of Acceptance and Use of Technology (UTAUT)

The UTAUT model was proposed by Viswanath Venkatesh et al. in 2003 (Venkatesh et al., 2003). UTAUT is built based on eight models: TAM/TAM2, IDT, TRA, TPB, MM, c-TAM-TPB, MPCU, and SCT (Venkatesh et al., 2003). This model has four main variables that significantly affect user acceptance and use behavior: performance expectancy, effort

expectancy, social influence, and facilitating conditions (Venkatesh et al., 2003). UTAUT is a theoretical framework established to estimate the factors that determine technology adoption and use (Menon & Shilpa, 2023). In addition, UTAUT highlights the importance of understanding users' attitudes and beliefs toward loans and shaping their behavioral perceptions regarding social norms and cultural values. Gen Z has beliefs related to the results obtained from the frequent use of information technology. This theoretical framework model is relevant for understanding Gen Z behavior in P2PL. With the variables in it, we can identify and understand the extent to which Gen Z factors accept and use it. Some literature on financial technology has used UTAUT in various research situations, such as e-learning, e-banking, and e-commerce (Ayaz & Yanartaş, 2020). This study uses five determinants related to the main factors in the UTAUT theory. In addition, UTAUT has moderating factors such as gender, age, experience, and various moderating factors to adjust usage (Usman, 2022). In this case, the UTAUT model is a valuable guide to more broadly examine behavioral factors in platform success.

2.2. Convenience Factor

The convenience factor measures a person's trust in adopting technology. According to (Kurniawan, 2019), the use of fintech services presents convenience to users and has a positive effect on consumer intentions.

Based on the results of previous research, including research by (Sunardi et al., 2021); (Yohanes et al., 2020); (Setiawan & Setyawati, 2020), it was found that the use of fintech services that provide convenience has a positive effect on customer behavior. In other words, when a fintech service is designed to be easy for customers to use, it encourages them to use it better. Ease of use, namely the perception of simplicity, convenience, and understanding of the loan process, affects the intention to use the service (Sunardi et al., 2021). These findings support the importance of ease of use in various financial technologies, including mobile payment systems and online banking. In contrast to the findings (U et al., 2022), the convenience variable has no effect. Ease is a conviction that utilizing the system does not necessitate additional exertion.

Researchers argue that the registration process, loan application procedures, methods of access to information about borrowers, and the required payment process manifest the application's ease of use.

H1: Convenience does not affect the behavioral intention of P2PL borrowers.

2.3. Security Factor

The convenience According to (Stewart & Jürjens, 2018), concerns about security in using fintech in addressing the dynamics of rapid and continuous fintech innovation, such as information security management systems in international standards. Security in P2PL is an important aspect that users need to pay attention to in order to protect personal data security.

According to previous research from (Putri et al., 2023), if user information is protected, it will increase service usage. So, the guaranteed user database security system service will lead to continuous use. (U et al., 2022) proves that security does not affect his research.

H2: Security of use does not affect the behavioral intentions of P2PL borrowers.

2.4. Utilitarian Value Factor

The use of P2PL has received significant attention lately for its benefits, especially for Gen Z. Retrieved from to (Overby & Lee, 2006), utilitarian value represents a holistic evaluation of practical advantages and costs. Meanwhile, according to (Kim et al., 2023), utilitarian value is another aspect of consumption value, which is related to efficiency, task completion, and economic aspects of products and services. Overall, both studies agree that utilitarian value is essential to user decision-making. Individuals will evaluate the benefits obtained and the functional sacrifices that must be made when using. So, it is necessary to test this variable on Gen Z, which tends to be FOMO. According to the literature (Sungkana et al., 2019), the benefits of technology provide flexibility and convenience and positively affect trust. A product will be complementary if it understands that it provides benefits, but on the contrary, if it does not, it will lose user trust. According to research results (Susanti et al., 2020), utilitarian value Favorably and substantially affects borrowing intentions.

H3: Utilitarian value positively affects the behavioral intention of P2PL borrowers.

2.5. Risk Perception Factor

The most significant factor in determining consumers' adoption of financial technology is the perception of risk (Hanafizadeh et al., 2014). (Zhang et al., 2011) risk perception reflects how strongly consumers believe there is a possibility of certain risks, such as financial, social, psychological, physical, or time risks, when deciding to use a service. The author argues that the two researchers consistently perceive risk perception as an essential factor in consumers' adoption of financial technology. High-risk perception can hinder fintech adoption, while low-risk perception can encourage adoption. In other words, known risks are ignored because the benefits obtained now tend to be more attractive.

Testing using the risk perception factor on Gen Z subjects is essential because, from OJK data, borrowers are dominated by Gen Z. Perception of risk for P2PL users can negatively affect and also become an obstacle to using P2PL. According to the literature (Sungkana et al., 2019), financial risk results in monetary losses that are felt from the beginning of the product purchase until the end. In addition, the results of previous research in the literature (Sungkana et al., 2019) show that financial risks such as fear of overcharging, losing money, and disclosing card information hurt customer satisfaction. The research aligns with the results (U et al., 2022) found that risk perception has a negative effect.

H4: Perceived risk positively affects the behavioral intention of P2PL borrowers.

2.6. Financial Literacy

(OJK. 2023) argues that financial understanding influences attitudes and actions, including each individual's knowledge, ability, and belief to improve quality in making conclusions and managing finances to achieve public financial satisfaction. Literacy according to the book (Setiawan 2018), financial knowledge is a significant determinant of the determination of financial goals for business organizers. According to (Hidajat, 2020), young people need help understanding how to calculate the loan amount and interest rate if they default. Moneytary management skills in decision-crafting and moneytary management must be emphasized to young people, especially Gen Z, so they can manage adequately and avoid financial risks such as outstanding debt and SLIK. The finding that financial

knowledge affects behavioral intentions refers to the findings of previous research (Hermansson & Jonsson, 2021).

H5: Financial literacy is significant to the behavioral intention of P2PL lenders.

3. RESEARCH METHOD

This research adopts a numerical approach to Examine and depict the impact of the predictor variables, which consist of convenience, security, utilitarian value, perceived risk, and financial literacy, on the dependent variable, namely behavioral intention. Accordingly, the conceptual model for this investigation is shown in Figure 1.

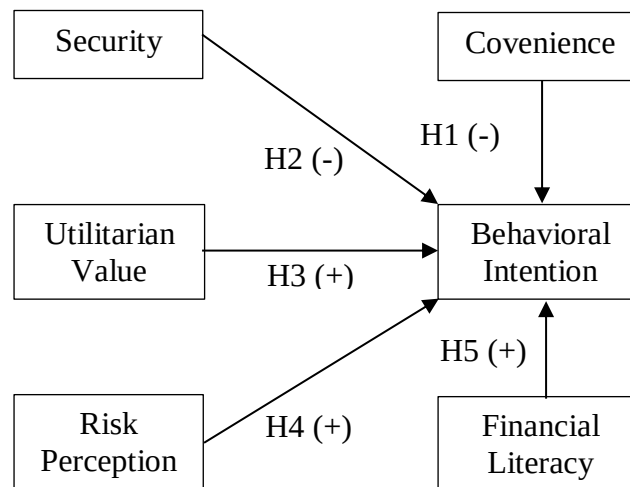


Figure 1. Research Theoretical Framework

Based on the 154 observations gathered, table 1 displays an overview of the characteristics of the individuals who are the subjects of this study.

Table 1. Characteristics of Respondents

	Frequency	%
Gender	44	28.6
Male	110	71.4
Female		
Monthly Income		
<IDR2,000,000	86	55.8
IDR2.000.000 - IDR10.000.000	68	44.2
Know Type of Application		
Modalku	37	24.0
6 Other Applications	117	76.0
Domicile		
Banten	16	10.4
West Java	40	26.0
DK Jakarta	40	26.0

Central Java	27	17.5
DI Yogyakarta	28	18.2
East Java	3	1.9

Source: Results of research data processing 2024

As illustrated in Table 1, the survey participants included 110 female respondents (71%) and 44 male respondents (29%). The data in the table indicates that 86 respondents, which represents the majority (56%) have a monthly income of less than IDR2,000,000. A total of 45 respondents (29%) have a monthly income of IDR2,000,000-IDR4,000,000. For Gen Z, this amount can be considered small or large depending on the geographical location and Gen Z's various needs. It is essential to be cautious if you possess insufficient financial knowledge and skills to effectively handle their fiscal matters because Gen Z is prone to hedonism. Moreover, the information contained in this tabular summary reveals (127 participants 82%) are aware of the P2PL application.

Moderation test analysis on income, gender, and known apps with the following effects. The determination of utilitarian value on behavioral intention has a more robust and significant influence on respondents with an income of more than 2 million. Likewise, the impact of utilitarian value on behavioral intention has a more robust and significant impact on male respondents. Meanwhile, the modalku application has a more substantial effect on financial literacy and behavioral intentions.

The population of this study is Gen Z, who were chosen as respondents because, based on OJK data, the majority group of loan users became outstanding. In addition, Gen Z is the largest population in Indonesia, and it can represent the use of information technology, so it is prone to being trapped in hedonism.

The study used a purposive sampling technique to obtain a representative sample. Respondents must meet the criteria: be domiciled in Java Island, aged between 11 and 26, and have borrowed or not. This study obtained sample data that had been selected as many as 154 people.

3.1. Data Collection

The present research utilized original data acquired by means of dissemination an digitally survey to Gen Z in Java Island and collected 154 respondent data points. The questionnaire, adopted from previous research, contained questions about convenience, security, utilitarian value, risk perception, financial literacy, and behavioral intention of Gen Z.

3.2. Variable Measurement

In research, using fintech services presents convenience to users and positively affects consumer intentions (Kurniawan, 2019). Fintech convenience will be assessed through the registration process, loan application procedures, how to access borrower information, and the required payment process (Emanuela et al., 2018). The convenience variable measurement contains six statements applied from research (Susanti et al., 2020). Each statement is rated through a 5-level rating scale. The security variable describes how users feel financial innovation is safe for their data. The measurement of the security variable comprises four items adapted from (Sitorus, 2021) and evaluated through a 5-point rating

scale. Grounded in the UTAUT framework, the intention to behave variable describes the view. Utilitarian value is another part of consumption value, along with efficiency, task completion, and economic value of direct products and services.

The assessment of the utilitarian value variable consists of six statements applied from (Susanti et al., 2020) and is quantified on a 5-point rating scale. The factor of perceived risk describes how users feel financial innovation is safe for their data. The assessment of the security-related factor is composed of seven items adapted from (Sitorus, 2021) and evaluated through a 5-point rating scale. Moneytary knowledge is another part of consumption value, along with efficiency, task completion, and economics of direct products and services. The assessment of the financial literacy factor is composed of three items adapted from (Sitorus, 2021) and is assessed by applying a Likert scale totaling five points.

3.3. Data Analysis

This research commenced by examining certain data pertaining to the participants' demographics, including gender, residence, age, and earnings. Furthermore, this study used the Partial Least Square (PLS) analysis model to examine the relationship between variables. The PLS scheme is used with the observation that it can be applied to the entire measurement scale without requiring many hypotheses or a large sample (Hair et al., 2017). Data analysis was conducted using SEM PLS 4.0 facilitated. Assessments encompassed measuring the outer model, inner model, and hypothesis testing.

Outer model assessment is applied with two tests: validity and reliability. Variable validity is determined by examining the outer model loadings and Average Variance Extracted (AVE) values. A variable is deemed valid if the outer loadings exceed 0.7 and the AVE value is 0.5 or greater (Hair et al., 2017). However, the outer loading score is above 0.5, so the variable indicator can still be considered. Then, the reliability test is assessed based on the composite reliability value. A variable is considered reliable if its composite reliability value exceeds 0.7.

The inner model is evaluated based on the coefficient of determination (R^2) and the cross-validated redundancy value (Q^2) (Hair et al., 2017). The explanation indicates that when the R^2 value ≤ 0.75 , the prediction model has a significant level of accuracy; when the R^2 value is ≤ 0.50 , the model has a medium Extent of precision; and ≤ 0.25 , the design has a low Extent of precision. The Q^2 value review the predictability strength of the model. The credibility of model predictions is deemed satisfactory and acceptable if the Q^2 value is more significant than zero. (Rosmita Rasyid, 2019).

Finally, hypothesis examination in a sequential manner, comprising two stages. The initial step involves evaluating the Immediate impact between the variables. Suppose the results reveal that the correlation between variables is substantial. In that case, the examination continues by assessment the mediated impact or, within this research, the mediating influence of the moneytary knowledge factor.

4. RESULTS AND DISCUSSION

4.1. Research Results

4.1.1. Outer Model Measurement Results

This study assesses construct validity and reliability to evaluate the outer measurement model. Construct validity is measured by examining the outer loading value of each indicator and the Average Variance Extracted (AVE) value for each latent variable.

The test results show that each variable indicator has an outer loading value above 0.5, which means the indicators are valid in measuring their respective constructs. In addition, the AVE value for each latent variable is more significant than 0.5 (Hair et al., 2017), indicating that the latent variable can explain more than 50% of the variance of its indicators. For construct reliability, this study uses the composite reliability measure. The composite reliability value for each latent variable exceeds 0.7, indicating that the constructs have good reliability (Rosmita Rasyid, 2019).

Thus, it can be concluded that all latent variables in the external measurement model have met the required validity and reliability criteria. Invalid data has been discarded, and testing is repeated until all remaining information is accurate.

Table 2. Outer Model Measurement Results

Variables and Indicators	Outer Loading	AVE	CR
Convenience			
X1.1	0.780		
X1.2	0.832		
X1.3	0.804		
X1.4	0.748	0.633	0.912
X1.5	0.836		
X1.6	0.770		
Security			
X2.1	0.872		
X2.2	0.833	0.698	0.874
X2.4	0.800		
Utilitarian Value			
X3.1	0.844		
X3.2	0.790		
X3.3	0.705		
X3.4	0.776	0.619	0.907
X3.5	0.775		
X3.6	0.821		
Risk Perception			
X4.1	0.778		
X4.2	0.826		
X4.3	0.823		
X4.4	0.824	0.629	0.922
X4.5	0.807		
X4.6	0.778		
X4.7	0.711		

Financial Literacy			
X5.1	0.725		
X5.2	0.847	0.681	0.864
X5.3	0.896		

Source: Results of research data processing 2024

4.1.2. Inner Model Measurement Results

Evaluation of the structural or inner model is done to assess the model's overall fit. This is done by examining two essential criteria: the coefficient of determination (R²) and cross-validated redundancy (Q²). The coefficient of determination (R²) measures how well the model can explain endogenous (dependent) variable variations. R² values range between 0 and 1, with higher values indicating a better model. According to the proposed criteria, R² values of 0.75, 0.50, or 0.25 can be considered substantial, moderate, or weak.

Meanwhile, cross-validated redundancy (Q²) measures how well the model can predict the observed values of the indicators of the endogenous variables. A Q² value greater than zero indicates the model has predictive relevance, and the greater the Q² value, the better the model is at predicting observed values. By evaluating the R² and Q² values, this study can assess how well the structural model can explain and predict endogenous variables, thus providing an overview of the strengths and weaknesses of the tested model. Table 3 displays the inner model assessment test.

Table 3. Inner Model Measurement Results

Endogen Variable	Coefficient of Determination (R ²)	Cross-Validated Redundancy (Q ²)
Behavioral Intention (Y1)	0.528	0.481

Source: Results of research data processing 2024

Table 3 shows that the behavioral intention variable to use the behavioral intention variable has an R² value of 0.528. This implies that convenience, security, utilitarian value, perception of risk, and level of financial literacy determine the behavioral intention variable to use a total of 52.8%, and other variables influence the remaining 47.2%.

Moreover, the coefficient of determination (R²) for the variables exceeds 0.5, indicating the variables used possess a reasonably robust level of predictive power within the model. Table 3 further demonstrates the variables have a Q² above zero, signifying the reliability of the model's predictions, allowing the model to be accepted.

4.1.3. Hypothesis Testing Results

In this study, hypothesis checking uses the beta coefficient (β) and p-value as a reference. The results of hypothesis testing are shown in Table 4.

Table 4. Hypothesis Testing Results

Hypothesis	p-value	Conclusions
Direct Effect		
X1 → Y1	0.025	>0.01 H1 unsupported
X2 → Y1	0.049	>0.01 H2 unsupported

X3 → Y1	0.355	<0.01	H3 supported
X4 → Y1	0.215	<0.01	H4 supported
X5 → Y1	0.216	<0.01	H5 supported

Source: Results of research data processing 2024

Table 5. Split Sample Testing Results

Hypothesis	β	p-value	Conclusions
Direct Effect			
On Men			
X1 → Y1	-0.026	>0.01	H1 unsupported
X2 → Y1	-0.045	>0.01	H2 unsupported
X3 → Y1	-0.606	<0.01	H3 supported
X4 → Y1	-0.060	>0.01	H4 unsupported
X5 → Y1	-0.376	<0.01	H5 supported
In Women			
X1 → Y1	0.019	>0.01	H1 unsupported
X2 → Y1	0.088	>0.01	H2 unsupported
X3 → Y1	0.186	>0.01	H3 unsupported
X4 → Y1	0.223	>0.01	H4 unsupported
X5 → Y1	0.373	<0.01	H5 supported
On <2 million revenue			
X1 → Y1	0.087	>0.01	H1 unsupported
X2 → Y1	0.038	>0.01	H2 unsupported
X3 → Y1	0.229	>0.01	H3 unsupported
X4 → Y1	0.193	>0.01	H4 unsupported
X5 → Y1	0.408	<0.01	H5 supported
On >2 million revenue			
X1 → Y1	-0.070	>0.01	H1 unsupported
X2 → Y1	0.002	>0.01	H2 unsupported
X3 → Y1	0.433	<0.01	H3 supported
X4 → Y1	0.194	>0.01	H4 unsupported
X5 → Y1	0.278	<0.01	H5 supported
On Modalku Application			
X1 → Y1	-0.101	>0.01	H1 unsupported
X2 → Y1	0.034	>0.01	H2 unsupported
X3 → Y1	0.240	>0.01	H3 unsupported
X4 → Y1	0.363	<0.01	H4 supported
X5 → Y1	0.456	<0.01	H5 supported
Besides Modalku Application			
X1 → Y1	0.020	>0.01	H1 unsupported
X2 → Y1	0.043	>0.01	H2 unsupported
X3 → Y1	0.415	<0.01	H3 supported
X4 → Y1	0.078	>0.01	H4 unsupported
X5 → Y1	0.286	<0.01	H5 supported

Source: Results of research data processing 2024

Explicitly stated effect, Table 4 illustrates the connection between Convenience and Behavioral Intention has a beta coefficient (β) of 0.025 and a p-value of >0.001 . This indicates that convenience does not affect behavioral intention, so hypothesis 1 is unsupported. The relationship between security and behavioral intention has a beta coefficient (β) of 0.049 and a p-value > 0.001 , indicating that behavioral intention does not support security. So, hypothesis 2 is also unsupported. Furthermore, the association with utilitarian value, perceived risk, and financial literacy on behavioral intention has a beta coefficient (β) of more than 0.1 through a p-value below 0.001, implying that the three variables affect behavioral intention, so hypotheses 3, 4, and 5 are supported.

However, table 5 differs from the split sample results for women and men. In men, only utilitarian value and financial literacy variables have an effect. This is supported by previous research by (Chen et al., 2023) that there is a gender gap in fintech in men and women. In addition, there are findings by (Dixon et al., 2014) that public access internet users are predominantly male. Meanwhile, in the female sample test, financial literacy affects behavioral intentions in P2PL. This finding is related to previous research by (Armantier et al., 2021) that women are worried about the impact of sharing their data on personal safety in fintech. This shows that women with sound financial literacy can evaluate risks and are more informed about P2PL services. The author argues that the gap indicates that Gen Z men are more aware of the benefits of fintech than more dominant men in fintech. On the other hand, women are more measured and considerate in their understanding. The author argues that the higher cost of living gap influences women's trust and decision-making.

4.2. Discussion

4.2.1. The Effect of Convenience on Behavioral Intention

The results of hypothesis testing show that the convenience variable does not determine the behavior desire to use P2PL. This finding suggests that the tech-savvy generation is a group that grew up in an era where technology is an integral part of everyday life. The convenience factor is not a driver of behavioral intention to use or borrow for Gen Z. This finding is consistent with the findings of previous researchers (Lin & Yu, 2023) and (U et al., 2022) that easy access to does not affect the adoption of EPI and the utilization of electronic reading devices.

4.2.2. Effect of Security on Behavioral Intention

Through hypothesis analysis, security has no impact on conduct purpose. This finding indicates that Gen Z has a high perception of internal security, and the distraction from news and Gen Z's relationship to the protection of the data provided is misused. The security factor is not a driver of behavioral intention to use or borrow for Gen Z. This study is consistent with previous research by (Lin & Yu, 2023) which found easy access to the acceptance and use of digital reading tools.

4.2.3. Effect of Utilitarian Value on Behavioral Intention

The results of hypothesis testing show that the utilitarian value variable determines behavioral intention. This finding states that Gen Z, in terms of finance, tends to look for

efficient and convenient solutions. Be accessible to fulfill Gen Z FOMO desires. The safety factor is not a driver of behavioral intention to use or borrow for Gen Z.

This study is consistent with the results of previous literature by (Susanti et al., 2020), whose findings are related to borrowing intentions influenced by utilitarian value factors, which have a significant positive effect. Likewise, the split sample of respondents with income >2 million supports this, seeing the main benefit of P2PL as the fastest access to additional funds and allowing them to repay. Behavioral intentions to fulfill FOMO or primary will lead to repeat transactions for Gen Z.

4.2.4. Effect of Risk Perception on Behavioral Intention

Based on the hypothesis testing results, risk perception has a significant effect on behavioral intentions in using P2PL. This finding shows that Gen Z takes into account the risks in P2PL. The higher the risk perception of Gen Z, the more sensitive to negative consequences that can occur and reduce behavioral intentions in P2PL.

This result is consistent with the existing literature (Lin & Yu, 2023) that easy access to the acceptance and use of digital reading tools. Low-risk tolerance is also related to financial literacy (Hermansson & Jonsson, 2021).

4.2.5. Effect of Financial Literacy on Behavioral Intention

Hypothesis findings show that financial literacy variables determine behavioral intentions. This finding indicates that Gen Z involves knowledge in using fintech. Through high optimism, directing has a positive behavioral intention.

This finding is consistent with previous studies by (Novantia Berlianti et al., 2023) that financial literacy factors influence Gen Z's investment decisions. The split sample results in Table 5 show that people with incomes of more or less than 2 million still have financial literacy in behavioral intentions towards P2PL. In addition, it will tend to have low-risk tolerance associated with high financial literacy (Hermansson & Jonsson, 2021)

5. CONCLUSION

This study explains the determination of factors that influence behavioral intentions through P2PL so that it can be concluded that three aspects determine Gen Z behavioral intentions in the adoption of this loan service, namely the utilitarian value factor, risk perception, and financial literacy, each factor has a p-value below 0.01. Where the three factors have a positive and significant effect on behavioral intentions, this study's results are from previous research (Mohta & Shunmugasundaram, 2023) that the quality of financial literacy influences risk-taking capacity and risk propensity. In this study, Gen Z states that financial literacy can affect risk perception in behavioral intentions. As supported by (Yakoboski et al., 2022) Gen X, y, and z of economic uncertainty is a driver in increasing Gen Z financial literacy.

Slik can affect Gen Z's utilitarian value when doing peer-to-peer lending. Gen Z, with high utilitarian values, will see the benefits of doing so, starting from the financial benefits of meeting their needs quickly and easily. In addition, FoMO influences Gen Z's behavioral intentions because of their desire to always be "up to date" with financial trends and the

guidance of hedonism. So, high FoMO can affect Gen Z SLIK in the future, making it difficult for them to apply for a loan.

These findings can add to Gen Z's knowledge of broader mindset and critical thinking. With the background that Gen Z is still financially independent in the digital era. These results show that convenience and security are optional to Gen Z behavioral intentions. This, it becomes the main focus that must be considered by service providers, especially in targeting their market and developing service features that are more relevant to Gen Z preferences and needs in P2PL. The limitation of this study is that some respondents needed help understanding some of the statements. In addition, this questionnaire is challenging to reach Gen Z with such negative presumptions.

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CLINIC OPERATIONAL EFFICIENCY THROUGH OPTIMIZING THE DISTRIBUTION OF NURSING STAFF

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Abstract

An inpatient primary clinic is a healthcare unit characterized by fewer facilities and amenities compared to a hospital. Consequently, the distribution and allocation of health workers, particularly nurses, for operational processes differ significantly from that in hospitals. This study aims to determine the optimal number of nursing personnel required for efficient operation of an inpatient primary clinic through the application of linear programming techniques. The research methodology involves secondary data analysis, utilizing administrative information from inpatient private clinics in Lumajang Regency, East Java. The findings reveal that the linear programming model implemented is effective in optimizing nurse distribution. Specifically, the results indicate that a minimum of eight nurses is necessary to ensure efficient operation and cost-effectiveness of the inpatient clinic. This efficient distribution model can potentially lead to significant operational cost savings, thereby enhancing the overall performance and sustainability of inpatient primary clinics in similar settings.

Keywords: Clinic, Hospitalization, Efficiency, Operations

1. INTRODUCTION

Every service and manufacturing company needs clear operational information for the continuity of its business processes. A clinic is a health care facility that organizes and provides basic and or specialized medical services, organized by more than one type of health worker and led by a medical staff (Permenkes RI No.9, 2014). Clinics have fewer facilities and services than hospitals so that the operational process is expected to be more effective and efficient. Decision-making for employee distribution is different from that of a typical hospital. Therefore, the scheduling distribution method in clinics is not the same as hospitals. When referring to employee scheduling distribution such as hospitals, there will be many employees who do not work efficiently or many employees who are unemployed. Therefore, a different method is needed for the distribution of employees in each service unit at an inpatient clinic.

One of the decision-making on operational management of services in the health sector is nurse scheduling (Yustiawan, 2013). Scheduling in work is the allocation of human resources at a certain workplace with a predetermined time and place in carrying out the planned work to achieve the goals desired by the Company (Suseno, 2017). Scheduling is related to the selection of operating time. According to Heizer and Render (2009) scheduling decisions begin with capacity planning which includes the availability of all resources owned. The purpose of scheduling is to allocate and prioritize demand on limited resources

within a period. In the daily process, one of the schedules found in the health sector is nurse scheduling.

According to the Law of the Republic of Indonesia. No. 23 of 1992 concerning health, nurses are those who have the ability and authority to perform nursing actions based on knowledge obtained through nursing education. In order for the performance of nursing services at the clinic to run well, nursing personnel are needed who meet the requirements both in quality and quantity and are adjusted to the workload carried out. Each clinic has several health service facilities, namely inpatient, outpatient, and emergency room. These three facilities are the main services provided by the clinic as health services, these health services cannot stop and continue to provide services with busy conditions and urgency.

Services at inpatient Pratama clinics that require the assistance of nurses and are also core services, include: Hospitalization, Emergency Room, and General clinic. Due to the small scope of services, it is hoped that the allocation of nurse distribution can be optimized so that there are no excess personnel that cause inefficiencies in the operational process. In addition, health services that are now using insurance in their financing (BPJS) which include centralized cost control make Pratama clinics must be able to improve services and also control their operational costs in order to continue operating and developing.

Valentine & Sitorus (2023) research, from this study is the creation of an optimal schedule for a period of 31 working days in accordance with hospital rules and nurse preferences by minimizing the deviation variable in the three objective constraints. Based on Widyaningsih's research (2018), the solver results in the morning shift require at least 8 nurses, the afternoon shift requires 8 nurses, and the night shift requires 12 nurses. Based on the results of the anova test, a significance value (Sig.) of $0.829 > 0.05$ was obtained, so it can be concluded that statistically the average number of nurses from the three shifts is the same or there is no significant difference if the hospital uses 12 or 8 nurses.

So from these two research results, an employee scheduling formulation is obtained for a more effective and efficient operational process. Based on this explanation, the purpose of this study is to analyze the distribution of the number of nurses in an inpatient clinic. And what is the minimum total distribution of nurses at the Primary Inpatient Clinic?

2. LITERATURE REVIEW

2.1. Clinic

The definition of a clinic based on the Regulation of the Minister of Health (PMK) No. 28 of 2011 is a health care facility that organizes individual health services that provide basic and/or specialized medical services, organized by more than one type of health worker and led by a medical staff. Thus, a clinic must determine the services it will provide, as it can be limited to basic medical services, or specialty services, or both. This decision will affect the stratum in which a clinic is organized.

There are two strata of clinic organization, namely: 1) Primary Clinic and 2) Primary Clinic. Primary Clinic is a clinic stratum that is limited to providing basic medical services. Primary Clinics are strata of clinics that can organize specialized medical services only, or also at the same time organize basic medical services. The organization of the clinic must pay attention to several requirements including:

a. Location Requirements

- b. Building and Room Requirements
- c. Facilities and Infrastructure
- d. Equipment
- e. Manpower (Yuastiawan, 2013)

2.2. Human Resources and Financial Management of Inpatient Provider Clinics

As stated by Yulia Nazlia Sidy (Directorate of Primary Health Care) that the human resource needs required at the Prata Inpatient Clinic consist of at least doctors, dentists, and / or specialists in the field of primary care (meeting at least the minimum number) (Sidy, 2023). As for financial management at the Clinic, clinic expenses include operational costs, employee salaries, capital expenditures, taxation, and other expenses. Clinic operating income is income from services, capitation, insurance and other income that does not come from the clinic.

2.3. Linier Programming

According to Mulyono (2004) Linear Programming (abbreviated as LP) is one of the most widely used and well known Operating Research techniques. Linear program is a mathematical method in allocating scarce resources to achieve goals. Linear Programming is a mathematical technique designed to assist operations managers in planning and making decisions needed to allocate resources based on the opinion of Heizer and Render (2006).

3. RESEARCH METHOD

The research method in this study is descriptive quantitative research with the Secondary Data Analysis (ADS) approach. ADS is a method by utilizing secondary data as the main data source (Martono, 2010). The secondary data owned is utilized by researchers to obtain the information desired by researchers. Descriptive research is a support for researchers to support and deepen the description of activities and conditions that occur in the field and also based on the results of the analysis. The time and place of this research was in March 2024 at the Inpatient Primary Clinic in Lumajang Regency, East Java.

According to how it was obtained, this study used secondary data, namely data obtained indirectly from the object of research. The data collection method used is to process secondary data sources. Secondary data sources are books, company records or documentation, government publications, databases, industry analysis by the media, websites, the internet and so on (Sekaran, 2006). The data used is the clinical nurse schedule data.

Winston (2004) states that linear programming is a method that will solve problems with several constraint functions to achieve goals such as maximizing (profits to be achieved) or minimizing (costs). The linear nature means that all mathematical functions in this model are linear functions, while programming is a synonym for planning. Thus, linear programming is the planning of activities to obtain an optimum result, i.e. the best result from all possible alternatives.

The steps to be taken in this research are:

- a. Check the Clinic's Terms of Use

Table 1. Provisions for nurse distribution and nurse preferences

Description	Terms
Morning Shift	Morning services are outpatient, inpatient, and emergency room
	Total number of nurses on the morning shift 4 people
Afternoon Shift	Morning services, namely outpatient, inpatient, and emergency room.
	Total number of nurses on the morning shift 4 people
Night shift	Night services are inpatient, and emergency room
	Total number of nurses on the morning shift 2 people
Total number of nurses	13 people
Number per shift	In 1 morning and afternoon shift, there must be a total of 4 nurses working in the morning shift and 4 in the afternoon shift (cannot be reduced).

Source: Nurse Administrative Information

b. Determining the Notation Used for the Mathematical Model

The following notation is used to determine the mathematical model:

a = Morning
b = Afternoon
c = Night
i = Inpatient
j = Outpatient
k = Emergency Room

Here are the decision variables

Xai = number of morning shift nurses in the inpatient unit
Xaj = number of morning shift nurses in the outpatient unit
Xak = number of morning shift nurses in the emergency department unit
Xbi = afternoon shift nurses in the inpatient unit
Xbj = afternoon shift nurses in the outpatient unit
Xbk = afternoon shift nurses in the emergency room unit
Xci = night shift nurse in inpatient unit
Xcj = night shift nurse in outpatient unit
Xck = night shift nurse in the emergency room unit

c. Modeling of Clinical Conditions

Table 2. Distribution of the number of nurses

Description	Inpatient	Outpatient	IGD
Morning	2	1	1
Afternoon	2	1	1
Night	1	0	1

Source: Nurse Administrative Information

d. Goal Setting for Non-Preemptive Goal Programming

$$\text{Min } Z = 2X_{ai} + X_{aj} + X_{ak} + 2X_{bi} + X_{bj} + X_{bk} + X_{ci} + X_{ck}$$

e. Determining the Goal to be Achieved

The goal to be achieved in this research is expected to find optimization of the distribution of available nurses and also prove the optimality of the nurse distribution method that has been done.

f. Solving Goal Programming Problems Using LINGO Software

g. Implementation of Final Result

4. RESULT AND DISCUSSION

4.1. Research Result

The Primary Inpatient Clinic has its own rules in assigning its nurses. The nurse scheduling model will be formulated in the form of mathematical model constraints. There are 13 nurses assigned to this clinic. In table 2, the distribution of the number of nurses at the Primary Inpatient Clinic has been described. The results of the LINGO analysis based on table 2 and the functions and constraints are:

$$\text{Min} = 2X_{ai} + X_{aj} + X_{ak} + 2X_{bi} + X_{bj} + X_{bk} + X_{ci} + X_{ck} \dots\dots\dots 1)$$

Subject to:

$$X_{ai} + X_{aj} + X_{ak} \leq 4 \dots\dots\dots 2)$$

$$X_{bi} + X_{bj} + X_{bk} \leq 4 \dots\dots\dots 3)$$

$$X_{ci} + X_{ck} \leq 2 \dots\dots\dots 4)$$

$$X_{ai} + X_{aj} + X_{ak} + X_{bi} + X_{bj} + X_{bk} + X_{ci} + X_{ck} \leq 13 \dots\dots\dots 5)$$

$$X_{ai} \geq 1$$

$$X_{aj} \geq 1$$

$$X_{ak} \geq 1$$

$$X_{bi} \geq 1$$

$$X_{bj} \geq 1$$

$$X_{bk} \geq 1$$

$$X_{ci} \geq 1$$

$$X_{cj} = 0$$

$$X_{ck} \geq 1$$



```
Model: Lingo2
MCD=2 * XAI+XAJ+XAK+2 * XBI+XBJ+XBK+XCI+XCK;
XAi+XAJ+XAK<=4;
XBi+XBJ+XBK<=4;
XCi+XCK<=2;
XAi+XAJ+XAK+XBi+XBJ+XBK+XCI+XCK<=12;
XAi>=1;
XAJ>=1;
XAK>=1;
XBi>=1;
XBJ>=1;
XBK>=1;
XCi>=1;
XCK>=1;
END
```

Source: Data processed, 2023

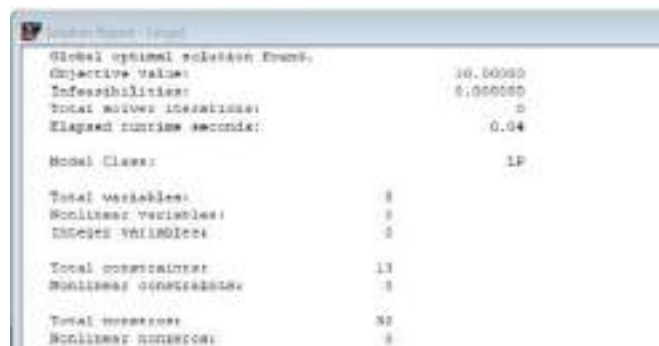
Figure 1. LINGO MODEL

4.1.1. Optimal Solution

Based on the data processed using LINGO, the following data is obtained:

a. Objection Function Value

The objective function value is under the Objective Function Value label. The objective function value of the LINGO result is 10.



```
Solution Report - Lingo2
Global optimal solution found.
Objective value:                10.00000
Infeasibilities:                0.000000
Total solver iterations:        0
Elapsed runtime seconds:        0.04

Model Class:                    LP

Total variables:                8
Nonlinear variables:            0
Integer variables:              0

Total constraints:              13
Nonlinear constraints:          0
Total messages:                32
Nonlinear messages:            0
```

Source: Data processed, 2023

Figure 2. Solution Report LINGO

b. Value

The optimal value of the decision variable under the value label. Decision variables in the LINGO output are labeled as variables. Since the above case has 8 decision variables labeled X_{ai} , X_{aj} , X_{ak} , X_{bi} , X_{bj} , X_{bk} , X_{ci} and X_{ck} , these two labels are listed under the Variable column. The number under the Value label and in the row where X_{ai} is located indicates the optimal value of variable X_{ai} which is 1; similarly, X_{aj} is 1; as stated below:

Variable	Value	Reduced Cost
XAI	1.000000	0.000000
XAJ	1.000000	0.000000
XAK	1.000000	0.000000
XBI	1.000000	0.000000
XBJ	1.000000	0.000000
XBK	1.000000	0.000000
XCI	1.000000	0.000000
XCK	1.000000	0.000000
XCU	0.000000	0.000000

Source: Data processed, 2023

Figure 3. Solution Report LINGO

c. Reduced Cost

Reduced Cost also describes the amount of reduction in the case of maximization and addition in the case of minimization. Therefore, in this case according to Figure 3, which explains that there are no additional employees (the reduced cost value is 0) with the value listed in Figure 3.

d. Slack or Surplus

This information shows the Slack or Surplus value of each constraint when the objective function value reaches an extreme value. Since the LINGO input structure has placed the constraints starting in the 2nd order, the Row label starts with the number 2 which means the 2nd row. Thus, it is obvious that row 2 marks the 1st constraint, row 3 marks the 2nd constraint, and so on, so that based on Figure 4 it is obtained that row 2 (constraint 1), row 4 (constraint 2) and row 14 (constraint 13) are basic variables that have positive values. For rows that have zero Slack variable values are non-base variables.

Row	Slack or Surplus	Dual Price
1	10.000000	-1.000000
2	1.000000	0.000000
3	1.000000	0.000000
4	0.000000	0.000000
5	5.000000	0.000000
6	0.000000	-2.000000
7	0.000000	-1.000000
8	0.000000	-1.000000
9	0.000000	-2.000000
10	0.000000	-1.000000
11	0.000000	-1.000000
12	0.000000	-1.000000
13	0.000000	0.000000
14	0.000000	-1.000000

Source: Data processed, 2023

Figure 4. Solution Report LINGO

e. Dual Price

This information explains the change that will occur in the value of the objective function if the value of the right-hand segment changes by one unit. Therefore, the dual price in row 2,3,4 and 13 is 0 which explains that the constraint will clearly not change the objective function. While rows 6,7,8,9,10,11,12, and 14 explain that the constraint will change the objective function.

f. Sensitivity analysis

In the sensitivity analysis output, there is the following data:

a) Sensitivity Analysis of Objective Function Coefficients

Sensitivity Analysis of the objective function describes changes in values that will not change the optimal value of the decision variable. Data information related to this sensitivity analysis is as follows:

Objective Coefficient Ranges:			
Variable	Current Coefficient	Allowable Increase	Allowable Decrease
XAI	2.000000	INFINITY	2.000000
XAJ	1.000000	INFINITY	1.000000
XAK	1.000000	INFINITY	1.000000
XBI	2.000000	INFINITY	2.000000
XBJ	1.000000	INFINITY	1.000000
XBK	1.000000	INFINITY	1.000000
XCI	1.000000	INFINITY	1.000000
XCK	1.000000	INFINITY	1.000000

Source: Data processed, 2023

Figure 5. Solution Report LINGO

Based on the data above, it can be concluded that changes in the value of XAI range between the upper limit of more than 2 and unlimited or down to 0 in a closed range that will not change the optimal value of the decision variable. This also applies to the decision variables Xai, Xaj, Xak, Xbi, Xbj, Xbk, Xci, Xck in a closed range.

b) Sensitivity Analysis

In this case, the right hand side value sensitivity analysis describes the interval of change in the right hand side value that ensures the validity of the dual price. Beyond that interval, the dual price value is no longer valid for estimating changes in the objective function value.

RIGHTHAND Side Ranges:			
Row	Current RHS	Allowable Increase	Allowable Decrease
2	4.000000	INFINITY	1.000000
3	4.000000	INFINITY	4.000000
4	2.000000	INFINITY	0.000000
5	14.000000	INFINITY	6.000000
6	2.000000	1.000000	2.000000
7	1.000000	1.000000	1.000000
8	1.000000	1.000000	1.000000
9	1.000000	1.000000	1.000000
10	1.000000	1.000000	1.000000
11	1.000000	1.000000	1.000000
12	1.000000	0.000000	1.000000
14	1.000000	0.000000	1.000000

Source: Data processed, 2023

Figure 6. Solution Report LINGO

Changing the value of the right segment of the 1st active constraint located in the 2nd row up to above 4 or infinity or down to 3 will not change the dual price value of the 1st constraint, which is 0 and does not change the objective function.

Based on the results of the analysis, the optimum value of the function is 10, the minimum distribution of employees required is 10 people. This calculation does not consider

the preference of the requirement for the number of days off for nurses at the Primary Inpatient Clinic. If the Pratama Inpatient Clinic wants to do nurse efficiency, the total number of nurses needed is 10 people. In addition, the distribution for the 10 employees needed for the operational process is 1 person in each shift and work unit. So for the inpatient morning shift there is 1 person, the inpatient afternoon shift is 1 person and the night shift is 1 person. When compared to the conditions in the field that the total number of existing nurses is 13 people, the number is more than the linear programming calculation.

Then if there is an addition of 1 employee in each shift and work unit, it will reduce the objective function. In this function, there should be no additional employees because the function will change. Because, if additional employees are added, it is not in accordance with the purpose of the objective function, namely minimization so that the clinic can make cost efficiency. As is the case in the 4th row or the 3rd constraint which explains that the night shift for inpatient and igd is 1 nurse on duty each, it is clearly expected that there should be no change in either the addition or subtraction of nurses so that there is no change in the objective function because it is in accordance with the existing constraints that X_{CJ} is 0 or no one is on guard.

There are limits in a closed range so that the objectives of this function can be achieved. For example, X_{AI} has a value of 1 then if the value is below 1 (the upper range allowed is more than 2 and unlimited, and the lower range allowed is 0). If the X_{AI} arrangement is below the range of 0, it will change the objective function, which means that there is a shortage of morning shift nurses guarding the inpatient unit. And it is allowed to make the morning shift inpatient nurse distribution formation with more than 2 nurses, it will not change the objective function. Likewise, in the morning shift for poly or outpatient units, where it is allowed to distribute the number of nurses more than 2 people and cannot be less than 0. However, this range creates a problem if there are no nurses at all because the lowest range is 0 for the morning shift of inpatient and outpatient poly, so that it can interfere with the duties of nurses in other units, namely the igd. Likewise, in other shifts and other units such as poly and outpatient, if below the range of 0 or equal to 0, it will interfere with the performance of other unit nurses to assist and replace the duties of other units.

$$X_{ai} + X_{aj} + X_{ak} \leq 4 \dots \dots \dots 2)$$

Based on Figure 5 which explains row 2 or constraint 1, where the allowed right limit is above 4 of the specified value of 4, while the allowed decrease limit value is 3. Then the number of nurses for the morning shift of inpatient, outpatient poly and igd with a total of at least 3 employees is allowed, while the maximum number of nurses for the morning shift is allowed to exceed 4 people and infinity. This explains that if in 1 morning shift there are only 2 employees, there will be problems with employee performance.

$$X_{ai} + X_{aj} + X_{ak} + X_{bi} + X_{bj} + X_{bk} + X_{ci} + X_{ck} \leq 13 \dots \dots 5)$$

Based on Figure 5 which explains about row 5 or constraint 4, where the allowed right limit is above 13 and more than that value, while the allowed lower limit value is 8. Then the total number of nurses allowed, the maximum number is more than 13 nurses and infinity. However, the total number of nurses allowed for 1 inpatient primary clinic is 8

people and cannot be less than 8. If the minimum limit of the total number of nurses is violated, it will interfere with the operation such as the absence of nurses in certain service units, services become slow, complaints are not handled and the worst is if there is an emergency action but there is no igd nurse on guard in the igd unit.

Nurses are the largest number of employees in a health service and according to the law, the work that is the expertise of nurses cannot be replaced by other medical personnel. However, when looking at the level of types of health services, it is necessary to assess the number and scheduling methods in more detail to be able to control human resource costs to support the sustainability of a health service.

g. Implementation

- 1) The number of nurses currently working at 13 people has exceeded the minimum number of nurses based on linear programming calculations, namely 10 people. However, in the implementation of minimizing the number of nurses, consideration is needed for the number of nurses and the quality of service according to the vision and mission of the inpatient clinic.
- 2) The nurse distribution modeling that has been running at the Primary Inpatient Clinic is appropriate because if each shift has a value of 0 (no nurse on duty) it will change the objective function and will interfere with the operational processes of other units.
- 3) Modeling the distribution of nurses based on linear programming, allows the value of 0 or one of the units there are no nurses on duty but will be assisted or replaced by other nurses. In the field implementation, more monitoring is needed regarding the number of patients and the position between rooms as easy access for nurses in carrying out their duties.
- 4) The minimum range of nurses allowed in the linear programming calculation is 8 nurses, in accordance with the calculation of constraint 4 with a maximum limit of 13 nurses. However, the calculation has not considered the preference of the number of nurses' days off and also the working hours allowed for nurses.

5. CONCLUSION

Based on the results of the discussion above, it is known that through linear programming, information is obtained on the range of the total number of minimum and maximum nurses intended for the inpatient clinic. So it can be concluded that linear programming can assist in the distribution of nurses at the inpatient clinic to provide information related to the efficiency of clinic management costs on labor salaries.

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BIBLIOMETRIC ANALYSIS: FACTORS CAUSING AND PREVENTION STRATEGIES FOR BURNOUT IN THE WORKPLACE

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Abstract

Every individual undoubtedly possesses different physical abilities and psychological conditions, especially when facing life situations, whether it is work-related or in other contexts. A challenging situation or condition can make someone feel pressured and experience prolonged stress if not handled properly. This physical, emotional, and mental exhaustion is known as burnout. This study discusses burnout, which has been addressed in previous research from 2018 to 2023. The method used in this research is to identify the number of journals using Harzing's Publish or Perish software, as well as bibliometric analysis using VOSviewer. The research results show that there are 200 publications with 60,448 citations and 10,074.67 citations per year discussing burnout. There are eight main clusters based on the bibliometric analysis. This article also provides information on research topics that have not been widely explored, thus offering benefits to future researchers interested in discussing burnout.

Keywords: Burnout, Work performance, Bibliometric Analysis

1. INTRODUCTION

Human resources have an important function in the sustainability of the agency's goals (Tokan & Mujanah, 2023). Burnout is an increasingly common phenomenon especially in the modern workplace. Burnout is a condition of physical, emotional, and mental exhaustion caused by prolonged and excessive job stress. Burnout can happen to anyone, but is more commonly experienced by those who work in high-demand environments or lack social support. The main causes of burnout include uncontrollable workload, role vagueness, lack of rewards or recognition, and lack of work-life balance. This condition has a significant impact on the work performance of employees in a company. When employees experience burnout, they often feel chronic fatigue, loss of energy, and motivation to work. As a result, their performance decreases due to difficulty in focus, decreased efficiency, and an increased number of errors in daily work.

According to Mujanah (2020), career development is an individual activity or activities carried out to prepare individuals to improve their careers as planned. The impact of burnout on work performance is not only seen in a decrease in productivity but also in the quality of work produced. A person experiencing burnout tends to have difficulty in thinking creatively and innovatively. They may feel trapped in a monotonous routine and lack the initiative to take new steps or solve problems effectively. This can hinder the development and growth of the Company, especially in a competitive and dynamic environment.

In addition, burnout also affects team dynamics and the overall work environment. Burnout also affects the work motivation of an individual. Work motivation is an encouragement that causes a person to complete the necessary work with enthusiasm without feeling constrained so that the work done can run well or produce something satisfying (Kurniawati et al., 2022). A person who experiences burnout will lose motivation at work so that the resulting performance is less satisfying. Employees who experience burnout may become more irritable, less patient, and tend to withdraw from social interactions with coworkers. This can create tension within the team, reduce collaboration, and lower the morale of the entire group. As a result, overall team performance can suffer, reducing project effectiveness and the achievement of organizational goals. In research (Setiawan, 2022), high social support overcomes the emergence of high burnout in employees, so employee performance is still in the high category and employee performance can still be improved by increasing social support for employees and at the same time overcoming high burnout in employees.

To address and prevent burnout, companies need to implement policies and practices that support employee well-being. This includes the provision of balanced workloads, psychological support, stress management training, and the promotion of work-life balance. Job stress arises when there is a gap between job demands and individual capabilities (Moi & Mujanah, 2023). Company leaders should also play an active role in creating a positive work environment, providing constructive feedback, and valuing employee contributions. In this way, companies can improve employee performance, retain a motivated workforce, and achieve better results. Burnout is therefore an interesting phenomenon to study in more depth. The purpose of this article is to help provide information about burnout that has been published in the period 2018-2023.

2. RESEARCH METHODS

Bibliometric analysis is a method used to analyze and map the scientific literature in a field of research. In this article, bibliometric analysis is applied to understand current research trends on burnout.

The first step involved using Harzing's Publish or Perish software. This software was used to identify the number of journal articles that have been published in the last six years (2018-2023) related to burnout. Using Google Scholar as a data source, the software was able to collect information on the number of articles relevant to the keyword burnout.

The second step involved the use of VOSviewer software. This software was used to map the patterns of relationships, year ranges, and topic density in the articles identified in the first step. Using visualization techniques, this software can help identify patterns and trends in burnout research.

This research focuses on the use of burnout keywords as search criteria. These keywords were used to identify articles relevant to the topic of burnout. Using bibliometric analysis, this study aims to provide a better understanding of current research trends in the field of burnout.

Using Harzing's Publish or Perish software and VOSviewer, this study can provide valuable information about the number of published articles and patterns of relationships in

burnout research. The results of this analysis can be used to identify under-researched areas and provide direction for future research in this field.

3. RESULTS AND DISCUSSION

3.1. Research Results

The results of bibliometric analysis show that there are 200 publications with 60448 citations and 10074.67 cites/years that discuss burnout (Figure 1)



Figure 1. Data on the number of journals, citations and cites/year

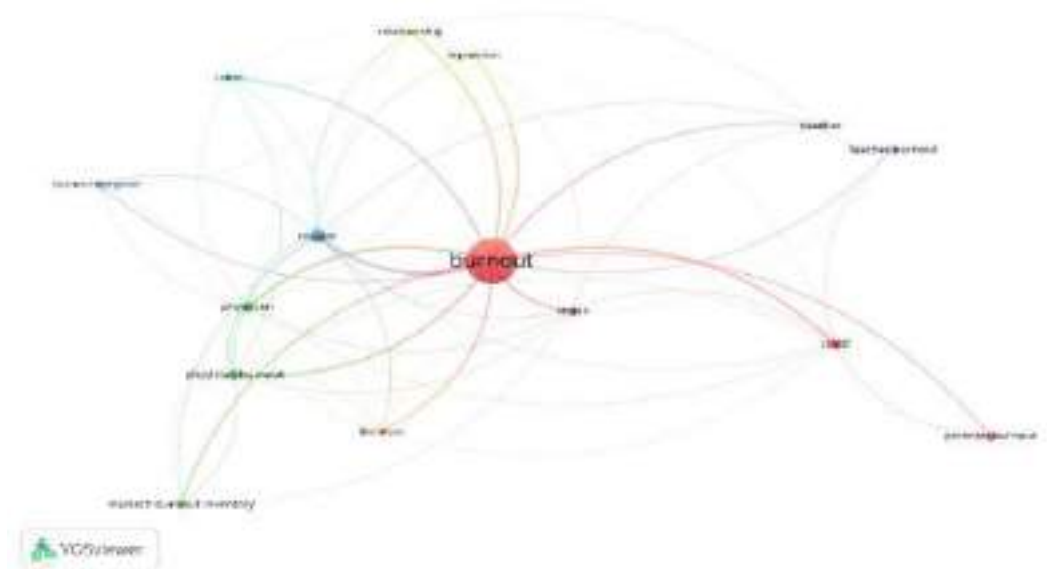


Figure 2. Visualization of the Relationship between *Burnout* Topics

Figure 2 shows that there are eight main clusters. The red clusters generally discuss burnout with covid and parental burnout. The green clusters are more directed towards the discussion of the Maslach burnout inventory, physician and physician burnout. The blue cluster discusses burnout symptom and review. The yellow cluster is more about depression

and relationships. The purple cluster deals with teacher and teacher burnout. The turquoise cluster discusses cause. The orange cluster discusses literature and the brown cluster discusses stress.

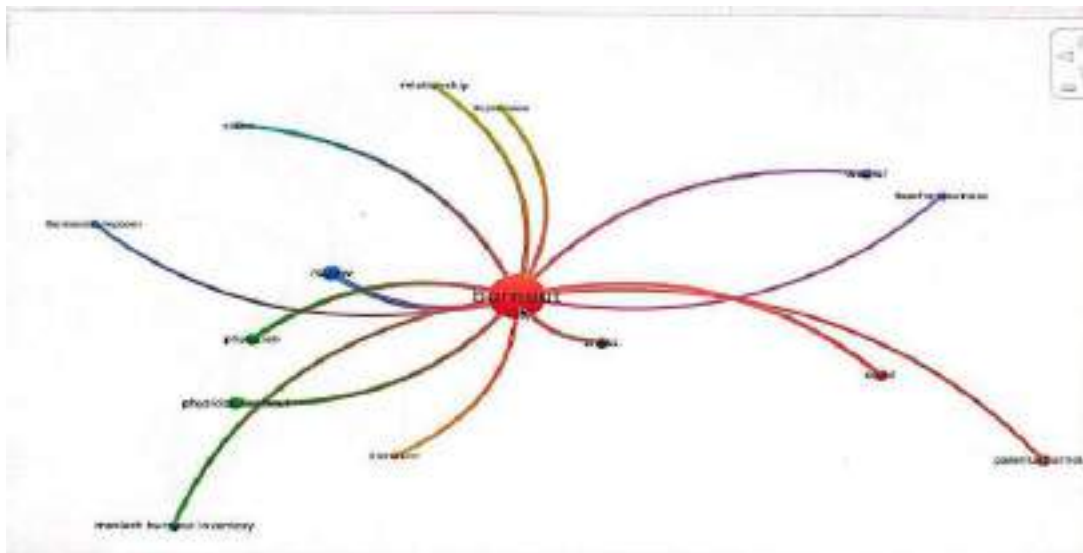


Figure 3. Visualization of the Relationship between Viral Marketing Strategy topics

The visualization in Figure 3 shows that several studies have been made linking *burnout*, *covid*, *parental burnout*, *Maslach burnout inventory*, *physician*, *physician burnout*, *burnout symptom*, *review*, *depression*, *relationship*, *teacher*, *teacher burnout*, *cause*, *literature* and *stress*.

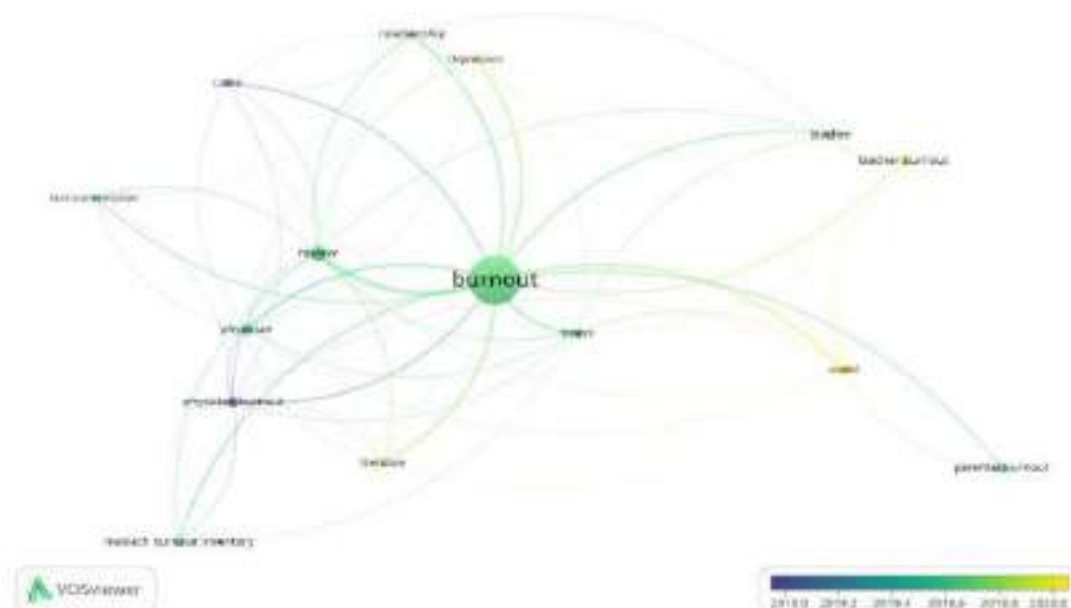


Figure 4. Burnout-related timeline visualization

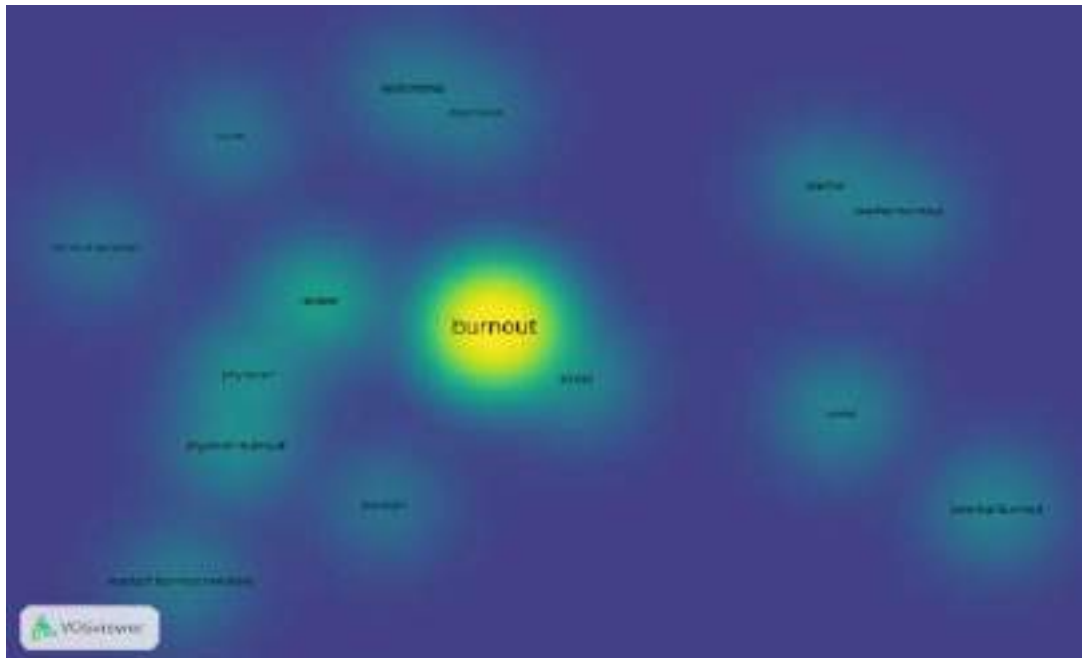


Figure 5. Burnout-related Topic Density Visualization

Figure 5 shows that the overall topic is still very little discussed or in other words there is not much research on the topic. This can be seen from the faded colors in the image. Therefore, it can be a consideration that these topics can be the subject of further research.

3.2. Discussion

The COVID-19 pandemic has significantly contributed to burnout among healthcare workers, particularly impacting radiologists and older healthcare workers. Studies have shown that COVID-19 anxiety, increased workload, disruptions in working relationships, and exacerbation of pre-existing systemic problems have led to higher levels of emotional exhaustion, depersonalization, and decreased personal accomplishment, all key components of burnout (Çukurova et al., 2023; Leiter & Maslach, 2022; Woo & Engel, 2022; Yong-Hing et al., 2023; Zhang et al., 2023). Factors such as inadequate staffing, workplace discrimination, and lack of job autonomy have been identified as risk factors for burnout among older healthcare workers, leading to higher rates of depression, anxiety, and intention to leave work. In addition, the pandemic has increased stressors such as anxiety, depression, and excessive workload, further contributing to burnout among resident physicians. Addressing these challenges through psychological support, workload management, and workplace accommodations is critical to mitigating the impact of COVID-19 on fatigue levels in individuals.

Burnout is a phenomenon that is getting more and more attention in an organization or company. Burnout serves as an employee performance evaluation tool (Mujanah, 2024). Research shows that burnout characterized by emotional exhaustion, cynicism and decreased professional effectiveness has a significant impact on productivity and work quality. According to (Mujanah, 2020) burnout is a person's condition experienced due to the onset

of stress over a long period of time which is characterized by continuous loss of psychological, physical, mental and emotional energy.

According to Katarini (2011), burnout is a loss of physical or emotional strength and motivation usually as a result of prolonged stress or frustration, role conflict, low salary or wages and lack of a performance reward system that results in depression. (Maharani & Triyoga, 2012) states that burnout is the most common result of work stress and workload. Specific symptoms of burnout include boredom, depression, pessimism, lack of concentration, poor work quality, dissatisfaction, absenteeism, and illness.

According to Andarika (2004), there are 11 characteristics in burnout sufferers including: 1) fatigue, 2) running away from reality, 3) boredom and cynicism, 4) impatience and irritability, 5) feeling that only he can solve all problems, 6) feeling unappreciated, 7) experiencing disorientation, 8) psychosomatic complaints, 9) suspicious for no reason, 10) depression and 11) denial. Thus, it can be concluded that burnout is a psychological symptom in the scope of work that is characterized by the factors of fatigue, cynicism, and ineffectiveness. Fatigue indicates a decrease in energy and motivation, cynicism reflects a negative attitude towards work and the work environment, while ineffectiveness describes a decrease in performance and a feeling of inability to complete work tasks properly. By understanding these characteristics, it can be concluded that burnout is not only a physical problem, but also includes emotional and mental aspects that affect an individual's overall well-being in a professional setting.

Burnout is manifested physically (poor health) and psychologically (detachment, boredom and rigidity). Prevention strategies generally fall into the categories of (a) in-school interventions (including being better prepared and developing high-quality interpersonal relationships), (b) out-of-school interventions (better work-life balance), and (c) mentoring. Given that engagement is the antithesis of burnout, keeping teachers engaged and feeling valued are factors that reduce burnout (Nápoles, 2022).

The Maslach Burnout Inventory (MBI) is a widely used self-report measure to assess fatigue, which consists of three subscales: Emotional Exhaustion (EE), Depersonalization (DP), and Personal Attainment (PA). The MBI-Human Services Survey (MBI-HSS) has been widely used to measure burnout among healthcare professionals, including physicians (Mukherjee et al., 2020). Physician burnout is a significant concern due to its negative consequences for individuals and the quality of patient care. Workplace stress, time constraints, and anxiety are all associated with burnout, which may explain the high rates of burnout among healthcare professionals who are not at the frontline of COVID-19 care (Etesam et al., 2021).

Organizational change, especially that leading to a reduction in staff or resources, is identified as a major factor that accelerates burnout and, consequently, Burnout (Shah et al., 2024). This suggests that when there is restructuring or reduction in the organization, the increased pressure and workload on the remaining staff can trigger faster burnout. The consequences of burnout are significant as research by (Tokan & Mujanah, 2023) shows that low levels of burnout correlate with higher overall worker performance. That is, when workers do not experience burnout, they tend to perform better, which has a positive impact on the overall productivity and efficiency of the organization. Therefore, it is important for management to consider the impact of organizational change on employee well-being and

implement strategies that can minimize the risk of burnout to maintain high performance in the long term.

At the organizational level, it is important to provide training that includes developing employees' technical and social skills and conducting regular assessments of their well-being as a performance indicator (Edú-Valsania et al., 2022). Meanwhile, at the individual level, physical activity is made part of the daily routine to reduce the impact of fatigue on overall health, while encouraging mindfulness exercises to reduce the risk of burnout and improve concentration and empathy. All of these interventions aim to manage workplace stressors and increase individual resources to deal with work challenges.

At the family level, addressing parental burnout during times of increased stress and uncertainty is important as increased and prolonged stress experienced by parents can potentially lead to parental burnout, which is associated with a range of negative outcomes for affected individuals and their children. Research (Skjerdingsstad et al., 2022) highlights the need for the development and implementation of preventive measures and interventions to reduce parental burden during these periods to reduce the risk of burnout and its adverse consequences.

The COVID-19 pandemic has had a significant impact on various aspects of life, including family relationships. One prominent effect is an increase in emotional exhaustion and anxiety among parents, which is directly related to deteriorating parenting outcomes. According to (Aumayr-Pintar et al., 2018), these symptoms are a central issue emerging from the stress of the pandemic. Further research shows that parental burnout during the pandemic is highly prevalent, especially among those with lower levels of education and those with school-aged children. These factors make them more susceptible to stress and burnout. However, there are also positive findings suggesting that interventions such as meditation can be effective in reducing parental burnout and increasing their resilience, as revealed by (Liu et al., 2022). This suggests that although the pandemic has put additional pressure on older people, there are strategies that can help them better cope with these challenges.

Research on burnout has shown significant development, particularly through small-scale occupational studies that provide an in-depth understanding of the phenomenon. However, these studies often vary in the methods and instruments used to measure burnout, leading to results that lack consistency and are difficult to compare directly (Aumayr-Pintar et al., 2018). Furthermore, there are indications that employees who have been diagnosed with depressive disorders and/or anxiety disorders may also experience burnout, suggesting a link between these psychological conditions (Aumayr-Pintar et al., 2018). This emphasizes the importance of a holistic approach in assessing employee mental health, as well as the need for more uniform measurement standards to enable more comprehensive and accurate analysis.

Personality is one of the personal factors that can affect burnout. Research shows that big five personality is a significant predictor of burnout in employees (Bhowmick & Mulla, 2021; Kapusuz & Cavuz, 2018; Sadoughi, 2017). For example, individuals with high scores on neuroticism type have a positive correlation with emotional exhaustion, it means they are more prone to burnout (Bhowmick & Mulla, 2021; Kapusuz & Cavuz, 2018; Sadoughi, 2017). In contrast, agreeableness and conscientiousness personality types have been shown to significantly predict higher personal achievement, thereby reducing the risk of burnout (Bhowmick & Mulla, 2021). In addition, individuals with extraversion personality type tend

to have more positive emotions, often feel happy, optimistic, and are able to reassess problems more positively, potentially reducing the likelihood of experiencing burnout (Divinakumar et al., 2019).

In addition to the big five, hardiness and dark personality also affect burnout. Research shows that hardiness personality is negatively correlated with burnout, where individuals with high scores on this personality are able to manage stress better and therefore less prone to burnout (Divinakumar et al., 2019). On the other hand, individuals with dark personalities, which include traits such as narcissism, Machiavellianism, and psychopathy, tend to be more prone to burnout, as these traits can increase interpersonal stress and conflict (Grover & Furnham, 2021).

Research (Corbeanu et al., 2023; Demerouti & Adaloudis, 2024; Mota et al., 2023; Vătmănescu & Vintilă, 2023) suggests that burnout is a significant concern in the workplace, affecting employee well-being and performance. Research has shown that burnout is associated with emotional exhaustion, low motivation, and a negative impact on job performance (Allam et al., 2022). Factors such as heavy workload, job stress, and organizational injustice have been identified as the main causes of increasing levels of burnout among employees. Excessive workload makes employees feel overwhelmed and less able to meet the demands of the job, while prolonged job stress can be detrimental to their mental and physical health. Organizational inequities, which include unfairness in task distribution, recognition and rewards, also contribute to frustration and decreased motivation. Therefore, to address workplace burnout, it is important for organizations to consider policies that manage workload, reduce stress, and improve organizational justice, in order to create a healthier and more productive work environment.

According to Demerouti & Adaloudis (2024), factors that contribute to burnout can be categorized into situational and individual factors. Situational factors include job demands such as role ambiguity, conflict, stress, stressful events, workload, and work pressure that can lead to burnout and depersonalization. In addition, job resources also play an important role, where the balance between job demands and job resources strongly influences burnout and cynicism, and has a stronger relationship with a decreased sense of personal accomplishment. Organizational attitudes also had a moderate to strong relationship with burnout, and job control and workplace support were negatively associated with emotional exhaustion. Job insecurity also increased the risk of burnout.

Individual factors have a significant role in influencing the level of burnout experienced by employees. One prominent individual characteristic is neuroticism, where employees who have this trait tend to focus more on negative aspects and are more prone to burnout. Emotional stability was also found to be an important predictor of burnout and depersonalization. In addition, resilience, stress coping ability, and intrinsic motivation are other individual aspects that serve as protectors against burnout. The absence or deficiency of these aspects can increase one's susceptibility to burnout. In addition, inter-role conflict, whether it originates from work to non-work or vice versa, has a strong correlation with emotional exhaustion and other dimensions of burnout. Research by Demerouti & Adaloudis (2024) emphasizes the importance of understanding these individual factors in efforts to prevent and treat burnout in the work environment.

4. CONCLUSION

There are 200 publications with 60448 citations and 10074.67 cites/years that discuss burnout based on the results of bibliometric analysis. There are eight clusters that can be grouped including 1) Clusters that discuss burnout with covid and parental burnout, 2) clusters that discuss Maslach burnout inventory, physician and physician burnout. Influencers, 3) clusters that discuss burnout symptoms and reviews, 4) clusters that discuss depression and relationships, 5) clusters related to teacher and teacher burnout, 6) clusters that discuss causes, 7) clusters that discuss literature, and 8) clusters related to stress.

The theoretical implication of this study is to provide information related to research topics that have not been widely conducted, so that it can provide benefits for future researchers who are interested in discussing burnout. Meanwhile, the practical implications include the importance of providing training at the organizational level that includes developing employees' technical and social skills and conducting regular assessments of their well-being as a performance indicator. At the individual level, physical activity is made part of the daily routine to reduce the impact of burnout on overall health, while encouraging mindfulness exercises to reduce the risk of burnout and improve concentration and empathy. All these interventions aim to manage workplace stressors and increase individual resources to deal with work challenges.

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THE EFFECT OF BEHAVIORAL CONTROL, ORGANIZATIONAL COMMITMENT, SELF KEFFICACY, AND MORAL INTENSITY ON WHISTLEBLOWING INTENTION

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Abstract

Village Credit Institutions (LPD) play a strategic role in helping micro and small businesses and rural communities. However, several problems such as cases of fraud still occur, so a whistleblowing system is important to detect and prevent unethical practices. This study attempts to gain insight into the influence of behavioral control, organizational commitment, self-efficacy, and moral intensity on whistleblowing intentions. Researchers looked at 75 employees from 9 LPDs in South Kuta District. Probability sampling is utilized in the sampling procedure with a simple random sampling technique, and data is gathered via a survey questionnaire. Data analysis using multiple linear regression shows that behavioral control, organizational commitment, self-efficacy, and moral intensity have a favorable impact on the intents of whistleblowers. Implications related to the theory of planned behavior show that whistleblowing intentions are influenced by the belief that reporting violations helps maintain the integrity and reputation of the organization. This research can be input for LPDs in South Kuta District.

Keywords: Behavioral Control, Organizational Commitment, Self Efficacy, Moral Intensity, Whistleblowing Intention

1. INTRODUCTION

To realize an increase in the standard of living of village communities and overall village development, it is necessary to have economic institutions that are healthy, strong, productive, resilient and have high competitiveness. One of the pillars of the people's economy is the Village Credit Institution (LPD) which has a strategic role in supporting micro and small businesses (UMK) and rural communities. Based on Regional Regulation Number 3 of 2017, LPD has several business fields, namely collecting funds from village communities, providing loans to them, facilitating cooperation between villages by providing loans, receiving loans from financial institutions, and storing excess liquidity in banks. LPD administrators must improve performance through providing credit and savings to compete with other financial institutions, because LPDs play an essential part in improving the village economy. As the financial institution closest to village communities, LPD must work well in distributing and providing savings and loan facilities to the community and ensuring that it is not involved in accounting fraud.

One of the LPDs in Bali, precisely in the Ungasan Traditional Village, South Kuta District, experienced a detrimental fraud incident. This case involves the former Chairman of the LPD who was involved in fraudulent practices, causing losses of IDR 26 billion. This fraud is carried out by providing fictitious credit to customers from outside or within the

village by issuing large value credit to avoid the maximum credit limit (BMPK) provisions. The modus operandi involves splitting loans into several separate loan names, so that transactions appear smaller and are able to deceive financial supervisors such as Panureksa, LPLPD, and auditor institutions (Suadnyana, 2022).

Fraud cases are often a hot topic that is widely reported in the mass media and electronic media. Fraud can occur in various places such as non-profit organizations, companies, and government agencies. The impact of this financial crime is not only felt by the perpetrators of fraud, but can also affect other parties (Anindya & Adhariani, 2019).

Survey results by the Institute of Business Ethics in 2019 show that fraud reports from employees are the main source of fraud findings, as shown in Figure 1.1. The National Committee for Governance Policy (KNKG) then issued guidelines for the Violation Reporting System (SPP) or Whistleblowing System (WBS) to restore public trust in financial institutions. According to Hardianto et al (2018), the majority of large companies have implemented a violation reporting system to improve their management. In addition, additional strategies are needed to detect fraud as a whole. Several studies show that whistleblowing is an effective method for detecting fraud (Alleyne et al., 2017; Owusu et al., 2020).

When someone who works for a company, or used to, reveals illegal, unethical, or unauthorized activities by the leadership, it's called *whistleblowing*. This can lead to corrective measures being taken (Brennan & Kelly, 2007). Triantoro et al (2020) argue that whistleblowing is an effort to reveal illicit actions carried out ...by folks who are part of a group governed by their leadership to the masses or entities that have the potential to take corrective action. In the context of whistleblowing, whistleblowing characterized as type of dissent that arises in the form of allegations made in public against an organization in reaction to a moral conundrum. This system includes six main portions: the act of revealing harmful information, the whistleblowing agent, the subject of the disclosure of some potential wrongdoing, the target organization deemed responsible, the recipient of the disclosure, and the results of the disclosure that ultimately enter the public domain (Jubb, 1999). Whistleblowing is considered a useful tool for uncovering fraud in an organization, and it is important to encourage every employee who knows about fraud to disclose it (Zakaria, 2015).

Whistleblowing is the act of exposing unethical or illegal practices in an organization, whether carried out by the organization itself or its members. This disclosure can be made internally to authorities within the organization or externally to outside parties such as the media, regulators or law enforcement. The goal of these actions is to correct errors, increase transparency, and ensure the organization operates in accordance with ethical and legal standards. The whistleblowing process begins when someone witnesses a deviant act and decides to report it to internal parties in the organization or external parties such as regulators or the media (Lee et al., 2021). The intention to carry out whistleblowing can arise from the desire to help save people who have been harmed by acts of fraud (Brief & Motowidlo, 1986).

According to Ajzen (1991) theory (TPB), people are more likely to do something if they intend to do it in the first place. Intention is a motivational factor that shows how much a person wants and tries to behave in a certain way. There are three beliefs that can shape individual behavior: (a) attitudes toward behavior, which are related to how good or bad a

person judges a lawsuit; (b) subjective norms, which are related to the societal pressures that one feels to engage in certain behaviors or not; and (c) perceived behavioral control, which refers to the perceived ease or difficulty in performing or not performing a behavior (Ajzen, 1991). The TPB allows us to detect and assess the cognitive processes of whistleblowers and examining three key drivers of the intention or intentions of reporting deviant acts (Lee et al., 2021).

People perceive behavioral control as how easy or hard they think it will be to do something. If someone considers an action to be easy to do and there are no obstacles that need to be overcome, they are more likely to do it (Ajzen, 1991). Conversely, if someone finds the action difficult or there are obstacles to overcome, they will likely choose not to do it. In this context, this action is whistleblowing. Control factors that influence the perceived ease of action include a person's beliefs about obstacles in the organization that might hinder or deliberately ignore reporting (Owusu et al., 2020). Other studies have explored how a person's perception of their ability to whistleblow impacts their decision to do so. Research results from Rosalia (2017), Wuryaningsih & Dzulhasni (2022), and Devi & Ratnadi (2024) state that behavioral restraint encourages whistleblowing intentions, while research results from Putri & Zahroh (2022) state that A person's belief in their ability to whistleblow doesn't necessarily affect their desire to do so. Given these findings, our hypothesis is:

H1: Behavioral control leads to favorable outcomes for the intention to carry out whistleblowing actions.

Organizational commitment represent force that drives employees based on their involvement in the organization, firm conviction that the principles and ultimate goals of the company, as well as the desire to work well for the organization (Porter et al., 1974). High organizational commitment, which in the TPB is explained as a component of personal standards, can increase enthusiasm for achieving organizational success and prosperity. Therefore, if employees witness fraud that could hinder organizational goals, they will be more motivated to report it Sari (2021). Research results from Setiawati et al (2016) assert that the aim of whistleblowers is positively impacted by organizational commitment, while probe results from Sari (2021) proposed that a strong attachment to one's workplace doesn't directly translate to a hesitation to blow the whistle. This leads us to believe that:

H2: Organizational commitment has a positive effect on the intention to take whistleblowing action.

Self efficacy or self-confidence is defined as a citizen's conviction that they are capable of success in carrying out a certain behavior or task. This level of trust can influence individual motivation and efforts in achieving goals or completing the tasks at hand (Ajzen, 2002). Individuals' confidence in their capacity to plan and execute the tasks required to fulfill certain achievements is known as self-efficacy. An individual's ability to control their thoughts, feelings, and actions depends largely on their view of themselves. Individuals who believe in their own abilities will maximize their efforts, including whistleblowing (Putra & Wirasedana, 2017). The influence of a person's confidence in their ability to whistleblow has been a topic of investigation in past research. Results from Putra & Wirasedana (2017) and Natawibawa (2018) state that the level of self-efficacy has a favorable impact on the desire to whistleblowing, while the probe results from Khusnah & Jannah (2021)state that self-

efficacy has no bearing on the desire to disclose information. In light of this, the following theory is put forth.

H3: Professional self efficacy has a positive effect on the intention to take whistleblowing action.

Moral intensity refers to the level of moral importance or morality that an individual feels towards a behavior. In the context of whistleblowing, moral intensity includes individuals' evaluations of the goodness or badness of reporting irregularities or infractions that they observe or become aware of. According to Jones (1991), moral intensity is one part of the process of making ethical decisions, because people think about the good and bad of behavior before making a decision. Studies have been done on the moral significance of whistleblowing by several previous researchers. Research results from Setiawati et al (2016), Putra & Wirasedana (2017), and Primasari & Fidiana (2020) state that moral intensity has a favorable impact on the desire to engage in whistleblowing, and study findings from Rachmawati et al (2022) state that moral intensity has no bearing on the objectives of whistleblowers. In light of this, the following hypothesis is proposed:

H4: Moral intensity has a positive effect on the intention to take whistleblowing action.

2. RESEARCH METHODS

In order to collect data for this study, a survey method in the form of distributing questionnaires is used. This research was conducted at 9 Village Credit Institutions (LPD) in South Kuta District. The study's enrollment consisted of 75 respondents. Simple random sampling is the sample strategy employed in this study, which employs a probability sampling method. This research uses respondents' answers in a questionnaire which are quantified by means of a 4-point Likert Scale as quantitative data through respondents. The behavioral control variable in this study was assessed utilizing 6 (six) statements adopted from Ambarawati (2020). The behavioral control indicators used in this research are one's own desire and not caring about other people's opinions to become a whistleblower, one's control over correct actions, one's level of responsibility for one's behavior, one's control over choosing one's path in life, and one's ease in reveals what he really knows about what happened.

In this study, the factor influencing organizational dedication was assessed utilizing 5 (five) statements adopted from Chandraini et al (2019). The behavioral control indicators used in this research are A deep dedication to the organization's objectives and core principles as well as employee acceptance of these values, readiness to provide encourage for the company, as well as a compelling incentive for staff people to stay members of the corporation. The self-efficacy variable in this study was measured using 5 (five) statements adopted from Ambarawati (2020). The behavioral control indicators used in this research are the ability to report fraud/violations, the belief that someone can report fraud/violations even though a friend advises them not to do so, the belief that someone can report fraud/violations even though they are in a situation that prevents them from doing so. people to do so, and the belief that someone can report fraud/violations even if the management team opposes the action.

This study's evaluation technique of moral intensity variable was using 5 (five) statements adopted from Chandraini et al (2019). The behavioral control indicators used in this research are moral values, ethical issues, likelihood of impact, severity of repercussions, and societal agreement. The whistleblowing variable in this study was measured using 3 (three) statements adopted from Atik (2018). The behavioral control indicators used in this research are a person's level of intention in disclosing fraud, a person's effort in disclosing fraud, and having a specific goal in disclosing fraud.

3. RESULTS AND DISCUSSION

The respondents for this research were 75 employees, 33 of whom were male and 42 female. If we look at age, there are 48 employees aged 21-30 years, 16 employees aged 31-40 years, and 11 employees aged 41-50 years. If we look at the length of work, there are 11 workers who were employed for less than 5 years, 30 workers who were employed for 5-10 years, and 34 worker who were employed for more than 10 years. If we look at education, there are 7 employees with diploma education, 63 employees with Bachelor's education, and 5 employees with Master's education.

This research uses primary data derived from the responses to the questionnaire. The validity and reliability of the used questionnaire must be examined using SPSS before being distributed to respondents. In validity testing, all research instruments were declared valid because they had a correlation coefficient value of more than 0.3. In reliability testing, all research instruments were declared reliable because they had a Cronbach's alpha coefficient value of more than 0.6 was observed in them. Descriptive statistics provide information regarding the characteristics of each research variable using minimum values, maximum values, average values, and standard deviation. InTable 1, descriptive statistics are displayed.

Tabel 1. Descriptive Statistics

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Whistleblowing intent (Y)	75	2,3	4	3,86	0,456
Behavior control (X1)	75	3	4	3,58	0,443
Organizational commitment (X2)	75	2,2	4	3,49	0,559
Self efficacy (X3)	75	2	4	3,45	0,539
Moral intensity (X4)	75	2	4	3,47	0,508

Source: Processed data (2024)

Table 1 shows the descriptive statistics as the minimum value, maximum value, average and standard deviation, and N is the number of samples processed. Based on the results of descriptive statistics, the whistleblowing intention of variable (Y) values ranges from 2.3 at the least to 4 at the highest. Whistleblowing intention has an average score of 3.86 and a standard deviation of 0.456. This demonstrates that LPD employees in South Kuta District tend to agree with the 3 indicators of whistleblowing. From these outcomes, it is evident that the standard deviation value of the whistleblowing intention variable is smaller when compared to the average value, this shows that the whistleblowing intention variable has a

good data deviation because the distribution of the whistleblowing intention variable is relatively small.

The maximum value of variable behavioral control (X1) is 4, while the minimum value is 3. Behavioral control has an average score of 3.58 and a standard deviation of 0.443. This indicates that LPD employees in South Kuta District tend to accept regarding the five behavioral control signs. From these findings, it is evident that the standard deviation value of the behavioral control variable is smaller when compared to the average value, this demonstrates how the behavioral control factor has good data deviation because the distribution of the behavioral control variable is relatively small. The organizational commitment variable (X2) ranges from a minimum of 2.2 to a maximum of 4. The mean value of organizational commitment is 3.58 with a standard deviation value of 0.443.

This shows that LPD employees in South Kuta District tend to agree with the 3 indicators of commitment. From these findings, it is evident that the standard deviation value of the organizational commitment variable is smaller when compared to the average value, this shows that the factor of organizational commitment has good data deviation because the organizational commitment variable's distribution is relatively small. The self efficacy variable (X3) has two as its minimum value and four as its maximum value. Self-efficacy has an average of 3.45 and a standard deviation of 0.539.

This proves that LPD employees in South Kuta District tend to agree with the 4 indicators of self-efficacy. From these findings, it is evident that the standard deviation value of the self-efficacy variable is smaller when compared to the average value, this suggest the self-efficacy variable has good data deviation because the distribution of the self-efficacy variable is relatively small. The moral intensity variable (X4) There are two possible values for the moral intensity variable (X4), with a maximum of four. With a standard deviation of 0.508, the average moral intensity is 3.47.

This demonstrates that LPD employees in South Kuta District tend to agree with the 5 indicators. From these findings, it is evident that the standard deviation value of the moral intensity variable is smaller when compared to the average value, this shows that the moral intensity variable has good data deviation because the distribution of the moral intensity variable is relatively small.

Tabel 2. Normality Test (One-Sample Kolmogorov-Smirnov)

One-Sample Kolmogorov-Smirnov Test	
N	75
Test Statistic	0,085
Asymp. Sig. (2-tailed)	0,200

Source: Processed data (2024)

From these findings, it is evident that the Table 2 displays the results of the One-Sample Kolmogorov-Smirnov Test normalcy test, which indicates the value of Asymp. Kolmogorov-Smirnov's (2-tailed) sigm is 0.200 Asymp. The data utilized in this study are regularly distributed, as indicated by the Sig (2-tailed) Kolmogorov-Smirnov value being bigger than the alpha value of 0.05. Therefore, it can be said that the model satisfies the normality assumption.

Tabel 3. Multicollinearity Test (Tolerance dan Variance Inflation Factor)

Variable	Collinearity Statistics	
	Tolerance	VIF
Behavior control (X1)	0,976	1,025
Organizational commitment (X2)	0,995	1,005
Self efficacy (X3)	0,743	1,346
Moral intensity (X4)	0,757	1,322

Source: Processed data (2024)

From these findings, it is evident that the tolerance and VIF values in Table 3 indicate that no independent variable has a tolerance value less than 0.10 and no independent variable has a VIF value more than 10. As a result, there are no multicollinearity symptoms in the regression model.

Tabel 4. Heteroscedasticity Test (Glesjer Test)

Variable	Sig.
Behavior control (X ₁)	0,074
Organizational commitment (X ₂)	0,307
Self efficacy (X ₃)	0,263
Moral intensity (X ₄)	0,195

Source: Processed data (2024)

From these findings, it is evident that the Table 4 demonstrates that every variable has a significant value larger than 5% (0.05), including behavioral control (0.074), organizational commitment (0.307), self-efficacy (0.263), and moral intensity (0.195). This demonstrates that the independent variable in this study does not significantly affect the dependent variable, the absolute residual, and as a result, there are no signs of heteroscedasticity in this research.

Tabel 5. Results of Multiple Linear Regression Analysis

Variable	Unstandardized Coefficients		Standardized Coefficients	t	Sig
	B	Std. Error	Beta		
(Constant)	0,984	0,995		0,989	0,326
Behavior control (X ₁)	0,078	0,032	0,170	2,467	0,016
Organizational commitment (X ₂)	0,083	0,030	0,191	2,802	0,007
Self efficacy (X ₃)	0,178	0,036	0,394	4,999	0,000
Intensitas moral (X ₄)	0,229	0,038	0,476	6,099	0,000
F Statistik : 36,659					
Sig F : 0,000					
R ² : 0,677					

Source: Processed data (2024)

From these findings, it is evident that the calculated F value is 36.659 with a significance of 0.000, which is less than 0.05, according to Table 5 of the F test results in this study. This means that the regression model fits the observation data and can be used as an analytical tool to determine how much the independent variable influences the dependent variable. Determination analysis in this research shows that is deserving of $R^2 = 67.7$ percent, implying that 67.7 percent of whistleblowing intentions are influenced by behavioral control variables (X1), organizational commitment variables (X2), self-efficacy (X3), moral intensity (X4) and other factors not included in this study have an impact on the remaining 32.3 percent.

The behavioral control variable (X1) is known to have a significance level of $0.016 < 0.05$ based on the t test findings in Table 5, so we can say that H_a is accepted and H_0 is refused, which means that the behavioral control variable has a favorable impact on whistleblowing intentions. The behavioral control variable, β_1 , has a regression coefficient of 0.078, suggesting that an increase in behavioral control will increase whistleblowing intentions. Thus, the research's initial hypothesis is accepted. The organizational commitment variable (X2) has a degree of relevance of $0.007 < 0.05$. Thus, the study's second hypothesis is supported, which means that the organizational commitment variable has a favorable impact on whistleblowing intentions. The regression coefficient β_2 (organizational commitment variable) is 0.083, suggesting that rising organizational commitment will increase whistleblowing intentions, indicating that the second research hypothesis is true. Since the significance level for self-efficacy variable (X3) is $0.000 < 0.05$, H_a is accepted and H_0 is denied.

This indicates that whistleblowing intentions are positively impacted by the self-efficacy component. The regression coefficient β_3 (self efficacy variable) is 0.178, exhibiting that raising self efficacy will increase whistleblowing intentions, therefore the third research hypothesis is approved. With a significant threshold of $0.000 < 0.05$ for the moral intensity variable (X4), H_0 is rejected and H_a is accepted, indicating that the moral intensity variable positively influences whistleblowing intentions. The regression coefficient β_4 (moral intensity variable) is 0.229. The fourth hypothesis in this study is accepted as it suggests that a rise in moral intensity would result in an increase in whistleblowing intentions.

The first hypothesis (H_1) states that perceived the intention to report misconduct has a favorable correlation with behavioral control. The greater the behavioral control indication, then: a. own desire and not caring about other people's opinions to become a whistleblower; b. one's control over right actions; c. a person's level of responsibility for his behavior; d. a person's control over the choice of his life path; and e. The ease with which a person can reveal incidents that they actually know about will have an impact on increasing whistleblowing intentions among LPD employees in South Kuta District. So the first hypothesis in this research can be accepted. From these findings, it is evident that the theory of planned behavior (TPB), behavioral control describes how someone feels about how simple or complicated it is to carry out or not carrying out a certain behavior.

Behavioral control perception affects signs of the desire to whistleblower: a. the level of an individual intention to disclose misconduct; b. an individuals efforts to reveal misconduct; c. has a specific goal in revealing misconduct. The study's findings are consistent with previous studies results from Rosalia (2017), Wuryaningsih & Dzulhasni

(2022), and Devi & Ratnadi (2024) which assert that behavioral regulation is beneficial to whistleblowing intentions.

The second hypothesis (H2) claims that the intention to take action as a whistleblower is positively impacted by corporate commitment. Thus, it may be said that the higher the behavioral control indicator: a. strong commitment to the organization's objectives and values, as well as employee acceptance of these values; b. willingness to lend support to the organization; c. the imperative that workers continue to be members of the organization will have an impact on increasing whistleblowing intentions among LPD employees in South Kuta District. Thus, it is possible to adopt the second research hypothesis. Organizational commitment is a proxy for sensory standards in the planned behavior theory (TPB). If an employee sees fraudulent actions that could interfere with achieving organizational goals, the employee will always reveal it. Organizational commitment influences indicators of whistleblowing intention: a. the level of a person's intention to disclose fraud; b. a person's efforts to reveal fraud; c. has a specific goal in revealing fraud. The findings of this study support those of Setiawati et al (2016) research, which found that organizational commitment positively influences whistleblowing intentions.

The intention to take action to expose wrongdoing is positively correlated with self-efficacy, according to the third hypothesis (H3). Accordingly, the greater the self-efficacy indication: a. ability to report fraud/violations; b. conviction that one may disclose transgressions or fraud even while they blamed by a friend for not doing so; c. belief that one can report fraud/violations despite situations that prevent one from doing so; d. The belief that someone can report fraud/violations even though the management team opposes this action will have an impact on increasing whistleblowing intentions among Village Credit Institution (LPD) employees in South Kuta District. Thus, it is possible to adopt the third research hypothesis. A stand-in for perceived behavioral control in the theory of planned behavior (TPB) is self-efficacy.

It speaks about the apparent ease or difficulty of carrying out an action, which is connected to a person's ideas about their ability to carry out that action. Self-efficacy, or someone's confidence in their capacity to accomplish goals or complete certain tasks, greatly influences an individual's perception of their control over that behavior. If someone has high self efficacy, they tend to feel that they have greater control and it is easier to carry out the desired behavior. Self-efficacy influences indicators of whistleblowing intention: a. the level of an individuals intention to disclose deceit; b. an individuals efforts to reveal fraud; c. has a specific goal in revealing deceit The findings of this study are consistent with those of studies from Putra & Wirasedana (2017) and Natawibawa (2018), claims that the intention to engage in whistleblowing is positively correlated with one's degree of self-efficacy.

The fourth hypothesis (H4) asserts that the intention to take action as a whistleblower is positively impacted by moral intensity. Thus, the greater the moral intensity indicator, the higher: a. moral values; b. ethical issues; c. probability of effect; d. magnitude of consequences; e. social consensus, it will have an impact on increasing whistleblowing intentions among Village Credit Institution (LPD) employees in South Kuta District. So the fourth hypothesis in this research can be accepted. According to the theory of planned behavior (TPB), moral intensity serves as a stand-in for attitudes toward activity. This speaks to the degree to which an individual judges a behavior as good or bad. Moral intensity relates

to individuals' beliefs about the moral and ethical values that guide their judgments of certain behaviors.

If someone has high moral intensity, they tend to have strong attitudes toward behavior, whether positive or negative, based on their moral judgment. For example, someone with high moral intensity might rate whistleblowing as a very good action and important for justice and integrity. Moral intensity influences indicators of whistleblowing intention: a. the level of a person's intention to disclose fraud; b. a person's efforts to reveal fraud; c. has a specific goal in revealing fraud. The outcomes of this study are consistent with those of the studies conducted by Setiawati et al (2016), Putra & Wirasedana (2017), and Primasari & Fidiana (2020), claimed that the intention to carry out whistleblowing is positively impacted by moral intensity.

4. CONCLUSION

The evaluation's findings allow for the conclusion that perceived behavioral control has a positive effect on the whistleblowing intentions of Village Credit Institution (LPD) employees in South Kuta District. This means that the more control over the behavior of LPD employees increases, the more they will carry out whistleblowing intentions. The aim of whistleblowers is positively impacted by organizational commitment of Village Credit Institution (LPD) employees in South Kuta District. This implies that workers of LPD are more likely to engage in whistleblowing if they have a higher organizational commitment. Self-efficacy has a favorable impact on the whistleblowing intentions of Village Credit Institution (LPD) employees in South Kuta District. This means that the more employees' self-efficacy increases, the more they will carry out whistleblowing intentions. The intents of individuals to come forward with information are positively impacted by moral intensity of Village Credit Institution (LPD) employees in South Kuta District. This means that the more the moral intensity of LPD employees increases, the more they will carry out whistleblowing intentions.

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ANALYSIS OF LOCAL REVENUE (PAD) OF MOROWALI DISTRICT

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Abstract

Local governments in Indonesia are increasingly focusing on financial independence and efficiency to support regional development. Morowali Regency, located in Central Sulawesi Province, is no exception. As regional autonomy policies have been implemented, it has become crucial to assess the financial performance of local governments. This assessment helps determine their capacity for self-governance and efficient resource management. Key indicators in this evaluation include the Independence Ratio, Effectiveness Ratio, and Efficiency Ratio of Regional Original Income (PAD). This study aims to analyze the Independence Ratio, Effectiveness Ratio, and Efficiency Ratio of Morowali Regency's Regional Original Income. The research employs calculations of these ratios for Local Revenue. Results show that the Independence Ratio had an average value of 24.97 percent, falling within the medium independence criteria. This indicates that the region has not yet achieved full independence. The average Effectiveness Ratio is 2.68 percent, reflecting that the realization of Regional Original Income (PAD) is greater than the target set by the Morowali Regency Government, suggesting effective task execution. The average Efficiency Ratio is 1.72 percent, meaning that the realized PAD obtained by Morowali Regency exceeds the costs incurred in collecting it. This indicates efficient PAD collection, as the realized income is greater than the budget allocated for its collection.

Keywords: Independence Ratio, Effectiveness Ratio, Efficiency Ratio, Local Revenue

1. INTRODUCTION

Regional autonomy in Indonesia has been in effect since January 1, 2001, the purpose of which is to want a region to find a source of revenue that can finance government spending in the context of governance and development, so that it is harmonized through the development of conditions, state administration and the demands of regional governance, regulations on regional autonomy and fiscal decentralization in Indonesia are always overhauled (Abdurahmat, 2003).

The law on regional autonomy, namely Law No. 22 of 1999 which was revised by Law No. 32 of 2004 and then amended by Law No. 23 of 2014 which explains about "Regional Government", requires adequate personal support, equipment and financing (finance) (Darise, 2006). In line with the implementation of regional autonomy (Kamaroellah, 2017), the central government has distributed various sources of financing to the regions in order to carry out their delegated duties and obligations, as regulated in Law No. 25 of 1999 which was later revised by Law No. 33 of 2004 concerning "Financial Balance Between the Central Government and Regional Governments" and government regulations that support

Decentralization and regional autonomy are tools and means for democratic development and good governance.

The government gives the regions the right to obtain financial resources to provide funds for the implementation of regional autonomy through the collection and effectiveness of taxes and levies, the right to obtain separate results of the management of regional assets, balance funds and other legal regional income (Babkin et al., 2017). The characteristics that prove a region is declared to be able to implement regional autonomy, namely the level of regional financial capability to finance local government activities, through increasing low regional dependence on funds from the center with high Regional Original Revenue (PAD). PAD is one of several sources of regional income used by regions to finance autonomy activities.

The existence of a regional autonomy system means that the authority of local governments is getting bigger, which means that the responsibilities they have are also getting bigger (Sutriadi et al., 2015). However, it is a burden to demand the readiness of local governments in their government activities. As for an aspect that is a supporter in knowing correctly the ability of the region to control and manage its own territory, namely the financial aspect, the intended regional capacity is how much the region's ability to generate its own income sources to finance all regional needs and not depend for a long time on assistance originating from the Central Government (Desita, 2015). The large or small PAD obtained is a basis for seeing the level of financial capability of a region, namely the greater the amount received and the collected Regional Original Funds provide evidence that the level of regional dependence on central government assistance is getting lower.

Morowali Regency is a regency located in Central Sulawesi Province, Indonesia. The capital of this district is located in Bungku Tengah District. The district has an area of 5,472.00 km² and a population of 170,415 people as of June 30, 2022, based on data from the Ministry of Home Affairs, and 176,244 people based on data from the Central Statistics Agency in 2023. Morowali Regency's Original Regional Income is a source of capital in running the government.

A region can be declared independent, if a region no longer expects assistance from the central government (Berlian & Vega F. R., 2023). Furthermore, if the region can finance government activities from costs originating from the Regional Original Revenue. In addition, the government strongly expects that the provinces and regencies/cities that have been expanded can explore and manage effectively and efficiently their sources of local revenue. The great desire of the local government to be able to develop the region according to the ability and desire of the region is evident from several years felt by various regions of the region far from its wishes, so fiscal dependence and subsidies and assistance from the Central Government are evidence of the region's helplessness to increase PAD.

Regions with income derived from high regional sources have a tendency to be able to meet the needs of their people and are very able to finance many programs. Lobao et al (2012) which suggests that local governments have sources consisting of PAD. PAD is regional income obtained from the region's own assets which are managed according to local regulations and applicable laws (Fernandes, 2021). Various sources of PAD are local taxes, local levies, management of separate local assets, and other legitimate local income (Abdul, 2007).

This study combines the analysis of the three main ratios of independence, effectiveness, and efficiency to provide a comprehensive picture of regional financial performance. The novelty of this approach lies in the incorporation of three different perspectives in one study, providing a deeper insight into local finance than studies that only focus on one ratio. By analyzing a broad period from 2014 to 2019, this study provides a long-term view of changes and trends in the financial performance of the Morowali region, allowing the identification of patterns and fluctuations that may not be apparent in studies with shorter periods.

This research provides concrete recommendations for the improvement of regional financial performance through intensification and extensification of own-source revenues, which can be directly implemented by local governments to achieve greater financial independence. Thus, this study offers a holistic and practical approach in evaluating and improving regional financial performance, particularly in Morowali Regency, which adds a new dimension to the study of regional finance in Indonesia.

2. RESEARCH METHODS

2.1. Type of Research

This research is descriptive research. Descriptive research is research that uses a more detailed study of events or can distinguish with other events. Descriptive research is a research method that describes population characteristics to examine the current status of a human population, an object, a situation, a system of thought or an event.

2.2. Data Type and Source

The type of data used in this study is secondary data, which includes quantitative data in the form of numbers such as data on the APBD Realization Report and budgets levied by Regional Original Revenue, Morowali Regency Government in 2014-2019.

2.3. Data Collection Method

The method of collecting data used in this research is the documentation method, through data collection techniques based on documentation at the Tadulako University Library and the Faculty of Economics, journals, then browsing related websites.

2.4. Data Analysis

a. Regional Financial Independence Ratio

The Independence Ratio describes the region's dependence on external sources of funds. The higher the independence ratio, the lower the dependence of the region on transfer revenues (central and provincial governments), and vice versa. The Independence Ratio can be formulated as:

$$\frac{\text{Local Revenue}}{\text{Transfer Income}} \times 100\%$$

The following criteria for the level of regional independence ratio are:

- 1) If the level of independence is 0 - 25%, then the level of regional independence is very low.
- 2) If the level of independence is 25 - 50%, then the level of regional independence is low.
- 3) If the level of independence is 50 - 75%, then the level of regional independence is moderate.
- 4) If the level of independence is 75 - 100%, then the level of regional independence is high (Halim, 2010).

b. Regional Financial Effectiveness Ratio

The effectiveness of PAD shows how much a predetermined goal is achieved. Effectiveness always relates between the intended results and the results actually achieved. The greater the results achieved, the greater the level of effectiveness. But the opposite, the smaller the results achieved, the smaller the effectiveness. The difference in PAD effectiveness is the comparison between revenue and PAD targets. The effectiveness ratio can be formulated as follows:

$$\frac{\text{PAD Revenue Target}}{\text{Realization of PAD Revenue}} \times 100\%$$

There is also a basis for determining the level of effectiveness of Local Revenue with criteria, namely:

- 1) If the value obtained is $<100\%$ ($X < 100\%$), it means that it is not effective.
- 2) If a value similar to 100% is obtained ($X = 100\%$), it means effectiveness is balanced.
- 3) If the value is obtained $> 100\%$ ($X > 100\%$), it means it is effective (Halim, 2010).

c. Regional Financial Efficiency Level Ratio

The following are the criteria for determining the level of efficiency ratio of Local Revenue, namely that a region can be declared efficient Local Revenue if this ratio is < 1 (one) or $< 100\%$. The efficiency ratio can be formulated, namely:

$$\frac{\text{PAD Collection Fee}}{\text{PAD Realization}} \times 100\%$$

The following are the criteria for the level of the regional efficiency ratio, namely:

- 1) If a value of less than 100% ($X < 100\%$) is obtained, it is highly efficient.
- 2) If the value obtained is equal to 100% ($X = 100\%$), it means balanced.
- 3) If the value obtained is $> 100\%$ ($X > 100\%$), it means inefficient (Abdul, 2004b).

3. RESULTS AND DISCUSSION

3.1. Research Results

3.1.1. Results of Self-Reliance Ratio Calculation

Table 1. Morowali Regency Independence Ratio 2014-2019

Year	PAD (Rp)	Transfer Income (Rp)	Independence Ratio (%)	Criteria
2014	25.341.127.905	399.072.482.000	6,350	instructive
2015	74.439.927.380	583.195.993.000	12,764	instructive
2016	72.794.497.090	944.980.000.000	7,703	instructive
2017	190.571.540.418	926.907.990.000	20,560	instructive
2018	181.232.941.457	932.350.000.000	19,438	instructive
2019	221.946.739.695	930.420.000.000	23,854	instructive
Average			90,670	delegative

Source: BPKAD Kab.Morowali Data Processed

The calculation results in table 1 show that the level of independence of Morowali Regency from 2014-2019 really remains independent in implementing its autonomy. Judging from the relationship pattern, the level of regional independence of Morowali Regency is classified as delegative, which means that there is no involvement of the Central Government. The largest ratio result occurred in 2019, which amounted to 23.854 percent with very low independence criteria, namely instructive, while the lowest ratio result was in 2014, namely 6.350 percent with very low criteria.

It is known that the average result of the independence ratio of Morowali Regency from 2014-2019 is 90.670 percent with the criteria for delegative regional independence. The results of the Morowali Regency's independence ratio fluctuated due to the Morowali Regency PAD which also experienced instability which tended to decrease. The matter here gives an indication if Morowali Regency is biased towards regional autonomy, where local government independence dominates over the role of the Government.

3.1.2. Effectiveness Ratio Calculation Results

Table 2. Morowali Regency Effectiveness Ratio 2014-2019

Year	Target PAD (Rp)	PAD Realization (Rp)	Effectiveness Ratio (%)	Criteria
2014	25.341.127.905	7.485.000.000	338,559	Effective
2015	74.439.927.380	25.815.631.730	288,352	Effective
2016	72.794.497.090	25.261.548.103	288,163	Effective
2017	190.571.540.418	61.402.703.870	310,363	Effective
2018	181.232.941.457	95.775.237.749	189,227	Effective
2019	221.946.739.695	114.311.231.789	194,160	Effective
Average			1608,825	Highly Effective

Source: BPKAD Kab.Morowali Data Processed

Table 2 shows that the level of Effectiveness of Morowali Regency from 2014-2019 is truly Efficient in implementing its autonomy. Judging from the criteria, it is classified as

Effective, which means that there is no involvement of the Central Government. The largest ratio result occurred in 2014, which was 338.559 percent with Effective criteria.

While the lowest result occurred in 2018, which amounted to 189.227 percent and the same criteria, namely Effective. It is known that the average result of the effectiveness ratio of Morowali Regency from 2014-2019 is 1608.825 percent with very effective criteria. The results of the effectiveness ratio of Morowali Regency fluctuate due to the PAD of Morowali Regency which also experiences stability which tends to be better. This is because the government's role is effective in implementing regional autonomy due to Morowali Regency's PAD.

3.1.3. Results of Efficiency Ratio Calculation

Table 3. Efficiency Ratio of Morowali Regency in 2014-2019

Year	PAD Collection Fee (Rp)	PAD Realization (Rp)	Efficiency Ratio (%)	Criteria
2014	530.880.637,92	25.341.127.904,78	2,095	Efficient
2015	958.238.649,00	74.439.927.380,93	1,287	Efficient
2016	771.756.488,00	72.794.497.090,37	1,060	Efficient
2017	6.105.500.000,00	190.571.540.417,70	3,204	Efficient
2018	3.719.522.058,00	181.232.941.457,03	2,052	Efficient
2019	1.389.235.836,61	221.946.739.695,07	0,626	Efficient
Average			10,324	Efficient

Source: BPKAD Kab.Morowali Data Processed

The efficiency level of Morowali Regency from 2014-2019 is truly efficient in implementing its autonomy. Judging from the criteria, the level of efficiency of the Morowali Regency is classified as Efficient, which means that there is no involvement of the Central Government. The largest ratio result was in 2017, namely 3.204 percent with Efficient criteria. While the lowest ratio result was in 2019, namely 0.626 percent with efficient criteria.

It was found that the average efficiency ratio of Morowali Regency from 2014-2019 was 10.324 percent with efficient criteria. The results of the efficiency ratio of Morowali Regency experience stability which tends to be efficient. This is because the Morowali Regency government has been able to implement regional autonomy, this can be seen from the realization of PAD obtained by Morowali Regency which is greater than the expenditure that must be given to PAD.

3.2. Discussion

3.2.1. Regional Financial Independence Ratio

The discussion of the financial independence of a region cannot be avoided from the ability of the local government, which acts as a government organizer, to allocate regional finances in accordance with targets, goals and continuously, so as to create and increase new sources of PAD. This requires officials in the regions to organize prioritized government affairs so that sources of PAD are available, but regional officials must always innovate so that new sources of PAD are created.

The level of regional independence of Morowali Regency in financing government activities showed significant variations during the 2014-2019 period. In 2014, the level of independence was recorded at 6.350 percent, then increased to 12.764 percent in 2015. However, in 2016, this figure decreased to 7.703 percent. The following period showed a sharp increasing trend, with self-reliance reaching 20.560 percent in 2017 and 19.438 percent in 2018, before finally reaching 23.854 percent in 2019. If calculated on average, the level of Regional Original Revenue (PAD) of Morowali Regency from 2014 to 2019 is only around 30.204 percent, which indicates that the level of independence is still in the instructive category. This shows that despite improvements in several years, overall Morowali Regency still needs guidance and instructions from the central government to achieve higher independence.

In response to this, the Morowali Regency Government must take effective intensification and extensification steps so that the PAD of Morowali Regency in the future can increase so that independence is achieved in the autonomous region. Intensification and extensification in question, namely the Morowali Regency Government, always makes fundamental changes not only internally but externally, for example improving Human Resources that have the highest quality and in the field of regional financial management, bureaucratic training so that the hopes of the local government in making an independent region can be achieved (Abdul, 2004a).

3.2.2. Regional Financial Effectiveness Ratio

The regional financial capacity of Morowali Regency during the period 2014 to 2019 showed variations that reflected the dynamics of regional financial management. Regional Original Revenue in the 2014 fiscal year can achieve the targets that have been set. From the PAD target of Rp.7,485,000,000, it can be realized at Rp. 25,341,127,905 in 2014, the effectiveness ratio is classified as effective because the ratio is more than 100 percent. This high effectiveness reflects good local government performance in managing local revenue sources, as well as possible improvements in the efficiency of local tax and levy collection. This achievement can be used as a positive indicator of the local government's ability to optimize the potential of the local economy, which in turn can improve the welfare of the local community.

In Fiscal Year 2015, local revenue was able to reach the target that had become a provision of the PAD target of Rp.25,815,631,730, which was realized at Rp.74,439,927,380. This shows a remarkable increase in the effectiveness ratio of PAD compared to the previous year, which is also classified as very powerful because the value exceeds 100 percent. This increase reflects the local government's success in increasing own-source revenues through various efforts, such as optimizing tax and levy collection and better management of local resources. This success also shows that local governments are able to identify and utilize existing economic opportunities more effectively, which in turn can contribute to improving community welfare and overall regional development.

The 2016 Local Revenue budget from the PAD target of Rp. 25,261,548,103 can be realized at Rp. 72,794,497,090 in this year the effectiveness ratio tends to increase but has decreased from the previous year's PAD target. Although the effectiveness ratio tends to increase, the lower PAD target compared to 2015 indicates an adjustment in budget planning. However, the effectiveness ratio, which remains more than 100 percent, shows that the

performance of PAD management is still classified as effective. This indicates that local governments continue to manage revenue sources well and are able to maintain a high level of effectiveness, despite changes in the targets set. This achievement reflects the adaptability of local governments in dealing with economic dynamics as well as their commitment to continuously increase own-source revenues for the sake of development and community welfare.

In Fiscal Year 2017 Local Revenue from the PAD target that has been set at Rp. 61,402,703,870 can be realized at Rp. 190,571,540,418 in 2017 the effectiveness ratio has increased. The increasing effectiveness ratio shows a remarkable increase in the ability of local governments to manage and optimize revenue sources. With an effectiveness ratio that is still classified as very effective because it is more than 100 percent, this reflects outstanding performance in the collection and management of local taxes and levies. This achievement signifies the success of the local government's strategy to increase own-source revenue, which could include improvements in administration, increased taxpayer compliance, and better exploitation of local resources. These results also illustrate the stability and effectiveness of local financial management, which in turn has a positive impact on local development and community welfare.

Regional Original Revenue (PAD) in 2018 from the PAD target of Rp. 95,775,237,749, the realization of PAD reached Rp. 181,232,941,457. This shows that the effectiveness ratio of PAD has increased significantly and is still classified as very effective, because the value is more than 100 percent. This achievement reflects the performance of local governments that continue to improve in managing local revenue. This increase is most likely due to efforts to optimize tax and levy collection, increase taxpayer compliance, and more efficient management of local resources. This success also shows that local government strategies and policies in increasing own-source revenue are working well, having a positive impact on local finances, which in turn contributes to development and community welfare.

In Fiscal Year 2019, the Regional Original Revenue successfully exceeded the predetermined target. From the PAD target of Rp. 114,311,231,789, the realization of PAD reached Rp. 221,946,739,695. This shows that the PAD effectiveness ratio is still classified as very effective, because the value is more than 100 percent. This achievement reflects the outstanding performance of local governments in managing and increasing own-source revenues. This success is likely due to various factors, including optimization efforts in tax and levy collection, increased taxpayer compliance, and efficient resource management strategies. This significant increase in own-source revenue also indicates that local governments are able to utilize the potential of the local economy well, thereby making a positive contribution to development and community welfare. This success is an indication that local government policies and programs are on track, having a positive impact on the regional economy.

The ability of autonomous regions to exercise full financial autonomy in a short period of time is doubtful, not only being the impact of the capabilities of autonomous regions that cannot be changed quickly but the financial system, namely the central government does not just want to lose control of local governments. Kuncoro (2002) explains that various issues that can hinder the success of autonomous local governments, namely (1) the dominance of central transfers, (2) the lack of role of local companies as a source of local revenue (PAD), (3) the high centralization in the field of taxation, (4) although local taxes vary, but only a

few can be relied upon as a source of revenue, (5) weaknesses in the provision of subsidies from the central government to local governments.

3.2.3. Regional Financial Efficiency Ratio

Efficiency is a ratio that describes the difference between the amount of budget spent in obtaining PAD and the realization of PAD obtained in each year of budget time. The results of the ratio analysis of the Morowali Regency Government from the level of budget efficiency for PAD collection in 2014 were 2.095 percent, in 2015 1.287 percent, in 2016 1.060 percent, in 2017 3.204 percent, in 2018 2.052 percent and in 2019 0.626 percent, the level of efficiency in collecting PAD when averaged reached 10.324 percent. From the results above, it shows that the Morowali Regency government's PAD collection budget is good, because the efficiency ratio is in the range of 10.324 percent, which means that the budget that must be issued by the Morowali Regency Government in the 2017 fiscal year in order to produce PAD realization is Rp. 190,571,540,417.70 or 3.204 percent of PAD realization is classified as efficient to obtain PAD realization. This means that the realization of PAD obtained by Morowali Regency is greater than the budget that must be spent in collecting PAD.

The Regional Financial Efficiency Ratio (REKD) describes the difference between the amount of budget spent in obtaining income and the realization of income obtained. Local Government Financial Performance to levy income with the realization of income earned. Local Government Financial Performance to levy income is categorized as efficient if the ratio achieved is < 1 or below 100%. The smaller the Regional Financial Efficiency Ratio means the better the Regional Government Financial Performance. Therefore, the local government must carefully calculate how much budget is spent in realizing all the income it gets so that it can be known whether the income levy activity is effective or not.

4. CONCLUSION

The results of research calculated by three ratios from 2014-2019 resulted in a very high level of regional financial capacity of Morowali Regency so that it can be said to have been able to support the implementation of regional autonomy. This is because the PAD owned by Morowali Regency is very large with transfer funds and routine expenses so that the Morowali Regency Government does not depend on the central government. Local governments need to explore Regional Original Revenue (PAD) and create potentials that can be used as PAD income.

Especially in the era of autonomy, each region needs a budget in carrying out government and development tasks. Thus, regional dependence on external sources of funds can be reduced. In order to increase the effectiveness of PAD, it is expected that the government can further improve supervision and evaluation of PAD revenue. In addition, to reduce the operational costs of collection, it is necessary to identify costs that are considered unnecessary. This can be done by providing an explanation of the costs incurred in collecting PAD, so that regional financial efficiency can be achieved.

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**ANALISIS DAN PERANCANGAN SISTEM INFORMASI
AKUNTANSI BERBASIS MICROSOFT ACCESS 2019 PADA
PERSEDIAAN BARANG DI UD. MAJU MAPAN PACITAN**

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Abstract

UD. Maju Mapan Pacitan is engaged in the production and sale of goods. In running its business, UD. Maju Mapan Pacitan still uses a manual accounting information system, especially in recording inventory, so that information on the inventory of manufactured goods often does not match the physical stock in the warehouse, which complicates the inventory control process. This research aims to design and implement a computerized accounting information system using Microsoft Access. The methods used include observation, interviews, and documentation related to UD. Maju Mapan Pacitan. Data required for design, such as customer data, product types, receipts or invoices, stock records, and inventory-related documents, were collected. The resulting accounting information system includes the main menu, customer form, product data form, production stock form, sales form, filter form, sales report, product in & out report, and production stock report. The new system provides fast and accurate output, minimizes manual recording errors, and produces fast, precise, and accurate merchandise inventory information, supporting the decision-making process.

Keywords: Design, Accounting Information System, Inventory, Microsoft Access

Abstrak

UD. Maju Mapan Pacitan bergerak di bidang produksi dan penjualan barang. Dalam menjalankan usahanya, UD. Maju Mapan Pacitan masih menggunakan sistem informasi akuntansi manual, terutama dalam pencatatan persediaan barang, sehingga informasi persediaan barang produksi sering kali tidak sesuai dengan stok fisik di gudang, yang mempersulit proses pengendalian persediaan. Penelitian ini bertujuan merancang dan mengimplementasikan sistem informasi akuntansi terkomputerisasi menggunakan Microsoft Access. Metode yang digunakan meliputi observasi, wawancara, dan dokumentasi yang terkait dengan UD. Maju Mapan Pacitan. Data yang diperlukan untuk perancangan, seperti data pelanggan, jenis produk, kwitansi atau invoice, catatan stok barang, serta dokumen terkait persediaan, dikumpulkan. Sistem informasi akuntansi yang dihasilkan mencakup menu utama, form customer, form data produk, form stok produksi, form penjualan, form filter, laporan penjualan, laporan masuk & keluar produk, serta laporan stok produksi. Sistem baru ini memberikan keluaran cepat dan akurat, meminimalkan kesalahan pencatatan manual, serta menghasilkan informasi persediaan barang dagang yang cepat, tepat, dan akurat, mendukung proses pengambilan keputusan.

Kata Kunci: Perancangan, Sistem Informasi Akuntansi, Persediaan Barang, Microsoft Access

1. PENDAHULUAN

Teknologi informasi berkembang dengan pesat di era globalisasi, terutama dalam hal perkembangan informasi. Hal ini sangat membantu para pengusaha dalam mengelola bisnis mereka. Karena para pengusaha membutuhkan informasi yang akurat untuk membuat keputusan dengan cepat dan tepat. Oleh karena itu, sistem informasi akuntansi menjadi alat formal yang penting untuk mengumpulkan informasi tersebut.

Sistem informasi akuntansi (SIA) sangat penting bagi manajemen dalam mengambil keputusan bisnis. Menurut Romney dan Steinbart (2017), sistem ini mengumpulkan, mencatat, menyimpan, dan mengolah data menjadi informasi yang berguna. Paulus (2017) juga menjelaskan bahwa sistem ini memiliki fungsi penting seperti mengumpulkan dan menyimpan data, mengolah data menjadi informasi, dan melakukan kontrol atas asset organisasi.

Sistem informasi akuntansi ini diperlukan bagi para manager guna mengelola kegiatan operasional rutin pada perusahaan dagang. Salah satu bagian dari kegiatan operasional yang membutuhkan perhatian yaitu bagian persediaan (*inventory*). Maka dari itu, bagian persediaan terutama pada perusahaan dagang memerlukan sebuah sistem informasi akuntansi untuk dapat mendukung kegiatan operasional perusahaan berjalan secara efektif dan efisien (Alabdullah & Kanaan-Jebna, 2023). Keberhasilan suatu perusahaan tidak hanya bergantung pada peran sistem informasi akuntansi yang mencukupi tetapi juga terdapat pada sistem pengendalian internal yang tepat dalam suatu perusahaan. Di bagian persediaan, pengendalian sangat penting dengan menerapkan tindakan pengamanan guna menghindari terjadinya kerusakan, pencurian atau tindakan penyimpangan lainnya (Sulaemah, 2022).

Pada dasarnya, perusahaan membutuhkan suatu kecepatan dan keakuratan untuk mengelola data menjadi informasi yang mereka butuhkan. Suatu informasi dapat membantu mengambil keputusan dalam perusahaan tersebut. Hal ini membuat perusahaan membutuhkan adanya sistem informasi akuntansi yang sudah terkomputerisasi. Hal yang sama berlaku untuk pengendalian internal yang tepat atas sistem persediaan di perusahaan. Kedua hal ini bisa membantu pada perusahaan dalam mendukung untuk mencapai keberhasilan dalam pencapaian tujuannya.

Banyaknya pengguna sistem akuntansi yang terkomputerisasi telah menghasilkan berbagai pilihan aplikasi atau perangkat lunak untuk menyederhanakan sistem informasi akuntansi dalam pelaporan keuangan. Oleh karena itu, para peneliti memilih untuk menggunakan pengujian Microsoft Access. Microsoft Access merupakan aplikasi manajemen basis data relasional yang dikembangkan oleh Microsoft Corporation, berguna untuk pembuatan, pengolahan, dan pengelolaan basis data. Sarwandi & Creative (2017) menjelaskan bahwa Microsoft Access adalah program aplikasi basis data komputer yang dirancang untuk rumah tangga serta perusahaan kecil hingga menengah. Hariyono et al. (2023) mencatat bahwa kelebihan Microsoft Access meliputi kemudahan akses terhadap aplikasi, manipulasi tabel dan data yang simpel, kemampuan untuk membuat relasi antar tabel dengan mudah, mendukung perintah Structured Query Language (SQL), serta menyediakan fasilitas keamanan data, kapasitas penyimpanan data besar, dan kemampuan pengembangan aplikasi database yang dapat disesuaikan dengan cepat (Rapid Application Development/RAD). Kompatibilitasnya dengan SQL memungkinkan pengguna untuk menggabungkan dan menggunakan dua bahasa pemrograman, yaitu VBA dan Micro, yang masing-masing memiliki fungsi untuk memprogram logika serta konsep berorientasi objek.

Salah satu pendekatan untuk mengotomatisasi proses akuntansi yang biasanya rumit adalah dengan memanfaatkan fitur-fitur dalam Microsoft Access seperti tabel, kueri, formulir, dan laporan yang saling terkait, guna menciptakan laporan dengan proses yang lebih efektif dan efisien dibandingkan dengan pencatatan manual.

Perbandingan antara aplikasi *Microsoft Access* dengan aplikasi *Microsoft* lainnya seperti halnya *Microsoft Excel* yaitu, secara spesifik kedua aplikasi tersebut memiliki fitur-fitur seperti *query*, *form*, dan *report* yang memungkinkan pengguna dalam mengelola dan menganalisis data. Namun, *Microsoft Excel* biasa digunakan untuk perhitungan akuntansi sederhana dan memiliki batasan jumlah data yang dapat disimpan, kurang lebih 1 juta baris dan 16.384 kolom. Jika data lebih besar, maka perlu menggunakan aplikasi lain seperti *Microsoft Access*. Karena, *Microsoft Access* dapat menyimpan data dalam jumlah yang lebih besar dan kompleks, serta memungkinkan pengguna untuk membuat aplikasi yang memerlukan pengelolaan data yang lebih terstruktur. Menurut penelitian yang dilakukan oleh Ismareta (2017), pencatatan menggunakan Microsoft Excel dianggap kurang detail atau terperinci. Kekurangan ini memiliki dampak negatif, karena pencatatan transaksi yang tidak terperinci dapat menyulitkan pemilik untuk memeriksa laporan harian dengan baik. Selain itu, Microsoft Excel tidak memiliki fasilitas database untuk menyimpan data, sehingga pencarian data yang terhapus atau hilang membutuhkan waktu yang lama. Oleh karena itu, penggunaan Microsoft Access dalam merancang aplikasi dapat membantu memastikan pencatatan yang lebih tepat dan akurat.

Microsoft Access menawarkan solusi tepat guna bagi Usaha Kecil Mikro dan Menengah (UMKM), khususnya pelaku Usaha Dagang (UD), untuk mengelola pelaporan stok barang. Sistem ini ideal bagi UD yang masih awam dengan sistem informasi terkomputerisasi dan terbiasa dengan pencatatan manual atau sistem akuntansi sederhana.

Saat ini, terdapat total 25.033 unit usaha mikro, kecil, dan menengah (UMKM) di Kabupaten Pacitan berdasarkan data Dinas Koperasi dan Usaha Mikro. Kabupaten ini terbagi menjadi 12 kecamatan, di mana setiap kecamatan memiliki UMKM termasuk di kecamatan Tulakan. Di kecamatan Tulakan sendiri, terdapat beberapa usaha di bidang pembuatan *cone ice cream* yang berjalan diantaranya: UD. Maju Mapan Pacitan, Contong Arjuna Wonoanti, Produksi *Cone Ice Cream* Bu Ida. Alasan peneliti memilih UD. Maju Mapan Pacitan, dikarenakan UD. Maju Mapan Pacitan merupakan usaha yang bergerak di bidang pembuatan *cone ice cream* yang cukup besar di Kecamatan Tulakan dan sudah berdiri sejak tahun 2011, serta memiliki banyak pelanggan didalam kota maupun diluar kota seperti, Ponorogo, Madiun, Magetan dan Ngawi, sedangkan usaha *cone ice cream* yang lain masih melakukan pengiriman didalam kota saja dikarenakan masih merintis. Terdapat beberapa jenis ukuran dan model *cone ice cream* yang di produksi UD. Maju Mapan Pacitan, seperti *cone ice cream* diameter 3cm, diameter 3,8, diameter 5cm, diameter 7cm dan model *twins cone*, sedangkan usaha yang lain hanya satu jenis yaitu *cone ice cream* diameter 5cm.

UD. Maju Mapan Pacitan, yang berlokasi di RT.03/04, Desa Gasang, Dsn. Singkil, Kec. Tulakan, Kab. Pacitan, merupakan subjek penelitian. Saat ini, UD. Maju Mapan Pacitan masih menggunakan sistem informasi manual dalam menjalankan operasionalnya. Namun, terdapat kekurangan dalam pencatatan, terutama dalam pengolahan data transaksi dan persediaan barang yang masih menggunakan metode manual. Permasalahan utama dalam pengolahan data manual adalah penumpukan data yang sering terjadi, menyebabkan ketidaksesuaian antara informasi persediaan barang produksi dengan stok fisik di gudang.

Dengan pertumbuhan transaksi harian yang semakin pesat, UD. Maju Mapan Pacitan harus segera memperbarui sistem yang digunakan untuk menghindari masalah yang mungkin timbul di masa depan.

Saat ini, sistem yang ada tidak mampu mengakomodasi kebutuhan untuk memperbarui informasi persediaan barang dagang, sehingga menyulitkan proses pengendalian persediaan. Oleh karena itu, perusahaan seharusnya melakukan perbaikan pada sistem informasi yang sudah ada dengan merancang atau mendesain sistem informasi persediaan barang dagang yang baru. Dengan demikian, peneliti akan berupaya mengembangkan sistem yang ada menjadi sistem informasi persediaan dengan memanfaatkan konsep database sebagai solusi bagi UD. Maju Mapan Pacitan dalam menangani masalah yang timbul dari sistem yang sudah ada.

Penelitian ini mengacu pada studi sebelumnya untuk memastikan hasil yang optimal. Rizaluddin (2019) menghasilkan kesimpulan bahwa penelitian ini menunjukkan penerapan sistem informasi persediaan yang terkomputerisasi menggunakan *Microsoft Access* dapat mengatasi masalah yang terkait dengan kesalahan pencatatan dan kehilangan barang. Sistem ini juga membantu meningkatkan akurasi laporan dan memudahkan akses data secara *real-time*. Penelitian ini juga menyimpulkan bahwa perancangan sistem informasi persediaan dapat menghasilkan informasi yang lebih baik, akurat, dan terpercaya. Meskipun sebagian kecil temuan tidak sesuai dengan teori yang ada, hasil penelitian secara umum mendukung hipotesis. Penelitian Arif (2018) memberikan bukti empiris yang kuat mengenai efektivitas *Microsoft Access* dalam meningkatkan efisiensi pembuatan laporan transaksi. Sebelumnya, proses ini memakan waktu lebih dari sebulan, namun setelah menggunakan perangkat lunak tersebut, waktu yang diperlukan berkurang drastis menjadi hanya satu hari.

Sebagai upaya untuk menjembatani kesenjangan penelitian, studi ini mengacu pada sejumlah penelitian terdahulu. Penelitian ini secara khusus akan merancang sebuah sistem informasi akuntansi persediaan barang dagang yang berbasis komputer dengan memanfaatkan perangkat lunak *Microsoft Access 2019*. Dengan demikian, penelitian ini diharapkan dapat berkontribusi pada pengembangan ilmu pengetahuan dalam bidang sistem informasi akuntansi.

Penelitian ini bertujuan untuk berkontribusi dalam pengembangan sistem informasi akuntansi dengan merancang sebuah sistem informasi persediaan berbasis komputer menggunakan *Microsoft Access*. Sistem yang dihasilkan diharapkan dapat memenuhi kebutuhan informasi manajemen yang cepat, akurat, dan relevan, serta mengatasi kendala yang sering dihadapi dalam sistem pencatatan manual.

2. LANDASAN TEORI

2.1. Perancangan

Perancangan dapat diartikan sebagai proses kreatif yang melibatkan penyusunan dan pengembangan ide-ide baru dengan memanfaatkan metode-metode terkini untuk memenuhi kebutuhan manusia. Proses ini, seperti yang dijelaskan oleh Nur & Suyuti (2018), mencakup analisis, evaluasi, perbaikan, dan pengembangan sistem, baik fisik maupun non-fisik, dengan tujuan mencapai optimasi di masa depan, dengan memanfaatkan informasi yang tersedia.

Lebih lanjut, Maulana (2019) mendefinisikan perancangan sebagai ungkapan, perencanaan, dan sketsa atau penataan elemen-elemen terpisah menjadi sebuah kesatuan.

fungsional yang utuh dan tunggal. Dari definisi-definisi ini, dapat disimpulkan bahwa perancangan merupakan gambaran menyeluruh dari suatu sistem, termasuk komponen perangkat lunak dan perangkat keras, yang bertujuan untuk menciptakan sistem yang sesuai dengan hasil yang diharapkan.

2.2. Sistem

Berdasarkan definisi yang dikemukakan oleh Tyoso (2016) dan Mulyani (2017), sistem dapat dipahami sebagai suatu kesatuan yang tersusun atas berbagai elemen, baik itu komponen, subsistem, ataupun unsur-unsur lainnya. Elemen-elemen ini saling bahu membahu dan bekerja sama dengan tujuan utama untuk mencapai hasil atau mewujudkan tujuan tertentu. Konsep input, proses, dan output merupakan elemen fundamental dalam suatu sistem. Meskipun demikian, penting untuk memahami bahwa kompleksitas suatu sistem dapat bervariasi, di mana sejumlah masukan dan keluaran dapat berinteraksi dalam suatu sistem yang lebih besar

2.3. Informasi

Berdasarkan definisi yang dikemukakan oleh Tyoso (2016) dan Mulyani (2017), informasi dapat dipahami sebagai suatu bentuk pengetahuan yang diperoleh melalui pengolahan data mentah. Informasi ini membantu membentuk kerangka konseptual dan memperkaya fakta yang telah diketahui. Informasi merupakan hasil pengolahan data yang disusun sedemikian rupa sehingga dapat memberikan makna, pengetahuan, atau pemahaman bagi penerima. Informasi ini dapat berupa fakta, ide, atau konsep yang bermanfaat dalam berbagai aspek kehidupan

2.4. Akuntansi

Berdasarkan pendapat Lestari & Amri (2020) dan Kieso et al. (2018), akuntansi dapat diartikan sebagai bahasa universal yang digunakan oleh perusahaan untuk menyajikan dan meringkas peristiwa ekonomi yang terjadi di dalamnya.

Akuntansi berperan sebagai alat komunikasi yang menghasilkan informasi keuangan yang berguna bagi manajemen perusahaan. Informasi ini membantu manajemen untuk memahami kinerja dan kondisi ekonomi perusahaan, serta membuat keputusan yang tepat untuk mencapai tujuan perusahaan. Berdasarkan hal tersebut maka Akuntansi terdiri dari tiga aktifitas atau kegiatan utama, yaitu aktifitas identifikasi, aktifitas pencatatan, aktifitas komunikasi.

2.5. Sistem Informasi Akuntansi

Sistem Informasi Akuntansi, menurut Susanto (2017) dan Lestari & Amri (2020), merupakan sekumpulan komponen yang saling terhubung dan terkoordinasi untuk memproses data transaksi keuangan menjadi informasi yang bermanfaat bagi pengambilan keputusan manajemen. Sistem ini menggabungkan dan mengelola data transaksi, kemudian mempublikasikannya kepada pihak-pihak yang membutuhkan.

SIA berfungsi sebagai jembatan antara data mentah dan informasi yang bermakna bagi manajemen. Menurut Iskandar (2017), SIA terdiri dari enam komponen utama: perangkat keras, perangkat lunak, sumber daya manusia, prosedur, basis data, dan jaringan komunikasi.

Komponen-komponen ini bekerja secara sinergis untuk mengumpulkan, mengolah, menyimpan, dan menyajikan data keuangan yang relevan

2.6. *Microsoft Access*

Di dunia perangkat lunak, Microsoft Access, seperti yang dijelaskan oleh Syahidi & Akhrian (2018) dan Sarwandi & Creative (2017), berperan sebagai alat khusus untuk mengatur informasi dalam format basis data. Program ini ditujukan untuk para penggunanya, baik perorangan maupun organisasi, khususnya bisnis skala kecil dan menengah, untuk mengelola informasi mereka dengan sistematis dan efisien. Singkatnya, Microsoft Access menjadi pilihan tepat bagi perusahaan kecil dan menengah untuk menyimpan, mengelola, dan menganalisis informasi mereka secara mudah.

2.7. *Persediaan Barang*

Persediaan berperan sebagai jembatan penting yang menghubungkan kegiatan penjualan dan produksi dalam perusahaan. Seperti yang dijelaskan Kieso et al (2018), persediaan adalah "aset yang siap dijual, digunakan dalam bisnis, atau diolah menjadi produk jadi yang dijual". Perusahaan dagang memiliki persediaan berupa barang siap jual, sementara perusahaan manufaktur menyimpan bahan baku yang akan diproses menjadi produk akhir sebelum dipasarkan. Diana & Setiawati (2017) pun mendefinisikan persediaan sebagai aset lancar yang esensial bagi kedua jenis perusahaan ini.

Berdasarkan penjelasan sebelumnya, dapat disimpulkan bahwa persediaan merupakan aset lancar dalam neraca perusahaan yang dimaksudkan untuk dijual atau diolah menjadi produk jadi dan kemudian dijual kembali sebagai bagian dari kegiatan utama perusahaan. Persediaan ini memainkan peran penting dalam kelancaran operasi dan penjualan produk, baik bagi perusahaan manufaktur maupun perusahaan dagang.

3. METODE PENELITIAN

Penelitian kualitatif ini berfokus pada UD. Maju Mapan Pacitan, yang terletak di RT.03/04, Kelurahan Gasang, Kecamatan Tulakan, Kabupaten Pacitan. Tujuan penelitian ini adalah untuk membedah makna di balik berbagai fenomena yang terjadi di UD. Maju Mapan Pacitan, seperti tingkah laku, asumsi, persepsi, motivasi, niat, kesukaan, dan tindakan para pemangku kepentingan. Temuan penelitian akan dipaparkan secara mendalam dan komprehensif, menggunakan berbagai metode pengumpulan data kualitatif (Moleong, 2018).

Dalam penelitian ini menggunakan 2 jenis sumber data, yaitu data primer dan data sekunder. Data Primer diperoleh dengan cara terjun langsung ke objek penelitian serta wawancara kepada pemilik UD. Maju Mapan Pacitan serta Bagian Gudang, Bagian Penjualan dan Bagian Keuangan untuk mendapatkan data atau informasi langsung tentang UD. Maju Mapan Pacitan. Data sekunder diperoleh secara tidak langsung melalui media perantara dan sudah tersedia yaitu bukti- bukti transaksi, seperti Kwitansi atau *Invoice* serta catatan persediaan stok barang.

Dalam penelitian ini, peneliti menggunakan tiga teknik utama untuk mengumpulkan data dan informasi terkait UD. Maju Mapan Pacitan:

- a) Observasi partisipan: Peneliti terlibat langsung dalam proses pengelolaan pencatatan persediaan di UD. Maju Mapan Pacitan. Hal ini dilakukan dengan mengamati langsung alur data di unit usaha dan proses pencatatan persediaan.
- b) Wawancara: Peneliti melakukan wawancara mendalam dengan dua narasumber kunci, yaitu Bapak Supriyanto (pemilik dan Bagian Gudang) dan Ibu Watik (Bagian Penjualan dan Keuangan). Wawancara ini bertujuan untuk menggali informasi terkait sistem penjualan, persediaan, dan kendala yang dihadapi dalam pengelolaan persediaan.
- c) Dokumentasi: Peneliti mengumpulkan berbagai dokumen yang relevan dengan penelitian, seperti foto, bukti transaksi (kwitansi/invoice), dan catatan persediaan barang. Dokumentasi ini digunakan untuk melengkapi data yang diperoleh dari observasi dan wawancara.

Teknik analisis data dalam penelitian ini dilakukan secara berkelanjutan, dimulai dari awal pengumpulan data hingga akhir periode penelitian. Prosesnya dimulai dengan memberikan daftar pertanyaan kepada narasumber saat wawancara berlangsung. Peneliti langsung menelaah jawaban narasumber dan dapat mengajukan pertanyaan lanjutan jika dirasa jawaban kurang tepat atau lengkap. Hal ini dilakukan untuk mendapatkan informasi yang akurat dan mendalam tentang subjek penelitian.

Setelah informasi yang dibutuhkan dirasa cukup, peneliti kemudian menganalisis informasi tersebut untuk mencari solusi atas permasalahan yang dihadapi perusahaan. Analisis data ini dilakukan dengan berbagai metode, seperti analisis tematik, analisis deskriptif, dan analisis kualitatif lainnya. Tujuan utama dari analisis data ini adalah untuk memahami akar permasalahan secara mendalam dan merumuskan solusi yang efektif dan tepat guna bagi perusahaan.

4. HASIL DAN PEMBAHASAN

4.1. Profil Perusahaan

UD. Maju Mapan Pacitan yang bertempat di RT.03/04, Kelurahan Gasang, Kecamatan Tulakan, Kabupaten Pacitan merupakan usaha yang bergerak dibidang produksi pembuatan *cone ice cream* Pacitan. Pendiri / Pemilik Bapak Supriyanto. Awal berdirinya UD. Maju Mapan Pacitan ini sudah cukup lama dimulai dari tahun 2011. Setiap hari UD. Maju Mapan Pacitan memproduksi 5.000 sampai 10.000 biji *cone ice cream* dengan berbagai jenis dan ukuran. Produk *cone ice cream* harganya mulai Rp. 80 s/d Rp. 300 per biji. Soal besaran harga menyesuaikan dengan tingkat ukuran serta model *cone* tersebut. Terdapat beberapa jenis ukuran dan model *cone ice cream* yang di produksi UD. Maju Mapan Pacitan, seperti *Cone ice cream* ukuran diameter 3cm, diameter 3,8cm, diameter 5cm dan *Cone Ice Cream Twins cone*. Saat ini UD. Maju Mapan Pacitan memiliki 5 orang karyawan. Pengiriman produknya saat ini didalam kota hingga keluar kota. Mulai dari agen-agen ice cream Pacitan, Ponorogo, Madiun, Magetan hingga Ngawi.

4.2. Hasil Penelitian

Dalam menjalankan usahanya, UD. Maju Mapan Pacitan menggunakan sistem FIFO untuk mengatur stok barang. Sistem ini memastikan bahwa barang yang lebih dulu masuk

ke gudang akan lebih dulu dijual, sehingga menghindari penumpukan barang yang terlalu lama. Metode fifo ini bisa dikatakan metode yang paling sesuai, dikarenakan produk yang dijual merupakan produk makanan yang memiliki batas waktu konsumsinya. UD. Maju Mapan Pacitan dalam aktivitas pengelolaan persediaan menggunakan dua dokumen yaitu bukti transaksi dan buku catatan persediaan. Pencatatan persediaan pada pengelolaan gudang dilakukan secara manual atau tulis tangan menggunakan buku tulis. Pencatatan barang masuk pada persediaan biasanya dilakukan saat ada kegiatan produksi oleh bagian gudang, sedangkan untuk barang keluar di tulis oleh bagian penjualan dan gudang saat terjadi aktivitas penjualan. Jadi, dalam pencatatan tersebut terdapat tiga buku sehingga UD. Maju Mapan Pacitan kesulitan ketika ingin mengetahui jumlah persediaan barang dagangnya.



Gambar 1. Catatan Penjualan Secara Manual

Pencatatan penjualan secara manual memakan banyak waktu dan biaya, seperti untuk pembelian buku dan bolpoin. Selain itu, banyaknya coretan dalam pencatatan menyebabkan kurangnya keakuratan dalam perhitungan pendapatan.



Gambar 2. Catatan Produksi Secara Manual

UD. Maju Mapan Pacitan mencatat stok barang dagangan secara manual di buku. Proses pencatatan manual ini memerlukan waktu yang lama dan menyulitkan dalam menghitung stok. Pencatatan menggunakan lembaran kertas yang dikelola sebagai arsipan menyebabkan berkas-berkas akan mempersulit dalam pengaksesan, sehingga ketika ingin mencari berkas-berkas tersebut membutuhkan waktu yang cukup lama bahkan dapat terjadi kehilangan atau bahkan kerusakan dalam arsip.

4.3. Pembahasan

4.3.1 Analisis Sistem Informasi Akuntansi Persediaan Barang Dagang di UD. Maju Mapan Pacitan

Analisis sistem merupakan tahap awal yang akan menjadi dasar dari proses selanjutnya. Kesuksesan dan kesesuaian dari keseluruhan proses penyusunan sistem akuntansi ini bergantung pada hasil pelaksanaan analisis sistem. Tahap ini dilakukan untuk mengetahui hal-hal yang sejatinya dibutuhkan oleh perusahaan. Berdasarkan hasil penelitian diatas, maka analisis sistem informasi akuntansi persediaan barang dagang pada UD. Maju Mapan Pacitan dilakukan dengan analisis data, analisis penyimpanan data, analisis kebutuhan sistem informasi akuntansi usulan dan analisis kebutuhan sistem yang diusulkan.

a. Analisis Data

Berdasarkan hasil penelitian diatas, ditemukan permasalahan bahwa pada UD. Maju Mapan Pacitan belum melakukan pencatatan dengan baik dan benar terutama pada pencatatan persediaan barang yang masih menggunakan pencatatan yang manual atau tulis tangan. Hal tersebut sangat beresiko terjadi kehilangan atau kerusakan pada catatan tersebut. Jika perusahaan tersebut ingin mengecek jumlah persediaan barang yang tersedia dalam gudang, maka akan mengalami kesulitan karena harus mengecek catatan satu per satu dengan hal tersebut maka membutuhkan waktu yang cukup lama untuk memperoleh data yang diinginkannya. Karena, terdapat catatan yang sangat banyak. Oleh karena itu, UD. Maju Mapan Pacitan memerlukan sebuah aplikasi sistem yang bisa diaplikasikan dengan mudah.

b. Analisis Penyimpanan Data

Berdasarkan hasil penelitian, pada UD. Maju Mapan Pacitan proses penyimpanan berkas-berkas pencatatan masih menggunakan lembaran kertas yang dikelola sebagai arsipan. Hal tersebut akan mempersulit pengaksesan, sehingga ketika ingin mencari berkas-berkas tersebut membutuhkan waktu yang cukup lama. Penyimpanan data seperti ini bisa dikatakan tidak aman serta memerlukan penanganan yang lebih supaya tidak terjadi kehilangan atau bahkan kerusakan.

c. Analisis Kebutuhan Sistem Informasi Akuntansi Usulan

Berdasarkan hasil penganalisisan diatas, maka bisa ditarik kesimpulan bahwa UD. Maju Mapan Pacitan membutuhkan suatu sistem yang berupa aplikasi yang sudah terkomputerisasi untuk memperbaiki pada sistem yang sedang berjalan serta fenomena permasalahan yang dihadapi pada UD. Maju Mapan Pacitan. Suatu aplikasi sistem yang bisa di aplikasikan dengan cara yang mudah untuk karyawan dan juga bisa menghemat waktu serta dapat meminimalisir atas kesalahan yang bisa terjadi.

Kebutuhan sistem yang dibutuhkan antara lain :

1. Membutuhkan sebuah penyimpanan yang lebih besar dari sebelumnya supaya pihak perusahaan mudah mengakses dengan cepat dan tepat.
2. Membutuhkan sebuah aplikasi yang bisa menggunakan cara hitung secara otomatis pada persediaan barang yang tersedia.
3. Sistem aplikasi yang bisa melihat jumlah persediaan barang dagang yang di gudang untuk dijual.
4. Suatu aplikasi yang bisa melihat atau memperoleh laporan secara akurat terhadap setiap transaksi.
5. Suatu aplikasi yang bisa menghasilkan *report* jika terjadi transaksi atas penjualan dan juga *report* terhadap stok persediaan barang dagang.

4.4. Perancangan Sistem

Sistem yang direncanakan untuk UD. Maju Mapan Pacitan bertujuan untuk memastikan kebutuhan perusahaan terpenuhi dengan baik. Tujuan lain dari perancangan sistem ini adalah untuk menyajikan gambaran yang komprehensif mengenai sistem informasi Akuntansi yang terkait dengan persediaan barang di UD. Maju Mapan Pacitan.

Setelah analisis pada sistem yang berjalan pada UD. Maju Mapan Pacitan dan melihat permasalahan yang terjadi di perusahaan tersebut, maka solusi yang dapat diberikan peneliti adalah dengan membuat sebuah sistem informasi akuntansi yang sudah terkomputerisasi. Sistem informasi akuntansi yang disusun oleh peneliti secara sederhana dengan menggunakan aplikasi *Microsoft Access* untuk membantu UD. Maju Mapan Pacitan dalam mengelola sistem persediaan barang. Berikut adalah menu-menu *form* yang digunakan sebagai penyimpanan data :

1. Halaman Menu Utama



Gambar 3. Menu Utama

2. *Form Customer*

Pada *form customer* ini terdapat beberapa menu *form* yaitu:

- a. *Form List Data Customer*

Kode Customer	Nama Customer	Alamat	Telepon
0001	PT. BINA	JL. KEMANGKARAN 4 PAKELAR	08123456789
0002	PT. BINA	JL. KEMANGKARAN 4 PAKELAR	08123456789
0003	PT. BINA	JL. KEMANGKARAN 4 PAKELAR	08123456789
0004	PT. BINA	JL. KEMANGKARAN 4 PAKELAR	08123456789

Gambar 4. Form List Data Customer

b. Form Isi Data Customer

Gambar 5. Form Isi Data Customer

3. Form Data Produk

Pada form data produk ini terdapat beberapa menu form yaitu:

a. Form List Produk

Kode	Nama Produk	Harga Produk	Jumlah Produk
0001	OPR. 32 CUBAN DIAMETER 100	5000	1000
0002	OPR. 32 CUBAN DIAMETER 100	5000	1000
0003	OPR. 32 CUBAN DIAMETER 100	5000	1000
0004	OPR. 32 CUBAN DIAMETER 100	5000	1000

Gambar 6. Form List Produk

b. Form Isi Data Produk



Gambar 7. Form Isi Data Produk

4. *Form List Stok Produksi*

Pada list produksi ini terdapat beberapa menu *form* yaitu:

a. *Form List Stok Produksi*



Gambar 8. Form List Stok Produksi

b. *Form Isi Stok Produksi*



Gambar 9. Form Isi Stok Produksi

5. *Form Penjualan*

Pada *form* penjualan ini terdapat beberapa menu *form* yaitu:

a. *Form Daftar Transaksi Penjualan*



Gambar 10. Form Daftar Transaksi Penjualan

b. *Form Penjualan*

Gambar 11. Form Penjualan

c. Laporan Penjualan

Kode Produk	Nama Produk	Jumlah	Harga	Sub Total
0001	KURUS KECIL COKLAT COKLAT KURUS	1000	1000	1000000
0002	KURUS KECIL COKLAT KURUS KURUS	1000	1000	1000000
Grand Total				2000000

Gambar 12. Laporan Penjualan

6. Form Filter Penjualan

Gambar 13. Form Filter Penjualan

7. Laporan Stok Produksi

Kode Produk	Nama Produk	Harga Produk	Jumlah Produk
0001	KURUS KECIL COKLAT COKLAT KURUS	1000	1000
0002	KURUS KECIL COKLAT COKLAT KURUS	1000	1000
0003	KURUS KECIL COKLAT COKLAT KURUS	1000	1000
0004	KURUS KECIL COKLAT COKLAT KURUS	1000	1000

Gambar 14. Laporan Stok Produksi

5. KESIMPULAN

Pencatatan persediaan barang dagang oleh UD. Maju Mapan Pacitan dilakukan secara sederhana sesuai kebutuhan. Pencatatan tersebut dilakukan oleh bagian gudang sebagai penanggung jawab barang dagang di gudang. Media yang digunakan untuk mencatat aktivitas persediaan berupa buku pencatatan persediaan. Perusahaan belum melakukan pengembangan sistem pencatatan persediaan dalam mengimbangi perkembangan

perusahaan yang semakin meningkat. Penyebab dari hal tersebut yakni adanya keterbatasan dari pihak UD. Maju Mapan Pacitan dalam hal penguasaan teknologi informasi. Bagian gudang terkadang mengalami kendala berupa perbedaan jumlah barang pada buku catatan dengan barang dagang secara fisik di gudang. Penerapan pencatatan persediaan dengan Sistem Informasi Akuntansi Berbasis Microsoft Access yang disusun oleh peneliti memberikan jalan keluar dari permasalahan pada UD Maju Mapan Pacitan. Aplikasi yang diterapkan di gudang dapat menyelesaikan permasalahan atas perbedaan data persediaan barang dagang antara bagian penjualan dengan bagian gudang. Aktivitas yang dilakukan bagian gudang dalam mengelola persediaan barang dagang dapat lebih jelas dan akurat sehingga kemungkinan kerugian bagi perusahaan dapat dihindarkan.

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ANALYSIS OF FACTORS THAT INFLUENCE CAREER CHOICE AS A PUBLIC ACCOUNTANT WITH MOTIVATION AS A MODERATING VARIABLE

(Study on Undergraduate Accounting Study Program Students of
Udayana University)

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Abstract

Indonesia faces a critical shortage of public accountants despite a growing demand for their services. While many individuals graduate with accounting degrees, few pursue careers in public accounting. This research aimed to understand the factors influencing this career choice, specifically examining the roles of financial rewards, professional recognition, and work environment, as well as the moderating effect of motivation. Based on expectation and planned behavior theories, the study analyzed data from 74 participants at Udayana University. Results indicate that motivation significantly impacts the relationship between financial rewards and the decision to become a public accountant, but it does not influence the relationships between professional recognition, work environment, and career choice in this field.

Keywords: Financial Reward, Professional Recognition, Work Environment, Motivation, Career Selection

1. INTRODUCTION

Widiartha & Utama (2023) state that the process of determining the professional path for students begins at the undergraduate level. Indonesia still has few certified public accountants. The annual growth rate of public accountants is still relatively low. For separate students, the job of a public accountant is a relatively complicated job and cannot be resolved quickly (Wen et al., 2018). Many students choose their careers outside of public accounting or outside the accounting path (Siskayani & Saitri, 2017). This is what explains the gradual growth of the public accounting profession in Indonesia (Hapsoro & Hendrik, 2018).

Several factors contribute to the decline in interest in public accounting careers. One primary factor is financial compensation. Many believe that high salaries are universally appealing in the job market, making financial rewards a top priority for most job seekers (Hutami et al., 2022). Professional recognition is an award that results from the results of one's hard work by getting recognition from people and superiors (Darmayanti & Dientri, 2020). Professional recognition will affect the individual or person in doing his job, where in addition to professional recognition, because the comfort level of a student while working also plays a role in job selection, which will also be related to the work environment (Febriyanti, 2019).

Factors such as professional rewards, recognition, and work environment significantly influence an individual's decision to pursue a career in public accounting (Made & Ratnadi, 2022). Conversely, financial compensation does not appear to be a determining factor

(Rahayu et al., 2023). Several factors contribute to conflicting or inconsistent findings from previous research regarding the selection of a job as a public accountant (Rosalina et al., 2020). There are additional considerations that play a role in shaping an individual's view of public accounting as a career path. What drives a person to take action is the expectation that the action will bring the desired results, commonly called motivation (Bailey & Phillips, 2016).

Financial rewards will be a condition where a job will be more attractive if it has better financial rewards than other jobs (Fitriana & Yanti, 2023). Financial rewards can influence individuals to choose the public accounting profession (Anam, 2018). Professional recognition, as stated by Stole in Setiyani (2005), is an intangible reward. Risawati (2021) found that the motivation for students to decide to become public accountants is professional recognition. Ambari & Ramantha (2017) reached similar results, supporting the findings of this study.

Job dissatisfaction due to discomfort at work can also be caused by an inadequate work environment or a workplace that has a negative impact (Talamaosandi & Wirakusuma, 2017). An unsupportive work environment leads to dissatisfied workers, who in turn produce substandard work, Chatman (1989) argues. A favorable work environment encourages people to choose a career in public accounting (Amalia et al., 2021). This study aims to determine the analysis of financial rewards, professional recognition, and work environment on career choice as a public accountant with motivation as a moderating variable.

2. LITERATURE REVIEW

2.1. Expectancy Theory

Expectancy theory posits that an individual's motivation to engage in a particular behavior is determined by two key factors:

1. **Expectancy:** This refers to the individual's belief or confidence that their effort and actions will lead to the desired performance level. In other words, it's their assessment of their ability to achieve the goal.
2. **Instrumentality:** This represents the individual's perception of the likelihood that successful performance will result in specific outcomes or rewards. It's about connecting performance with outcomes.
3. **Valence:** This reflects the value or desirability of the expected outcomes or rewards to the individual. It's about how much the individual wants the potential rewards (Putra, 2021).

In essence, individuals are more likely to be motivated to act when they believe they can perform well (expectancy), that successful performance will lead to desired outcomes (instrumentality), and those outcomes are considered valuable (valence).

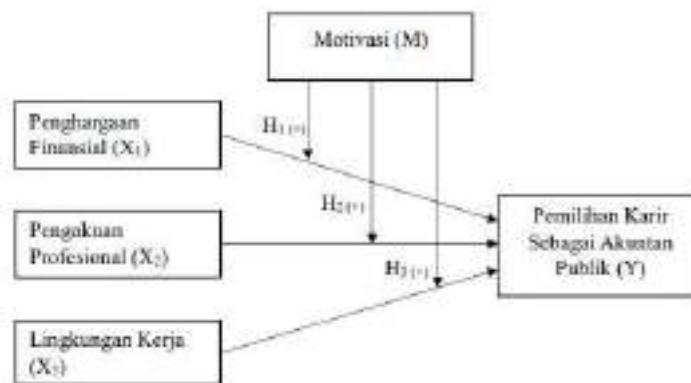
2.2. Theory of Planned Behavior

Theory of Planned Behavior is a social psychology theory to predict human behavior (Robbins & Judge, 2012). The theory of planned behavior examines how individuals exhibit behaviors that are based on intentions or intentions to act. This approach focuses on how

individuals decide to act and how they manage those intentions in exhibiting behavior. This theory states that how a person perceives or captures their own behavior affects their motivation towards interest or desire to perform the behavior (Muhamad et al., 2020).

3. RESEARCH METHOD

This quantitative study, conducted at Udayana University's Faculty of Economics and Business, aimed to identify factors influencing accounting graduates' decisions to become public accountants (Dalci, 2018). The research examined the relationship between the decision to pursue a public accounting career (dependent variable) and financial rewards, professional recognition, and work environment (independent variables). Motivation was considered as a potential factor that could strengthen or weaken the relationship between these variables.



Source: Research Data, 2024

Figure 1. Research Model

The sample for this study consisted of 280 students who will be pursuing an accounting degree in 2024 (Joshi, 2022). The Slovin formula was used in this study to determine a representative sample size, to allow the findings to be generalized. Data for this study was collected using a questionnaire distributed to accounting students at Udayana University's Faculty of Economics and Business via Google Forms. To measure respondents' opinions, a 4-point Likert scale was employed.

4. RESULTS AND DISCUSSION

4.1. Research Results

A review of validity test shows that all the correlation coefficient values tested for financial rewards, professional recognition, work environment, career selection, and motivation are higher than the r-table value of 0.30. All claims made in this study have been validated by these results.

The reliability test results for variables such as financial reward (Cronbach's Alpha = 0.927), professional recognition (0.897), work environment (0.882), career selection (0.949), and motivation (0.945). All variables exhibited Cronbach's Alpha values above the

acceptable threshold of 0.7, indicating high reliability and consistent measurement. However, without additional research context or sample size information, a comprehensive interpretation is limited.

Table 1. Descriptive Statistical Analysis

	N	Minimum	Maximum	Mean	Std. Deviation
Financial Rewards	74	18,00	24,00	21,5000	2,10837
Professional Recognition	74	9,00	20,00	17,0946	2,10784
Work Environment	74	22,00	32,00	28,1081	2,37318
Career Selection	74	16,00	32,00	26,7703	3,72164
Motivation	74	12,00	24,00	20,6216	2,86071

Based on Table 1, an average of 3.07 was generated by dividing the total of 21.5 by six statements. The entire professional recognition score of 17.09 into its component parts with five statements resulted in an average score of 3.41. The average work environment had a value of 28.1. After breaking it down into eight separate statements, it had an average of 3.51. Career selection had an average value of 26.77.

The average value when divided into eight statements is 3.34. After dividing the total motivation value by six statements, an average of 3.43 was obtained. This shows that becoming a public accountant is a good choice for someone looking for financial rewards, professional recognition, a supportive work environment, goals, and motivation. The standard deviation value shows a smaller number than the average, indicating that the distribution of financial rewards, professional recognition, work environment, career selection, and motivation variables is evenly distributed.

To ensure that the regression coefficients are consistent, unbiased, and accurately estimate the dependent variable, a classical assumption test is used, using the SPSS data processing program. Heteroscedasticity, multicollinearity, and normality tests are among the conventional assumption tests conducted by the researchers in this study.

Table 2. Normality Test

One-Sample Kolmogorov-Smirnov Test	
	Unstandardized Residual
N	74
Test Statistic	0,083
Asymp. Sig. (2-tailed)	0,2

Table 2 indicates a non-significant asymptotic significance value (0.200) for the two-tailed test, exceeding the conventional alpha level of 0.05. Consequently, the regression model employed in this study can be assumed to adhere to a normal distribution.

Table 3. Multicollinearity Test

Variable	Collinearity Statistics	
	Tolerance	VIF
Financial Reward (X1)	0,616	1,623
Professional Recognition (X2)	0,809	1,236
Work Environment (X3)	0,688	1,453
Motivation (M)	0,561	1,784

Table 3 demonstrates that all independent variables exhibit VIF values below the critical threshold of 10 and corresponding tolerance values exceeding 0.10. These findings suggest an absence of significant intercorrelations among the independent variables within the regression model, thereby indicating no multicollinearity issue.

Table 4. Heteroscedasticity Test

Variable	Sig.
Financial Reward (X1)	0,390
Professional Recognition (X2)	0,759
Work Environment (X3)	0,206
Motivation (M)	0,496
X1.M	0,567
X2.M	0,567
X3.M	0,215

As indicated in Table 4, all variables exhibit significance levels exceeding the 0.05 threshold. This suggests no substantial variance in the residuals across observations within the regression model, thereby confirming the absence of heteroscedasticity. The primary objective of this study is to examine the influence of work environment, professional recognition, and professional rewards on the decision to pursue a career in public accounting, mediated by motivation. To achieve this, moderated regression analysis (MRA) is employed (Ghozali, 2016).

Table 5. Test Coefficient of Determination (Adjusted R2) Moderated Regression Analysis (MRA)

Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	0,743 ^a	0,552	0,504	2,621	

Table 5 reveals an adjusted R-squared value of 0.504. This indicates that the combined influence of financial rewards, professional recognition, work environment, and their interactions on the decision to choose a career in public accounting accounts for 50.4% of the total variance in the dependent variable. The remaining 49.6% of the variance is attributable to factors beyond the scope of this regression model.

Table 6. Model Feasibility Test (F Test) Moderated Regression Analysis (MRA)

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	557,637	7	79,662	11,595	0,000 ^b
	Residual	453,458	66	6,871		
	Total	1011,095	73			
a. Dependent Variable: Career Selection						
b. Predictors: (Constant), X3.M, Professional Recognition, Financial Rewards, Work Environment, X2.M, Motivation, X1.M						

Table 6 reveals a significant F-value of 11.595 ($p < 0.001$) which surpasses the critical F-value of 2.50 (with numerator degrees of freedom = 4, denominator degrees of freedom = 69, and $\alpha = 0.05$). This finding provides strong evidence that the model incorporating financial rewards, professional recognition, work environment, and their interactions significantly influences the decision to choose a career in public accounting.

Table 7. Partial Regression Test (t test)

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-71,309	26,115		-2,731	0,008
	Financial Rewards	4,953	1,419	2,806	3,49	0,001
	Professional Recognition	-0,007	0,896	-0,004	-0,007	0,994
	Work Environment	-0,474	1,218	-0,302	-0,389	0,698
	Motivation	4,178	1,269	3,211	3,292	0,002
	X1.M	-0,227	0,068	-5,478	-3,335	0,001
	X2.M	0,018	0,045	0,363	0,399	0,691
	X3.M	0,024	0,057	0,708	0,418	0,677
a. Dependent Variable: Career Selection						

Table 7 presents the following moderated regression analysis equation:

$$Y = -71,309 + 4,953X_1 - 0,007X_2 - 0,474X_3 + 4,178M - 0,227X_{1M} + 0,018X_{2M} + 0,024X_{3M} + \varepsilon$$

The t-test results indicate the following:

1. Financial rewards and motivation: The interaction between financial rewards and motivation significantly influences career selection as a public accountant ($p < 0.001$, $t = -3.335$). Motivation moderates the impact of financial rewards on career choice, with a regression coefficient of -0.227.

2. Professional recognition and motivation: There is no significant interaction between professional recognition and motivation on career selection as a public accountant ($p = 0.691$, $t = 0.399$). Motivation does not influence how professional recognition affects career choice, with a regression coefficient of 0.018.
3. Work environment and motivation: There is no significant interaction between work environment and motivation on career selection as a public accountant ($p = 0.677$, $t = 0.418$). Motivation does not influence how work environment affects career choice, with a regression coefficient of 0.024.

4.2. Discussion

4.2.1. Motivation Moderates the Effect of Financial Rewards on Career Selection as a Public Accountant

The interplay of financial rewards and motivational factors on public accounting career selection was investigated. Results indicated that motivation tempered the influence of financial rewards, with a negative impact on the likelihood of choosing public accounting. This finding validates the hypothesis that motivation moderates the financial rewards-career choice relationship in this domain. Essentially, motivation attenuated the pull of financial compensation on aspiring public accountants.

These findings resonate with prior research (Amalia et al., 2021; Cahyadi et al., 2019) highlighting the significance of financial rewards in public accounting career decisions. In alignment with expectation theory (Sharif et al., 2009), individuals are guided by perceived outcomes. However, while monetary gains are anticipated, the pursuit of intrinsic satisfaction, skill enhancement, and practical experience frequently eclipses the sole allure of financial recompense among students.

4.2.2. Motivation Does Not Moderate Professional Recognition on Career Selection as a Public Accountant

Analysis of the interaction between professional recognition and motivation revealed no significant moderating effect of motivation on the relationship between professional recognition and career choice as a public accountant (Ulfah et al., 2019). This outcome contradicts the second hypothesis, leading to its rejection. The findings diverge from previous research (Ambari & Ramantha, 2017) positing a positive correlation between professional recognition and the decision to pursue a public accounting career. These results challenge the tenets of expectation and planned behavior theories, which suggest that individuals are motivated by desired outcomes.

4.2.3. Motivation Does Not Moderate the Effect of Work Environment on Career Selection as a Public Accountant

The data did not support a moderating role for motivation on the relationship between work environment and public accounting career choice, as indicated by regression analyses (Iswahyuni, 2018; Astika, 2017). Consequently, the third hypothesis was rejected. Motivation was found to neither amplify nor diminish the impact of work environment on career selection (Budiandru, 2021).

These findings contradict previous research affirming a positive association between work environment and public accounting career choice (Amalia et al., 2021; Juliansah &

Suryaputri, 2016). Moreover, the results challenge the expectation and planned behavior theories, which posit that individuals are influenced by perceived outcomes.

5. CONCLUSION

The study found that motivation significantly moderates the influence of financial rewards on public accounting career choice. Specifically, motivation weakens the positive relationship between financial incentives and selecting a public accounting career. Conversely, neither professional recognition nor work environment was moderated by motivation in relation to career choice.

To expand upon these findings, future research should consider a broader range of independent variables beyond financial rewards, professional recognition, and work environment. Additionally, incorporating moderating variables that more accurately reflect individual career interests could provide deeper insights. These refinements are expected to yield more comprehensive and robust research outcomes.

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THE EFFECT OF JOB STRESS, BENEFITS, USER SATISFACTION, EDUCATION LEVEL AND TRAINING ON ACCOUNTING INFORMATION SYSTEM PERFORMANCE

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Abstract

The application and utilization of computer-based information systems will make it easier to face competition in the era of globalization. The way a company uses its financial information system can affect how well that system works for that business. This research aims to determine the effect of work stress, performance allowances, user satisfaction, education and training on the performance of accounting information systems. The research population is employees of the Denpasar City Regional Secretariat who use an accounting information system. A purposive sampling method was used, including a total of 60 participants. The collected data was then subjected to analysis utilizing multiple linear regression techniques. The study findings reveal that the work stress variable has a detrimental impact on the functioning of the accounting information system. The factors of allowances, user satisfaction, education level, and training are beneficial to the performance of the accounting information system. The independent variables have a major effect of 73.8% on the performance of the accounting information system, while the remaining 26.2% is attributed to other considerations.

Keywords: Job Stress, Benefits, User Satisfaction, Education, Accounting Information System Performance Training

1. INTRODUCTION

The proliferation of IT has seen exponential growth across several domains. The application and utilization of computer-based information systems will make it easier to face competition in the era of globalization. Accounting Information System or AIS is a reporting method used in an agency or regional organization, especially in Indonesia (Adi et al., 2017). AIS is a data collecting, recording, storing, processing system used to create data required for use during decision-making (Nurhayati, 2022). How effectively a company's financial information systems work can be affected by how those systems are used (Ghisellini et al., 2016).

The application and utilization of AIS itself is to achieve organization's goals (George et al., 2016). The success of AIS depends on how well a number of separate jobs are done with the help of technology (Goodhue, 1995). The AIS outcomes benchmark will prove whether there is an impact of the new system on the accuracy of task completion, improving performance and making users more creative and productive (Damana & Suardikha, 2016). Users feel secure and comfortable when working with an information system if they are pleased with the technology used; this will allow them to finish their activities.

Consequently, the performance of the AIS increases with increasing degrees of system users' contentment with their use of IT.

The survey findings reveal various issues within the Denpasar City Secretariat about the functioning of the AIS, which is the occurrence of concurrent duties on employees making the work that has been given not in accordance with the time due to the large number of employees who are still unfamiliar with technology so that it triggers workload which is characterized by work stress, the provision of allowances that are uneven and not in accordance with the amount of work that has been assigned. This implies that the AIS output at the Denpasar City Secretariat has not been maximized; this is believed to be the result of issues with job stress, allowances, user satisfaction, education and training levels (Cahyana & Jati, 2017).

2. LITERATURE REVIEW

The theory used in this study is Social System Theory, a theory that emphasizes the complex interactions between individuals, groups, and social structures in forming a complete social system (Blau & Scott, 2003). Social systems theory emphasizes that AIS do not only consist of technology and procedures, but also involve individuals, groups, and organizations as a whole (Nasikin, 2006). In the framework of AIS, variables such as job stress, benefits, user satisfaction, education level, and training will interact with one another, according to social systems theory. A high degree of occupational stress might impact user happiness, which in turn affects the performance of AIS. However, AIS performance may be enhanced by raising the competency of system users, which in turn is achieved via extensive education and training.

Work stress is the sensation of being under pressure that people have while dealing with work (Dewi & Wiratmaja, 2020; Julvia, 2016), which is created by several elements in the work environment, including the physical surroundings, organizational structure, and human interactions (Rahmah et al., 2013). Social system theory explains that work stress can be understood as the result of interactions between individuals (employees who use AIS), teams or departments that use AIS (Cahyaningsih & Nurmalitasari, 2022). High work stress can result in various negative impacts on how well AIS outcomes, such as decreased quality of work, increased error rates and decreased levels of innovation in the use of AIS (Ariwibowo, 2023).

Research conducted Rahayu et al (2017) states that work stress has a negative effect on the performance of AIS. A lot of different researchers have done the same study, including Maison et al (2021), Pragaswari & Widhiyani (2020), and Rahayu et al (2017), Kurnia (2022), Chandra (2021), Ahmad et al (2019), Dwi Septianto & Lataruva (2011), Valendra et al (2019), (Manuaba & Yadnyana, 2021) discovered that worry at work hurts the function of AIS. This is because too much work causes the most stress at work, which lowers the quality of AIS performance (Devi & Widhiyani, 2020). Meanwhile, Aturrizki, et al (2022), Heruwanto, et al (2020), Aprilia & Hersona (2021), (Muhtarom et al., 2022) uncover that work stress has a favorable and major effect on how well AIS works. Following is the formulation of the hypotheses used in this investigation.

H₁: Job stress has a negative effect on AIS performance.

Social system theory explains that allowances are one of the social factors that can influence individual behavior in a social system, including the use of AIS (Jamal, 1984). Allowances can play a role in increasing individual motivation to use AIS more effectively and efficiently (Can & Yasri, 2016). Providing allowances to employees who successfully use AIS to increase efficiency or to produce more accurate financial reports and can encourage employees to try harder in using AIS (Jin, 2002).

Research conducted by Melasari & Lestari (2019) states that allowances have a positive effect on information system performance. The same research was conducted by Ariansy & Kurnia (2022), Belawa & Pande (2018), Monita, et al. (2022), Pragaswari & Widhiyani (2020), Yusnita & Rohana (2022), Almaududi et al (2021), Oktaria & Alexandro (2020) in their research, allowances have a positive effect on the performance of AIS due to the importance of providing allowances to improve the performance of AIS. Following is the formulation of the hypotheses used in this investigation.

H₂: Allowances have a positive effect on AIS performance.

Social system theory explains that user satisfaction is the result of interactions between individuals, groups and social structures in a social system, including in the use of AIS (Istianingsih et al., 2009). High user satisfaction can contribute positively to AIS performance. Satisfied users tend to be more motivated to use AIS properly and effectively. Employees tend to be more accepting of changes or updates to AIS that can improve the efficiency and effectiveness of using AIS in the organization (Sefianti, 2020).

The same research was conducted by Gede et al. (2017), Nurhayati (2022), Pragaswari & Widhiyani (2020), Saputra et al (2018), Satria & Putra (2019), Romney et al (2006) Fajriyansyah and Edi (2020) that AIS user satisfaction affects the performance of AIS. AIS user satisfaction can be seen in the feedback and attitude of users after operating the system. The user's attitude towards using the AIS can make an evaluation of how satisfied the user is using the AIS (Devi Apriliana, 2021). Following is the formulation of the hypotheses used in this investigation.

H₃: User satisfaction has a positive effect on the performance of AIS.

Social system theory emphasizes that an individual's level of education can affect social interactions and social structures in a system including the use of AIS (Venkatesh et al., 2003). Employees with higher levels of education tend to have a better understanding of technology and can be more effective in using AIS (Davis et al., 1989; Davis & Venkatesh, 1996). Dwijayanthi and Dharmadiaksa's research (2013) states that the level of education possessed by employees has a positive effect on the effectiveness of using AIS and Anjani & Wirawati (2018), Belawa and Putra (2018), Hudha (2017), Ribeiro & Putra (2022), Chandra (2021), Tevi. 2020, Sulistiyo (2016) in their research also state that education has a positive effect on the effectiveness of AIS. Following is the formulation of the hypotheses used in this investigation.

H₄: Education has a positive effect on the performance of AIS.

Social system theory emphasizes that training can be understood as one of the social factors that influence the interaction between individuals, groups, and social structures in a social system including the use of AIS (Danawati et al., 2016). Effective training can increase individual competence in using AIS, thereby improving performance in using AIS (Wang et al., 2012). The results of research by Sudibyo and Kuswanto (2010) state that job training for users has a significant effect on the performance of AIS as measured by user

satisfaction in foreign franchise restaurants in Denpasar City (Cleary, 2022). Abhimantra and Suryanawa (2016), Ribeiro & Putra (2022), Chandra (2021), Raharjono & Dharmadiaksa (2021) also got the same results, namely training affects the performance of AIS. Following is the formulation of the hypotheses used in this investigation.

H₅: Training has a positive effect on the performance of AIS.

3. RESEARCH METHOD

The research conducted in this study is a quantitative method. This research was conducted by taking the test area at the Regional Secretariat of Denpasar City. The object in this study is the performance of AIS users of the Denpasar City Regional Secretariat who are involved in the use of AIS (Almilia & Brilliantien, 2007). The factors studied were job stress, incentives and user satisfaction (Anggara & Yadnyana, 2019). The variables used in this study are independent variables and dependent variables. The independent variables in this study are job stress (X1), allowances (X2), user satisfaction (X3), education level (X4) and training (X5). The dependent variable in this study is the performance of the AIS (Y).

The population in this study were employees of the Denpasar City Regional Secretariat who used the AIS as many as 113 people. The method used in determining the sample in this study is the purposive sampling method, namely the sample selection method aims at certain considerations in selecting non-random samples (Sugiyono, 2019). The criteria used in determining the sample are employees with a minimum service period of 3 years. Based on these criteria, the respondents in this study were 60 employees at the Denpasar City Regional Secretariat who were directly involved in using the AIS.

This study uses a quantitative approach with an explanatory research method which in a quantitative approach can be measured so that it can use statistics in its testing. The explanatory method is used to explain the position of the variables studied and the relationship between one variable and another. Quantitative data in this study are data from questionnaires presented in the form of a Likert scale (Sugiyono, 2019).

Primary data Primary data is data obtained from respondents through questionnaires, focus groups, and data from researcher interviews with sources (Sugiyono, 2019). Primary data in this study are structured questions in questionnaires and interview results that are closed in nature with answers that have been provided and must be filled in by respondents by choosing one of the alternative answers available.

The data collection method used in this research is a questionnaire. The questionnaire is a technique by giving statements to respondents to be answered according to their respective perceptions, this aims to collect data in writing to respondents (Sugiyono, 2019). Through a questionnaire distributed to respondents who were sent to Denpasar City Regional Secretariat employees through intermediaries (contact persons). The questionnaire will be assessed using a Likert scale. The Likert scale is a tool for measuring social phenomena through a person's opinion (Sugiyono, 2019).

Instrument testing and classical assumption tests, such as the Normality Test (using Kolmogorov-Smirnov), the Multicollinearity Test (using tolerance and VIF values), and the Heteroscedasticity Test, are conducted prior to the use of descriptive statistics and multiple linear regression analysis in this research. The overall validity of the model is evaluated by a F Test, which stands for Model Feasibility, and the explanatory power is measured by the

R², or Coefficient of Determination. The next step is to use a t-test, which stands for hypothesis test, to find out how much each independent variable matters for the dependent variable.

4. RESULT AND DISCUSSION

Regression coefficients, obtained using a model for multiple linear regression analysis, will decide the acceptability or rejection of the hypothesis. Table 1 below displays the results of the regression analysis.

Table 1. Multiple Linear Regression Analysis Results

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	- 0,750	1,523		-0,492	0,625
	Work stress	-0,109	0,052	-0,149	-2,099	0,040
	Performance benefits	0,241	0,099	0,271	2,438	0,018
	User satisfaction	0,362	0,134	0,256	2,688	0,010
	Education	0,237	0,063	0,284	3,759	0,000
	Training	0,234	0,095	0,229	2,469	0,017
R		0,872				
R Square		0,760				
Adjusted R Square		0,738				
F Statistics		34,276				
F Test Significance		0,000				

Based on Table 1 above, the regression equation can be arranged as follows:

$$Y = - 0,750 - 0,109X_1 + 0,241X_2 + 0,362X_3 + 0,237X_4 + 0,234 X_5$$

In the case of the Accounting Information System (AIS) at the Denpasar City Regional Secretariat, the results of the F-test indicate that there is a significant simultaneous influence of transparency, performance benefits, user satisfaction, education, and training on the performance of the system. Furthermore, the regression model is suitable for testing the hypothesis. Based on the adjusted R-Square value of 0.738, it can be inferred that these variables account for 73.8% of the variance in AIS performance, while other elements are responsible for the remaining 26.2% of the variation. The findings of the t-test indicate that job stress has a substantial negative impact on AIS performance, but performance allowances, user satisfaction, education, and training have major positive effects on AIS performance. On the other hand, greater performance allowances, user happiness, education, and training all contribute to better AIS performance at the Denpasar City Regional Secretariat. In particular, higher levels of job stress are associated with lower levels of application of AIS.

Results on the examination of variables affecting the performance of AIS in the Denpasar City Regional Secretariat are anticipated to be provided by the conducted study. According to social system theory, which explains how work stress, performance allowances, user satisfaction, education, and training are social factors that impact interactions between individuals, groups, and social structures in a social system, including the use of AIS, this study's hypothesis testing results show that these factors have an influence on the performance of AIS in the Denpasar City Regional Secretariat. This aligns with previous research studies and theory (Werastuti, 2020).

The findings and information presented in this research have important significance for the Denpasar City Regional Secretariat with respect to the efficiency and effectiveness of AIS. The Denpasar City Regional Secretariat's AIS performance is susceptible to factors such as employee stress, performance rewards, user fulfilment, and training and education (AbuAlRub, 2004).

5. CONCLUSION

The examination of the data and debate that followed led to the following conclusion: the accounting information systems (AIS) at the Denpasar City Regional Secretariat are negatively impacted by work stress. In essence, the more stress that the employees of the secretariat are under, the worse their AIS performance will be. The Denpasar City Regional Secretariat's accounting information system benefits from performance allowance; thus, the higher the performance allowance held by the secretariat, the better the accounting information system's performance. The accounting information system's performance in the Denpasar City Regional Secretariat is positively correlated with user satisfaction. Consequently, a higher level of user satisfaction will lead to a more effective accounting information system.

Higher education levels within the Regional Secretariat of Denpasar City are positively correlated with improved accounting information system performance. This implies that higher education levels within the Secretariat will lead to higher-performing accounting information systems. The effectiveness of accounting information systems in the Regional Secretariat of Denpasar City is positively impacted by training; thus, the more effective the training offered by the Regional Secretariat of Denpasar City, the higher the performance of the ensuing accounting information system.

In light of the findings, it is expected that the Denpasar City Secretariat would consistently strive to reduce work-related stress by assigning reasonable workloads to its staff. Then the Denpasar City Secretariat is expected to always provide performance allowances in accordance with the employee's contribution to the company, periodically update the information system used so that employees feel satisfied when using it, provide opportunities for employees to pursue higher education and periodically provide training to employees using materials according to employee needs and experienced instructors. For further researchers, they should add other variables that can affect the performance of accounting information systems, in addition to increasing the number of samples and expanding the scope of research which is not only limited to the Denpasar City Regional Secretariat.

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ANALISIS PENERAPAN *ACTIVITY BASED COSTING* DAN *TARGET COSTING* DALAM MENINGKATKAN LABA DENGAN *JUST IN TIME* SEBAGAI VARIABEL MODERATING PADA BERKAH JAYA MANDIRI SURABAYA

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Abstract

In the era of globalization with rapid advances in information technology, various lines of manufacturing industry, both old and new, are increasingly developing. The business environment continues to change and develop. This research aims to see the influence of Activity Based Costing on profits, see the influence of Target Costing on profits partially, the influence of profits on Just In Time (JIT) partially, and see the influence of Activity Based Costing, Target Costing, on profits with Just In Time as a moderating variable at Berkah Mandiri Jaya, Surabaya. This research uses quantitative methods with statistical analysis to process data in the form of numbers. The findings discover that the application of the Activity Based Costing method can increase company profits. This is because the method provides accurate cost information and enables precise pricing for each product.

Keywords: *Activity Based Costing (ABC), Target Costing (TC), Just In Time (JIT)*

Abstrak

Di era globalisasi dengan kemajuan teknologi informasi yang sangat pesat, berbagai lini industri manufaktur, baik yang lama maupun yang baru, semakin berkembang. Lingkungan bisnis pun terus berubah dan berkembang. Penelitian ini bertujuan untuk melihat pengaruh *Activity Based Costing* terhadap laba, melihat pengaruh *Target Costing* terhadap laba secara parsial, pengaruh laba terhadap *Just In Time* (JIT) secara parsial, dan melihat pengaruh *Activity Based Costing*, *Target Costing*, terhadap laba dengan *Just In Time* sebagai variabel pemoderasi pada Berkah Mandiri Jaya, Surabaya. Penelitian ini menggunakan metode kuantitatif dengan analisis statistik untuk mengolah data berupa angka. Hasilnya menunjukkan bahwa penerapan metode Biaya Berdasarkan Aktivitas (*Activity Based Costing*) dapat meningkatkan keuntungan perusahaan. Hal ini karena metode tersebut memberikan informasi biaya yang akurat dan memungkinkan penentuan harga yang tepat untuk setiap produk.

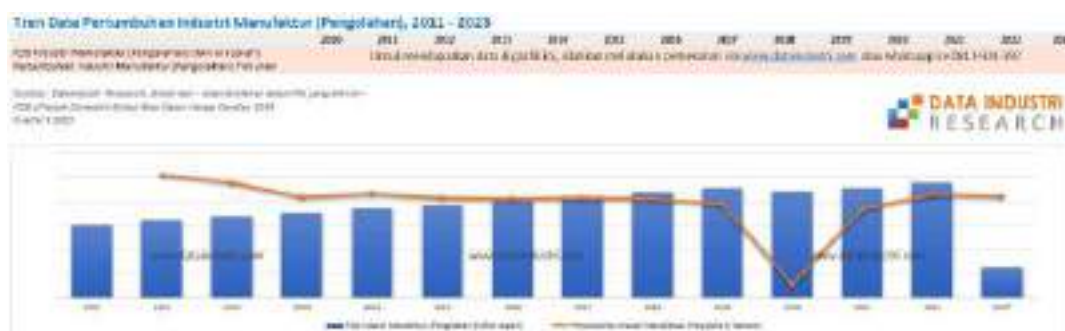
Kata kunci: *Activity Based Costing (ABC), Target Costing (TC), Just In Time (JIT)*

1. PENDAHULUAN

Di era globalisasi yang didukung oleh teknologi informasi yang semakin cepat, semua lini industri manufaktur, baik industri yang sudah berdiri sejak lama maupun yang baru, terus berkembang. Untuk lingkungan bisnis yang terus berubah seperti ini, penelitian ini menguji pengaruh arus kas dari operasi, tingkat usaha, ukuran perusahaan pada peningkatan laba, dan interaksi *Just In Time* (JIT) dimoderasi. *Activity Based Costing* (ABC), yang menghitung biaya neologistic berdasarkan aktivitas-aktivitas yang ada, tidak meningkatkan laba perusahaan kerana memberikan informasi yang akurat tentang biaya dan memastikan harga sesuai kebutuhan. *Target Costing* (TC), yang menetapkan jumlah biaya dengan jalan mencari jumlah permintaan pasar atau customer. *JIT* tidak dimoderasi interaksi antara ABC dan meningkatkannya. TC, yang menetapkan biaya target berdasarkan harga jual dan laba yang diinginkan, dapat disesuaikan untuk meningkatkan keuntungan. Metode ini mendorong persaingan yang ketat, sehingga penerapan strategi bisnis menjadi lebih menantang (Wijirahayu, 2022).

Untuk memastikan keberlanjutan dan pertumbuhan perusahaan, mengadopsi strategi bisnis yang efektif dan memproduksi barang berkualitas adalah langkah penting. Dengan menciptakan inovasi baru dan menghasilkan produk yang unggul, perusahaan dapat bersaing dengan pesaing dan mencapai objektif yang telah ditetapkan (Pristianingrum, 2017). Kebanyakan tujuan secara perusahaan itu sendiri untuk memperoleh keuntungan sebanyak yang mungkin, tidak hanya untuk memperoleh keuntungan secara perusahaan juga memperoleh keuntungan dengan. Nilai perusahaan Meningkatkan, Kesejahteraan bagi karyawan yang berada, dalam perusahaan juga untuk memenuhi kebutuhan dalam masaysrakat agar kesejahteraan perusahaan tercapai (Alfiana, 2017). Mengukur pertumbuhan laba adalah langkah krusial dalam mengevaluasi kinerja keuangan perusahaan. Data tentang pertumbuhan laba sangat penting bagi pihak yang menggunakan laporan keuangan, karena informasi ini memberikan pandangan tentang prospek bisnis dan kondisi keuangan perusahaan di masa depan (Giselawati, 2023).

Laba (profit) adalah informasi lain yang terdapat dalam laporan keuangan suatu bagian formal suatu struktur yang memberikan verifikasi kepada dua pihak yang berkepentingan – baik internal maupun eksternal. Laba adalah isi dari laporan keuangan perusahaan dengan fungsi-fungsi tertentu: menilai hasil kinerja manajemen, membantu menaksir kemampuan laba jangka panjang yang berkesinambungan, menaksir risiko investasi atau peminjaman dana (Agusvianto, 2017).



Gambar 1. Pertumbuhan Industri Manufaktur (Pengolahan) 2011-2023

Sumber: Data Industri (2024)

Dapat dilihat dari gambar 1 bahwa tingkat pertumbuhan industri manufaktur (pengolahan) pada tahun 2011-2013 mengalami penurunan, pada tahun 2013-2019 stabil, namun pada tahun 2020 mengalami penurunan pertumbuhan, dan mengalami kenaikan pada tahun berikutnya 2021-2023, namun pada tahun 2023 pertumbuhan industri manufaktur (pengolahan) mengalami penurunan yang sangat signifikan pada PDB-nya. Beban inilah yang saat ini dialami banyak perusahaan yang memantik terjadinya PHK atau pengurangan tenaga kerja. Perusahaan mungkin menghadapi masalah karena kurangnya adaptasi terhadap globalisasi dan inovasi, yang membuat produk mereka tidak bersaing. Untuk mengatasi tantangan ini, perusahaan perlu mengembangkan strategi yang tepat. Salah satu pendekatan adalah dengan meningkatkan kualitas produk melalui inovasi, serta mengelola harga dan biaya produksi secara efektif. Upaya meminimalkan biaya produksi juga penting untuk tetap kompetitif (Istiqomah et al., 2023).

Berkah Mandiri Jaya telah mengalami penurunan laba beberapa kali. Dalam industri manufaktur, penurunan laba yang signifikan dapat menjadi pukulan keras bagi kesehatan keuangan perusahaan, sehingga jelas bahwa manajemen biaya produksi dan strategi keuangan sangat penting dalam menjaga stabilitas perusahaan. Dalam konteks Berkah Mandiri Jaya, penurunan laba yang drastis dapat mengindikasikan adanya masalah mendasar dalam manajemen biaya produksi. Manajemen biaya yang tidak efektif atau tidak efisien dapat menjadi salah satu penyebab utama penurunan laba ini. Oleh sebab itu, perusahaan harus berupaya untuk meningkatkan kinerja keuangannya dengan berfokus pada pengelolaan biaya produksi.

Dalam menghadapi penurunan laba yang cukup signifikan, Berkah Mandiri Jaya harus mampu mengevaluasi langkah-langkah strategis untuk memperbaiki kondisinya. Untuk mencapai efisiensi yang lebih tinggi dalam produksi, Anda mungkin dapat mempertimbangkan metode seperti ABC dan TC sebagai solusi yang tepat (Giselawati, 2023). Dengan menggunakan pendekatan ini, perusahaan dapat mengalokasikan biaya produksi secara lebih akurat dan menetapkan target biaya sesuai dengan laba yang diinginkan. Penerapan ABC dapat membantu Berkah Mandiri Jaya dalam mengidentifikasi elemen-elemen biaya yang berhubungan langsung dengan produksi, sehingga manajemen dapat mengambil keputusan yang lebih bijak terkait pengalokasian sumber daya. Menerapkan TC dapat menjadi strategi yang efektif bagi perusahaan untuk menetapkan harga jual yang sesuai dengan target laba per unit, yang pada akhirnya berkontribusi pada peningkatan profitabilitas (Rita, 2020).

ABC memberikan informasi biaya yang lebih akurat dengan mendetailkan biaya berdasarkan aktivitas dalam proses produksi. Ini membantu manajemen untuk mengelola perusahaan lebih baik dan memahami baik kekuatan yang ada maupun area yang membutuhkan peningkatan (Haryanti et al., 2022). Jadi, ABC memungkinkan manajer untuk memperoleh informasi harga pokok produksi yang tepat guna. Sementara itu, TC adalah biaya yang seharusnya dialokasikan untuk produk agar dapat disesuaikan dengan harga yang disetujui pasar sehingga perusahaan tetap memperoleh keuntungan. TC diawali dengan proses riset pasar terlebih dahulu. Dengan kata lain, manajer mendefinisikan Harga Jual Baru di pasar, dan kemudian melakukan analisis biaya produksi agar mereka dapat memahami saham laba per unit. Dalam hal ini, bagian produksi bertugas menghasilkan biaya produksi

per produk. Dengan analisis biaya produksi tersebut, manajemen menyusun desain produk sesuai anggaran, dimana proses ini disebut *TC* (Idrawahyuni et al., 2020).

Dalam penelitian ini, kami menggunakan sebagai acuan penelitian yang dilakukan oleh Husni (2017) dan Sani (2021). Husni (2017) menerapkan metode *TC* untuk mengevaluasi peningkatan profitabilitas perusahaan (Alfiana, 2017), sedangkan Sani (2021) menggunakan metode *ABC* untuk tujuan yang serupa. Perbedaan utama dengan penelitian sebelumnya terletak pada variabel moderasi yang diteliti yaitu *JIT* (Apriliany, 2021). *JIT* (*JIT*) merujuk kepada konsep yang menggambarkan perubahan dari sistem yang ketat menuju ke arah pemenuhan kepuasan pelanggan dan peningkatan keunggulan kompetitif dalam dunia bisnis (Istiqomah et al., 2023). Selain itu, *JIT* dianggap sebagai teknologi manufaktur yang maju. Sistem manufaktur *JIT* berfokus pada mengurangi pemborosan dengan memanfaatkan kapasitas pekerja secara penuh, dan mengurangi pergerakan bahan baku, barang setengah jadi, serta persediaan barang jadi. Ini juga membantu dalam menemukan kekurangan dalam proses produksi (Pristianingrum, 2017).

Pitoyo (2018) membuktikan bahwa metode *ABC* dapat meningkatkan laba dari penjualan barang bekas lebih dibandingkan dengan sistem konvensional. Affiqah & Fuadi (2019) menunjukkan bahwa *TC* mengoptimalkan laba UMKM Dendeng Sapi Aceh secara efektif. Penelitian Febriana (2020) juga menunjukkan bahwa *TC* memungkinkan produsen suwar-suwir di Jember untuk menetapkan harga jual yang kompetitif sambil mencapai laba yang diinginkan dan mengelola biaya produksi dengan sangat baik (Febriana Fitriyatul Amalia, 2019).

Berdasarkan penjelasan sebelumnya, serta penelitian yang telah dilakukan sebelumnya dalam penelitian mengenai hubungan antara *ABC*, *TC*, laba dan *JIT*. Dengan demikian, peneliti berfokus pada mengevaluasi dampak *ABC* terhadap laba, melihat pengaruh *TC* terhadap laba secara parsial, pengaruh laba terhadap *JIT* secara parsial, dan melihat pengaruh *ABC*, *TC*, terhadap laba dengan *JIT* sebagai variabel moderating pada *PT*. Mikatasa, Surabaya.

2. TINJAUAN PUSTAKA

2.1. Activity Based Costing (ABC)

Menurut pemaparan Firmansyah (2020), System *ABC* adalah sistem biaya khusus yang mengumpulkan biaya ke dalam aktivitas yang terjadi pada perusahaan dan membebaninya pada produk atau jasa. Laporan biaya aktivitas ini dapat memberikan informasi tentang aktivitas keuangan manajemen yang direncanakan dengan lebih rinci, biaya nyata dari aktivitas yang diidentifikasi dan biaya yang direncanakan pada biaya biaya yang diidentifikasi. *ABC* adalah jenis akuntansi yang fokus pada aktivitas yang dilakukan untuk menghasilkan produk atau jasa. *ABC* mengeksplorasi biaya yang berkaitan dengan aktivitas dan sumber daya yang diperlukan untuk melaksanakan aktivitas tersebut.

Indikator:

$$\text{BOP kelompok aktivitas} = \frac{\text{BOP Kelompok kegiatan tertentu}}{\text{Biaya pengemudi}}$$

2.2. Target Costing (TC)

Menurut Idrawahyuni et al. (2020), bahwa tujuan utama TC mendorong perusahaan dapat menekan biaya, karena saat target cost telah tercapai maka bisa di tetapkan lagi target cost yang lebih kecil. Selain itu, TC juga memberikan motivasi kepada para karyawan untuk mencapai target laba yang diinginkan perusahaan saat pembangian produk. Cara ini dilakukan secara terbalik dan berbeda dengan metode lain, langkah pertama yang dilakukan ialah menentukan harga dengan mengacu pada pemasaran atau pesaing (febriana fitriyatul amalia, 2019).

Indikator:

$$\text{Target Biaya} = \text{Harga jual} - \text{Target laba}$$

2.3. Laba

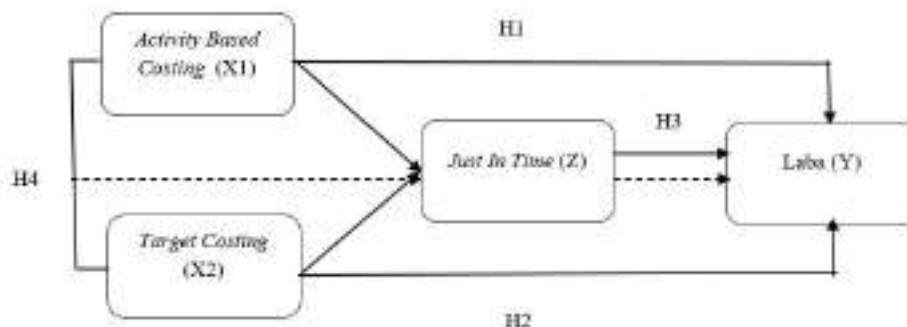
Laba, yang merupakan selisih antara pendapatan dan beban dari aktivitas perusahaan, sangat penting untuk menilai kinerja finansial (Adinda Putri et al., 2022). Laba tahun berjalan mencerminkan keuntungan yang diperoleh dalam tahun buku setelah pajak diperhitungkan. Perlu dicatat bahwa hanya 50% dari laba tahun berjalan yang dianggap sebagai modal inti. Jika perusahaan mengalami kerugian, maka seluruh kerugian tersebut akan mengurangi modal inti, yang harus memenuhi persyaratan modal inti sebesar 8% (Adinda Putri et al., 2022).

Indikator:

$$\text{Laba} = \text{Penjualan} - \text{Biaya Pokok Produksi}$$

2.4. Just In Time (JIT)

Pendekatan JIT menawarkan cara baru untuk mengurangi total biaya penyimpanan dan penyiapan secara efektif, berbeda dari pendekatan tradisional yang hanya menyeimbangkan biaya persiapan dengan jumlah pesanan untuk hasil yang optimal (Cynthia Maharani, 2018). Tujuan JIT adalah untuk memastikan bahan-bahan tiba tepat waktu untuk produksi, barang jadi siap untuk dijual ketika dibutuhkan, dan elemen persediaan lainnya tersedia sesuai kebutuhan. Dalam JIT, dampak terbesar pada manajemen persediaan adalah pengurangan persediaan ke tingkat yang sangat rendah, dan jika memungkinkan, menjadi nol (Istiqomah et al., 2023). Indikator: Pengadaan bahan baku hanya pada saat produksi, produksi tanpa persediaan (menghilangkan biaya suku cadang).



Gambar 2. Kerangka Konseptual Kerangka Kerja Konseptual

3. METODE PENELITIAN

Dalam penelitian ini, kami menggunakan pendekatan kuantitatif, yang memungkinkan kami menganalisis data numerik dengan metode statistik. Metode ini, yang berakar pada filsafat positivisme, dirancang untuk menyelidiki populasi atau sampel tertentu. Kami memilih sampel menggunakan purposive sampling, yaitu teknik yang memilih sampel berdasarkan kriteria tertentu. Sampel penelitian ini terdiri dari laporan keuangan Berkah Mandiri Jaya untuk tahun 2019 hingga 2022.

4. HASIL DAN PEMBAHASAN

4.1. Hasil Penelitian

Guna menguji hipotesis H1 dan H2, kami menerapkan analisis regresi berganda yang melihat pengaruh ABC dan TC terhadap peningkatan laba. Sementara itu, hipotesis H3 dan H4 diuji dengan analisis moderasi pakai pendekatan residual absolut atau uji selisih mutlak. Semua uji hipotesis ini dilakukan dengan bantuan program SPSS 22.

a. Hasil Uji Regresi Berganda Hipotesis Penelitian H1 dan H2

Tabel 1. Hasil Koefisien Determinasi (R^2)

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,848a	,720	,703	53553,03172
a. Predictors: (Constant), TC, ABC				

Sumber: Output SPSS 22 (2017))

Dari tabel 1, nilai R sebesar 0,848 atau 84,8% menunjukkan korelasi pengaruh sedang, jadi penerapan ABC dan TC punya dampak yang sangat kuat terhadap peningkatan laba. Nilai R^2 (Adjusted R Square) sebesar 0,703 berarti 70,3% dari peningkatan laba bisa dijelaskan oleh kedua metode ini, sementara 29,7% dipengaruhi oleh elemen lain yang belum diteliti.

Tabel 2. Hasil Uji F - Uji Simultan

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regresi	242784215191,374	2	121392107595,687	42,327	,000b
	Residual	94641597803,848	33	2867927206,177		
	Total	337425812995,222	35			
a. Dependent Variable: Profit Increase						
b. Predictors: (Constant), TC, ABC						

Sumber: Output SPSS 22 (2017)

Dari tabel 2, terlihat bahwa uji regresi berganda memberi nilai F hitung 42,327 dengan signifikansi 0,000, jauh di bawah 0,05. Karena nilai F hitung lebih besar dari F tabel yang

hanya 3,28, maka H_0 ditolak dan H_a diterima. Maka, penerapan ABC dan TC berpengaruh besar terhadap peningkatan laba.

Tabel 3. Hasil Uji t (Uji Parsial)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	390063,586	55832,088		-6,986	,000
	ABC	,100	,029	,358	3,513	,001
	TC	,343	,055	,632	6,206	,000

a. Dependent Variable: Profit Increase

Sumber: Output SPSS 22 (2017)

Berdasarkan tabel 3 di atas, model estimasi dapat dianalisis sebagai berikut:

$$\text{Peningkatan Laba} = 399369,751 + 0,100 \text{ ABC} + 0,343 \text{ TC} + \text{error}$$

Atas dasar persamaan di atas, maka:

- Nilai konstanta sebesar 390,063.586 menunjukkan bahwa tanpa penerapan ABC dan TC, laba akan tetap meningkat sebesar 390,063.586.
- Koefisien regresi untuk ABC (X_1) adalah 0,100, yang berarti setiap unit tambahan pada variabel ini meningkatkan laba sebesar 0,100.
- Koefisien regresi untuk TC (X_2) adalah 0,343, yang menunjukkan bahwa setiap unit tambahan pada variabel ini meningkatkan laba sebesar 0,343."

Tabel 4. Hasil Uji Perbedaan Mutlak

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	92891,640	13551,537		6,855	,000
	Zscore: ABC	29646,348	9502,009	,302	3,120	,004
	Zscore: TC	51901,146	10521,382	,529	4,933	,000
	Zscore: JIT	9182,029	11179,153	,094	,821	,418
	X1_M	-620,303	14341,882	-,005	-,043	,966
	X2_M	37828,979	16020,022	,257	2,361	,025

a. Variabel Dependen: Peningkatan Laba

Sumber: Output SPSS 22 (2017)

Interpretasi dari hipotesis H3 dan H4 menunjukkan hasil sebagai berikut:

Just In-Time tidak memoderasi hubungan antara penerapan ABC dan peningkatan laba. Hasil dari Tabel 4 menunjukkan t hitung sebesar -0.043 yang jauh di bawah t tabel 1.692 dengan signifikansi 0.966, melebihi 0.05. Ini berarti hipotesis H3 ditolak, karena Just In-Time tidak berfungsi sebagai variabel moderating dalam konteks ini.

Sebaliknya, Just In-Time terbukti efektif dalam memoderasi hubungan antara TC dan peningkatan laba. Nilai signifikansi 0.025 dan koefisien regresi positif sebesar 378,28.979 rupiah, dengan t-hitung 2.361 melebihi t-tabel 1.692, mendukung penerimaan hipotesis H4.

Dimana menunjukkan bahwa Just In-Time berhasil meningkatkan efektivitas TC dalam meningkatkan laba.

Tabel 5. Hasil Koefisien Determinasi (R^2)

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the
1	,848 ^a	,720	,703	53553,03172
a. Predictors: (Constant), TC, ABC				

Sumber: Output SPSS 22 (2017)

Dari Tabel 5, terlihat bahwa nilai R sebesar 0,848 menunjukkan korelasi yang sangat kuat, menurut pedoman interpretasi koefisien korelasi, yang berada dalam interval 0,8 - 1,0. Ini berarti bahwa variabel AbsX2_M, Z ABC, Z TC, Z Just In-Time, dan AbsX1_M sangat berpengaruh terhadap peningkatan laba perusahaan. Dengan nilai R^2 (Adjusted R Square) sebesar 0,756, kita dapat menyimpulkan bahwa 75,6% dari peningkatan laba dapat dijelaskan oleh variabel-variabel tersebut. Sisanya, sebesar 24,4%, dipengaruhi oleh aspek lain yang tidak dilibatkan

Tabel 6. Hasil Uji F - Uji Simultan

ANOVA ^a						
	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regresi	249315094285,504	3	83105031428,501	30,182	,000 ^b
	Residual	88110718709,718	32	2753459959,679		
	Total	337425812995,222	35			

Uji ANOVA atau F-test memperlihatkan nilai F hitung sebesar 22,645 dengan tingkat signifikansi 0,000, jauh di bawah batas 0,05. Dimana menunjukkan bahwa variabel-variabel seperti AbsX2_M, Z ABC, Z TC, Z JIT, dan AbsX1_M secara kolektif memberikan dampak positif yang besar terhadap peningkatan laba

4.2. Pembahasan

1) Pengaruh ABC terhadap peningkatan laba

Temuan mendukung H1 bahwa ABC berperan penting dalam meningkatkan laba. Seperti yang dijelaskan oleh Tandiontong & Lestari (2012), ABC menawarkan akurasi yang lebih tinggi dibandingkan metode konvensional dalam menilai profitabilitas. Penelitian ini menemukan efisiensi biaya signifikan dengan penerapan ABC dan TC, termasuk efisiensi hingga Rp. 18.550,87 dan Rp. 18.589,39, serta pengurangan biaya sebesar Rp. (242.539,13). Hal ini sejalan dengan teori Akuntansi Biaya yang mendukung pengendalian biaya secara efektif ((Dunia & Wasilah, 2001); (Kurniawan & Kiswara, 2012)). Dengan metode ABC, perusahaan dapat menentukan harga jual yang lebih bersaing dan mengelola operasional dengan lebih efisien (Martusa & Dicky (2011); Drake et al (1999))

2) Pengaruh TC terhadap peningkatan laba

Hasil investigasi mendukung H2 yang mengklaim bahwa TC dapat meningkatkan laba perusahaan. Hasilnya menunjukkan efisiensi yang mengesankan, dengan penghematan

sebesar Rp1.423.154,94 untuk gula SHS I dan Tetes, dan total efisiensi mencapai Rp1.665.694,07. Dimana, selaras dengan penelitian Bakrie (2009), yang menyoroti TC sebagai alat yang sangat efektif dalam perencanaan biaya dan desain produk serta dalam memaksimalkan laba jangka panjang. Penelitian Agung (2009) juga membuktikan bahwa TC berhasil mengurangi biaya produksi dan merencanakan laba dengan lebih baik

3) Pengaruh *ABC* terhadap peningkatan laba dengan *JIT* sebagai variabel moderating

Hipotesis ketiga (H3) meneliti apakah *JIT* bisa memoderasi efek *ABC* pada laba, tapi hasilnya menunjukkan bahwa *JIT* tidak memberikan dampak yang cukup berarti. Jadi, hipotesis yang dirumuskan ini ditolak setelah analisis regresi moderasi dengan pendekatan selisih mutlak. *ABC* memang efektif untuk menghitung biaya secara akurat dan mendukung strategi cost leadership, sementara *JIT* berfokus pada menghilangkan pemborosan untuk meningkatkan kualitas dan produktivitas (Modarress & Ansari, 1990). Namun, *ABC* tetap kunci untuk mendapatkan informasi biaya yang tepat dan meningkatkan profitabilitas produk (Caroline & Wokas, 2016).

4) Pengaruh TC terhadap peningkatan laba dengan *JIT* sebagai variabel moderating

Hipotesis keempat (H4) mengindikasikan dimana *JIT* memoderasi hubungan antara TC dan peningkatan laba perusahaan secara signifikan. Analisis regresi moderasi menunjukkan bahwa *JIT* memperkuat dampak positif TC pada laba. Temuan ini senada dengan investigasi yang diungkap Fitriah & Lestari (2015) yang menunjukkan peningkatan laba pada CV Underhold Company berkat TC. Dukungan dari studi-studi sebelumnya (Agung, 2009) menyatakan konfirmasinya bahwa TC dapat meningkatkan laba secara efektif. TC memastikan biaya sesuai dengan harga jual dan laba yang diinginkan, sementara *JIT*, dengan fokus pada pengurangan pemborosan, semakin memperkuat efektivitas TC (Apriyani et al. (2014); Husanto et al. (2014).

5. KESIMPULAN

Dari penelitian ini, kita dapat menarik kesimpulan bahwa arus kas operasi, tingkat hutang, dan ukuran perusahaan berpengaruh pada peningkatan laba, dengan *Just In Time* (*JIT*) sebagai variabel moderasi. Temuan menunjukkan bahwa *Activity Based Costing* (*ABC*), yang fokus pada perhitungan biaya berdasarkan aktivitas, berhasil meningkatkan laba dengan memberikan informasi biaya yang akurat dan memastikan harga produk yang tepat. *Target Costing* (*TC*) juga berperan dalam meningkatkan laba dengan menetapkan target biaya berdasarkan permintaan pasar. Meskipun *JIT* tidak memoderasi hubungan antara *ABC* dan peningkatan laba, *TC* yang disesuaikan dengan harga jual dan laba yang diinginkan dapat dimoderasi untuk memaksimalkan laba

Untuk meningkatkan kinerja finansial perusahaan, disarankan agar manajemen mempertimbangkan penerapan *ABC* dan *TC* secara bersamaan. *ABC* dapat memberikan informasi biaya yang akurat dan mendetail, yang akan membantu dalam penetapan harga yang kompetitif dan efisien. Sementara itu, *TC* dapat memfokuskan pada penetapan biaya yang sesuai dengan permintaan pasar dan laba yang diinginkan. Mengingat bahwa *JIT* tidak terbukti memoderasi hubungan antara *ABC* dan laba, perusahaan sebaiknya tetap memanfaatkan metode ini untuk mengoptimalkan efisiensi operasional dan kontrol biaya.

Penelitian ini menunjukkan bahwa penerapan ABC dan TC dapat secara signifikan meningkatkan laba perusahaan. Dengan mengintegrasikan kedua metode tersebut, perusahaan dapat memperoleh keuntungan kompetitif melalui informasi biaya yang lebih akurat dan efisiensi biaya yang lebih baik. Manajemen diharapkan dapat menggunakan temuan ini untuk membuat keputusan yang lebih strategis dalam pengelolaan biaya dan penetapan harga, serta untuk merancang strategi bisnis yang lebih efektif dan berorientasi pada pasar.

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**THE INFLUENCE OF THE VILLAGE FINANCIAL SYSTEM,
COMPETENCE OF VILLAGE APPARATUS, AND COMMUNITY
PARTICIPATION ON ACCOUNTABILITY IN VILLAGE
FUND MANAGEMENT**

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Abstract

This research aims to examine the influence of the implementation of the village financial system, the competence of village officials, and community participation on the accountability of village fund management. The total or census technique was used to choose 72 respondents for the study sample. Using a questionnaire distribution approach, the study was carried out. A method known multiple linear regression analysis was employed for the data analysis. The investigation findings point out that there is a positive relationship between accountability in managing village funds, the competence of village officials, and community participation. Specifically, accountable management of village funds is enhanced by implementing the village financial system.

Keywords: Village Financial System Implementation, Village Apparatus Competence, Community Participation, Village Fund Management Accountability

1. INTRODUCTION

The way village funds are managed is crucial, particularly in light of President Joko Widodo's mandate for fair and needs-based village development to ensure balance and prosperity in rural areas. For village fund management to be accountable, it must be transparent and responsible at every stage, from planning and implementation to the final financial reporting (Rasmini, 2019). All actions taken by the Village Financial Management Board are subject to the accountability standards established by the laws and regulations governing the administration of Village Funds. Considering the state's financial capabilities, village funds typically rise annually. Rp538.9 trillion was the total amount of village funds from 2015 – 2023 (Latrini, 2018).

Village revenue in accordance with the law there are 6 other sources so that on average each village has managed village funds amounting to Rp1.5 billion (DJP, Ministry of Finance processed, 2023). The highest proportion of village budget revenue in 2023 is village funds (53.8%), village fund allocations (29.7%), financial assistance (8.5%), village own-source revenues (3.27%), local tax revenue sharing (4.4%), and others (0.4%) (SIKD, 2024). Advancement and community empowerment are given priority while allocating the village funding. How to hold village administrations accountable and build public confidence in their financial performance is a pressing concern in the modern era of village fund management (Kadir & Moonti, 2018).

Based on what Indonesia Corruption Watch (ICW) has seen, village funds are still not being managed very well. In 2022, the sector most prone to corruption in Indonesia was the village budget sector with a total of 155 recorded cases with 252 suspects over the past year (Indonesia Corruption Watch, 2022). In 2022, due to the high number of cases of fraud in the accountability of village fund management, the Corruption Eradication Commission of the Republic of Indonesia created the Anticorruption Village program, where Badung Regency was used as a pilot project for Anticorruption Villages in Bali Province, which was considered to have practiced real clean governance and involved community participation (Tribun Bali, 2022). Apart from government accounts, there are still a couple issues that are extremely vital when it comes to managing village funds, notably when it is related to the high standards of responsibility for managing village funds.

Considering the above situation, the Central Government (Kemendagri) and the Financial and Development Supervisory Agency (BPKP) are working in harmony to make the handling of village funds more accountable by creating village financial governance applications and putting village financial systems into place. By implementing this system, it will make benefit for village authorities in order to organize community program and also support the realization for a transparent, accountable, credible and trusted government and will facilitate involvement of the community in handling village financial systems which is require special attention (Ridwan, 2019). This inquiry seeks to uncover the relationship of the implementation of the village financial system, the competence of village officials, and community participation on the accountability of village fund management.

2. LITERATURE REVIEW

Literature on accountability of village fund management identifies a number of factors acting on effectiveness. In that light, the research is guided by three areas, namely the implementation of village financial systems, competence of village officials, and participation of the community.

It has been proved that the village financial system, or SISKEUDES, has an effect on accountability. Indeed, studies by Triyono et al. (2019) and Julianto & Dewi (2019) uncover that the use of SISKEUDES positively affects the accountability of fund management. The results imply that SISKEUDES is a key instrument in the success and transparency of financial activities at the village level.

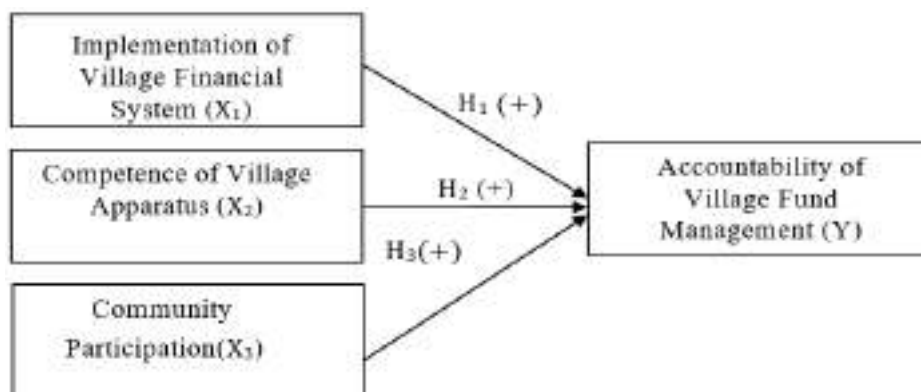
Other critical factors are village officials' competencies. According to Ladapase, knowledge, skills, and attitudes are important to align in accordance with the position of the officials. However, research findings on this matter have remained mixed. Some studies documented a positive correlation between competence and accountability. However, Kuncahyo & Dharmakarja (2022) did not find significant effects, probably due to the differences in education level and experience among the officials. From this, it shall imply there could be some complex relationship between official competence and accountability, depending on the context.

Another key element considered to be very important in village governance and fund management is community participation. Dewi & Gayatri (2019) highlighted the importance of community involvement in various activities organized by the government. Nevertheless, it is arguable how community participation influences accountability. Some studies, like

Fajri & Julita (2021); Rasmini (2019), reveal that community participation can positively influence accountability, while others, like Luthfiani et al (2020), find no influence at all. The differing results also already point to the fact that the effects of community participation are conditioned by a lot of factors and local contexts.

Very often, these results have been placed in Agency Theory by Jensen and Meckling, (1976), and Stewardship Theory by Davis et al. (1997). These theories try to explain the prevailing connection and motives in village fund management, therefore giving a theoretical basis to understand the association between village officials, community members, and accountability mechanisms (Rasyid, 2022).

The results of these different studies are varied, and hence the reasons that affect the accountability of village fund management are complex, plausible, and interconnected. Further studies on these factors and how they interact in different contexts may offer valuable insights into the improvement of accountability in village fund management. Similar studies can help in the formulation of better policies and practices toward ensuring openness and accountability in the use of village funds.



Source: Research Data, 2024

Figure 1. Conceptual Framework

3. RESEARCH METHODS

The associative quantitative research method has been employed in the present investigation to find out how the independent variable affected the dependent variable (Sugiyono, 2014). It will be done by the method of survey. The research tool is in the form of a questionnaire. This research was conducted at the Abiansema District Village Government, Badung Regency.

The population in the present study consisted of all village government officials in Abiansema District, Badung Regency, with a total of 18 villages. In the present case, the sampling was done by non-probability techniques with total or census sampling. In examining the hypothesis of this study, using analysis of data commencement from validity test, reliability test, descriptive statistic, classical assumption test, and multiple regression analysis test with testing hypothesis. In this research, the hypothesis is to be tested using a Multiple Linear Regression Analysis.

4. RESULTS AND DISCUSSION

This study uses descriptive statistics to show and describe the research data used. Table 1 displays the findings of the descriptive statistical analysis.

Table 1. Descriptive Statistics Results

	N	Minimum	Maximum	Average	Standard Deviation
Implementation of the Village Financial System (X1)	72	2,40	4,00	3,45	0,374
Village Apparatus Competence (X2)	72	2,29	3,86	3,40	0,266
Community Participation (X3)	72	2,00	4,00	3,56	0,382
Village Fund Management Accountability (Y)	72	2,57	4,00	3,68	0,320

Source: Primary data processed, 2024

The variable application of the village financial system have a range of 2.40, while its highest limit is 4.00. Regarding the average value, the variable application of the village financial system is at 3.45 which signifies that this particular system applied by villages can influence how they manage their funds; considering that 0.374 standard deviation is lesser than average value denotes very slight variation in the village apparatus competency variable's data. Consequently, it amounts to 2.29 constituting a maximum of 3.86 for village apparatus competence. Indicating from the value above, it means a competence level for authorities within villages that may determine how they will handle money assigned from public funds at villages as shown by an average value equal to 3.40 and hence implies that there is less deviation in terms of collecting data regarding such variables as those associated with competencies among local officers.

The available range for community participation is between 2.00 and 4.00. The average community participation variable of 3.56 means that the accountability of village fund management is influenced by community participation and the data deviation on this variable is very small since its standard deviation value is 0.382 which is lower than the mean. Also, the village fund management accountability variable has a range of 2.57 to 4.00. The average village fund management accountability variable is 3.68, while its standard deviation value of 0.320 is lower than the mean indicating a very small deviation in data around this variable. This research applies multiple linear regression analysis equation model for its purpose and table 2 presents results of such analyses done using multiple linear regression analysis method.

Table 2. Multiple Linear Regression Analysis Results

Model	Unstandardized Coefficients			Standardized Coefficients		
	B	Std. Error		Beta	t	Sig.
1	(Constant)	-.142	1.589		-.090	.929
	Implementation of the Village Financial System (X1)	.249	.067	.207	3.700	.000
	Village Apparatus Competence (X2)	.424	.086	.343	4.948	.000
	Community Participation (X3)	1.075	.135	.537	7.949	.000

Source: Primary data processed, 2024

As discovered in Table 5, the regression equation number (2) obtains the constant value -0.142 . This shows that in the case of no change regarding the variables of the application of village financial system, competence of village apparatus, and community participation (X1, X2, and X3 are 0), accountability of the management of village funds is zero. It means that the application of the village financial system (X1) has a positive influence on the accountability of the management of the village fund (Y); this means that if the application of the village financial system is increased, then the accountability of the village fund management also increases with a coefficient of 0.249.

Besides, the coefficient for village apparatus competency variables is 0.424, implying that the application of village apparatus competencies has a favorable influence on the accountability of village fund management (Y); it means that the higher the competence of the village apparatus, the higher the accountability level of the village fund management is. The coefficient for the community participation variable, X3, is 1.075. This means that community participation influences accountability in village fund management, Y. To this effect, if community participation increases, then accountability in the management of village funds increases.

Table 3. Coefficient of Determination

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.908 ^a	.825	.817	.96290

Source: Primary data processed, 2024

Regression analysis uncover that the Adjusted R Square value in table 3 is 0.817 indicating that 81.7 percent of changes in accountability of village fund management (Y) can be influential by the application of village financial system (X1), competence of village officials (X2) and community participation (X3), while the other 18.3 percent is accounted for by other factors beyond the scope of this research.

Table 4. F Test Results

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	296.230	3	98.743	106.500	.000b
	Residual	63.048	68	.927		
	Total	359.278	71			

Source: data processed, 2024

As the findings from the F-test which are shown in Table 4, the significance value is set at $0.000 < 0.05$, thus concluding that the variables of Y, X1, X2 and X3 simultaneously affect accountability of fund management in villages.

Consequently, the first null hypothesis is rejected while the alternative is accepted indicating that variable application of village financial systems (X1) positively impacts upon accountability on villages' funds (Y). As for the view of Julianto et al., (2019), application of village financial system does have an effect on how accountable management of village funds are done. These findings align well with agency theory where there is a mandate given to village governments (agents) by both central and regional governments (principals) in terms of supervision and performance evaluation for implementation of this mandate especially when it comes to management of village funds (Jensen and Meckling, 1976).

In managing funds of the village, each activity and end results of village governance actions must be accountable to the community in accordance with their rules and regulations. Having a financial system for villages is hoped to be a way or solution that reduces differences in information between principle and agent or village community and its leadership.

The competence variable of the village apparatus (X2), with a significance value of $0.000 < 0.05$, then H_0 is denied and H_1 is confirmed. It can be said that the village apparatus competency variable (X2) has an impact on village fund management accountability (Y). Hardiningsih et al. (2020) mentions that there is a beneficial impact of competence of village officials on accountability in managing village funds. The findings are corroborated by stewardship theory as described by Davis (1977). In this case, stewards do not pursue personal gains but act on behalf of principals' aims only. Thus, the principal assesses success of the village government (steward) based on how much priority it gives to organizational/institutional interests.

There must be expertise, knowledge and skills available for officials in villages to manage village funds. The economic purpose ought to be achieved optimally in terms of wealth for society in this regard, the village government is an institution which may be relied upon so as to offer public services effectively and make financial management reporting intelligible along with building public trust at large.

Community participation variable (X3), with a significance value of $0.000 < 0.05$, then H_0 is refused and H_1 is valid. In this case, the community participation variable (X3) has a beneficial impact on the accountability of village fund management (Y). In their study, Firdaus et al. (2020) found evidence that there is a positive influence of community participation on village fund management accountability. The findings from this study are consistent with agency theory (Jensen & Meckling 1976), where one thing about performance measures for principals deals with how participatory people must be. Evaluation of the principal regarding the performance of the agent, among others, is

community participation. The right of the community to obtain accountability regarding the management of village funds by the agent, namely the village government. Where strong community participation is supported through decision making and budget execution. The impact of community participation is also visible in the process of evaluating and controlling government performance and minimizing abuse of authority. One of the factors that determines accountability in village funds is engagement from the community.

5. CONCLUSION

In conclusion, when it comes to village fund management, better application of village financial system paired with high competencies of village officials and community participation will all lead to positive effects on the accountability thereof. This is due to the fact that only in instances where there is good implementation of the village financial system and credibility amongst available local governance can this be achieved

In terms of enhancing comprehension regarding village fund management accountability for the Village Government in Abiansema District, researchers may recommend participation in technical guidance so that village fund management adheres with regulations and standards set out through planning, execution, Administrative processes growths accountability reports. Meanwhile, The village government ought improve its performance over time whilst fostering community involvement during decision making process aimed at making sure that such funds directed at their respective villages are adequate enough.

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IMPLEMENTASI *TARGET COSTING* DALAM UPAYA EFISIENSI BIAYA PRODUKSI UNTUK MENINGKATKAN LABA PRODUK

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Abstract

This paper looks into how MIE NAGA figures out their production costs, checking if Target Costing makes a difference in cutting costs, and seeing how using Target Costing can help boost their product profits. This research is a type of qualitative research using a case study approach. The type of research used is qualitative with a case study model. Data sources refer to primary data and secondary data. Data analysis and processing used to get answers to the formulation of the problem is to get supporting data and then processed with the target costing method used until the end of the problem. In essence, the application of the target costing method is effective for streamlining production costs. this is evident that the difference from the total production cost in 2020 and the total production cost in 2021 before and after the application of the target costing method is Rp. 340,206,650, and the total production cost is Rp. 516,244,150 and Rp. 176,037,500. Furthermore, there is an increase in product profit in the amount of the difference in revenue seen from 2020 and 2021 by 71.4%. Meanwhile, two additional alternatives that have been implemented through the value engineering method are changes in selling prices to maximize profits.

Keywords: *Target Costing, Cost Efficiency, Product Profit*

Abstrak

Artikel ini melihat bagaimana MIE NAGA menghitung biaya produksi mereka, memeriksa apakah Target Costing membuat perbedaan dalam memangkas biaya, dan melihat bagaimana penggunaan Target Costing dapat membantu meningkatkan keuntungan produk mereka. Penelitian ini merupakan jenis penelitian kualitatif dengan menggunakan pendekatan studi kasus. Jenis penelitian yang digunakan adalah kualitatif dengan model studi kasus. Sumber data merujuk pada data primer dan data sekunder. Analisis dan pengolahan data yang dipakai untuk mendapatkan jawaban dari rumusan permasalahan adalah dengan mendapatkan data pendukung lalu diproses dengan metode *target costing* digunakan hingga akhir permasalahan. Pada dasarnya, penerapan metode *target costing* efektif untuk mengefisienkan biaya produksi. ini terbukti bahwa selisih dari total biaya produksi tahun 2020 dan total biaya produksi tahun 2021 sebelum dan sesudah diterapkannya metode *target costing* adalah Rp. 340.206.650, dan total biaya produksi adalah Rp. 516.244.150 dan Rp. 176.037.500. Selanjutnya terjadi peningkatan laba produk sejumlah selisih pendapatan yang dilihat dari tahun 2020 dan 2021 sebesar 71,4%. Sementara itu, dua Alternatif tambahan yang sudah diterapkan melalui metode rekayasa nilai adalah perubahan harga jual hingga mampu memaksimalkan keuntungan.

Kata Kunci: *Target Costing, Efisiensi Biaya, Keuntungan Produk*

1. PENDAHULUAN

Persaingan dalam dunia bisnis sekarang ini sangat berkembang pesat. Akibatnya, pasar selalu dipenuhi dengan banyak industri baru, dari makanan, barang sampai jasa semuanya diperlukan persaingan. Oleh karena itu, untuk bisnis yang dibuka, diperlukan strategi bisnis agar dapat memenuhi industri tersebut dan tumbuh lebih kuat. Untuk hal tersebut, masing-masing sektor atau industri perlu memiliki kelebihan atau sesua yang membuatnya berbeda dari bisnis sejenisnya. Keragaman bisnis membuat persaingan lebih kompetitif dan memotivasi industri untuk menghasilkan produk berkualitas, dengan harga terjangkau, dan memberikan pelayanan terbaik bagi konsumen. Namun, Indonesia saat ini menghadapi ketidakstabilan ekonomi akibat wabah COVID-19 yang juga mempengaruhi sektor yang lain. Maka dari itu, sangat penting bagi setiap industri untuk segera merancang strategi yang kuat dalam menangani masalah ini.

Tinjauan ekonomi Kota Makassar dalam lima tahun terakhir menunjukkan tren penyusutan, dengan puncaknya pada tahun 2020 yang mencapai angka minus 1.27% akibat pandemi Covid-19. Rahmania & Dahtiah (2022) menekankan pentingnya industri bisnis dalam menghasilkan produk-produk berdaya saing untuk menunjang proses produksi dan memperoleh laba yang besar.

Wuysang & Pusung (2019) mendefinisikan kemampulabaan (profitabilitas) sebagai hasil akhir dari kebijakan dan keputusan manajemen, yang mencerminkan efektivitas pengelolaan perusahaan. Ini menekankan pentingnya tidak hanya menciptakan produk berkualitas, tetapi juga merumuskan strategi yang tepat untuk mencapai tujuan perusahaan.

Putri (2022) menjelaskan dilema penetapan harga jual, di mana harga terlalu tinggi dapat mengurangi minat konsumen, sementara harga terlalu rendah dapat menghambat pencapaian target perusahaan. Metode *target costing* diusulkan sebagai solusi untuk mengatasi masalah ini. Saleh et al. (2022) menyoroti bahwa *target costing* dapat memberikan perkiraan volume penjualan, harga pasar produk, dan tingkat kemanfaatan.

Wulandari & Dewi (2024) mengaitkan *target costing* dengan desain produk baru, sementara Utami et al. (2022) menekankan penetapan biaya produk berdasarkan harga jual yang masuk akal di pasar. Penelitian-penelitian terdahulu seperti yang dilakukan oleh Syukri et al. (2022), Moechry (2023), dan Nafatu et al. (2021) menunjukkan efektivitas metode *target costing* dalam meningkatkan laba perusahaan dan meminimalisir biaya produksi.

Pada saat ini yang memasuki periode dimana COVID-19 telah mempengaruhi stabilitas ekonomi global, termasuk Makassar, bisnis-bisnis tidak terkecuali MIE NAGA juga sudah merasakan turunnya stabilitas bisnis. Oleh karenanya, metode *target costing* digunakan sebagai cara untuk mengurangi seluruh biaya yang dikeluarkan dalam proses produksi dan kemudian melihat perbedaan antara biaya yang diharapkan dengan biaya aktual sehingga perusahaan mendapatkan profit dengan optimal.

Dengan adanya fenomena yang terjadi, maka penelitian ini bertujuan untuk memahami metode perhitungan biaya produksi, mengevaluasi potensi *target costing* sebagai alternatif untuk efisiensi biaya produksi, dan menganalisis dampak penerapan *target costing* terhadap peningkatan laba produk.

2. LANDASAN TEORI

Tinjauan pustaka ini mencakup beberapa konsep kunci dalam akuntansi manajemen dan biaya, serta metode *target costing*. Akuntansi manajemen, sebagaimana dijelaskan oleh Affiqah & Fuadi (2019), merupakan praktik yang menggunakan berbagai konsep dan teknik untuk mengolah data ekonomi guna memfasilitasi perencanaan dan pencapaian tujuan ekonomi yang realistis. Mahsunah & Hariyati (2021) menambahkan bahwa akuntansi manajemen menghasilkan informasi yang diperlukan manajemen dalam proses pengambilan keputusan.

Akuntansi biaya, sebagai bagian dari akuntansi manajemen, berfokus pada penentuan dan pengendalian biaya. Juliani et al. (2019) dan Istikhoro & Ardhiani (2019) menekankan peran akuntansi biaya sebagai alat bagi manajer dalam perencanaan, pengendalian, dan analisis biaya. Hal ini erat kaitannya dengan konsep biaya produksi, yang menurut Bustami & Nurlela (2006), mencakup biaya overhead pabrik, biaya tenaga kerja langsung, dan biaya bahan baku.

Laba, sebagaimana diuraikan oleh Idrawahyuni et al. (2020), merupakan ukuran kinerja perusahaan dan indikator kemampuannya dalam memenuhi kebutuhan konsumen. Affiqah & Fuadi (2019) menekankan pentingnya informasi laba dalam penentuan strategi pengelolaan sumber daya ekonomi perusahaan.

Efisiensi, menurut Bustami & Nurlela (2006), berkaitan dengan upaya meminimalkan input untuk output tertentu. Mahsunah & Hariyati (2021) menambahkan bahwa analisis efisiensi menjadi kunci dalam mengevaluasi keberhasilan perusahaan dalam mengelola sumber dayanya secara efektif.

Akhirnya, metode *target costing* dibahas sebagai pendekatan inovatif dalam pengendalian biaya. Maknun et al. (2023) menjelaskan *target costing* sebagai proses penentuan biaya maksimal untuk memproduksi produk baru. Priyanto & Akbar (2019) menekankan peran *target costing* dalam optimalisasi perencanaan laba. Moechry (2023) menambahkan bahwa metode ini mempertimbangkan seluruh aspek proses produksi dalam pengendalian biaya.

Adapun kerangka konsep penelitian ini dibuat karena ada masalah dalam proses produksi perusahaan, yaitu biaya produksi yang tidak terkontrol, sehingga laba yang dihasilkan tidak maksimal.



Gambar 1. Kerangka Konsep Penelitian

3. METODE PENELITIAN

Penelitian ini mengadopsi pendekatan kualitatif melalui studi kasus, bertujuan untuk mengungkapkan dinamika yang terjadi dalam penelitian. Dengan menggunakan studi kasus, peneliti dapat secara mendalam menelusuri masalah atau kondisi yang terjadi pada objek penelitian, mencakup semua aspek yang relevan. Melalui pendekatan ini, peneliti diharapkan dapat memahami lebih baik masalah dan kondisi yang sedang dihadapi, serta menghubungkannya dengan latar belakang penelitian.

Penulis melakukan observasi dan wawancara kepada salah satu pemilik usaha dan beberapa tenaga kerja yang menjadi obyek dalam pengumpulan data yang berhubungan langsung dengan biaya produksi yang ada. Dalam wawancara itu, penulis mengumpulkan data biaya bahan mentah, tenaga kerja dan overhead dalam proses produksi secara kuantitatif. Setelah data dan data sekunder yang tersedia telah dianalisis, maka penulis menggunakan metode *target costing* yang artinya antara lain menentukan harga pasar, laba yang diharapkan dan rekayasa nilai yang ingin dicapai. Rekayasa nilai ini yang akan menjadi alat mengefisienkan biaya. Dari hasil analisis tersebut, penulis menarik kesimpulan yang sesuai dengan subjek dan obyek penelitian ini. Selain itu, uji keabsahan data juga dilakukan guna memastikan kredibilitas, validitas dan keandalan data penelitian ini benar sesuai dengan standar ilmiah.

4. HASIL DAN PEMBAHASAN

4.1. Penjualan dan Identifikasi Pembiayaan Mie Naga

MIE NAGA, sebuah bisnis kuliner yang telah beroperasi sejak 2013, belum sepenuhnya mengikuti standar akuntansi yang berlaku dalam pencatatan biaya produksi. Penelitian ini akan mengungkapkan bagaimana MIE NAGA menghitung biaya produksi pada tahun 2020 dan 2021, menggunakan data dari tahun 2020 sebagai acuan untuk menilai efisiensi di tahun 2021. Sebelum masuk ke rincian biaya produksi, mari kita lihat total penjualan usaha ini di tahun 2021:

Tabel 1. Rincian Penjualan Menu (2021)

Sampel Menu	Harga	Penjualan (Porsi)	Jumlah
MIE NAGA Komplit	Rp. 25,000	1120	Rp. 28,000,000
Grilled Sausage Roll	Rp. 18,000	1000	Rp. 18,000,000
Total			Rp. 46,000,000

1) Biaya Bahan Baku

Tabel 2. Rincian Biaya Bahan Baku (2020)

MIE NAGA Komplit				
Bahan Baku	Satuan	Harga	Pembelian	Jumlah
Garam	1 kg	Rp 40.000	5 kg	Rp 200.000
Bawang Putih	1 kg	Rp 25.250	15 kg	Rp 378.750
Bawang Merah	1 kg	Rp 39.150	28 kg	Rp 1.096.200
Kaldu Ayam Bubuk	1 pack	Rp 28.000	8 pack	Rp 224.000
Fiber creme	1 kg	Rp 131.000	5 kg	Rp 655.000
Kecap	1 botol	Rp 25.000	20 botol	Rp 500.000
Saos Sambal	1 botol	Rp 25.000	20 botol	Rp 500.000
Cabai Rawit	1 kg	Rp 90.000	25 kg	Rp 2.250.000
Daun Bawang	1 kg	Rp 13.000	25 kg	Rp 325.000
Kulit Pangsit	1 pack	Rp 8.000	72 pack	Rp 576.000
Bakso Frozen	1 pack	Rp 25.000	60 pack	Rp 1.500.000
Telur	1 rak	Rp 40.000	15 rak	Rp 600.000
Ayam Cincang	1 kg	Rp 50.000	70 kg	Rp 3.500.000
Minyak Goreng	1 liter	Rp 11.000	45 liter	Rp 495.000
Penyedap Rasa	1 pack	Rp 22.000	8 pack	Rp 176.000
Daun Selada	1 kg	Rp 21.000	15 kg	Rp 315.000
Gula	1 kg	Rp 15.400	10 kg	Rp 154.000
Mentimun	1 kg	Rp 9.200	10 kg	Rp 92.000
Jeruk Nipis	1 kg	Rp 30.000	8 kg	Rp 240.000
Saos Tiram	1 botol	Rp 21.000	15 botol	Rp 315.000
Kemiri	1 kg	Rp 18.000	8 kg	Rp 144.000
Daun Sop	1 kg	Rp 11.800	5 kg	Rp 59.000
TOTAL				Rp14.294.950
MIE NAGA Komplit				
Bahan Baku	Satuan	Harga	Pembelian	Jumlah
Grilled Sausage Roll				
Bahan Baku	Satuan	Harga	Pembelian	Jumlah
Sosis	500 gr	Rp 33.000	85 pack	Rp 2.805.000
Bawang Merah	1 kg	Rp 39.150	8 kg	Rp 313.200
Telur	1 rak	Rp 40.000	25 rak	Rp 1.000.000
Susu Full Cream	1 liter	Rp 20.000	30 liter	Rp 600.000
Saos Tomat	1 botol	Rp 25.000	15 botol	Rp 375.000
Penyedap Rasa	1 pack	Rp 22.000	8 pack	Rp 176.000
Puff Pastry Sheets	750 gr	Rp 36.000	100 pack	Rp 3.600.000
TOTAL				Rp 8.869.200

Tabel 3. Rincian Biaya Bahan Baku (2021)

MIE NAGA Komplit				
Bahan Baku	Satuan	Harga	Pembelian	Jumlah
Garam	1 kg	Rp 31.000	5 kg	Rp 155.000
Bawang Putih	1 kg	Rp 19.500	15 kg	Rp 292.500
Bawang Merah	1 kg	Rp 18.000	28 kg	Rp 504.000
Kaldu Ayam Bubuk	1 pack	Rp 25.000	8 pack	Rp 200.000
Fiber creme	1 kg	Rp 131.000	5 kg	Rp 655.000
Kecap	1 botol	Rp 21.000	20 botol	Rp 420.000
Saos Sambal	1 botol	Rp 21.000	20 botol	Rp 420.000
Cabai Rawit	1 kg	Rp 51.600	25 kg	Rp 1.290.000
Daun Bawang	1 kg	Rp 13.800	25 kg	Rp 345.000
Kulit Pangsit	1 pack	Rp 8.000	72 pack	Rp 576.000
Bakso Frozen	1 pack	Rp 25.000	60 pack	Rp 1.500.000
Telur	1 rak	Rp 40.000	15 rak	Rp 600.000
Ayam Cincang	1 kg	Rp 43.000	70 kg	Rp 3.010.000
Minyak Goreng	1 liter	Rp 20.000	45 liter	Rp 900.000
Penyedap Rasa	1 pack	Rp 22.000	8 pack	Rp 176.000
Daun Selada	1 kg	Rp 21.000	15 kg	Rp 315.000
Gula	1 kg	Rp 14.000	10 kg	Rp 140.000
Mentimun	1 kg	Rp 9.200	10 kg	Rp 92.000
Jeruk Nipis	1 kg	Rp 11.000	8 kg	Rp 88.000
Saos Tiram	1 botol	Rp 12.000	15 botol	Rp 180.000
Kemiri	1 kg	Rp 10.000	8 kg	Rp 80.000
Daun Sop	1 kg	Rp 11.800	5 kg	Rp 59.000
TOTAL				Rp 11.997.500
Grilled Sausage Roll				
Bahan Baku	Satuan	Harga	Pembelian	Jumlah
Sosis	500 gr	Rp 33.000	85 pack	Rp 2.805.000
Bawang Merah	1 kg	Rp 18.000	8 kg	Rp 144.000
Telur	1 rak	Rp 40.000	25 rak	Rp 1.000.000
Susu Full Cream	1 liter	Rp 20.000	30 liter	Rp 600.000
Saos Tomat	1 botol	Rp 21.000	15 botol	Rp 315.000
Penyedap Rasa	1 pack	Rp 22.000	8 pack	Rp 176.000
Puff Pastry Sheets	750 gr	Rp 36.000	100 pack	Rp 3.600.000
TOTAL				Rp 8.640.000

Dari Tabel 3 dapat kita lihat bahwa beberapa harga bahan baku mengalami perubahan, seperti penurunan pada bawang merah, bawang putih, cabai rawit, dan gula. Beberapa bahan

juga beralih pemasok, seperti garam, kecap, dan saus sambal. Ayam cincang, jeruk nipis, dan saus tomat. Beberapa bahan naik harga atau pergantian produk, namun beberapa bahan lain masih sama. Jumlah bahan baku yang digunakan oleh Kaimuddin Idris masih sama, selaras dengan keputusan pemilik usaha. Ketika owner memegang pemasukan bahan baku, dia mencatat semua pembelian secara hati-hati setelah mengunjungi pasar.

Tabel 4. Data Historis Biaya Bahan Baku per Porsi Mie Naga (2021)

Sampel Menu	Biaya Bahan Baku	Penjualan (Porsi)	Biaya/Porsi
MIE NAGA Komplit	Rp. 11,997,500	1120 <i>Portion</i>	Rp. 10,712
<i>Grilled Sausage Roll</i>	Rp. 8,640,000	1000 <i>Portion</i>	Rp. 8,640

2) Biaya Tenaga Kerja

Di samping biaya bahan baku, usaha ini juga menanggung biaya tenaga kerja dan overhead, yang merupakan komponen penting dalam mendukung produksi. Sistem penggajian di sini dirancang berdasarkan status karyawan, dengan upah yang berbeda untuk karyawan tetap, kontrak, dan training, memastikan keseimbangan dan keadilan dalam kompensasi.

Tabel 5. Data Historis Biaya Tenaga Kerja (2020)

Bagian	Jumlah Karyawan	Standar Gaji	Gaji/Bulan	Gaji 1 Tahun
Karyawan Tetap	3	Rp 2,600,000	Rp 7,800,000	Rp 93,600,000
Karyawan Kontrak	2	Rp 1,800,000	Rp 3,600,000	Rp 43,200,000
Karyawan <i>Training</i>	2	Rp 1,300,000	Rp 2,600,000	Rp. 31,200,000
TOTAL	7		Rp 14,000,000	Rp 168,000,000

Tabel 6. Data Historis Biaya Tenaga Kerja (2021)

Bagian	Jumlah Karyawan	Standar Gaji	Gaji/Bulan	Gaji 1 Tahun
Karyawan Tetap	3	Rp 2,600,000	Rp 7,800,000	Rp 93,600,000
Karyawan Kontrak	1	Rp 1,800,000	Rp 1,800,000	Rp 21,600,000
Karyawan <i>Training</i>	1	Rp 1,300,000	Rp 1,300,000	Rp. 15,600,000
TOTAL	5		Rp 10,900,000	Rp 130,800,000

Ada perbedaan biaya tenaga kerja antara tahun 2020 dan 2021, terutama karena pengurangan tenaga kerja. Pandemi COVID-19 di awal 2021 juga mempengaruhi pendapatan di MIE NAGA, demikian owner memutuskan untuk mengurangi biaya di tengah penurunan pendapatan. Tabel 5 dan 6 menunjukkan bahwa jumlah karyawan tetap tidak berubah, tapi jumlah karyawan kontrak dan training berkurang untuk menekan biaya.

Tabel 7. Rincian Biaya Overhead (2020)

Biaya Overhead	Biaya/Bulan	1 Tahun
Sewa Tempat	Rp 25,000,000	Rp 300,000,000
Air	Rp 300,000	Rp 3,600,000
Listrik	Rp 800,000	Rp 9,600,000
Tabung Gas LPG	Rp 450,000	Rp 5,400,000
Sumpit	Rp 180,000	Rp 2,160,000
Box Makanan	Rp 360,000	Rp 4,320,000
TOTAL	Rp 27,090,000	Rp 325,080,000

Perubahan biaya tahun 2020 ke tahun 2021 terutama disebabkan oleh tarif sewa kamar. Namun, pada tahun berikutnya, pemilik membeli properti tersebut secara pribadi menggunakan dana yang tidak terkait dengan pendapatan bisnis tahun sebelumnya, sehingga tidak ada pembayaran sewa.

Tabel 8. Rincian Biaya Overhead (2021)

Biaya Overhead	Biaya/bulanan	Tahunan
Air	Rp300.000	Rp3.600.000
Listrik	Rp800.000	Rp9.600.000
Tabung gas LPG	Rp450.000	Rp5.400.000
Sumpit	Rp165.000	Rp1.980.000
Box makanan	Rp335.000	Rp4.020.000
Total	Rp2.050.000	Rp24.600.000

Tabel 9. Rincian Harga Pokok Produksi per Porsi Varian Mie Naga (2021)

Menu	Biaya Bahan Baku	Biaya Tenaga Kerja	Biaya Overhead	Harga Pokok Produksi/Porsi
Mie Naga Komplit	Rp 11.997.500	Rp 2.317.286	Rp 2.222.500	Rp 1.476.600
Grilled sausage roll	Rp 8.640.000	Rp 2.331.300	Rp 2.225.100	Rp 1.319.700

4.2. Tahap – Tahap Pengimplementasian Metode Target costing

1. Menentukan harga pasar

Tabel 10. Rincian Harga Mie Naga dengan Kompetitor

Nama Menu	Mie Naga Pantai Losari	Resto A	Resto B
Mie Naga Komplit	Rp 25.000	Rp 21.000	Rp 23.000
Grilled sausage roll	Rp 18.000	Rp 16.500	Rp 10.500

2. Analisis Target Costing

$$\text{Target costing} = \text{Sales Price} - \text{Product Profit Per Unit target}$$

$$\begin{aligned}
 \text{Mie Naga Komplit} &= \text{Rp } 23.000 - (40\% \times \text{Rp } 23.000) \\
 &= \text{Rp } 23.000 - \text{Rp } 9.200 \\
 &= \text{Rp } 13.800 \\
 \\
 \text{Grilled sausage roll} &= \text{Rp } 16.500 - (40\% \times \text{Rp } 16.500) \\
 &= \text{Rp } 16.500 - \text{Rp } 6.600 \\
 &= \text{Rp } 9.900
 \end{aligned}$$

Dari perhitungan, *target costing* untuk MIE NAGA Komplit adalah Rp. 13.800, dan untuk Grilled Sausage Roll adalah Rp. 9.900. Angka-angka ini memberi pemilik usaha gambaran tentang target biaya yang harus dicapai untuk setiap menu.

3. Penerapan Value Engineering

Tabel 11. Sebelum dan Sesudah Value Engineering

Bahan Baku	Anggaran (BP Tahun 2020)	Realisasi (PB Tahun 2021)	Selisih	%
Garam	Rp200.000	Rp155.000	Rp45.000	22,50%
Bawang putih	Rp378.750	Rp292.500	Rp86.250	22,70%
Bawang merah	Rp1.096.200	Rp504.000	Rp592.200	54%
Kaldu ayam bubuk	Rp224.000	Rp200.000	Rp24.000	10,70%
Fiber creme	Rp655.000	Rp655.000	Rp -	-
Kecap	Rp500.000	Rp420.000	Rp80.000	16%
Saos Sabai	Rp500.000	Rp420.000	Rp80.000	16%
Cabai rawit	Rp2.250.000	Rp1.290.000	Rp960.000	42,60%
Daun bawang	Rp325.000	Rp345.000	-Rp20.000	6,10%
Kulit pangsit	Rp576.000	Rp576.000	Rp -	-
bakso frozen	Rp1.500.000	Rp1.500.000	Rp -	-
Telur	Rp600.000	Rp600.000	Rp -	-
Ayam cincang	Rp3.500.000	Rp3.010.000	Rp490.000	14%
Minyak goreng	Rp495.000	Rp900.000	-Rp405.000	81,80%
Penyedap rasa	Rp176.000	Rp176.000	Rp -	-
Daun selada	Rp315.000	Rp315.000	Rp -	-
Gula	Rp154.000	Rp140.000	Rp14.000	9%
Mentimun	Rp92.000	Rp92.000	Rp -	-
Jeruk nipis	Rp240.000	Rp88.000	Rp152.000	63,30%
Saos tiram	Rp315.000	Rp180.000	Rp135.000	42,80%
Kemiri	Rp144.000	Rp80.000	Rp64.000	44,40%
Daun Sup	Rp59.000	Rp59.000	Rp -	-
Total	Rp14.294.950	Rp11.997.500	Rp2.297.450	16%
<i>Grilled Sausage Roll</i>				
Bahan Baku	Anggaran (BP Tahun 2020)	Realisasi (PB Tahun 2021)	Selisih	%
sisis	Rp2.805.000	Rp2.805.000	Rp -	-
Bawang Merah	Rp313.200	Rp144.000	Rp169.200	54%
Telur	Rp1.000.000	Rp1.000.000	Rp -	-
Susu full cream	Rp600.000	Rp600.000	Rp -	-
Saos tomat	Rp375.000	Rp315.000	Rp60.000	16%
Penyedap rasa	Rp176.000	Rp176.000	Rp -	-
Puff pastry sheets	Rp3.600.000	Rp3.600.000	Rp -	-
Total	Rp8.869.200	Rp8.640.000	Rp229.200	2,50%
Total Biaya Bahan Baku	Rp23.164.150	Rp20.637.500	Rp2.526.650	10,90%

Biaya Tenaga Kerja	Anggaran (BP Tahun 2020)	Realisasi (PB Tahun 2021)	Selisih	%
Karyawan tetap	Rp93.600.000	Rp93.600.000	Rp -	-
Karyawan kontrak	Rp43.200.000	Rp21.600.000	Rp21.600.000	50%
Karyawan training	Rp31.200.000	Rp15.600.000	Rp15.600.000	50%
Total	Rp168.000.000	Rp130.800.000	Rp37.200.000	22.1%
Biaya Overhead	Anggaran (BP Tahun 2020)	Realisasi (PB Tahun 2021)	Selisih	%
Sewa tempat	Rp300.000.000	Rp	Rp300.000.000	-
Air	Rp3.600.000	Rp3.600.000	Rp -	-
Listrik	Rp9.600.000	Rp9.600.000	Rp -	-
Tabung gas LPG	Rp5.400.000	Rp5.400.000	Rp -	-
Sumpit	Rp2.160.000	Rp1.980.000	Rp180.000	8,30%
Box Makanan	Rp4.320.000	Rp4.020.000	Rp300.000	6,90%
Total	Rp325.080.000	Rp24.600.000	Rp300.480.000	92,40%

Tabel 12 Komparasi Laba Bersih

Pendapatan 2020	Pendapatan 2021	Selisih	%
Rp 9.488.868	Rp 16.266.314	Rp 6.777.446	71,4%

Tabel 12 menunjukkan betapa besarnya perubahan laba bersih antara tahun 2020 dan 2021 untuk menu MIE NAGA Komplit dan Grilled Sausage Roll. Ada selisih Rp. 6.777.446, dengan perubahan 71,4%, dari pendapatan Rp. 9.488.868 di tahun 2020 menjadi Rp. 16.266.314 di tahun 2021. Dari temuan diatas, *target costing* membawa dampak positif pada laba. Menetapkan harga jual yang lebih rendah dan kompetitif membantu perusahaan mencapai laba yang lebih besar dari yang diharapkan. Perhitungan biaya hanya memperhitungkan biaya langsung produksi dan harga produk ditetapkan berdasarkan biaya langsung serta harga pasar. Dengan metode *target costing*, perusahaan bisa merencanakan ulang, mengurangi biaya produksi, dan menggunakan harga pesaing sebagai acuan, dengan ini mempermudah pencapaian target laba.

5. KESIMPULAN

Penerapan metode *target costing* menunjukkan dampak positif terhadap efisiensi biaya produksi dan profitabilitas. Implementasi metode ini menghasilkan penghematan biaya produksi sebesar Rp. 340.206.650 untuk menu NAGA MIE Lengkap dan Sosis Gulung Panggang. Laba bersih usaha meningkat 71,4% dari tahun 2020 ke 2021. Metode ini juga memungkinkan penurunan harga jual tanpa mengorbankan margin keuntungan, meningkatkan daya saing produk. Penelitian ini menekankan pentingnya pemahaman dan penerapan *target costing* bagi pengelola usaha. Disarankan untuk memperluas penelitian ke sektor usaha lain seperti asuransi, rumah sakit, dan perhotelan untuk perbandingan dan pengembangan lebih lanjut.

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THE EFFECT OF GOOD CORPORATE GOVERNANCE, LEVERAGE, AND COMPANY SIZE ON THE VALUE OF PROPERTY AND REAL ESTATE SECTOR COMPANIES

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Abstract

This study was meant to uncover the impact of good corporate governance, leverage, and company size on firms' value in the property and real estate sector listed on the Indonesia Stock Exchange for the period 2020-2022. The population taken into consideration in the research is the firm operating in the property and real estate sector listed on the IDX. The sample selection is by purposive sampling with certain criteria so that 81 data samples are obtained to be studied. The present investigation uses secondary data that came from financial records. The analysis of the data in this study was analyzed by utilizing SPSS for Windows software, which has given deep insight into the relationship between variables. According to the findings of the investigation, proper corporate governance represented by managers' awareness is one of the factors that raise the worth of a business, in that increased stock ownership by management will lead to more motivation for performance improvement hence increasing the firm's worth. If handled properly and effectively, leverage can enhance organizational value since increased leverage leads to increased company worth. On the other hand, when total assets are seen as being too large by investors who regard it as a bad signal therefore this may lead to decline in company value. Consequently, a negative relationship exist between company size and firm value.

Keywords: GCG, Leverage, Company Size, Firm Value

1. INTRODUCTION

One of the sectors where there has been a high drop due to the coronavirus pandemic is in property and real estate. Demand for the property and real estate sector has reduced, which increases overstocking of property. It also makes investors be more careful and take into consideration the condition of the company where he will invest his capital. Not only do investors consider the company's ability to generate profits, but it is also concerned with the extent to which corporate debt is used in running its activities (Putra & Putra, 2020).

Reported by CNBC Indonesia, all sectors in 2020 dropped drastically, including the property and real estate sector, due to the Covid-19 pandemic, which has lasted for over a year. Within the last three years, the stock prices of companies in the property and real estate sector are still in a negative position. The property and real estate sector stock index dropped by 30.63 percent from July 2018 to October 2022. It can be observed from the graph that even though the value is still negative, it has been improving year by year. The rise in stock market property and real estate sectors is due to several government incentives, including the incentive given for Government Borne Value Added Tax or PPN DTP. According to CNBC Indonesia in 2022, the amount of a company's stock price may be used as a measurement of the firm's value. Thus, the value of a company is crucial, and it would be

essential to explore all the factors that can be said to have a relationship with firm value for the companies.

In this signal theory, it is argued that leverage can be employed to establish how business enterprises utilize debts with the aim of enhancing their value which may act as a sign for such companies. One of the factors that influence business worthiness depends on leverage. The property and land sector has a tendency of high levels of leverage because there are many determinants like when there is a project going on, companies tend to take loans for facilitating investment and development. In this context major capital investments are required in the property sector for development, purchasing and maintaining homes; moreover this branch requires longer periods for receiving returns or sometimes they cannot be traded fast enough. For this reason, it utilizes bigger levels of borrowed funds. Financing decisions in the housing environment differ quite substantially from those made by different industries, for example compared to manufacturing whose financing may have an even mix between loans and shareholders' funds. Also when it comes to finance institutions there are clear regulations especially regarding borrowing money. The corporate worthiness which is presented by price to book value (PBV) ratio along with leverage represented by debt against equity ratio (DER) in real estate and property corporations over 2020-2022.

As indicated by PBV, the progress of corporate worth in the realm of property and real estate for the years 2020-2022 has gone down when viewed against PBV for 2018 which was 2.08 and progressed further up to 2.43 in 2019. Meanwhile, PBV in 2020 has decreased, which amounts to 1.40 percent, then experienced a decline in 2021 to 0.65% percent to 0.52% in 2022. The decrease in company value in the graph above is balanced by the decrease in leverage value. A decrease in company value can also occur due to company performance also its size.

The success of company performance can be done by implementing good corporate governance. Under agency theory, the notion of separation of ownership from control in a company might lead to an agency problem. Corporate governance works as a collection of regulations that can be employed to govern the actions of a corporation. Agency problems can be solved through corporate governance according to Brigham & Houston (2015). The features of effective corporate governance are: ownership by institutions, stake held by managers, audit committee and independent commissioners. In this case, Managerial ownership (MNJ) has used as a measure for good corporate governance (GCG) variables. This is due to the fact that when management owns shares they are likely to want to perform better for their company's sake so the expectation is that managers behave like shareholders hence increasing value for the company (Dewi & Abundanti, 2019).

Another success, according to Jensen and William, 1976, was that managerial ownership had become one of the mechanisms for reducing agency problems, thereby reducing agency costs. According to IDX data, the average managerial ownership in property and real estate sector companies decreases, although insignificant. Where the average percentage in the previous year, 2019, was 12.64%, it amounted to 11.63% in 2020, 11.43% in 2021 to 11.41% in 2022. The implementation of GCG in this sector is considered to increase company value and encourage companies to have a greater focus on compliance with regional planning regulations and requirements, not only to comply with existing regulations, but also to reduce legal, financial and reputational risks that may arise from violations related to regional planning (Abidin & Prabantarikso, 2021). Meanwhile, other

sectors such as the manufacturing sector have different challenges which are related to product quality, safety standards, and export-import requirements. One would expect that the concern by a company towards the environment and to society generally may increase as good corporate governance is implemented. This, in essence, is an added advantage that would strengthen the relationship between the developer and the community.

This research will also be based on related theories in relation to this phenomenon: agency theory and signal theory. Wherein agency theory deals with the relationship between the principal and the agent, wherein both have their respective interests, the value of the firm can be representative of the level of management success in managing resources and the investor confidence in its performance. Firm value is very important because high firm value shall be consistent with high shareholder wealth or prosperity. Firm value mirrors not only the intrinsic value of the company today but also shows prospects and expectations of the ability of the company to increase its value in the future (Septyanto & Nugraha, 2021). When the stock price of the company rises, the shareholder's prosperity is attained. When the share price of a company is high, shareholders' prosperity also increases (Gunawan, 2019).

Effective corporate governance is among the factors which have an impact on the value of firms. When a company performs well, it also gains trust from its people; thus, good governance helps in achieving proper company performance. This is in line with research findings by Sutha & Widanaputra (2023) and Ardesta (2020) that affirm the positive effects of good corporate governance on firm value. On the other hand, this contradicts evidence provided by Nugroho & Budiman (2022) and Wiariningsih et al (2019) to claim that proper management does not influence valuation of organizations.

Besides corporate governance, there is leverage. Leverage is when a company uses assets or financial resources that have fixed costs to increase stockholder profits (Putri, 2020). Leverage tells how much of a firm's capital is financed through borrowing. Leverage ratios are ratios that indicate what percentage of company's resources are funded by creditors (Kurniati & Saifi, 2018). It implies the amount a company charges a debt in relation to its assets (Manuari et al., 2022). Leverage will give benefits to the investors if the benefits gained are more significant than the constraint cost that the company has to pay (Markonah et al., 2020). Companies that apply a debt to productive objectives will really be able to generate profit in the future. This is consistent with other studies such as Veronica (2022) and Ningsih & Dewi (2021) which had found out that leverage positively affects firm value. The view that leverage does not affect firm value, which this study has found to be correct, though is not consistent with the study of Manuari et al. (2022) and Indrayani et al. (2021).

As put by signal theory, large company size can give the signal that the Company has assets and the capability to enhance an increased performance and therefore a capability to add to the value of the Company. Company size is one of the indicators that measure the amount of company size. Firm value is said to be capable of being influenced by the size of a company; the larger the size or scale of the company, the smoother the company will get funding sources, both internal and external. This study is also supported by Fariski et al. 2021 and Sahara et al. 2022, which stated that company size affects firm value. Fine but not in line with research done by Ramdhonah et al. (2019) and Wirawati et al. (2020) which reveals that size does not lead to the increased value of a firm (Khaniya et al., 2023). Against this backdrop, this study is set out to ascertain the influence of GCG, Leverage, and Company Size on firms' value in the property and real estate sector.

2. LITERATURE REVIEW

2.1. Firm Value

Value added in firms or firm value mirrors the stock price and assessment of the company, whereas, on the other hand, the higher the assessment of the company, the better the demand for its shares within the capital market and the higher the price of the shares, the better the price for the company will be (Damayanti & Sucipto, 2022). There could be several formulas that would proxy the value of a company, such as price-book value, price-earning ratio, and Tobin's Q. For this research, the price-book value will be used to measure company value. Some of the reasons to use PBV in measuring the value of the firm include, among others: book value offers a relatively constant benchmark compared to the volatile stock market price, it can be used as a reference to compare the high and low share prices of companies within the same industry, and it can also be used to see the potential price movement of a stock.

Meanwhile, Tobin's Q measurement, according to Margaretha (2011), has a weakness where Tobin's Q can be misleading in measuring market power due to the difficulty of estimating the cost of changing assets for expenditure on advertising and research, as well as the development of creating intangible assets, and the reason for not using PER is because when using earnings per share can sometimes be very misleading since people use this ratio. (Siregar & Harahap, 2021). More expenses than revenues is possible for companies and yet they can report positive earnings with negative free cash flow.

2.2. Good Corporate Government

GCG is seen as a system that regulates the structure and mechanism within a company to improve efficiency and performance (Esti Damayanti & Dewi, 2019). Company that is well governed in the corporate usually has good financial reporting quality characterized by the company financial statements to be more transparent and thereby minimising unequal or asymmetric information (Murdayanti et al., 2020).

2.3. Agency Theory

Agency theory is meant to solve problems in an agency relationship, including the problems that arise from conflicting desires or goals of the principal and the agent, and also difficulties faced by the principal in checking on what is done by the agent (Prawitasari & Putra, 2019). Signal theory is the theory concerning firms that give signals to the users of financial statements. In theory, if the signal is good, prospects in the future will be very good for the company, showing good value to the company so that investors will become interested and buy many shares, hence increasing the price of the stock (Wardani & Kaleka, 2022).

2.4. Previous Research

According to some previous researches, the result is not consistent. Research on good corporate governance by Sutha & Widanaputra (2023) and Ardesta (2020) shows that good corporate governance has an impact that is positive towards firm value, while in contrast, Nugraha et al. (2022) and Wiariningsih et al. It was observed from the studies by Veronica (2022) and Ningsih & Dewi (2021) that leverage had a positive effect on firm value, but by

the studies of Manuari et al. (2022) and Indrayani et al. (2021), no such effect of leverage was observed on firm value. Company size research done by Fariski et al. (2021) and Sahara et al. (2022) revealed that company size has a positive impact on firm value, meanwhile the other several researches by Ramdhonah et al. (2019) and Wirawati et al. (2020) shown that it does not has an effect on firm value. The above findings of the study that came up with a research gap of the studies drove the researchers to come up with an in-depth analysis of the firm value studies (Warsiki & Dewi, 2023).

Seeing the differences in the results of previous studies, the development carried out by the researcher uses good corporate governance measurements with managerial ownership, combines financial variables, namely leverage and company size, with non-financial variables, namely good corporate governance. With the implementation of good corporate governance within the company, it is possible to control and manage the company in such a way as to influence the decisions and performance of company management, both in the use of debt and assets so that variables of leverage and company size appear. The chosen period is also different, which is 2020-2022, by selecting the property and real estate sector because this sector is one of the sectors that makes an important contribution to the country's economy (Wahyudi, 2020). It is, therefore, a hard profession to predict since even these kinds of professions have a great toll on the economic conditions of a country. Sufficient infrastructure depicts the increased extent of developed infrastructures thus, in turn, impacts in decreasing the rate of unemployment and in enhancing the economy of the country. Therefore, the property and real estate industry is a domain that opens up opportunity for various reasons in terms of economic growth of a country.

3. RESEARCH METHODS

This is an associative quantitative research study. The variables studied in this research are GCG, Leverage, and Company Size on Company Value. Research was conducted using the official website of the Indonesia Stock Exchange (IDX), www.idx.co.id, focusing on the property and real estate sectors listed on the IDX for the period 2020-2022.

The secondary data used in this study are the annual and financial reports of companies in the property and real estate business area that were listed on the Indonesia Stock Exchange in 2020-2022. Company value is represented by variable Y as the object of the research, tested with good corporate governance represented by variable X1, leverage by variable X2, and company size by variable X3. This research is the population for property and real estate business entities trading on the Indonesia Stock Exchange. This study used samples of companies listed in the property and real estate sector in the Indonesia Stock Exchange in 2020–2022 that meet the specified criteria. The number of property and real estate companies meeting the criteria is 27, with a total observation count amounting to 81. This study has a non-probability sampling method.

Table 1. Research Sample Design

No.	Description	Quantity
1.	Property and real estate sector companies listed on the Indonesia Stock Exchange in consecutive periods 2020-2022.	78
2.	Property and real estate sector companies that publish consecutive annual reports during the 2020-2022 period.	(18)
3.	Property and real estate sector companies that have complete data related to research variables consecutively during 2020-2022.	(33)
Number of selected samples		27
Total sample in 3 years of research		81

This research depends on data collection techniques that involve numbers which concentrate on the following variables: stock prices, book values, managerial ownership, total capital, profit amount earned by a company over time as well as the size of the respective organization. In addition to these variables, second hand were used for data gathering from information found in financial statements of property and real estate companies which trade their shares publicly on the Indonesia Stock Exchange for the years 2020 - 2022. The non-participant observation method was employed throughout this study while SPSS was employed to analyze the data through various methods such as factor analysis, descriptive statistics including classical assumption Tests, regression analysis (multiple linear regression) and hypothesis testing.

4. RESULTS AND DISCUSSION

4.1. Research Results

4.1.1. Classical Assumption Test

Table 2. Classical Assumption Test

Test	GCG (X1)	Leverage (X2)	Company Size (X3)	Firm Value (Y)
Multicollinearity	0,926	0,928	0,861	
Heteroscedasticity	0,732	0,529	0,121	
Normality (Asymp. Sig. (2-tailed))				0,200
Autocorrelation				2,067
N				75

Source: Data processed, 2024

Table 2 depicts Kolmogorov-Smirnov test. From the output, the Asymp. Sig. 2-tailed is 0.200, indicating that the regression model is normally distributed. All of the tolerance values of the variables GCG, 0.926; lev, 0.928; company size, 0.861 are all greater than 0.01, thus indicating no multicollinearity problems. The Durbin Watson value of 1.337 compared with the table value range $1.7164 < 2.068 < 2.2836$, there is no autocorrelation. Additionally, the significance values of the variables—good corporate governance, 0.732; leverage, 0.529; and company size, 0.121 indicate the absence of heteroscedasticity in the model.

4.1.2. Multiple Linear Regression Analysis

Table 3. Data Analysis Results

Dependent Variable: Firm Value		
Variable	Hypothesis	Model
Constant		8,179
Good Corporate Governance	+	0,393
		(0,000) ***
Leverage	+	0,056
		(0,033)**
Company Size	+	-0,243
		(0,000) ***
R ²		0,867
F-statistic		0,002
N		75
Notes: The number in the first row of each model column is the coefficient value of the variable, while the second row is the significant value.		
* significance on the level $\alpha = 10\%$ (0,1)		
** significance on the level $\alpha = 5\%$ (0,05)		
*** significance on the level $\alpha = 1\%$ (0,001)		

Source: Data processed, 2024

Table 3 presents the constant value as 8.179. The coefficients of the regressors are presented as 0.393 for good corporate governance, 0.056 for leverage, and -0.243 for the size of the company.

4.1.3. Hypothesis Test

a. Determination Coefficient Test (R²)

As it can be seen in Table 3 Results of Analysis of Research Data, the value of Adjusted R Square is 0.867 or 86.7%. It indicates that GCG variable, leverage variable, and company size variable jointly influence as much as 86.7% to the firm value variable and the remaining 13.3% is influenced by other variables beyond this study.

b. Hypothesis testing (T test)

As in Table 3, this is the result of analysis of research data; then, hypothesis testing is shown as follows:

- With a beta coefficient of 0.393 and the value of significance of $0.000 < 0.05$, there is significant evidence that GCG holds had an advantageous effect on firm value. H1 is valid.
- A beta coefficient of 0.056 and a significance of $0.033 < 0.05$ reflect that leverage embraces a major and good result for firm value. H2 is holds true.
- Beta coefficient -0.243 with its significance $0.000 < 0.05$, indicating a negative major result of company size on the firm value. Hence, H3 is rejected.

4.2. Discussion

4.2.1. The effect of Good Corporate Governance on Firm Value

The statistical tests prove that good corporate governance affects firm value. From the phenomenon that happened in the property and real estate sector listed on the IDX within 2020-2022, there is a decrease in firm value, which may be caused by decreased managerial ownership in this period. This research proves that GCG via managerial ownership, contributes positively over firm value in this sector.

On average, the managerial ownership in property and real estate dropped on the IDX from 11.63 percent in 2020 down to 11.41 percent in 2022, parallel to the decrease in the PBV from 2.05 to 1.55. Thus, if managers own a greater share of the company's stocks, its worth will be greater. Conversely, a small ownership means lower worth of the firm.

Jensen & Meckling suggest that high managerial ownership may reduce agency costs. Shareholders experience the expropriation in agency costs by the structures they incur to oversee and regulate management actions so as to maintain their interests within the company. Therefore, an increase in managerial ownership should reduce agency conflicts and align management's interests with those of the shareholders, hence motivating management to improve performance. The better management control can generate revenues and reduce cost structures, thus bringing greater investor confidence. This study, therefore, aims to increment the value of firms belonging to the property and real estate sectors listed on the IDX during the period 2020-2022.

The findings support the agency theory of GCG in besides guiding and controlling the company but also benefiting stakeholders with an increased value of the firms (Phuong & Hung, 2020). The results also supported past studies by Sutha & Widanaputra (2023) and Ardesta (2020), which proved the fact GCG raises firm value, which means that enhanced oversight leads to more advanced firm value reported in Bakti & Triyono (2022).

4.2.2. The Effect of Leverage on Firm Value

Statistical tests proved that leverage has a beneficial and major impact on firm value. As such, if there is an increase in the leverage of companies within the property and real estate business in the IDX listed category for the 2020-2022 period, then there will be a resultant increase in the firm's value. This is because the firms can handle leverage properly, hence enhancing investors' confidence and, in turn, resulting in increased firm value.

High leverage signals to investors rapid company growth, indicating that the company is engaging in so many projects that warrant further financing. This change has a positive impact on firm value (Anggita & Andayani, 2022). The finding is within the theoretical postulation of Modigliani & Miller (1963), that increasing debt can increase firm value. In a case where debt increases to an optimal point, market reacts positively to that since it reflects enhanced capability of the company to cover its obligations.

Therefore, an important fact driving the value of property and listed firms in the real estate sector on the IDX downward during the period 2020-2022 is decreasing leverage. The leverage ratio decreased from 0.84 in 2020 to 0.48 in 2021 and further to 0.46 in 2022, in line with firm value, which fell during the same period. This shows the higher the leverage, the greater will be the firm value and otherwise (Ibhagui & Olokoyo, 2018).

The result is in line with signal theory, which says that the increased financial burden of the corporation, the stronger the financial condition of the company to withstand the risk of

having high debt. An increase in debt can signal to investors the presence of growth opportunities, which could cause an increase in stock prices, ultimately increasing firm value. These results are in line with previous studies by Veronica (2022); Anggita & Andayani (2022); and Ningsih & Dewi (2021), all of which concluded that Leverage has an advantageous bearing on the value of the company, and increasing leverage increases firm value.

4.2.3. The Effect of Company Size on Firm Value

In consideration of the statistical tests conducted on each variable, the results portray that the firm size variable significantly negatively affects the firm value (Boenyamin & Santioso, 2023). The fact that the coefficient value that was created in this research was negative demonstrates that the business size variable is moving in the other direction. This means that if a firm in the property and real estate sector grows the size of the company, the value of the company will fall. It is for this reason that investors or prospective investors see the size of the firm, as determined by the total assets of the company, as a negative indicator. This is because the size of the company is too huge. When the overall assets of the firm are substantial, the management will have more leeway to make use of the assets that are held inside the organization (Adi et al., 2020).

The freedom that management has is proportionate to the concerns felt by the owners of the company's assets. That, therefore, would reduce its value in consideration from the company owner side with a large number of its assets (Ramdhonah et al., 2019). Therefore, a decrease in the value of property and real estate sector companies listed on the Indonesia Stock Exchange can happen during the 2020-2022 period for the reason that one of the factors is an increase in the size of companies within the property and real state sector. Within this industry, it is common for companies to engage in off-balance-sheet financing, which can be as varied as the following: heavy equipment leasing for projects and subcontractor service contracts where subcontractors are responsible for the work delivered by the contractor. This, however, renders the financial statements of the company less transparent because off-balance-sheet financing can conceal the company's assets and liabilities. This will result in actual assets not being reflected clearly in the company's finances so as to reduce the level of investor confidence in the company's operations impacting a decrease in the value of the company.

As it is also posited by the theory of signals, the greater the size of a firm, the lower the value of the company, hence providing a negative signal. Results: The research is in tandem with existing studies conducted by Ramdhonah et al. (2019) and Wirawati et al. (2020), which revealed that company size shown to have an adverse effect on firm value. For this reason, it is not the case that a company's worth rises in tandem with its size (Pakpahan, 2010). Companies with large assets are considered by external parties, especially investors, to often set retained earnings greater than dividend distribution so that this can reduce company value (Bon & Hartoko, 2022).

5. CONCLUSION

This study has revealed three major findings about property and real estate firms listed on the Indonesia Stock Exchange from 2020-2022. To begin with, GCG has positively and significantly affects firm value as it reduces agency costs while bringing management and shareholder interests close together. Also, leverage positively and significantly influences firm value since debt that has been well managed can enhance company values as well as attracting investors. Lastly, firm size negatively and significantly influences firm value, as excessive total assets may signal management's overuse of resources, concerning investors and potentially reducing company value. The findings underline the fact that interactions among corporate governance variables, financial structure, and firm size play critical roles in establishing the firm value within Indonesia's property and real estate sector.

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THE INFLUENCE OF VIRAL MARKETING, BRAND IMAGE, FOOD QUALITY AND FOOD PRICE MIXUE ON REPEAT ORDERS FOR GEN Z CONSUMERS IN MEDAN CITY

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Abstract

The objective of this study is to investigate how Viral Marketing, Brand Image, Food Quality, and Food Price affect Repeat Orders at Mixue Medan. This study falls under the category of quantitative research. The research will involve all customers who have bought items at Mixue in Medan City in 2022, a population too vast to quantify. With 18 question items in the research, a minimum of 90 samples will be needed. The findings from the study indicate that the initial hypothesis has been confirmed, namely Viral Marketing influences Repeat Orders at Mixue Medan, the second hypothesis is accepted, namely Brand Image influences Repeat Orders at Mixue Medan, the third hypothesis is accepted, namely Food Quality influences Repeat Orders at Mixue Medan, the fourth hypothesis is accepted, namely Food Price influences Repeat Orders in Mixue Medan and the fifth hypothesis is that Viral Marketing, Brand Image, Food Quality and Food Price influence Repeat Orders in Mixue Medan.

Keywords: Viral Marketing, Brand Image, Food Quality, Food Price, Repeat Orders

1. INTRODUCTION

Today's economy relies heavily on the digital revolution and the management of information, with the internet network playing a crucial role in enabling interactions between consumers and businesses. It is possible to accomplish various tasks, from seeking information to running a business, to encourage repeat purchases from potential customers. Mixue is a café that is engaged in selling ice cream, Mixue ice cream & tea outlet has a strategic location and a comfortable place to enjoy ice cream. There are various variants in this outlet not only ice cream including Mocha Milkshake, Lemon Coffee, Brown Sugar, Pearl Milk Tea, Fresh Squeezed Lemonade and many more.

Viral marketing is a strategy used by marketers to spread their messages from one consumer to another through digital channels like emails or videos shared on personal blogs and then forwarded to other websites or platforms (Maulida et al., 2022). The problem of viral marketing at Mixue Medan City Area is the lack of viral marketing on social media so that the production process is carried out if there are orders only (Firmansyah, 2020). Brand Image is a perception of a brand that may or may not accurately represent the brand's actual attributes. The problem with the brand image at Mixue Medan City Area is that there are

still many potential customers who prefer to go to other similar cafes rather than mixue because it is still not well-known enough.

The overall quality of food is determined by its various features and characteristics, which can also be seen as a defining trait of a product. The problem with food quality at Mixue Medan City Area is that mixue ice cream is considered to melt faster than ice cream from other cafes and the sweetness of mixue ice cream is less than other cafes such as McDonald's and others. The pricing of food plays a crucial role in the success of a business as it directly impacts the profit margins based on consumer choice. The challenges related to food pricing in the Mixue Medan City Area are outlined in the provided table:

Table 1. Price Comparison of Mixue Ice Cream with CFC Ice Cream

Decription	Price			
	Mixue	CFC	MCDonald	AW
Ice Cream Cone	Rp. 8.000	Rp. 5.000	Rp. 8.000	Rp. 10.000
Lucky Sundae	Rp. 16.000	Rp. 12.000	Rp. 12.000	Rp. 12.000

Sumber: Data diolah, Peneliti (2024)

According to the information provided in the table, it is evident that the ice cream mixture includes different sundae flavors, is considered more expensive than rival ice cream cafes, for example, such as lucky sundae mixue bought at a price of Rp. 16,000, while lucky sundae CFC bought at a price of Rp. 12,000, for lucky sundae MCDonald bought at a price of Rp. 12,000 and for lucky sundae AW bought at a price of Rp. 12,000.

2. LITERATURE REVIEW

2.1. Viral Marketing

Maulida et al (2022) states that viral advertising involves spreading marketing messages digitally from one consumer to another through channels like email, personal blogs, and social media sites. So, the definition of viral marketing is a marketing technique that utilizes a news or event that is not common and unique which is then told and spread to social media (videos or photos on blogs). According to Maulida et al (2022) the indicators of viral marketing are as follows: 1) Engagement with the product; 2) Product knowledge; and 3) Talking about the product.

2.2. Brand Image

The concept of brand image refers to how consumers perceive a specific product brand when they think about it (Firmansyah, 2020). According to Indrasari (2019), a brand is a visual symbol such as a logo, name, or combination of colors that sets apart a product or service in the marketplace during commercial transactions. So that brand image is the thinking or understanding of users of goods or services about a product (branding from advertising / social media and the experience of users of goods or services that are positive about the brand). According to Firmansyah (2020) the indicators of brand reputation are listed below: a) Corporate Image; b) Image of the User; and c) Product Image.

2.3. Food Quality

According to Arifin & Soediono (2021), food quality defined is a main aspect that must be provided by a restaurant in meeting customer needs and satisfaction. According to Sari & Siregar (2019) the standard of food is a feature that defines the quality of something provided, specifically in the form of food and can be judged by considering various factors such as nutrition content, ingredients, flavor, and presentation in order to achieve a desired level of excellence. The excellence of food served to consumers, whether in taste, appearance, size, etc., has an impact on their satisfaction with the product (whether the quality of the food is good or not). According to Arifin & Soediono (2021) the indicators of food excellence or quality can be outlined as the following: a) Freshness, b) Presentation, c) Well Cooked, d) Food Variety.

2.4. Food Price

According to Arianto et al (2022) price is the price of a product or service is the financial cost paid by consumers in exchange for the advantages gained from owning or using the items. According to Rianto et al (2022), consumers often have to give up certain amounts or factors in order to obtain the product or service they desire. This thing is called price. For instance, the cost of food can be seen as a specific sum of money, whether it be in physical currency or digital transactions, that reflects the worth of the item being purchased, usually determined based on considerations (capital, etc.) restaurants. According to Arianto et al (2022) the indicators of price are as follows: a) Affordable pricing, b) Ensuring that the price reflects the quality of the product, c) Competitiveness in pricing, and d) Ensuring that the price aligns with the benefits offered.

2.5. Repeat Order

According to Rafki et al (2022) repeat orders are shopping activities that have been carried out more than once or several times due to the satisfaction felt by consumers, the satisfaction received will build consumer trust and loyalty to a marketed product. According to Cendriono & Ardiana (2018) repurchase can be interpreted as consumer behavior that only buys a product repeatedly, without including the feeling aspect in it. So that repeat orders are the habit of a consumer to buy something repeatedly either within a certain time frame or not. Repeat orders will usually be made by consumers who already trust and are satisfied with the products they buy at a store. According to Rafki et al (2022) the indicators of repeat orders are as follows: a) Interest in transactions, b) Interest in references, c) Interest in preferences, and d) Interest in exploration and discovery.

3. RESEARCH METHODS

This research utilizes the quantitative methodology. According to Sugiyono (2019), quantitative data refers to information that presents as numerical values, such as numbers representing income, population figures, consumption levels, and bank interest rates. These characteristics are always displayed in numerical format. According to Sugiyono (2019), a population is a broad category comprising elements or individuals with specific traits and attributes identified by researchers for analysis and eventual inference. The research

population that will be used in the study are all consumers who have made purchases at Mixue Medan City Area in 2022 which cannot be counted.

According to Hair et al (2014), a sample of 100 or more is recommended. Typically, the sample size should be at least five times larger than the number of items being analyzed and ideally should follow a ratio of 10:1. In the present investigation, there are 18 items to be analyzed, therefore a minimum of 90 samples is needed (Ghozali, 2021). According to Sugiyono (2019), accidental sampling involves selecting individuals randomly as samples, where anyone encountered by the researcher can be chosen to participate if they are considered appropriate as a source of data.

4. RESULTS AND DISCUSSION

4.1. Research Results

4.1.1. Statistics Descriptive

The outcomes of the statistical test for describing data are outlined here:

Table 2. Statistics Descriptive

	N	Minimum	Maximum	Mean	Std. Deviation
Viral Marketing	90	14	30	23,12	3,597
Brand Image	90	13	30	22,68	3,169
Food Quality	90	22	40	30,93	3,684
Food Price	90	11	39	29,49	5,974
Repeat Order	90	21	40	31,19	3,765

Source: Data processed (2023)

Table 2 provides descriptive statistics that reveal following information:

- a) Viral Marketing has a minimum value of 14, while the maximum value is 30. Then for the mean or average value, a value of 23.12 is obtained with a standard deviation of 3.597.
- b) Brand Image has a minimum value of 13, while the maximum value is 30. Then for the mean or average value, a value of 22.68 is obtained with a standard deviation of 3.169.
- c) Food Quality has a minimum value of 22, while the maximum value is 40. Then for the mean or average value, a value of 30.93 is obtained with a standard deviation of 3.684.
- d) Food Price has a minimum value of 11, while the maximum value is 39. Then for the mean or average value, a value of 29.49 is obtained with a standard deviation of 5.974.
- e) Repeat Order has a minimum value of 21, while the maximum value is 40. Then for the mean or average value, a value of 31.19 is obtained with a standard deviation of 3.765.

4.1.2. Normality Test

The findings from the test for normality are outlined below:

Table 3. Normality Test

		Unstandardized Residual
N		90
Normal Parameters ^{a,b}	Mean	31.1888889
	Std. Deviation	2.41977421
Most Extreme Differences	Absolute	.059
	Positive	.047
	Negative	-.059
Kolmogorov-Smirnov Z		.059
Asymp. Sig. (2-tailed)		.200 ^c

Source: Data processed (2023)

In the data presented in table 3, it is evident from the results of the Kolmogorov-Smirnov normality test that the obtained p-value of 0.200 is greater than the threshold of 0.05. This leads to the conclusion that the statistical test for normality falls within the category of normally distributed.

4.1.3. Multicollinearity Test

The outcomes of the test for multicollinearity are outlined below:

Table 4. Multicollinearity Testing Results

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Viral Marketing	.522	1.914
	Brand Image	.751	1.332
	Food Quality	.573	1.745
	Food Price	.573	1.745
a. Dependent Variable: Repeat Order			

Source: Data processed (2023)

This research utilizes data from the independent variables to perform a multicollinearity test. Based on the table above, it is known that each VIF value is as follows:

- It is determined that there are no signs of multicollinearity for Viral Marketing since the Tolerance value is $0.522 > 1$ and $1.914 < 1$.
- The absence of multicollinearity symptoms is confirmed for Brand Image as the Tolerance value is $0.751 > 1$ and $1.332 < 1$.
- For Food Quality, the Tolerance value of $0.573 > 1$ and $1.745 < 1$ indicates no presence of multicollinearity symptoms.
- Similarly, there are no signs of multicollinearity for Food Price with Tolerance values of $0.573 > 1$ and $1.745 < 1$.

4.1.4. Heteroscedasticity Test

The heteroscedasticity test produced the following outcomes:

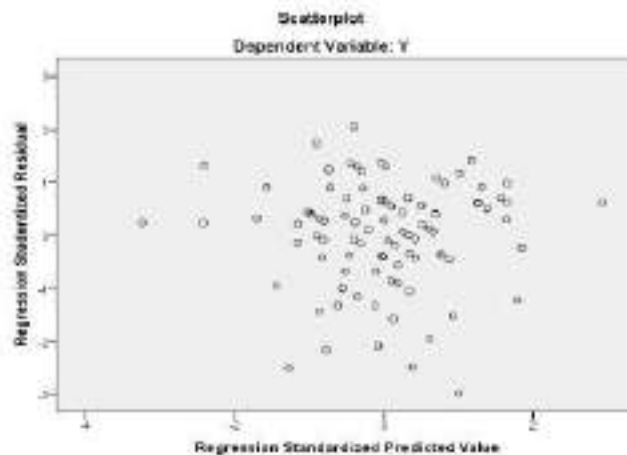


Figure 1. Scatter Plot

In the provided Figure 1, the Scatterplot points are scattered randomly with no specific pattern, appearing both above and below the zero mark on the Y axis. This lack of consistent spread suggests the absence of heteroscedasticity.

4.1.5. Multiple Linear Regression Analysis

The findings obtained from the analysis of multiple linear regression are listed below:

Table 5. Multiple Linear Regression Analysis Results

Model		Unstandardized Coefficients		Standardized Coefficients
		B	Std. Error	Beta
1	(Constant)	8,229	3,098	
	Viral Marketing	0,212	0,099	0,203
	Brand Image	0,277	0,113	0,233
	Food Quality	0,223	0,097	0,218
	Food Price	0,165	0,056	0,263

a. Dependent Variable: Repeat Order

Source: Data processed (2023)

In Table 5. above get the following values:

$$\text{Repeat Order} = 8,229 + 0,212 \text{ Viral Marketing} + 0,277 \text{ Brand Image} + 0,223 \text{ Food Quality} + 0,165 \text{ Food Price} + e$$

Based on the above equation, it can be described as follows:

- When the values of X1 to X4 are all 0, the Repeat Order value is 8.229.
- The value of 0.212 for Viral Marketing suggests that for every one unit increase in Viral Marketing, the Repeat Order will increase by 0.212.

- c) Brand Image has a value of 0.277, meaning that an increase in Brand Image by one unit will lead to a 0.277 increase in Repeat Order.
- d) An increase in Food Quality of one unit results in a 0.223 increase in Repeat Order, as indicated by the value of 0.223.
- e) The value of 0.165 for Food Price implies that for each unit increase in Food Price, the Repeat Order will increase by 0.165.

4.1.6. Coefficient of Determination

The following are the outcomes of the determination coefficient:

Table 6. Determinant Coefficient Test (R^2)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.643 ^a	0,413	0,385	2,952

Source: Data processed (2023)

According to the findings in table 6, the analysis shows that the Adjusted R Square value, also known as the coefficient of determination, is 0.385. This indicates that 38.5% of the variability in the Repeat Order variable can be explained by factors such as Viral Marketing, Brand Image, Food Quality, and Food Price, while the remaining 61.5% is attributed to external factors not considered in the research model.

4.1.7. Simultaneous Test

The findings from the simultaneous test are outlined below:

Table 7. Simultaneous Test

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	521,122	4	130,281	14,951	.000 ^b
	Residual	740,667	85	8,714		
	Total	1261,789	89			

Source: Data processed (2023)

The analysis presented in Table 7 indicates that the calculated F value (14.951) is greater than the tabulated F value (2.71), with a significance level of 0.000 which is less than 0.05. This allows for the conclusion that there is a significant impact of Viral Marketing, Brand Image, Food Quality, and Food Price on Repeat Orders at Mixue Medan when considered together.

4.1.8. Partial Test

The findings from the incomplete examination are detailed below:

Table 8. Partial Testing Results (t-test)

Model		t	Sig
1	(Constant)	2,657	0,009
	Viral Marketing	2,144	0,035
	Brand Image	2,454	0,016
	Food Quality	2,292	0,024
	Food Price	2,962	0,004
b. Dependent Variable: Repeat Order			

Source: Data processed (2023)

From the data presented in Table 8, the following conclusions can be drawn:

- Viral Marketing (X1) shows a tstatistic value of 2.144, which is greater than the ttable value of 1.987, with a significance level of 0.35, indicating a partially significant positive impact on Repeat Order at Mixue Medan.
- Brand Image (X2) has a tstatistic of 2.454, surpassing the ttable value of 1.987, with a significance level of 0.16, suggesting a partially significant positive influence on Repeat Order at Mixue Medan.
- Food Quality (X3) exhibits a tstatistic of 2.292, higher than the ttable value of 1.987, with a significance level of 0.24, indicating a partially significant positive effect on Repeat Order at Mixue Medan.
- Food Price (X4) has a tstatistic value of 2.962, exceeding the ttable value of 1.987, with a significance level of 0.04, suggesting a partially significant positive effect on Repeat Order at Mixue Medan.

4.2. Discussion

4.2.1. The Effect of Viral Marketing on Repeat Order

The t-test results indicate a significant positive influence of Viral Marketing on Repeat Order at Mixue Medan. This is evident from the tstatistic value (2.144) being greater than the ttable value (1.987), with a significant level of 0.35 less than 0.05.

4.2.2. The Influence of Brand Image on Repeat Order

The study findings from the t-test indicate that the tstatistic value of 2.454 is greater than the ttable value of 1.987, with a significance level of 0.16 less than 0.05. Therefore, it can be inferred that there is a partially significant and positive relationship between Brand Image and Repeat Order at Mixue Medan.

4.2.3. Effect of Food Quality on Repeat Order

The t test results in the study show that the tstatistic value of 2.292 is greater than the ttable value of 1.987, indicating a partial significant positive relationship between Food Quality and Repeat Order at Mixue Medan. This relationship is found to be significant at a level of 0.24, which is less than the conventional threshold of 0.05.

4.2.4. Effect of Food Price on Repeat Order

In the research results using the t test, has a tstatistic value $(2.962) > t_{table} (1.987)$ with a significant level of $0.04 < 0.05$ so it can be concluded that there is a partially significant positive influence between Food Price on Repeat Order at Mixue Medan.

4.2.5. The Effect of Viral Marketing, Brand Image, Food Quality and Food Price on Repeat Orders

In the research results using the F test, has a value of Fstatistic $(14,951) > F_{table} (2.71)$, and the statistical significance of 0.000, which is less than 0.05, indicates a strong link between Viral Marketing, Brand Image, Food Quality, and Food Price in relation to Repeat Order at Mixue Medan.

5. CONCLUSION

The study's findings indicate that viral marketing plays a crucial role in influencing repeat orders at Mixue Medan. Additionally, brand image has a notable impact on repeat orders at Mixue Medan. Moreover, the quality of food and its pricing also contribute significantly to repeat orders at Mixue Medan. Overall, viral marketing, brand image, food quality, and food pricing collectively have a positive and significant influence on repeat orders at Mixue Medan.

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Acknowledgments (if any)

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