239

# JURNAL ILMIAH EKONOMII BISNIS

## JOURNAL OF ECONOMIC AND BUSINESS

Muhammad Tetan 203	
ON EQUITY DENGAN SOKONGAN POLITIK SEBAGAI VARIABLE INTERVEINING	
PENGARUH DEBT TO ASSET RATIO DAN DEBT TO EQUITY RATIO TERHADAP RE	TURN

THE INFLUENCE OF PERCEIVED JUSTICE IN SERVICE RECOVERY ON COMPLAINANT SATISFACTION AND WORD-OF MOUTH INTENTION AT HOTEL IN JAKARTA

Murni Setyawati 221

FINANCIAL DISTRESS PREDICTION AND SEEING THE INFLUENCE OF THE ALTMAN RATIO ON COMPANY FINANCIAL DISTRESS

Hadhi Dharmaputra Juliyan, Bertilia Lina Kusrina

THE INFLUENCE OF PROMOTION EXPENSES, SAVINGS, AND FINANCIAL RATIOS TO DIBURSED LOANS ON BANK PEMBANGUNAN DAERAH IN INDONESIA

Sartika, Misdiyono 247

ANALYSIS AND DESIGN CASH SALES ACCOUNTING INFORMATION SYSTEM AT UTAMA ALUMINIUM STORES

Azhelia Syafira, Lana Sularto 261

ANALYSIS AND DESIGN ACCOUNTING INFORMATION SYSTEM OF FUNDING AND FINANCING AT KOPERASI SERBA USAHA SYARIAH BAITUL MAAL WAT TAMWIL BAKTI NURUL HUDA

Malicha Aulia Zatalini, Imam Subaweh 277

THE EFFECT OF ACCOUNTING INFORMATION SYSTEMS QUALITY, TRUST AND LOYALTY ON USER PERFORMANCE USING EXTENDED INFORMATION SYSTEM SUCCESS MODEL ON MULTIFINANCE COMPANY IN DEPOK

Arinda Pramesti 296

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## DAFTAR ISI

PENGARUH <i>DEBT TO ASSET RATIO</i> DAN <i>DEBT TO EQUITY RATIO</i> TERHADAP <i>RETURN ON EQUITY</i> DENGAN SOKONGAN POLITIK SEBAGAI <i>VARIABEL INTERVEINING</i> <b>Muhammad Istan</b>	203
THE INFLUENCE OF PERCEIVED JUSTICE IN SERVICE RECOVERY ON COMPLAINANT SATISFACTION AND WORD-OF MOUTH INTENTION AT HOTEL IN JAKARTA Murni Setyawati	221
FINANCIAL DISTRESS PREDICTION AND SEEING THE INFLUENCE OF THE ALTMAN RATIO ON COMPANY FINANCIAL DISTRESS  Hadhi Dharmaputra Juliyan, Bertilia Lina Kusrina	239
THE INFLUENCE OF PROMOTION EXPENSES, SAVINGS, AND FINANCIAL RATIOS TO DIBURSED LOANS ON BANK PEMBANGUNAN DAERAH IN INDONESIA Sartika, Misdiyono	247
ANALYSIS AND DESIGN CASH SALES ACCOUNTING INFORMATION SYSTEM AT UTAMA ALUMINIUM STORES Azhelia Syafira, Lana Sularto	261
ANALYSIS AND DESIGN ACCOUNTING INFORMATION SYSTEM OF FUNDING AND FINANCING AT KOPERASI SERBA USAHA SYARIAH BAITUL MAAL WAT TAMWIL BAKTI NURUL HUDA  Malicha Aulia Zatalini, Imam Subaweh	277
THE EFFECT OF ACCOUNTING INFORMATION SYSTEMS QUALITY, TRUST AND LOYALTY	
ON USER PERFORMANCE USING EXTENDED INFORMATION SYSTEM SUCCESS MODEL ON MULTIFINANCE COMPANY IN DEPOK  Arinda Pramesti	296

## PENGARUH DEBT TO ASSET RATIO DAN DEBT TO EQUITY RATIO TERHADAP RETURN ON EQUITY DENGAN SOKONGAN POLITIK SEBAGAI VARIABEL INTERVEINING

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#### Abstrak

Untuk menjalankan aktivitasnya, perusahaan memerlukan dana yang cukup agar kegiatan operasionalnya dapat berjalan dengan lancar. Perusahaan yang kekurangan dana akan mencari dana untuk menutupi kekurangannya akan dana tersebut. Dana bisa diperoleh dengan cara memasukkan modal baru dari pemilik perusahaan atau dengan melakukan pinjaman ke pihak luar perusahaan. Tujuan dari penelitian ini adalah untuk mengetahui pengaruh debt to equity ratio (DER) dan debt to total asset ratio (DAR) terhadap return on equity perusahaan terindikasi memiliki dukungan politik yang terdaftar pada Bursa Efek Indonesia. Permasalahan dalam penelitian ini bagaimana pengaruh DER dan DAR terhadap Return On Equity (ROE)? Bagaimana peran dukungan politik sebagai variabel mediasi antara DER dan DAR terhadap ROE? Data peneltian ini berasal dari laporan keuangan perusahaan yang terdaftar di BEI. Sampel sebanyak 33 perusahaan yang terindikasi memiliki dukungan politik yang diambil dengan purposive sampling. Teknik analisis regresi sederhana dan berganda. Penelitian menunjukkan bahwa Struktur modal (DER) memberikan pengaruh yang signifikan terhadap kinerja perusahaan (ROE) perusahaan. Struktur modal berupa (DAR), memberikan pengaruh yang tidak signifikan terhadap kinerja perusahaan (ROE). Struktur modal (DER) memberikan pengaruh yang signifikan terhadap dukungan politik (SP). Struktur modal berupa (DAR) memberikan pengaruh yang signifikan terhadap dukungan politik (SP). Dukungan politik (SP) tidak menjadi mediasi struktur modal (DAR), dan DER terhadap ROE.

Kata Kunci: DER, DAR, ROE, Dukungan Politik.

#### Abstract

The purpose of this study is to find out the effect of Debt to Equity Ratio (DER) and Debt to Total Asset Ratio (DAR) to Return on Equity of the indicated companies having political support listed in Indonesia Stock Exchange. The problems in this study are to find out how DER and DAR influence Return on Equity (ROE) and to find out the role of political support as a mediating variable between DER and DAR to ROE. The data are taken from financial statements of companies listed in the Stock Exchange. A sample of 33 companies indicated to have political support taken by purposive sampling. This study uses simple and multiple regression analysis techniques. The result of this study has shown that the Capital Structure (DER) has a significant influence to the company's performance. Capital Structure in the form of Debt to Asset Ratio (DAR) gives a minor effect on the company's performance on ROE. The DER Capital Structure has a significant influence on political support (SP). Capital Structure in the form of DAR has a significant influence on political support (SP). Political support does not mediate the structure of the DAR and the DER to the ROE.

Keywords: DER, DAR, ROE, Political Support.

#### **PENDAHULUAN**

Dalam menjalankan aktivitasnya perusahaan tentunya memiliki tujuan tertentu, dan salah satunya yaitu memperoleh keuntungan. Tujuan tersebut dapat tercapai apabila manajemen perusahaan bekerja dengan tingkat efektivitas tinggi. Tingkat efektivitas manajemen yang ditunjukkan dari laba hasil penjualan atau pendapatan investasi dapat diketahui melalui rasio profitabilitas yang dimiliki (Mayasari E. Y., 2012).

Walsh (2004), profitabilitas merupakan gambaran kemampuan modal perusahaan dalam menghasilkan keuntungan. Keuntungan yang tersedia bagi pemegang saham atas modal yang diinvestasikan diukur melalui rasio *return on equity* (ROE). ROE yang baik membawa implikasi pemegang saham akan mendapatkan bagian yang besar dari laba, selain itu kreditor merasa aman karena hutang yang diberikan dijamin oleh pemegang saham. Hal inilah yang membuat investor dan kreditor tertarik untuk menanamkan dananya.

Heriyono (2013:98), ekonomi politik pada hakikatnya adalah melihat hubungan timbal balik antara kepentingan ekonomi dan kepentingan politik, namun setelah kita melihat indikator perbedaan antara ekonomi dan politik tentu juga ada persamaan antara dua ilmu ini, yaitu sama-sama untuk mencapai kepuasan, ketika orang sudah kaya atau sudah bosan dengan kekayaan tersebut maka mereka mencoba merubah kebosanan dengan masuk atau terjun ke ranah politik.

Untuk menjalankan aktivitasnya, perusahaan memerlukan dana yang cukup agar kegiatan operasionalnya dapat berjalan dengan lancar. Perusahaan yang kekurangan dana akan mencari dana untuk menutupi kekurangannya akan dana tersebut. Dana bisa diperoleh dengan cara memasukkan modal baru dari pemilik perusahaan atau dengan melakukan pinjaman ke pihak luar perusahaan. Tujuan dari penelitian ini adalah untuk mengetahui pengaruh DER dan DAR terhadap return on perusahaan pertambangan equity yang terdaftar pada Bursa Efek Indonesia (BEI) periode tahun 2012-2016. ROE merupakan kemampuan perusahaan dalam memberikan keuntungan pemilik perusahaan atau pemilik saham. ROE menunjukkan keberhasilan atau kegagalan perusahaan pihak manajemen perusahaan dalam memaksimumkan tingkat hasil pengembalian investasi pemegang saham.

Bouresli (2001) menemukan bahwa rasio hutang terhadap jumlah aset berpengaruh negatif terhadap kinerja perusahaan, tetapi Calisir et al., (2010) menemukan pengaruh yang positif. Lin (2006) dan Wright et al., (2009) menemukan bahwa ukuran perusahaan berpengaruh positif terhadap kinerja. Hal ini menunjukkan bahwa perusahaan besar lebih menjanjikan kinerja yang baik. Lin (2006) menemukan pengaruh positif ukuran perusahaan terhadap kinerja perusahaan sektor teknologi informasi dan komunikasi di Turki, tetapi Huang (2002) menemukan bahwa tidak terdapat pengaruh ukuran perusahaan terhadap kinerja perusahaan Taiwan yang berada di China.

### KERANGKA TEORI

#### Struktur Modal

Menurut Modigliani dan Miller

(1958) dengan menambahkan unsur pajak ke dalam analisis mereka, nilai perusahaan lebih tinggi dengan utang dari pada nilai perusahaan tanpa utang. Perusahaan yang menggunakan utang akan menghasilkan kinerja yang lebih bagus dari pada perusahaan yang tidak menggunakan utang. Biaya bunga dari utang yang bisa digunakan sebagai pengurang pajak menjadikan perusahaan yang memiliki utang memiliki kinerja yang lebih bagus dari pada perusahaan yang tidak memiliki utang. Penggunaan utang yang tinggi juga memiliki resiko yang tinggi yaitu adanya beban bunga yang tinggi.

Menurut Pecking Order Theory dalam menggunakan komposisi struktur modal perusahaan lebih memilih menggunakan dana kas internal terlebih dahulu, apabila pendanaan diperlukan perusahaan eksternal menerbitkan surat berharga yang paling aman terlebih dahulu (Myers & Maljuf, 1984). Bistrova et al., (2011) dalam penelitiannya terhadap 36 perusahaan blue chip yang listing di Baltic Stock Exchange menyatakan tidak terdapat pengaruh antara struktur modal dan kinerja perusahaan. Selain itu, ditemukan hubungan terbalik antara tingkat utang dan keuntungan modal sesuai Pecking Order Theory bahwa dalam kasus terbaik perusahaan sebaiknya menggunakan dana internal. Gupta, Srivastava dan Sharma (2011)penelitiannya menyatakan bahwa struktur modal mempengaruhi kinerja perusahaan, pengaruh signifikan struktur modal terhadap kinerja perusahaan masing-masing memiliki ukuran nilai yang disesuaikan dengan nilai pasar dan nilai buku.

#### Sokongan Politik

Patron politik perusahaan dapat ditinjau dari berbagai karakteristik Johnson dan Mitton (2003), Fraser *et al.*, (2006) dan Faccio (2010) menunjukkan bahwa patron politik memiliki pengaruh yang sangat penting dalam menentukan tingkat *leverage* perusahaan. Perusahaan yang memiliki patron politik cenderung menunjukkan kinerja rendah, walaupun ada beberapa keuntungan yang diperoleh oleh perusahaan yang memiliki hubungan politik.

Bouresli (2001) dan Lin (2006) menemukan bahwa rasio hutang terhadap jumlah aset berpengaruh negatif terhadap kinerja perusahaan, tetapi Calisir et al.,(2010) menemukan pengaruh yang positif. Penelitian Aulia (2013), Ritonga et al., (2014), dan Kurniawati et al., (2015). menghasilkan bahwa DAR berpengaruh positif terhadap ROE. Sedangkan Herdiani et al.. (2013)mengungkapkan bahwa DAR berpengaruh negatif terhadap ROE. Lain halnya dengan penelitian Nurhasanah (2012) dan Jannati et al., (2014) menghasilkan bahwa DAR tidak berpengaruh terhadap ROE.

Penelitian Herdiani *et al.*, (2015), Wahdaniah, Nurhilaliah, & Fatmawati (2013), dan Jannati *et al.*, (2014) menghasilkan bahwa DER berpengaruh positif terhadap ROE. Sedangkan penelitian Nurhasanah (2012) dan Kurniawati *et al.*, (2015) menyatakan bahwa DER berpengaruh negatif terhadap ROE. Supriadi (2010) dan Ritonga (2014) yang menunjukkan hasil penelitian bahwa DER tidak berpengaruh terhadap ROE.

Perusahaan yang terkoneksi politik

205

mengeluarkan biaya yang tidak sedikit untuk memperoleh berbagai kemudahan dalam menjalankan operasionalnya. Biaya kemudahan tersebut diambil dari pendapatan operasional perusahaan, sehingga mengurangi hasil akhir dari keuntungan yang diperoleh. Hasil penelitian ini mendukung hasil penelitian Fan et al., (2007) menemukan bahwa di China perusahaan dengan CEO terkoneksi politik memiliki kinerja lebih rendah dibandingkan dengan perusahaan yang tidak terkoneksi politik yang dilihat dari tingkat pengembalian saham pasca IPO dalam kurun waktu tiga Chantrataragul (2007) juga menemukan bahwa perusahaan yang terkoneksi politik memiliki kinerja lebih rendah dari perusahaan yang tidak terkoneksi politik dilihat dari rasio ROA.

Namun demikian, hasil penelitian Faccio (2006), menemukan bahwa perusahaan yang tertekan secara ekonomi dan mempunyai koneksi politik lebih mungkin untuk ditalangi oleh pemerintah dari pada perusahaan lain yang tertekan juga secara ekonomi tapi tidak memiliki koneksi politik. Sesungguhnya bahwa terciptanya hubungan antara politik dengan perusahaan, kedua pihak memiliki kepentingan dan keuntungan masing-masing. Dari sisi politik atau pemerintah dapat membantu perumusan kebijakan publik termasuk dalam kepentingan bisnis, serta kegiatan perusahaan juga membantu tujuan politik pemerintah. Dari sisi perusahaan hubungan ini bermanfaat dalam hal keringanan pajak, pemenang proyek pemerintah, menerima fasilitas monopoli dan kemudahan lain membantu kegiatan bisnis yang

perusahaan.

Fachrudin & Amalia (2011) dalam penelitiannya menyimpulkan bahwa tidak terdapat pengaruh tidak langsung struktur modal dan ukuran perusahaan terhadap kinerja perusahaan melalui *agency cost*. Secara langsung struktur modal hampir berpengaruh terhadap kinerja perusahaan. Namun secara tidak langsung tidak berpengaruh. Ukuran perusahaan tidak berpengaruh terhadap kinerja perusahaan baik secara langsung maupun tidak langsung.

Kaitan dengan hal ini, maka dapat dilihat bahwa struktur modal menjadi aspek yang paling penting dalam menentukan kinerja perusahaan berdasarkan sokongan politik. Terdapat banyak penelitian mengenai hal ini, salah satu yang ditemukan oleh Kamaludin (2010) menunjukkan bahwa sokongan politik turut serta mempengaruhi struktur modal sebuah perusahaan, sebab dengan sokongan politik sebuah perusahaan dapat mendapatkan laverage dengan mudah dari lembaga keuangan.

#### METODE PENELITIAN

Populasi dalam penelitian ini adalah perusahaan yang terdaftar di Bursa Efek Indonesia (*go public*) pada tahun 2012-2016. Kriteria pengambilan sampel adalah: (1) perusahaan telah listing di BEI tahun 2012 – 2016, (2) perusahaan tidak delisting di BEI Tahun 2012-2016, (3) nilai ROA tidak negatif.

Teknik pemilihan sampel dalam penelitian ini menggunakan metode *purposive* sampling yaitu pengambilan sampel berdasar kriteria tertentu. Teknik sampling yang

digunakan yaitu purposive sampling. Menurut Sugiyono (2012) "purposive sampling", yaitu mengambil sampel dengan pertimbangan Pengambilan waktu tertentu. tersebut dilakukan guna melihat konsistensi penelitian dari tahun ke tahun, selain itu alasan memilih periode waktu dari tahun 2012-2016 karena belum diteliti penelitian-penelitian sebelumnya dan kriteria sampel yang diteliti pada penelitian ini berbeda penelitian-penelitian dengan sebelumnya. Analisis data dilakukan dengan analisis regresi berganda. Oleh karena itu,

penelitian ini dilakukan untuk mengetahui apakah hasil yang akan diperoleh nantinya dapat mendekati hasil atau berbeda hasil dengan penelitian sebelumnya.

#### HASIL DAN PEMBAHASAN

Objek penelitian adalah perusahaan yang terdaftar di BEJ periode tahun 2012-2016 berjumlah 33 Perusahaan. Seluruh perusahaan yang menjadi objek penelitian ini adalah perusahaan yang juga konsisten listing di BEI sejak tahun 2012-2016.

Tabel 1. Model Penelitian

$ROE = \alpha + \beta DER + \varepsilon$									
Hipotesa 1= Debt to Equity Ratio (DER) mempengaruhi Return on Equity (ROE)									
Hipotesis 1	to zquity	220000 (2			8***		- qy (210		
Model	Beta	T	Sig		R	R Square	F	Hasil	Simpulan
DER – ROE	1,455	,545	,00	8	,205ª	,042	7,126	Signifikan	Diterima
$ROE = \alpha + \beta DAF$	3 + £								
Hipotesa 2= Debt	to Asset	Ratio (D.	AR) r	nempen	garuhi <i>l</i>	Return on E	quity (RO	<b>E</b> )	
Hipotesis 2									
DAR – ROE	5,617	1,247	,214	4	,097ª	,009	1,556	Tidak Signifikan	Diterima
$SP = \alpha + \beta DER +$	3 ·								
Hipotesa 3= Debt	to Equity	Ratio (1	DER)	mempe	ngaruh	i Sokongan	Politik (S	<b>P</b> )	
Hipotesis 3									
DER – SP	,472	8,320	,000	0	,546a	,298	69,225	Signifikan	Diterima
$SP = \alpha + \beta DAR +$	3 -								
Hipotesa 4= Debt	to Asset	Ratio (D.	AR) r	nempen	garuhi S	Sokongan P	olitik (SP)		
Hipotesis 4									
DAR – SP	2,762	5,455	,000	C	,393ª	,154	29,756	Signifikan	Diterima
$ROE = \alpha + \beta SP +$	3 -								
Hipotesa 5= Soko	ongan Poli	tik (SP)	mem	pengaru	hi <i>Retui</i>	rn on Equit	y (ROE)		
Hipotesis 5									
SP – ROE	,129	,200	,842	2 <sup>b</sup>	,016ª	,006	,040	Tidak Signifikan	Ditolak
$ROE = \alpha + \beta DAR + \beta DER + \beta SP + \varepsilon$									
Hipotesa 6= Debt to Asset Ratio (DAR), Debt to Equity Ratio (DER), Sokongan Politik (SP)									
mempengaruhi Return on Equity (ROE)									
Hipotesis 6									
DAR, DER, SP - ROE	DAR = 2 DER= -1 SP= -1,1	,716	4,4 36	,026 <sup>b</sup>	,236ª	,056	3,159	Tidak Signifikan	Ditolak

Sumber: Penelitian 2018, diolah.

Untuk melihat ada atau tidaknya pengaruh variabel *interveining* (mediasi) yang sudah

dirumuskan dalam hipotesis penelitian, yaitu sokongan politik merupakan pemediasi atau tidak antara DAR dan DER terhadap kinerja perusahaan ROE dapat dijelaskan dalam Tabel 2.

Tabel 2. Uji Mediasi Sokongan Politik sebagai Mediasi antara DAR terhadap ROE

$ROE = \alpha + \beta SP + \beta DAR + \varepsilon$							
<b>Hipotesis 7 = Sokongan Politik sebagai Mediasi antara</b> <i>Debt to Asset Ratio</i> (DAR) terhadap							
kinerja perusahaan <i>Return On Equity</i> (ROE)							
Variabel	Beta	Т	Sig	R	R Square	F	Kesimpulan
DAR – ROE	5,617	1,247	,214	,097a	,009	1,556	Tidak Signifikan
DAR - SP	2,762	5,455	,000	,393ª	,154	29,756	Signifikan
SP – ROE	,129	,200	,842 <sup>b</sup>	,016a	,006	,040	Tidak Signifikan

Sumber: Data Penelitian 2018, diolah.

Untuk melihat ada atau tidaknya pengaruh variabel interveining (mediasi) yang sudah dirumuskan dalam hipotesis penelitian, yaitu struktur modal baik DAR maupun DER merupakan mediasi atau tidak antara sokongan politik terhadap *financial distress* (FD) dapat dijelaskan dalam Tabel 3.

Tabel 3. Uji Mediasi Sokongan Politik sebagai Mediasi antara DER terhadap ROE

$ROE = \alpha + \beta SP + \beta DER + \varepsilon$							
Hipotesis 7 = Sokongan Politik sebagai Mediasi antara Debt to Equity (DER) terhadap							
	kinerja perusahaan <i>Return On Equity</i> (ROE)						
Variabel	Beta	R	R Square	T	F	Sig	Kesimpulan
DER – ROE	DER – ROE 1,455 ,545 ,008 ,205 <sup>a</sup> ,042 7,126 Signifikan						
DER – SP	,472	8,320	,000	,546a	,298	69,225	Signifikan
SP – ROE	,129	,200	,842 <sup>b</sup>	,016a	,000	,040	Tidak Signifikan

Sumber: Data Penelitian 2018, diolah

## Sokongan Politik sebagai mediasi antara Struktur Modal DAR dan DER terhadap Kinerja Perusahaan

Untuk melihat peran mediasi sokongan politik dalam menentukan pengaruh DAR dan DER terhadap ROE dengan melihat tingkat signifikansi pengaruh masing-masing variabel,

yaitu variabel independen terhadap dependen, independen terhadap variabel mediasi dan variabel mediasi terhadap variabel dependen. Pengaruh masing-masing variabel tersebut dapat dilihat pada Tabel 4.

Tabel 4. Uji Mediasi Sokongan Politik sebagai Mediasi antara Sokongan Politik 1 terhadap Kinerja Perusahaan ROA dan ROE

ROTI GUILLE								
Variabel	Beta	Т	Sig	R	R Squa re	F	Kesimpula n	Ket
DAR – ROE	5,617	1,247	0,214	,097ª	,009	1,556	Tidak Signifikan	Tidak Ada Mediasi

DAR – SP	2,762	5,455	0,000	,393ª	,154	29,75	Signifikan	
SP – ROE	,129	,200	0,842 b	,016ª	,006	,040	Tidak Signifikan	
DAR & SP ==ROE	DAR= 0,108 SP= 0,027	SP= - 0,314; DAR= 1,267	0,441 b	,100ª	,010	,823	Tidak Signifikan	
DER – ROE	1,455	,545	0,008	,205ª	,042	7,126	Signifikan	Tidak ada Mediasi
DER – SP	,472	8,320	0,000	,546ª	,298	69,23	Signifikan	
SP – ROE	,129	,200	0,842 b	,016ª	,006	,040	Tidak Signifikan	
DER & SP ==ROE	DER= 0,279; SP= 0,137	SP1= - 1,125; DER= 1,987	0,010 b	,235ª	,055	4,718	Signifikan	

Sumber: Data Penelitian 2018, diolah.

Tabel 4 menunjukkan bahwa sokongan politik (SP) tidak memediasi dari DAR terhadap ROE. Kemudian sokongan politik juga tidak memediasi DER terhadap ROE. Apabila ada satu atau lebih tidak signifikan maka dapat dikatakan tidak ada mediasi. Hal ini dapat dilihat dari nilai persamaan koefisien a, b, dan c, dimana pada masing-masing koefisien nya tidak menunjukkan pengaruh yang siginifikan pada koefisien c baik itu pada SP maupun ROE perusahaan. Nilai F juga pada masing-masing variabel lebih besar dari 0.05. Jika nilai F lebih besar dari 0.05 maka dapat disimpulkan bahwa data telah terdistribusi secara normal.

### Pengaruh Struktur Modal terhadap Kinerja Perusahaan

Struktur modal memberikan pengaruh yang signifikan terhadap ROA perusahaan. Pratheepkanth (2011) juga menemukan bahwa terdapat hubungan antara struktur modal

dengan ROI dan ROA Perusahaan. Hasil penelitian juga sependapat dengan hasil penelitian yang telah dilakukan oleh Imadudin, Swandari, dan Redawari (2014), dimana struktur modal DAR berpengaruh positif terhadap ROA dan berpengaruh negatif terhadap ROE perusahaan. Husnan (2004) menyatakan bahwa struktur modal akan memaksimalkan nilai perusahaan. Fachrudin & Amalia (2011) juga menyatakan bahwa struktur modal, ukuran perusahaan dan *agency cost* tidak berpengaruh signifikan terhadap kinerja perusahaan.

Pada ROE perusahaan, struktur modal (DER) juga memberikan pengaruh yang signifikan. Sama seperti pendapat San & Heng (2011), juga menemukan bahwa terdapat hubungan signifikan antara struktur modal dan kinerja perusahaan di Papan Bursa Malaysia. Penelitian dari Al-Kayed, Zain, & Duasa (2014) juga menemukan bahwa *equity* (rasio modal) memberikan respon positif untuk

meningkatkan kinerja perusahaan. Baker & Wurgler (2002:29) juga sependapat bahwa struktur modal memiliki kekuatan di dalam menentukan kinerja suatu perusahaan. Zeitun & Tian (2007:59) juga berpendapat bahwa struktur modal sangat penting dan memberikan pengaruh yang buruk bagi kinerja perusahaan dalam keuangan dan penjualan.

Setelah menemukan pengaruh struktur modal terhadap kinerja perusahaan secara global, peneliti juga menemukan pengaruh struktur modal terhadap kinerja perusahaan pada setiap aspeknya yaitu DAR, DER, dan ROE. Struktur modal *Debt to Equity* (DER) memberikan pengaruh yang signifikan terhadap ROE perusahaan. Hasil ini berlawanan dengan pendapat Modigliani dan Miller (1958) bahwa nilai suatu perusahaan tidak dipengaruhi oleh struktur modal, bukti tersebut dengan berdasarkan serangkaian asumsi antara lain tidak ada biaya broker, tidak ada pajak, tidak ada biaya kebangkrutan, para investor dapat meminjam dengan tingkat suku bunga yang sama dengan perseroan, semua investor mempunyai informasi yang sama, EBIT tidak terpengaruh oleh biaya utang.

Kesimpulannya adalah struktur modal (DER) memberikan kontribusi terhadap ROE, yaitu sebesar 20,5%. Sedangkan sisanya 79,5% dipengaruhi oleh variabel lain yang tidak dibahas dalam penelitian ini. Faktorfaktor lainnya yang dapat mempengaruhi struktur modal menurut Riyanto (1999) yaitu tingkat bunga, susunan daripada aktiva, kadar resiko dari pada aktiva, besarnya jumlah modal yang dibutuhkan, keadaan pasar modal,

sifat manajemen, dan ukuran suatu perusahanan.

Penelitian lain dilakukan oleh Zeitun & Tian (2007)ditemukan bahwa tingkat penggunaan hutang yang tinggi akan menurunkan kinerja perusahaan yang diukur dengan return on asset (ROA). Hasil tersebut sesuai dengan penelitian yang dilakukan Ogebe & Alawi (2013) bahwa struktur modal merupakan salah satu faktor yang menentukan kinerja perusahaan, dan pengunaan hutang dalam struktur modal berpengaruh negatif terhadap nilai perusahaan.

### Pengaruh Struktur Modal (DAR) terhadap Kinerja Perusahaan (ROE)

Struktur modal (DAR) tidak memberikan pengaruh yang signifikan terhadap kinerja perusahaan (ROE). Hasil ini berlawanan dengan pendapat Sharma (2011) dimana dia berpendapat bahwa struktur modal mempengaruhi kinerja perusahaan. Skopljak & Luo (2012)juga sependapat, mereka menemukan bahwa struktur modal signifikan terhadap berpengaruh kinerja perusahaan. Skopljak & Luo (2012:295) juga sependapat bahwa terdapat hubungan yang signifikan anatara struktur modal dan kinerja perusahaan pada Australian ADIs.

Kesimpulannya adalah struktur modal (DAR) memberikan kontribusi terhadap ROE perusahaan yaitu sebesar 9% sedangkan 91% dipengaruhi oleh faktor lainnya. Faktor-faktor lainnya yang dapat mempengaruhi struktur modal menurut Riyanto (1999) yaitu tingkat bunga, susunan daripada aktiva, kadar resiko dari pada aktiva, besarnya jumlah modal yang

dibutuhkan, keadaan pasar modal, sifat manajemen, dan ukuran suatu perusahanan.

### Pengaruh Sokongan Politik (SP) terhadap Kinerja Perusahaan (ROE)

Berdasarkan data pada hasil penelitian didapatkan bahwa sokongan politik (SP) tidak memberikan pengaruh yang signifikan terhadap ROA perusahaan. Hasil penelitian ini menunjukkan pada ROE perusahaan. sokongan politik (SP) juga tidak memberikan pengaruh yang signifikan. Penelitian ini berlawanan dengan penelitian yang telah (2007:6)dilakukan oleh Chantrataragul dimana di dalam penelitiannya didapatkan hasil bahwa koneksi politik mempunyai pengaruh positif yang signifikant terhadap kinerja perusahaan seperti ROE, Tobin's Q dan pembagian Pasar di Thailand. Pendapat Wong (2010:275) juga terbantahkan dengan penelitian ini, koneksi politik memberikan pengaruh kepada kinerja perusahaan diukur dari ROE dan rasio pasar. Hasil data ini juga membantah pendapat Faccio (2006) sokongan dikarenakan keterlibatan politik sebagai manajemen perusahaan (SP) tidak memberikan pengaruh yang signifikan terhadap ROA dan ROE perusahaan.

Hasil penelitian ini sejalan dengan penelitian yang telah dilakukan oleh Wahab, Zain, dan James (2011) pada beberapa perusahaan di Malaysia, dimana hasilnya yaitu tidak ada pengaruh yang signifikan antara hubungan pemerintah dengan kinerja perusahaan. Hasil penelitian Fadeev (2008:19) di Rusia juga sependapat dimana penelitannya menyatakan bahwa tidak ada dampak yang

signifikan dari koneksi politik terhadap produktivitas perusahaan.

Berikut ini akan dibahas pengaruh sokongan politik terhadap kinerja perusahaan dilihat dari sokongan politik tidak memberikan pengaruh yang signifikan terhadap ROE perusahaan. Hasil ini membantah pendapat yang dikemukakan oleh Fan, Wong, & Zhang (2007) yang melaporkan hasil penelitiannya bahwa perusahaan yang memiliki CEO berafiliasi politik memiliki kinerja yang yang lebih rendah dibandingkan perusahaan yang tidak memiliki afiliasi politik.

tidak Sokongan politik juga memberikan pengaruh yang signifikan terhadap ROA dan ROE perusahaan. Hasil penelitian ini sejalan dengan penelitian yang telah dilakukan oleh Osad & Andrew (2013:83) yaitu tidak ada hubungan yang signifikan antara komposisi pengurus, komposisi koneksi politik, dan kinerja perusahaan. Xu, Zhu, dan Lin (2005:22) juga sependapat bahwa kepemilikan perusahaan berasal dari yang unsur pemerintah mempunyai hubungan signifikan yang terhadap perusahaan.

Selain melihat pengaruh dari sokongan politik terhadap kinerja perusahaan, peneliti juga melihat kontribusi yang diberikan oleh sokongan politik terhadap kinerja perusahaan. Sokongan politik memberikan kontribusi kepada kinerja perusahaan (ROE) sebesar 16%. Jadi, dapat disimpulkan bahwa sokongan politik memberikan kontribusi kepada kinerja perusahaan yaitu sebesar 16% sedangkan 84% dipengaruhi oleh faktor lain. Faktor-faktor lainnya dapat yang

mempengaruhi kinerja perusahaan yaitu struktur modal (Modigliani, 1958) dan *financial distress* (Iramani, 2007).

Fisman (2001) yang menyatakan bahwa ada dari kedekatan pengaruh politik perusahaan dengan penguasa terhadap harga saham perusahaan. Penelitian lain di Indonesia terkait dengan hubungan politik perusahaan ialah oleh Wulandari (2012) yang membahas mengenai pengaruh koneksi politik dan struktur kepemilikan terhadap kinerja perusahaan. Hasil penelitiannya membuktikan bahwa perusahaan yang memiliki hubungan politik memiliki kinerja yang lebih buruk dibandingkan dengan perusahaan yang tidak memiliki hubungan politik.

Jadi sokongan yang diberikan para politisi kepada perusahaan tidak signifikan mempengaruhi kinerja perusahaan dikarenakan pengusaha karena yang memiliki belakang bisnis ketika menjalan operasional perusahaan dan kekuasaannya tidak sematamata memburu rente, melainkan sesuai dengan tujuan awal yaitu ingin memperbaiki keadaan sesuai dengan kewenangan yang dimilikinya. Kemudian sokongan politik juga bukan satusatunya penentu kinerja perusahaan. Kinerja perusahaan juga dipengaruhi oleh banyak faktor, baik faktor keuangan maupun non keuangan seperti struktur modal, size perusahaan, growth, kepemilikan, kondisi perekonomian pada periode tertentu. Penelitian selanjutnya akan lebih menarik jika dapat memadukan faktor keuangan dan non keuangan.

### Pengaruh Struktur Modal terhadap Kinerja Perusahaan

Struktur modal (DER) juga memberikan pengaruh yang tidak signifikan terhadap ROE. Hasil ini sependapat dengan Modigliani dan Miller (1958) bahwa nilai suatu perusahaan tidak dipengaruhi oleh struktur modal, bukti tersebut dengan berdasarkan serangkaian asumsi antara lain tidak ada biaya broker, tidak ada pajak, tidak ada biaya kebangkrutan, para investor dapat meminjam dengan tingkat suku bunga yang sama dengan perseroan, semua investor mempunyai informasi yang sama, EBIT tidak terpengaruh oleh biaya utang.

Struktur modal (DER) memberikan kontribusi terhadap ROE, yaitu sebesar 9,7%., sedangkan 90,3% dipengaruhi oleh faktor lain dilaur variabel yang diteliti. Faktor-faktor lainnya yang dapat mempengaruhi struktur modal menurut Riyanto (1999) yaitu tingkat bunga, susunan daripada aktiva, kadar resiko dari pada aktiva, besarnya jumlah modal yang dibutuhkan, keadaan pasar modal, sifat manajemen, dan ukuran suatu perusahanan. Semakin besar ROE, semakin besar pula kemampuan perusahaan menghasilkan laba bagi pemegang saham. Moeljadi (2006) mengatakan bahwa leverage merupakan variabel penjelas bagi rentabilitas modal sendiri. Maksudnya struktur modal merupakan variabel penjelas bagi ROE.

Brigham & Houston (2001) menyatakan bahwa *leverage* keuangan merupakan alternatif yang dapat digunakan untuk meningkatkan laba. Penggunaan hutang dalam investasi sebagai tambahan untuk mendanai

aktiva perusahaan diharapkan dapat meningkatkan keuntungan yang akan diperoleh perusahaan, karena aktiva perusahaan digunakan untuk menghasilkan laba.

Laba yang tersedia untuk pemegang ekuitas menjadi lebih besar (Brigham & Houston, 2001). Penggunaan leverage yang semakin besar menyebabkan beban bunga semakin besar (Brigham & Gapenski, 1997). Jika beban bunga sangat besar sedangkan laba operasi tidak cukup besar maka akan timbul masalah kesulitan keuangan yang menyebabkan kineria menurun. Namun demikian beban bunga hutang juga merupakan pengurang pajak yang dapat meningkatkan nilai perusahaan (Brigham & Gapenski, 1997). Dalam hal ini dapat dikatakan bahwa hutang dapat meningkatkan kinerja. Sedangkan bila perusahaan menggunakan ekuitas maka tidak terdapat penghematan pajak karena beban ekuitas tidak mengurangi pajak. Bouresli (2001) dan Li (2010) menemukan bahwa rasio hutang terhadap jumlah aset berpengaruh negatif terhadap kinerja perusahaan, tetapi Calisir et al., (2010) menemukan pengaruh yang positif.

Myers & Majluf (1984) menyatakan perusahaan lebih menggunakan pendanaan melalui modal internal (retained earnings) ketika masih tersedia. Apabila modal internal tidak mencukupi, hutang menjadi opsi yang lebih diprioritaskan dibandingkan saham karena biaya transaksi penerbitan hutang lebih murah dan terdapat keuntungan pajak yang diperoleh. Alasan lainnya yaitu karena menimbulkan penerbitan saham akan

kekhawatiran pada investor jika harga saham yang mereka miliki ternyata *overpriced*, sehingga seringkali penerbitan saham justru membuat harga saham yang beredar menurun. Kesimpulan yang kedua konsisten dengan teori irelevansi struktur modal oleh Modigliani & Miller (1958) yang menyatakan bahwa modal saham tidak berhubungan dengan nilai perusahaan.

Penelitian lain dilakukan oleh Zeitun & Tian (2007) ditemukan bahwa tingkat penggunaan hutang yang tinggi akan menurunkan kinerja perusahaan yang diukur dengan ROA. Hasil tersebut sesuai dengan penelitian yang dilakukan Ogebe & Alawi (2013) bahwa struktur modal merupakan salah faktor menentukan kinerja satu yang perusahaan, dan pengunaan hutang dalam struktur modal berpengaruh negatif terhadap nilai perusahaan.

Hadianto (2008) menunjukan bahwa struktur aktiva berpengaruh positif terhadap struktur modal. Hasil yang berbeda ditemukan dalam penelitian yang dilakukan Harjanti & Tadelilin (2007), Kusumawati (2004), Darmawan (2008) yang memberikan hasil struktur aktiva tidak berpengaruh terhadap struktur modal.

Brigham dan Houston (2006) menyatakan bahwa perusahaan yang asetnya sesuai untuk dijadikan jaminan kredit cenderung lebih banyak menggunakan utang. Aset mulitiguna yang dapat digunakan oleh banyak perusahaan merupakan jaminan yang baik, sedangkan aset yang hanya digunakan untuk tujuan tertentu tidak begitu baik untuk dijadikan pinjaman. Karena itu, perusahaan

real estate biasanya mempunyai leverage yang tinggi sedangkan perusahaan yang terlibat dalam penelitian teknologi memiliki tingkat leverage yang rendah.

### Pengaruh Struktur Modal terhadap Sokongan Politik

Struktur modal (DAR) memberikan pengaruh yang signifikan terhadap sokongan politik (SP). Hasil ini juga sependapat Duan & bahwa perusahaan yang Chik (2013:137) mempunyai sokongan koneksi politik yang kuat akan mendapatkan pinjaman bank yang lebih banyak dibandingkan perusahan yang tidak terkoneksi politik. Wahab (2011) juga setuju, perusahaan yang mempunyai koneksi politik merupakan perusahaan yang risk taker sehingga kemungkinan mengalami kegagalan besar. Sokongan politik sangat (SP3) memberikan memberikan pengaruh yang signifikan terhadap DAR perusahaan. Hasil ini sependapat dari Wahab (2011)yang menyatakan perusahaan yang terkoneksi politik akan menggunakan pengaruhnya untuk mendapatkan akses yang lebih mudah didalam memperoleh pinjaman lunak. Hasil ini membantah pendapat dari Hok & Wong (2010) dimana mereka menyatakan bahwa perusahaan yang memiliki koneksi politik memiliki kinerja keuangan yang lebih baik dibandingkan dengan yang tidak memiliki koneksi politik.

Kontribusi struktur modal (DAR) terhadap sokongan politik (SP) yaitu sebesar 15,4%,. Kesimpulannya bahwa kontribusi struktur modal (DAR) terhadap sokongan politik (SP) yaitu 15,4% sedangkan 84,6% dipengaruhi oleh faktor lainnya. Faktor lain tersebut seperti financial distress (Almilia & Herdiningtyas, 2005) dan faktor lainnya. Faktor-faktor yang berpengaruh signifikan terhadap struktur modal yaitu ukuran perusahaan, tingkat pertumbuhan, struktur aset, dan risiko bisnis (Al-Najjar & Taylor, 2008). Sokongan politik baik kepemilikan saham, adanya unsur penguasa atau kekuasaan dalam perusahaan ataupun adanya keterlibatan dalam manajemen, tidak signifikan pengaruhnya pada struktur modal perusahaan. Hal ini disebabkan oleh sokongan politik bukan satu-satunya faktor yang menentukan struktur modal. Struktur modal ditentukan oleh ukuran perusahaan, yang artinya semakin besar ukuran perusahaan maka struktur dan komposisi struktur modalnya semakin besar.

Resiko bisnis juga menjadi pertimbangan dalam menentukan struktur Investasi dilakukan modal. dengan perhitungan ekonomis dan rasionalitas. Manajemen perlu hati-hati dalam melakukan investasi pada proyek-proyek yang ditawarkan oleh politisi. Kecermatan dan kehati-hatian diperlukan dalam melakukan pengambilan keputusan investasi.

### Pengaruh Struktur Modal terhadap Sokongan Politik

Struktur modal (DER) memberikan yang tidak signifikan terhadap Sokongan politik (SP). Hasil penelitian ini membantah penelitian dari Friedman (1999) yang menjelaskan bahwa bankir yang dipaksa untuk memberikan pinjaman bagi proyek-proyek yang dilakukan oleh perusahaan berafiliasi

politik meskipun proyek tersebut diperkirakan tidak menguntungkan. Pendapat Friedman tersebut sependapat oleh hasil penelitian ini yaitu sokongan politik berpengaruh terhadap struktur modal.

Berikut ini akan dibahas pengaruh stuktur modal perusahaan terhadap sokongan politik secara detail pada setiap aspeknya. Struktur modal (DER) memberikan pengaruh yang signifikan terhadap Sokongan politik (SP). Hasil ini sependapat dari Wahab (2011) yang menyatakan perusahaan yang terkoneksi politik akan menggunakan pengaruhnya untuk mendapatkan akses yang lebih mudah didalam memperoleh pinjaman lunak. Hasil ini membantah pendapat dari Hok & Wong (2010) dimana mereka menyatakan bahwa perusahaan yang memiliki koneksi politik memiliki kinerja keuangan yang lebih baik dibandingkan dengan yang tidak memiliki koneksi politik.

Kontribusi struktur modal (DER) terhadap sokongan politik (SP) yaitu sebesar 29,8%. Kesimpulannya bahwa kontribusi struktur modal (DER) terhadap sokongan politik (SP3) yaitu 29,8% sedangkan 70,2% dipengaruhi oleh faktor lainnya. Faktor lain tersebut seperti *financial distress* (Almilia & Herdiningtyas, 2005) dan faktor lainnya.

Faktor-faktor yang berpengaruh signifikan terhadap struktur modal yaitu ukuran perusahaan, tingkat pertumbuhan, struktur aset, dan risiko bisnis (Al-Najjar & Taylor, 2008). Zeitun & Tian (2007) menyimpulkan bahwa ukuran perusahaan berpengaruh positif signifikan terhadap kinerja perusahaan, tingkat pertumbuhan berpengaruh

positif terhadap kinerja perusahaan, struktur aset berpengaruh negatif signifikan terhadap kinerja perusahaan, dan risiko berpengaruh negatif terhadap kinerja perusahaan.

## Sokongan Politik sebagai mediasi antara Struktur Modal berpengaruh terhadap Kinerja Perusahaan

Untuk melihat pengaruh mediasi Baron & Kenny (1986) adalah melihat signifikansi pengaruh variabel independen dengan mediasi, pengaruh variabel mediasi dengan dependen, dan pengaruh indpenden terhadap dependen. Jika ditemukan satu atau lebih tidak signifikan, maka mediasi tidak terjadi. Namun menurut Ghozali (2005) untuk melihat ada atau tidak mediasi cukup dilihat signifikansi independen terhadap mediasi, dan signifikansi mediasi ke dependen. SP tidak menjadi mediasi DAR dan DER ke ROE.

Sokongan Politik (SP) tidak memediasi pengaruh Struktur modal (DAR, DER) terhadap ROE perusahaan. Hasil ini tidak sependapat dengan hasil penelitian Bistrova et al., (2011) yang menemukan bahwa tidak terdapat pengaruh yang signifikan antara struktur modal dan kinerja perusahaan. Hasil ini membantah pendapat Li *et al.*, (2008) juga menunjukkan bahwa kondisi modal memberikan pengaruh positif bagi pertumbuhan sebuah perusahaan.

#### SIMPULAN DAN SARAN

Hasil analisa data dari kesembilan pertanyaan penelitian di atas, dapat ditarik kesimpulan bahwa struktur modal (DER) memberikan pengaruh yang signifikan terhadap kinerja perusahaan baik (ROE) perusahaan. Struktur modal berupa (DAR), memberikan pengaruh yang tidak signifikan terhadap kinerja perusahaan (ROE) perusahaan. Struktur modal (DER) memberikan pengaruh yang signifikan terhadap sokongan politik (SP). Struktur modal berupa (DAR) memberikan pengaruh yang signifikan terhadap sokongan politik (SP). Sokongan politik (SP) tidak menjadi mediasi struktur modal (DAR, DER) terhadap ROE.

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### THE INFLUENCE OF PERCEIVED JUSTICE IN SERVICE RECOVERY ON COMPLAINANT SATISFACTION AND WORD-OF-MOUTH INTENTION AT HOTEL IN JAKARTA

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#### Abstract

The purpose of this study is to assess the relative influences of distributive (DJ), procedural (PJ), and interactional (IJ) justices on customer satisfaction with service recovery and to examine the relationship between recovery satisfaction and word-of-mouth intention. On-site surveys were administered to collect data from hotel guests who stayed, and experienced a service failure at five-star hotels. The effects of procedural and interactional justice have a positive relationship with complainant satisfaction and word-of mouth intention. The results also confirmed the role of complainant satisfaction on word-of-mouth intention. Managerial implications of these findings are briefly discussed.

**Keywords:** Service failure, Service recovery, Perceived justice, Complainant satisfaction, Word-of-mouth intention

#### INTRODUCTION

Customer satisfaction through the delivery of service quality is a key component to overall success and satisfaction; both which are equally important to customers as well as employees. Competition in the field of tourism has always been extremely high as newcomers and adopter of new trends systematically appear and demand their own market share. Therefore, tourism industry professionals need to focus on offering better service at competitive prices. Hospitality organizations do typically strive to make customer satisfaction a focal point in their core values, vision and mission. However steady growth and expansion, global competition, and the influx of seasoned travelers create cumbersome

obstacles in delivering quality service. It appears that quality service is the cornerstone to industry success.

Customer satisfaction is crucial to the survival of any business organization. However, in many opportunities, perfection can't be reached and sometimes problem start to appear despite the hotel purpose to offer maximum quality for service. Once that problem appears, companies should welcome complaint because they should be viewed as a second chance to keep a dissatisfied customer loyal. If the customer is unsatisfied but does not complain he/she will likely leave the company and spread a bad word-of-mouth which can hurt the company's image. It has therefore been recognized that once a service failure occurs, it becomes crucial that service

recovery, defined as the action taken by the service provider to seek out dissatisfaction and as a response to poor service quality, be effectively carried out to reduce the damage in relationship and pacify the dissatisfied customer.

Although hospitality organizations strive to provide excellent service in the first place, the characteristic nature of the environment makes imperfections unavoidable. Therefore, things frequently go wrong. The majority of the customer dissatisfaction and complaint research has focused on why, who, and how consumers respond to dissatisfaction (Andreassen quoted in Kuenzel & Katsaris, 2004).

Satisfying a customer, however, is a difficult task, especially when it comes to services, since studies have shown that consumer's level of satisfaction is generally lower for services than products (Andreasen & Best quoted in Kuenzel & Kasaris, 2004). Lewis & McCann quoted in Kuenzel & Kasaris (2004) stated that in hotels, where there is a high degree of personal interaction with many departments and services, service failure is sometimes difficult to avoid. Lovelock & Wirtz (2011: 376) suggested that, at all costs, the organization should encourage the customer to complain.

Although service organizations want the customer to lodge a complainant, for the organization to truly benefit, the complaint must be lodged to the

organization. Some of the avenues a customer could explore after a service failure could be quite devastating to a service organization. For example, a hotel customer complaints to the Department of Housekeeping for poor cleanliness. It could create different challenges for an organization to overcome Thus, service recovery is a valuable marketing tool which constitutes a second chance for the hotel to satisfy the customer.

Therefore, the primary objective of this study is to determine the influence between each of perceived justice in service recovery on complainant satisfaction and word-of-mouth intentions in the upscale hotel in Jakarta. Second, it aims to determine the influence between complainant satisfactions on word-of-mouth intentions. Third, it proposes to define the service recovery satisfaction construction best in the upscale hotel in Jakarta.

#### LITERATURE REVIEW

#### Perceived Justice (Fairness) Theory

Studies concerning service recoveries have focused on the role of perceived justice in understanding the effectiveness of service recovery strategies (Blodgett et al., 1997; Tax et al., 1998; McCollough et al., 2000). This perspective focuses on the extent to which customers perceive the process and outcomes of a service recovery to be fair and in cases

where the levels of perceived justice are high, consumers are more likely to be satisfied.

When a service failure occurs. customers expect to receive justice, a fair treatment, and to be compensated in a timely and polite manner (McCollough et al., 2000; Tax et al., 1998). Since complaint handling involves a sequence of procedures in order to reach the final outcome, complaining customers would evaluate the perceived fairness of each procedure throughout the complaint handling process (Tax et al., 1998). Customers who complain have certain expectations of how they should be treated and expectations regarding compensation for the negative emotions they experienced complaint efforts (McCollough et al., 2000).

As a result, the perceptions of justice could determine whether the dissatisfied customer would engage in future repurchase intentions (Blodgett et al., 1993), negative word-of-mouth, and it can influence the customer's satisfaction level with the service firm's complaint handling and their post-complaint future relationship (Blodgett et al., 1997).

Stephen Tax and Stephen Brown quoted in Lovelock and Wirtz (2011: 375)

found that as much as 85 percent of the variation in the satisfaction with a service recovery was determined by three dimensions of fairness (see Figure 1):

- a. Distributive Justice concerns compensation a customer receives as a result of the losses and inconveniences incurred because of a service failure. This includes compensation for not only the failure but also time, effort and energy spent during the process of service recovery (Lovelock and Wirtz, 2011: 375).
- b. Procedural Justice concerns policies and rules that any customer has to go through to seek fairness. Customers expect the firm to assume responsibility, which is the key to start of a fair procedure, followed by a convenient and responsive recovery process. That includes flexibility of the system and consideration of customer inputs into the recovery process (Lovelock and Wirtz, 2011: 375).
- c. Interactional Justice involves employees of the firm who provide the service recovery and their behavior toward the customer. Giving an explanation for the failure and making an effort must be perceived as genuine, honest and polite (Lovelock and Wirtz, 2011: 375).

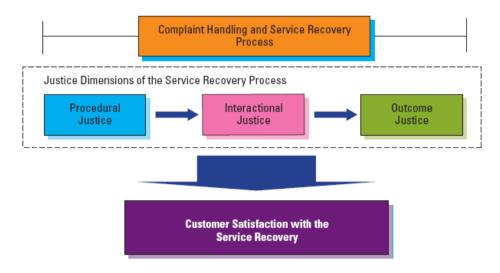


Figure 1. Three Dimensions of Justice Theory in Service Recovery Process Source: (Lovelock & Wirtz, 2011: 373)

#### **Service Recovery**

Lovelocks & Wirtz (2011: 373) Response Service Failure Choice model, demonstrated the customer's choice in the event of a service failure. In the event of a service failure, customers are presented with numerous opportunities. To begin, customers have a choice whether to report the failure to a manager or employee of the organization or leave dissatisfied. Lovelock & Wirtz (2011: 376) suggested that, at all costs, the organization should encourage the customer to complain. Although service organizations want the customer to lodge complainant, for the benefit. organization to truly the complaint must be lodged to the organization. Some of the avenues a customer could explore after a service failure could be quite devastating to a service organization. For example, a hotel customer complaints Department of Housekeeping for poor cleanliness. It could create different challenges for an organization overcome. As outlined in the model, faced with organizations various right opportunities to the wrong, preserve the relationship and, hopefully, engender loyalty. The ultimate goal of any service organization should be for the customer to seek redress from the service organization. This in turn will give the organization an opportunity to correct the problem and avoid the other negative outcomes of a service failure.

#### **Complainant Satisfaction**

It is often difficult for organizations to provide 100% error free products or services. Errors are a

critical and inevitable part of every service offering. In the case of service failures, organization should satisfying corrective actions in order to address the consumer complaints/ problems. Some research studies have indicated that there are strong positive relationships between complainant satisfaction and loyalty, trust and positive word of mouth communications. Complainant satisfaction with service recovery is significantly affected by the three dimensions of perceived justice or justice theory (e.g. procedural, interactional and distributive justice). In this study, predictors of complainant satisfaction with service recovery efforts were considered namely perceived justice theory. (Kau & Loh, 2006).

#### **Word-of-Mouth (WOM) Intentions**

Word-of-mouth (WOM) refers to the informal communication between consumers about the characteristics of a business or a product (Westbrook quoted in Kau & Loh, 2006). In a service setting, it is important that if failure occurs steps must be taken to pacify the dissatisfied customers. If not, it is highly likely that they will either exit or engaged in negative WOM to the detriment of the service provider. The

end result would be lost sales and profits. On the other hand, consumers who receive fair service recovery are more likely to repatronize the service provider and even engage in positive WOM behavior. thus spreading goodwill for the service provider. Blodgett et al. (1993) confirmed that interactional justice had large impact on WOM intentions. As such, satisfaction with service recovery would encourage positive WOM communication. Moreover, consumers mostly trust each other more than communication from company and this shows the importance of word-ofmouth.

Everybody talks to friends and family about their experiences regarding products, services and brands. The attitude could be positive or negative and result in advice and recommendations that other people follow. With today's development of social media such as blogs, You Tube, Facebook and Twitter, word of mouth has become an even more powerful tool.

Blodgett et al. (1997) confirmed that satisfaction with service recovery would encourage positive word of mouth communication between the customer and the organizations.

#### RESEARCH METHOD

#### **Sampling Design**

This research uses nonprobability sampling method. To those criteria of non-probability sampling method. this research used combination of a convenience sample and a judgement sample. Since it have a relatively well defined target group people must fulfil certain requirements to be in question for the sample, thereby similar to a judgement sample. Data were collected through survey using a structured questionnaire administered to 1) both customers who had stayed in the upscale hotel during 2012, 2) had experienced a failure in service, 3) reported the problem to an employee or member of the management team and 4) progressed through the hotel's service recovery process and 5) had provided contact information to be recipient of the questionnaire.

The survey was sent to guest's email address. A total of 560 guests received the email requesting their participation in evaluating the service recovery. Of the total guest database, 171 respondents or 30,5 % responded to the questionnaire. Of the 171 questionnaires returned, 163 questionnaires were valid (n = 163). In order to evaluate their

satisfaction with the service recovery and word-of-mouth intention, questionnaires collected from respondents who experienced a service failure were analyzed and discussed.

#### The Questionnaire

This variables of this study are two. group into thev are: independent variable is the justice theory in service recovery evaluation and two dependent variables complainant satisfaction and word-ofmouth. The variables were measure on a 5 point Likert type scale anchored by (1) strongly disagree, through to (5) strongly agree. For demographic data, used nominal scale defined in this research.

The initial portion questionnaire requested respondents to provide information about their demographic This characteristics. included gender, education level attained, age, monthly income, and occupation. This was followed by a series of questions relating to different aspects and overall satisfaction with the hotel. The objective of soliciting such information was to help the respondents to recall their service experience and find out their level of satisfaction with their respective hotel.

In section 2, a question was asked to proceed to another section to fill up questions regarding the procedural (accessibility (Bitner et al., 1990), timing (Taylor, 1994) and process control (Goodwin and Ross, 1992)), interactional (Politeness (Blodgett et al., 1997), effort, empathy

(Parasuraman et al., 1988) and explanation (Bies and Shapiro, 1987)) and distributive justice (fairness of outcome, compensation). Next, the constructs Complainant Satisfaction (Crosby et al.,1990), "word-of-mouth" (Blodgett et al., 1997; Walker and Harrison, 2001) were measured with items adapted specifically for this research study.

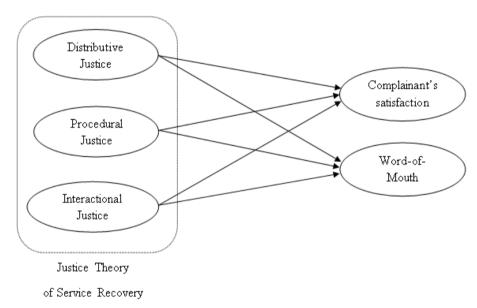


Figure 2. Conceptual Framework

On the basis of the previous discussion, the following hypotheses are offered (see Figure 1).

The effect of perceived justice dimensions on recovery satisfaction also has been mentioned in past literature. Many researchers have found that all three forms of justice including distributive justice, procedural justice, interactional justice have a positive effect on overall service recovery

satisfaction (Smith et al., 1999; Tax et al.,1998; Kau & Loh, 2006). The effects of dimensions of justice on customer's recovery satisfaction have been studied in different service industries as well, including mobile phone buyers (Kau & Loh 2006), undergraduate students, hotel customers (Smith et al., 1999) and airline passengers (McCollough et al., 2000).

Thus, based on the above discussion, this study proposed the following hypotheses:

- H1 Distributive justice is related positively to complainant satisfaction.
- H2 Procedural justice is related positively to complainant satisfaction.
- H3 Interactional justice is related positively to complainant satisfaction.

Both satisfaction and dissatisfaction with a service encounter lead to the production of word-of-mouth. Satisfied customers usually engage in positive word of-mouth and share their positive with experience people. Dissatisfied customers, on the other hand, usually share their negative encounters with other people, either to warn others about this specific service provider or to obtain sympathy. Theory and previous research indicate that higher levels of distributive, procedural, and interactional justice will lead to a decreased likelihood of negative word-ofmouth (e.g., Blodgett et al., 1993). Thus, it is hypothesized that:

- H4 Distributive justice is related positively to word-of-mouth.
- H5 Procedural justice is related positively to word-of-mouth.
- H6 Interactional justice is related positively to word-of-mouth.
- H7 Complainant satisfaction is related positively to word-of-mouth

## Validity and Reliability of Measurement Tools

Measurement was conducted on 32 statements related to the three dimensions perceived iustice. complainant satisfaction and word of mouth. This research used primary data. The data collected with a questionnaire, i.e. by providing a written statement to the respondent. Furthermore, the respondents provide responses to a given statement. Data analyses were performed to check for both validity and reliability. A pre-test was conducted to refine the research instrument. Hotel costumer who ever felt service failure asked to evaluate the survey instrument. Participants were asked to identify any ambiguous questions. Modifications were made accordingly (e.g., wording and underling of negative verbs). Following the pre-test, a pilot test of the instrument was conducted to ensure manipulations of justice dimensions and to assess the reliability and validity of the measurements. A convenience sample of 20 participants (6 female and 14 male) assigned to evaluate it. No changes were made in the instrument for the final study. Validity and reliability measurement of the instruments performed by using coefficients of Pearson Product Moment Correlation.

The questionnaire was pre-tested among a group of 20 potential respondents but no major problems were detected. Several minor modifications were made to

ensure clarity of the items in the final version of the questionnaire.

#### RESULTS AND DISCUSSION

The data were analyzed using SPSS for Windows 17.0 and LISREL 8.70. Data testing is performed by SEM (Structural Equation Modeling). The profiles of the respondents would first be presented in this section, followed by results of the statistical analysis.

#### **Profiles of Respondents**

Table 1 shows the demographic characteristics of the respondents in total.

There were almost equal number of males and females in the sample. The majority of the respondents were Bachelor educated. In terms of age distribution, about 55percent were 26 to 35 years old. About 39 percent were aged 36 or older. About five out of ten in the sample (or 49.7 percent) were Asia-Pacific Islander and about 44.8 percent were Black African-American. The sample consisted mainly of guests in the age group of 26 – 35 years old.

Table 1
Demographic Characteristics of Respondents

Characteristics	Number	Total (%)
Gender		
Male	88	54
Female	75	46
<b>Education Level Attained</b>		
High School Graduate	17	10.4
Associate Degree	44	27
Bachelor Degree	76	46.6
Master Degree	26	16
Ethnicity		
Asian/ Pacific Islander	81	49.7
Black African-American	73	44.8
Caucasian	1	0.6
Hispanic	6	3.7
American/ Alaska Native	1	0.6
Other/ Multi Racial	1	0.6
Age		
≤ 25 years old	8	4.9
26 – 35 years old	90	55.2

36 - 45 years ol	d
46 – 55 years ol	d
≥ 56 years old	

20	12.3
29	17.8
16	9.8

**Notes:** Total consists of all respondents (n = 163)

## Description of Service Recovery, Complainant Satisfaction and Word-Of-Mouth (WOM) Intention

The questionnaire was measured on a 5 point Likert scale anchored at (1) strongly disagree through to (5) strongly agree. Variable number 1 until 4 shows about the procedural justice of service recovery, number 5 until 8 represent interactional justice, number 9 until 12 represent distributive justice; number 13 until 16 represent complainant satisfaction and the rest variable represent word-of-mouth intention.

The minimum score of variable represented procedural justice of service recovery found on "The employees gave a convincing explanation about the reason behind the service failure" and the mean of the whole variable procedural justice is 4.04.

The minimum score of variable represented interactional justice of service recovery found on "Employees should always apologize for the inconvenience" and the mean of the whole variable interactional justice is 4.13.

The minimum score of variable represented distributive justice of service

recovery found on "The compensation makes up for the effort (time and emotions)" and the mean of the whole variable interactional justice is 4.20.

In variable complainant satisfaction, the minimum score found in "Pleasure with the service experienced from the hotel" and the mean of the whole variable complainant satisfaction is 4.01.

"Would not warn friends and relatives about the service failure in the future" is the variable of word-of-mouth with the minimum score and the mean overall of word-of-mouth is 4.13.

#### **Data Analysis**

Statistical analyses were performed using SPSS for Windows 17.0 and LISREL 8.70. Data testing is performed by SEM (Structural Equation Modeling), the multivariate statistical technique which is a combination of factors and regression analysis (correlation), which aims to examine the relationships exist between variables in a model.

The model which should be tested and analyzed first is the measurement model. Once the model subsequently tested and analysis structural model testing. This method is used to determine whether the measurement model that has been tested and analyzed can explain the structural model. This stage is intended to evaluate the level of agreement between the data with model, the measurement model and the significance of the coefficients of the

structural model using SEM (Structural Equation Modeling) with LISREL application 8.70. SEM describes relationships between constructs that have been hypothesized. Result calculation of the overall suitability testing the model can be seen in table 2 below.

Table 2.

Measurement Model Testing Result

Index Model	Measurement Model Test Acceptable Level	Index Model	Remark
Accuracy	Acceptable Level	muca Mouei	Kemark
ricediacy			
Chi Square	Less is better	658.14	Good
	$(P-values \ge 0.05)$	(P-value = 0.0)	
	(1 varaes = 0.03)	(1 value = 0.0	
Goodness of	$GFI \ge 0.90 = good fit$	0.83	Marginal Fit
Fit Index	and		
(GFI)	$0.80 \le GFI < 0.90 = marginal fit$		
Root Mean	$RMSR \le 0.05 = good fit$	0.023	Good fit
Square			
Residual (RMSR)			
Root Mean	$RMSEA \le 0.08 = good fit$	0.056	Good fit
Square	and	0.030	Good III
Error of	RMSEA $< 0.05 = close fit$		
Approximation			
Adjusted	Value between 0-1, more is		
Goodness of	better		
Fit	$AGFI \ge 0.90 = good fit$		
Index (AGFI)	and		
NCP	$0.80 \le AGFI < 0.90 = marginal fit$	266.14	Good fit
Interval	Small value and narrow interval	(199.33 – 340.83)	Good III
intervar	Sman value and harrow interval	(177.55 – 540.65)	
ECVI	Small value and near with ECVI	M = 4.05	Good fit
	Saturated	S = 4.64	
		I = 36.87	
AIC	Small value and near with AIC		Good fit
	Saturated	M = 866.14	
		S = 992.00	
G L T G	a	I = 7891.24	
CAIC	Small value and near with CAIC	M 1220 (8	C - 1 C
	saturated	M = 1320.68 S = 3159.84	Good fit
	saturated	S = 3159.84 I = 8026.73	
NFI	$NFI \ge 0.90$	0.91	Good fit
NNFI	$NNFI \ge 0.90$	0.95	Good fit
CFI	CFI ≥ 0.90	0.96	Good fit

IFI	IFI $\geq 0.90$	0.96	Good fit
RFI	$RFI \ge 0.90$	0.90	Good fit
CN	$CN \ge 200$	145.05	Not Good Fit

Source: Sitinjak & Sugiarto, 2006 dan output LISREL 8.70

The test results in a row seem Chi Square value of 658.14 in both categories, GFI value of 0.83 in the category of marginal fit, RMSR of 0.023 in the category of good fit, RMSEA for 0056 in the category of good fit, and the value of AGFI amounted to 0.79 in the marginal category fit, so it can be concluded that the model used in this study can be used as the basis of an analysis of the problems this study.

Chi-square value is 658.14, as already been mentioned above, follow the statistical Chi-Square statistical test associated significantly with the requirements, where the smaller the value of Chi-Square the better the model fit to the data. Goodness of Fit Index (GFI) owned models also have a match that relatively marginal because value 0.83, where GFI is in the range  $0.80 \le GFI < 0.90$  are in the scale of marginal fit.

Residual average between matrix (correlation or covariance) observed from the estimation (RMSR =  $0.023 \le 0.05$ ), rated good-fit. The average difference per degree of freedom that expected to occur in

the population and not the sample also had good fit (RMSEA= 0.056 < 0.08). Likewise, the value of AGFI is worth  $0.79 (0.79 \le AGFI < 0.80)$  assessed in the scale of marginal fit.

The acquisition of the above structural model testing in accordance with the requirements set forth by Hair, et al. (2006), so it can conclude that the structural model of this study has value a good fit to serve as a model.

#### **Variables Testing Results**

LISREL 8.80 was used to establish the result of outcome data collection. Path shows the value of coefficient hypothetical model was created and the tformed from this Hypothesis testing will be done with the requisite degree of significance of 0,05 or 5% and the critical t value of  $\pm$  1.96. The following will be shown table 2 that contains the structured form equations model and figure 3 which presents the results of testing hypothesis by looking at the t-value of each relationship. The structured equation modeling follows:

## Table 3. Structured Form Equations Model

#### Equation

1 CS = 1.65\*PJ + 0.29\*IJ - 0.09\*DJ, Errorvar.= 0.50,  $R^2 = 0.50$ 

(0.088)(0.10)(0.12)

14.63 3.15 -0.73

2 WM = 0.23\*PJ + 1.50\*IJ - 0.03\*DJ + 1.23\*CS, Errorvar.= 0.25,  $R^2 = 0.45$ 

(0.10) (0.12) (0.099) (0.070)

3.42 10.97 -0.24 3.52

Source: Output LISREL 8.80

Remarks:

PJ = Procedural Justice

IJ = Interactional Justice

DJ = Distributive Justice

CS = Complainant Satisfaction

WM= Word-of-Mouth Intention

Here is an explanation of the values:

- 1. Relationships between Complainant Satisfaction and Procedural Justice is shown in Path coefficient value of 1.65. relationship to Interactional Justice is value 0.29 and relationship Distributive Justice is -0.09. From the equation model, we can see that all variables of Service Recovery are affecting the Complainant Satisfaction with determination (R2) at 0,50. It means that the variance in Procedural Justice, Interactional Justice and Distributive Justice are able influence the Complainant Satisfaction by 50% and the rest is influenced by other factors.
- 2. Relationships between Word-of-Mouth Intention and Procedural Justice is -0,.23, to Interactional Justice is 1.50, to distributive justice is -0.03 and the relationship to complainant satisfaction is 1.23. The equation model table shown that both of Perceived Justice of Service Recovery and Complainant Satisfaction are influencing the Word-of Mouth Intentions with determination (R2) 0.45. Means that both variables are able to influence the word of mouth intention by 45% and the rest is influenced by other factors.

From the parameters of the structural equations, hypotheses testing can be implemented with the following result:

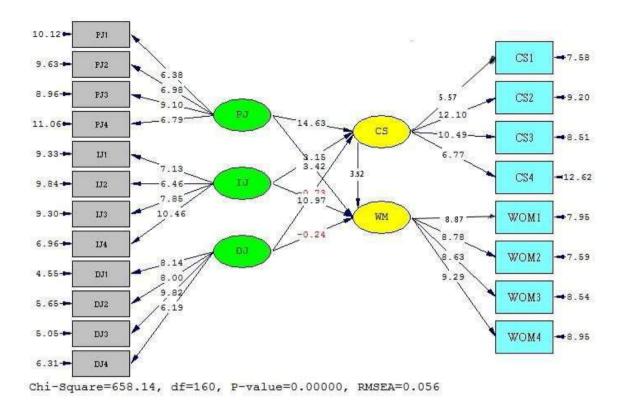


Figure 3. T-Value Path Diagram Source: T-Value Output of LISREL 8.70

Based on the results of the above ttest on hypothesis, it can be concluded as follows:

## H1: Procedural justice is related positively to complainant satisfaction.

Apparently the result of research found path coefficient is 1.65 and t-value at 14.63 >1.96, which significant meaning. This indicates that the first hypothesis proposed in the research is supported by the data in which there is positive relation between procedural justice and complainant satisfaction.

## H2: Interactional justice is related positively to complainant satisfaction.

Interactional justice on complainant satisfaction with the results of the study found 0.29 scale path coefficients with t-value 3.15 > 1.96 is significant. This indicates that the second hypothesis proposed in this study is supported by the data in which there is positive relation between interactional justice and complainant satisfaction.

## H3: Distributive justice is not related positively to complainant satisfaction.

The study result found that the path coefficients is -0.09 with t-value -0.73 < 1.96 is significant. It indicates that the third hypothesis proposed in the study is not supported by the data where there is

positive effect between distributive justice on complainant satisfaction.

## H4: Procedural justice is related positively to word-of-mouth intention.

Procedural justice on word-of-mouth intention with the results of the study found 0.23 scale path coefficients with t-value 3.42 > 1.96 is significant. This indicates that the fourth hypothesis proposed in this study is supported by the data in which there is positive relation between procedural justice and word-of-mouth intention.

## H5: Interactional justice is related positively to word-of-mouth intention

The result found 1.50 scale path coefficients with large values t=10.97>1.96 is significant.

It indicates that the fifth hypotheses proposed in the study is supported by the data in which there is positive relation between Interactional justice and word-of-mouth intention.

## H6: Distributive justice is not related positively to word-of-mouth intention.

The result of research found path coefficient is 0.03 and t-value at -0.24 < 1.96, which significant meaning. It indicates that the third hypothesis proposed in the study is not supported by the data where there is positive effect between distributive justice on word-of-mouth.

## H7: Complainant satisfaction is related positively to word-of-mouth.

It found that the path coefficient is 1.23 and t-value 3.52 > 1.96 is significant. It indicates that the seventh hypothesis proposed in the study is supported by the data in which there is positive relation between complainant satisfaction and word-of mouth intention.

#### CONCLUSSION AND SUGGESTION

In general, the research hypotheses were well supported, with evidence confirming both the disconfirmation model as well as the important role of justice. Several important conclusions can be inferred from the study. First, the validity of the constructs under study was evaluated. Then, the influence of perceived justice of service recovery on complainant satisfaction and word-of-mouth intention at Hotel in Jakarta was fruitfully evaluated, as follows Procedural (a) justice related significantly to complainant satisfaction and word-of-mouth intention, (b) Interactional justice is significantly related to complainant satisfaction and word-of-mouth intention, (c) Distributive justice is not related to complainant satisfaction and word of-mouth intention, (d) Complainant satisfaction is significantly related to word-of-mouth intention.

Understanding the impact of justice perceptions has great relevance for

who deal with customer managers complaint handling. Proper analysis of justice perception can lead to training employees on what is appropriate interpersonal behavior, allowing customers to contribute in the decision making process and providing outcomes which customers perceive as being fair under the circumstances.

Managers that are interested in maintaining and building customer relationships should pay particular attention to developing just procedures for handling complaints. At the same time, managers should weigh the costs of addressing complaints against the potential harmful costs of negative word-of-mouth, thirdparty actions and brand switching. This research would help in developing strategies to allow for a more effective response to customer complaints and thus increase long-term sales and profits.

It will also allow researchers to advance in their understandings of justice theory, and to developing a more precise model of the customer complaining behavior process. Although two of the six hypotheses were not supported, the entire set of findings suggests that managers need to include perceived justice as a major component in models dealing with customer complaining behavior.

Results of this study suggest that managers need to design complaint handling strategies which are responsive to

fairness considerations in terms of outcomes/distributive. Thus, customer's needs and loss need to be thought off when planning recovery strategies.

It is much easier to keep current customers satisfied that it is to attract new customers; therefore it is important to handle customer complaints with care. Preventing customer dissatisfaction continues to be of uttermost importance due to its effect on customer satisfaction and the extent of word-of-mouth intention in the marketplace. Negative word-of-mouth has of affecting the power consumer expectations, brand or company image and eventually future sales and profits.

To provide a fair outcome, companies should be aware of the full costs incurred by the complainants. However, a firm that aims at a generous compensation for a failure should deliver the reparation in hand with the fair procedures and courteous conduct, otherwise its impact on customer satisfaction and negative word of-mouth might be less than desirable. That is why managers should not underestimate the influence of perceived justice on satisfaction. It is crucial for an organization to resort to an effective recovery strategy that would boost the customer's loyalty. Thus, firms need to revise carefully the fairness of their existing course of actions (procedural justice), outcomes (distributive justice), and customer-employee communication (interactional justice). Usually, customers

complain to the frontline employee. Therefore, managers should hire customer contact employees who are capable of handling complaints.

Empowerment is a powerful tool that managers can use to develop a fair complaint handling procedure. It allows front line employees to handle complaints in a prompt, accessible, convenient and flexible manner. Thus, it is crucial to have the employees trained, encouraged and empowered in order to perform the recovery process successfully.

In the future, more research needs to be conducted which tries to identify other variables that have an impact on post-complaint emotions, attitudes and behaviors and the mediating role service recovery dimensions and recovery satisfaction could be analyzed as well.

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# FINANCIAL DISTRESS PREDICTION AND SEEING THE INFLUENCE OF THE ALTMAN RATIO ON COMPANY FINANCIAL DISTRESS

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#### Abstract

This research aims to determine the level of bankruptcy of the company and to see if the Altman ratio can predict the condition of corporate bankruptcy in mining companies on the Indonesia Stock Exchange, because mining companies have a large role in the Indonesian economy. This study uses the Altman Z-Score model analysis to see how much the company's bankruptcy prediction and uses logistic regression to see how much the influence of the Altman ratio in predicting corporate bankruptcy. The data used is discriminant analysis using a variable from Altman Z-Score, a modification of four, namely X1 = Net Working Capital to Total Assets, X2 = Retained Earning to Total Assets, X3 = Earnings Before Interest and Tax to Total Assets, and  $X4 = Book \ Value \ of \ Equity \ to \ Total \ Liability.$  The Altman Z-score formula is Z = 6.56 X1 + 3.26 X2 + 6.72 X3 + 1.05 X4. Z-Score > 2.6 is categorized as healthy company, 1.1 < Z-Score < 2.6 is categorized as grey area and Z-Score < 1.1 is categorized as financial distress. The results of this study indicate that the Altman Z-Score model can be used to detect the possibility of corporate bankruptcy with the results of 7 companies in 2012, 9 companies in 2013, 10 companies in 2014, 14 companies in 2015 and 14 companies in 2016 experiencing financial distress. The results of this study also show that by using logistic regression, the Altman ratio can affect financial distress with the results of Net Working Capital to Total Assets (0.016 < 0.05) and Earnings Before Interest and Tax to Total Assets (0.000 < 0.05). It means that these variables can affect financial distress and reveal that among the variables found in the Altman Z-Score ratio, the most dominant variable is Net Working Capital to Total Assets and Earnings Before Interest and Tax to Total Assets.

**Keywords**: financial distress, the altman z-score, bankruptcy prediction

#### INTRODUCTION

Indonesia has the same natural resources and human resources, where these assets are spread throughout Indonesia. Thus, Indonesia should have no difficulty in working on and processing everything it has in an effort to improve the quality of national life. These assets include the mining sector such as gold mines in Papua, coal mines in Kalimantan, sand mines in Bangka Belitung, mineral mines, oil and gas mines, and many others.

Managing Director Natural Resources Lead Accenture Indonesia, Saut Maria Santosa, revealed that in the United States (US) geological survey, Indonesia was ranked sixth as a country rich in mining resources. As for the Southeast Asian region, Indonesia occupied the top position for new mining projects to be run, followed by the Philippines and Vietnam.

The revenue of mining companies listed on the Indonesia Stock Exchange

(IDX) in general declined in 2014. The slow-moving global economy caused low demand for commodities such as coal and crude palm oil (two important foreign exchange earners in Indonesia). Slowing economic growth in the People's Republic of China (PRC) was particularly alarming.

Pricewaterhouse Coopers (PwC) research results in 2016 showed that as many as 40 global mining companies suffered the biggest losses in history during 2015. In that year, they suffered a loss of 27 billion US dollars, equivalent to around Rp. 364.5 trillion at an exchange rate of Rp. 13,500 per US dollar. In 2016, mining commodity prices also declined to 25% compared to the previous year. In order to survive, mining companies try to increase their productivity, but some also release assets or close their businesses.

The falling prices of mining commodities and the decline in demand for mining materials from China, have a negative impact on the financial performance of domestic mining companies. In December 31, 2015, the capitalization value of national mining companies in the capital market was Rp. 161 trillion, down considerably compared to December 31, 2014, which reached Rp. 255 trillion.

Judging from the annual index issued by the IDX in 2012 - 2016 the mining sector always experienced a minus percentage.

The purpose of this study is to determine the level of corporate bankruptcy and to see if the Altman ratio can predict the condition of corporate bankruptcy in mining companies on the Indonesia Stock Exchange.

# RESEARCH METHOD

Pratama (2016<sub>a</sub>) stated that Financial Distress is a condition in which a company's finances are in a state of unhealthy or crisis. Financial distress occurs before bankruptcy. Bankruptcy itself is usually defined as a situation where the company fails or is unable to fulfill its obligations.

In this writing, the author uses a population of manufacturing companies listed on the IDX. The researcher conducted a purposive sampling technique with the criteria of each company. Companies that get a net profit of 2 consecutive years are categorized as healthy companies and are given the number 0 as the category variable. Companies that experience a net loss of 2 consecutive years are included in the criteria of financial distress and are given the number 1 as the category variable that will be used as the dependent variable in this writing, so that a sample of 36 companies is obtained. These criteria were used when using a logistic regression analysis tool to see the effect between the dependent variable and the independent variable using the modified Altman ratio.

Altman has combined several ratios into prediction models with discriminant analysis techniques used to predict a company's bankruptcy, with the term known as Z-score. Z-score is a score determined from a standard count that will indicate the possibility of a company's bankruptcy. Z-score for predicting bankruptcy of Edward Altman's formula is a multivariate measure of financial health and a powerful diagnostic tool that estimates the probability of bankruptcy entering a company within 2 years (Altman, 1986 in Cahyono, 2013).

Along with the times and also changes in economic conditions and market behavior, Altman modified his bankruptcy analysis model. In this Z-Score model Altman removes the Sales / Total Assets variable which is the sales ratio to total assets and replaces the amount of the coefficient value of all the variables used in predicting bankruptcy in a company (Irfan and Yuniati, 2014).

This analysis is named after the Modified Altman Z-Score Model. Altman (1995) in Pratama (2016<sub>b</sub>) stated that the Formula of the Modified Altman Z-Score Model (for all companies) is as follows:

$$Z = 6,56 X_1 + 3,26X_2 + 6,72X_3 + 1,05X_4$$

Where:

# $X_1 = Working \ capital/total \ assets$

This analysis is used to determine the ability of a company to fulfill all financial obligations that must be immediately fulfilled, by comparing working capital with total assets. Working capital is obtained by reducing current assets with current liabilities.

# X<sub>2</sub> = Retained earnings/total

From this ratio we can know the amount of capital that comes from internal parties, to finance the company's operations. Retained earnings are accumulated profits as long as the company operates. Retained earnings are obtained by reducing net income with dividends.

# X<sub>3</sub> = Earnings before interest and taxes/total assets

This ratio shows the company's ability to manage total assets to get profit before interest and tax (EBIT). This ratio looks very important, so Altman wants to give the biggest value to reach 6.72.

# X<sub>4</sub> = Book value of equity/book value of total liability

The ratio is used to measure the extent to which company assets are financed from debt. This means how much the debt burden borne by the company is compared to its assets. In general it is said that this ratio is used to measure the ability

of a company to pay all of its obligations, both short and long term if the company is dissolved or liquidated (Endri: 2009).

According to Altman (1995) in Pratama (2016), the classification of healthy and bankrupt companies is based on the value of Z-Score, which are:

# a. Z <1.10

The company falls into the category of financial distress.

### b. 1.10 < Z < 2.60

The company is included in the gray area category cannot determined whether the company is healthy or experiencing financial distress.

### c. Z > 2.60

The company falls into the category of not financial distress.

study also uses logistic regression. According to (Ghozali: 2006) this method is suitable for research whose dependentH1: There are significant differences between the variables are categorical (nominal or nonmetric) and the independent variables are a combination of metric and non-metric as in this study.

Logistic regression is used to test if the variables contained in the Altman ratio financial distress which represented by the value of the company's net income.

In this study, researchers do not conduct normative data tests because according to (Ghozali: 2006) logistic regression does not require normative assumptions on the independent variables. The normal multivariate assumption here cannot be fulfilled because the independent variable is a continuous (metric) and categorical (non-metric) mixture. Gujarati (2003) stated that logistic regression also ignores the problem of heteroscedacity, meaning here the dependent variable does not require homoscedacity for each of the independent variables. However, the testing analysis with Logistics Regression according to Santoso (2004) needs to pay attention to the following matters:

### **Assessing Feasibility of** a. **Regression Capital**

Note the output of Hosmer and Lemeshow with the hypothesis:

Testing of the hypothesis in thisHo: There is no significant difference between the classifications predicted by the observed classification.

> classifications predicted by the observed classification.

### Basic decision making:

Note to the goodness of fit test value as measured by the chi square value at the bottom of the Hosmer and Lemeshow test

if the probability is > 0.05, Ho is accepted.

if the probability is < 0.05, Ho is rejected.

# b. Assessing the Overall Model(Overall Fit Model)

The overall assessment of the regression model uses a value of -2 log likelihood (LL) where if there is a decrease in the number -2 log likelihood in the second block (Block Number = 1) compared to the first block (Block Number = 0) or value -2 LL Block Number = 0 > -2 LL Block Number = 1, it can be concluded that good regression.

### c. Coefficient of Determination

The magnitude of the coefficient of determination in the logistic regression model is indicated by the value of Nagelkerke R Square (R2), which is a test used to measure how far the independent ability is able to explain and influence the dependent variable. R2 values range from 0 to 1, where if the R2 value is small, the ability of the independent variable to explain the dependent variable is limited. Whereas, if R2 approaches 1, it means that the independent variable is able to provide all the information needed to predict the dependent variable. For regression with independent variables more than 2, adjusted R2 is used the coefficient of as determination.

# d. Logistic Regression Test

The test with logistic regression model used in this study is to determine the effect of each independent variable on the dependent variable. Partial parameter significance testing can be done through the Wald test of the test criteria, namely:

The level of trust used is 95% or a significance level of 5% ( $\alpha = 0.05$ ).

Criteria for acceptance or rejection of hypotheses are based on p-value significance. If the significance level> 0.05 H0 is rejected, if the significance level <0.05 H0 is accepted.

### RESULTS AND DISCUSSION

Data that has been collected and calculated will then be processed and analyzed using descriptive statistics by the researchers.

The following are descriptive values presented in Table 4.1 in the appendix.

The table above shows that the average amount of data on the net working capital to total assets, retained earnings to total assets, earnings before interest and taxes to total assets and book value of equity to total liability is 180 data which are the total sample study period from 2012 -2016. Working capital to total assets has a minimum value of -1.781, a maximum value of 0.757 and an average value of 0.079. Retained earnings to total assets variable has a minimum value of -1,731, a maximum value of 1,325 and an average value of 0.058. Earnings before interest and taxes to total assets have a minimum value of -1.736, a maximum value of 1.329 and an average value of 0.042. Book value of equity to total liability has a minimum value of -0.496, a maximum value of 23,557 and an average value of 2,052.

In this writing, the author uses the Altman Z-Score to predict the bankruptcy of a company.

Calculation results using the Altman z-score model can be seen in Table 4.2 in the Appendix.

The results of the analysis of the modified Altman Z-score model in table 4.2 shows that mining companies listed on the Indonesian stock exchange in 2012-2016 which experienced financial distress were 7 companies in 2012, 9 companies in 2013, 10 companies in 2014, 14 companies in 2015 and 14 companies in 2016.

There were 6 companies that throughout the year had always received a red report card, including companies with the codes ENRG, ARII, BORN, BUMI, BYAN and CTTH.

In this writing, the authors also uses logistic regression method analysis. This logistic regression analysis is used to see the effect between the independent variable and the dependent variable.

The following are the results of the analysis using logistic regression analysis which is presented in table 4.3 in the appendix

The results of logistic regression analysis shows that the ratio of net working capital to total assets and earnings before interest and tax to total assets have a significant effect on financial distress with each value of 0.16 and 0.000 smaller than 0.05.

### **CONCLUSION AND SUGGESTION**

Based on the results of the analysis conducted in this study, it can be concluded as follows:

- 1. The results of the analysis of the modified Altman Z-Score method shows that mining sector companies listed on the Indonesian stock exchange in 2012-2016 experienced which financial distress conditions were 7 companies in 2012, 9 companies in 2013, 10 companies in 2014, 14 companies in 2015 and 14 companies in 2016.
- 2. The results of the research using Logistic Regression **Analysis** shows that there are several Altman Z-Score ratios that can provide a significant picture in predicting financial distress measured by using net income as the dependent variable which is the ratio of Net Working Capital to Total Assets (X1) obtained the results of significant values of 0.016 < 0.05. This means that the variable X1 has a significant influence on financial distress, and the ratio of earnings before interest and tax (X3) obtained significant value of 0.000

<0.05. This means that the variable X3 has a significant effect on financial distress.

3. The results of the study using logistic regression analysis shows that mining sector companies listed on the Indonesian stock exchange in 2012-2016 contained 76 data included in the financial distress category and 104 data included in the non-financial distress category.

Based on the limitations in this study, there are several suggestions for future research, namely:

- For future researchers, it is expected to add the variables studied so that they can better explain financial distress.
- Further researchers are expected also to be able to use technical analysis in addition to fundamental analysis.
- For the next researchers, it is also expected to study more deeply the phenomena that will be raised to fit the results.
- Subsequent research can extend the observation period, so that more consistent research can be obtained.

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# THE INFLUENCE OF PROMOTION EXPENSES, SAVINGS, AND FINANCIAL RATIOS TO DIBURSED LOANS ON BANK PEMBANGUNAN DAERAH IN INDONESIA

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#### Abstract

Bank as financial intermediaries have a vital function, which is collecting and distributing funds. This research is focused on disbursed loans, because it is an activity that generates the greatest income for a bank and can help public who need funds. This research is aimed to examine the influence of promotion expenses, savings, while Capital Adequacy Ratio (CAR), Gross Non Performing Loan (Gross NPL), and Return on Asset (ROA) as proxy of financial ratios in this research to disbursed loans. The objects of this research are Bank Pembangunan Daerah (BPDs) listed in Bank Indonesia (BI) and published their annual reports and financial statements which have been audited by the Public Accountants' Office in the period 2008-2012 as samples. The sampling technique uses purposive sampling with specific criteria, so that 12 BPDs are selected. The analytical method uses multiple regression analysis with SPSS version 20. The results of this research show that promotion expenses have influence on disbursed loans partially on the BPDs, savings have influence on disbursed loans, CAR has influence on disbursed loans, Gross NPL has no influence on disbursed loans, and ROA has no influence on disbursed loans. Independent variables (promotion expenses, savings, CAR, Gross NPL, and ROA) have influences on disbursed loans simultaneously on the BPDs.

Keywords: CAR, disbursed loans, financial ratios, NPL, promotion expenses, ROA, savings

### INTRODUCTION

This study focuses on disbursed loans which is in accordance with Handayani (2005) who states that banks have a function as financial institutions that play a role in the progress of payment traffic. The development of payment traffic shows the role of banks in the payment system for all economic sectors. Bank Pembangunan Daerah (BPDs) or regional banks according Bank Indonesia (BI) are agents of development to support the economic recovery in regions, including the implementation strategy. Then, BPDs as regional champions, have challenge that their disbursed loans are still low. According to Suprapto (2012), disbursed

loans are influential in all areas of life, especially in economy world to improve circulation of money and excite world of business in public. Providing loans to the public was an activity that generates the greatest income for banks.

This research is related to the framework of regional autonomy and fiscal decentralization, namely statutes, more obvious to areas in administering government and financial services and management based on the principles of transparency, participation, and accountability (Kementrian Keuangan Indonesia, 2012). Promotion role is to spread information to consumers and increase

consumer loyalty. Various demands arise from consumers who are more critical of bank performance so that promotion expenses tend to increase. The results of the study by Lausu (2011) indicate that an increase in bank promotion expenses are needed to increase disbursed loans. Effective and potential promotional activities become a means of communication and marketing of the company's products or services today, especially the marketing of credit products distributed by banks.

Another factor is the increase in savings in an effort to increase the disbursed loans. Based on the results of research by Mukhlis (2011), savings have a positive and significant effect on total disbursed loans. This is related to the function of banks as financial intermediaries, which collect and distribute funds in the form of credit to the public. Furthermore, financial analysis ratios can be applied to measure bank performance and risk level. This study uses the following variables: bank capital represented by the Capital Adequacy Ratio (CAR), valuation of asset quality represented by Gross Performing Loan (Gross NPL), and profitability as measured by Return on Assets (ROA).

The result of the study by Meydianawati (2006) shows that CAR variable has a positive and significant effect on the total disbursed loans. This indicates that an increase in CAR resulted in a total increase in disbursed loans to the community. The result of Sari's research (2013) shows that Non Performing Loans (NPL) has a negative effect on disbursed

loans, so that an increase in NPL would reduce disbursed loans to the public. This is related to a research by Manalu and Norman (2012) which shows that the increase in Gross NPLs illustrates the poor performance of banks in the process of billing and lending, because there is an increase in bad credit which will cause financial losses to banks. According to Ayu, et al (2012), ROA has a positive and significant influence on the amount of disbursed loans.

The reason for choosing these variables is because they have been investigated in several previous studies, but the object of this study uses BPDs that are different from previous studies. This study applies these variables to determine the effect of promotion expenses, savings, and financial ratios (CAR, Gross NPL, and ROA) on disbursed loans partially and simultaneously to the BPDs.

# LITERATURE REVIEW

#### Disbursed loans

Banks as financial institutions have a vital role in the economy. Almost all economic activities in the community need a loan. The bank's main business is providing loans, so that it has a very broad influence in all areas of life, especially in the economic sector. According to Suprapto (2012), disbursed loans not only benefit banks and debtors but also affect all areas of life, especially in the economic field, namely increasing the circulation of money and stimulating public business. According to Law No. 10 of 1998 (Indonesian law) concerning banking, the bank's main function is to collect and channel funds to the public. This

distribution will be given to parties who need funds as disbursed loans, so that is one of the important things for the banking world. The definition of a debtor or party who gets a loan according to Oktavia (2010) is a party that gets trust from creditors, of course after fulfilling the requirements and evaluating the ability of the debtor

# **Promotion expenses**

According to the results of research conducted by Sari (2008), the increase in promotion expenses is a tool used to increase customer interest in products or services. In this case a marketing communication strategy is also needed that is quite effective in attracting the attention of consumers in developing countries such as Indonesia, whose culture is still interested in prizes. So, there is an increase in promotion expenses by giving gifts to consumers. It is indicated that consumer satisfaction increases because they feel they have been shopping carefully. It takes an increase in promotion expenses in the face of high competition between banks, so companies must improve their product or service marketing strategies to attract customers and prospective customers to use and buy bank products or services.

# **Savings**

Saving is one of the products in the bank to collect funds from the public. The definition of saving according to Law No. 10 of 1998 (Law in Indonesia) is a deposit that can only be withdrawn under certain agreed conditions, but

cannot be withdrawn by check, current account, and other means commensurate with it. The meaning of withdrawal with certain conditions is in accordance with the agreement made between the bank and the depositor. Savings are bank loans to owners that are classified as short-term debt on the balance sheet. This is due to the absence of a saving deadline, so that it can be withdrawn at any time. Every bank has a different saving product. This saving product can be used as a promotional tool in the form of interest rates, attractive prizes, comfort facilities, and others.

# Capital Adequacy Ratio (CAR)

According to Almilia and Winny (2005) CAR reflects how much all bank assets contain risks (loans, equity participation, securities, and bills in other banks) to be financed from their own capital. This shows that CAR is a solvency ratio or capital ratio that can measure a bank's ability to provide funds for business development needs and estimate the risk of losing funds as a consequence of the bank's operations. The provisions of BI (2012) stipulate the minimum CAR value for each bank is 8%, so the higher the CAR, the better the performance of a Bank. CAR value can be one of the benchmarks for the community in choosing the right bank. A high CAR indicates that banking companies have sufficient capital, so public trust will increase.

# **Gross Non Performing Loan (Gross NPL)**

Non-performing loans (NPLs) consist of two types, namely Gross NPL and Net NPL.

NPL can measure the amount of Non-Performing Loans anticipated by the bank. Gross NPL consists of the number of nonstandard, doubtful, and bad loans to be disbursed. Net NPL only compares bad loans and total disbursed loans. Gross NPL aims to take into account non-standard and doubtful loans that in the future it is predicted to increase its status to bad credit. Gross NPL aims to anticipate the risk of losses that do not take into account the allowance (BI, 2013). Based on the provisions of BI (2012), the maximum Gross NPL level is 5% as the amount of tolerance for bank health. According to Bank Indonesia Regulation 2012, loan risk is a risk caused by a failure of a customer or other party to fulfill a loan to the bank in accordance with the agreed arrangement. Loan risks are non-standard. doubtful, and bad According to BI (2003), risk is the potential for occurrence of events that cause losses. Banks have risks because disbursed loans to the public have the possibility that the debtor does not return the loan to the bank. Loans that are not met by the debtor will cause loss of bank income.

#### Return on Asset (ROA)

ROA is a profitability ratio that measures the ability of banks to obtain overall

profits. The increase in bank ROA shows an increase also in the level of profit achieved by the bank and a better bank position in using assets. Based on BI (2004), ROA is used to measure skills in the use of assets that generate gross profit. Increased ROA shows better ability or performance in the bank. The level of profitability with the ROA approach is intended to measure bank management in managing several assets to earn income. According to BI (2012), healthy banks must have a minimum ROA value of 1.5%. Greater ROA shows that company performance is getting better because of higher returns. A bank's ROA level can be a consideration for prospective customers in choosing a bank with good performance. According to Almilia and Winny (2005), ROAis used to measure the ability of bank management in profit or profit before tax resulting from the average total assets of the bank. The greater the ROA, the greater the level of profit achieved at the bank.

### **Research Framework**

Based on previous research and theory, this study shows that promotion expenses, savings, CAR, Gross NPL, and ROA have an influence on disbursed loans. This research framework is illustrated in Figure 1 as follows:

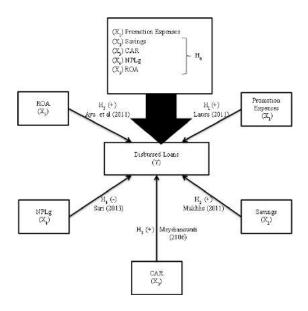


Figure 1: Research Framework

# **Research Hypothesis**

A hypothesis is a statement that will be examined as a temporary answer to a problem. Research conducted by Putra (2013) states that promotion of one of the marketing mix variables has a vital role in marketing a product or service. The research revealed that without promotion, the existence of products or services would not attract the attention of consumers, even consumers were not aware of the products or services offered. According to research conducted by Sari (2008), promotion expenses are used to increase customer interest in the products or services offered by banks. The results of the research conducted by Lausu (2011) show that promotion expenses have a positive and significant effect on the disbursed loans.

This shows that the increase in promotion expenses will increase the disbursed loans. Based on research, the formulation of the

hypothesis is as follows:

# H<sub>1</sub>= Promotion expenses have influence on disbursed loans to the BPDs.

Savings are bank debt to saving owners as short-term debt on the balance sheet. This shows that there is no limitation on period savings, so withdrawals can be made at any time. According to research conducted by Danibrata (2011), savings are a very important source of funding for banks because interest rates are lower than product demand deposits and are more stable than time deposits. Research by Mukhlis (2011) states that savings have a positive and significant effect on the amount of disbursed loans. Based on previous research, the hypothesis is formulated as follows:

# $H_2$ = Savings have influence on disbursed loans to the BPDs.

CAR is a solvency ratio or capital ratio that measures inventory funds for business development needs and has the risk of losing funds as a consequence of bank operations. The results of research by Meydianawati (2006) revealed that CAR has a positive and significant influence on the number of disbursed loans. It was concluded that an increase in CAR resulted in an increase in disbursed loans to the public. Based on previous research, the hypothesis is formulated as follows:

# $H_3 = CAR$ has influence on disbursed loans to the BPDs.

NPL aims to determine performance management in using all assets efficiently. According to Manalu and Norman (2012), the greater the Gross NPL shows poor bank performance in the credit collection and distribution process. This indicates an increase in both of them will increase bank losses. Research by Sari (2013) said that NPLs had a negative and significant influence on lending to regular banks in Indonesia. This shows that an increase in NPL will reduce the credit disbursed, because of the high NPL due to banks not interested in lending to the public. The research hypothesis is formulated as follows:

# $H_4$ = Gross NPL has influence on disbursed loans to the BPDs.

The level of profitability with the ROA approach aims to measure the ability of banks to manage assets to earn income. The results of the study by Ayu, et al. (2012) show that ROA has a positive and significant effect on the volume of disbursed loans, so that an increase in ROA will be followed by an increase in disbursed loans and vice versa. Based on the research, this study can formulate the following hypothesis:

# $H_5 = ROA$ has influence on disbursed loans to the BPDs.

This study simultaneously examines the effect of independent variables (promotion expenses, savings, CAR, Gross NPL, and ROA) on the dependent variable (disbursed loans) on the BPD, so the hypothesis is formulated as follows:

 $H_6$  = Independent variables (promotion expenses, savings, CAR, Gross NPL, and ROA) have a simultaneous influence on disbursed loans to the BPDs.

# RESEARCH METHOD

The independent variables in this study are promotion expenses, savings, and financial ratios such as (CAR, Gross NPL, and ROA). The dependent variable is distributed credit. Data analysis techniques in this study were conducted to test hypotheses using multiple regression in SPSS version 20 such as descriptive analysis, classical assumption test, and hypothesis testing. The objects of this

research are Bank Pembangunan Daerah (BPDs) listed in Bank Indonesia (BI) and have published their annual reports and audited their financial statements in Public Accountants Office for the period December 2008-2012. The population of this study is all BPDs

registered in BI. Based on the BI directory in 2013, all populations of BPDs are 26 (twenty six). The samples are selected using a purposive sampling method. The criteria used in selecting samples are shown in table 1 as follows:

Table 1.
Samples of Collecting Criteria

Specified Criteria		
Number of Bank Pembangunan Daerah (BPD) listed in		
BI	26	
<b>Reduction of the samples:</b>		
BPDs which have not completed annual report in the		
period 2008-2012	-14	
The financial statements of BPD that were not audited		
by the Public Accountants' Office in the period 2008-		
2012	0	
BPDs which have not required data for this research		
•	0	
Number of samples in this research		

Source: Secondary data processed

Based on predetermined criteria, obtained 12 BPDs as the object of research. Research data is sourced from the official BPD website. There is also additional information through the BI website address (www.bi.go.id). Based on the samples collected, the list of BPDs is shown in table 2 as follows:

Table 2. Samples of Bank Pembangunan Daerah

No	Bank Pembangunan Daerah
1	PT. BPD of Bali
2	PT. BPD of Jambi
3	PT. BPD of Jawa Barat dan Banten, Tbk.
4	PT. BPD of Jawa Timur, Tbk.
5	BPD of Kalimantan Timur
6	PT. BPD of Kalimantan Barat
7	PT. BPD of Kalimantan Selatan
8	PT. BPD of Nusa Tenggara Barat
9	PT. BPD of Riau Kepri
10	PT. BPD of Sulawesi Tenggara
11	PT. BPD of Sumatera Barat
12	BPD DIY (Daerah Istimewa Yogyakarta)
	Source: Secondary data processed

Source: Secondary data processed

### RESULTS AND DISCUSSION

According to research conducted by Sari (2008), increased promotion expenses are useful for increasing customer interest in products or services. Promotion expenses in this study were obtained from the BPDs financial report notes. According to research conducted by Danibrata (2011),

savings are important sources of funding for

banks because interest rates are lower than deposits and more stable than current accounts. Saving is one of the Third Party Funds in this study that comes from the BPD financial reports. CAR is a ratio that shows how much all assets contain bank risk (loans, investments, securities, other bank bills) financed from capital. Non-Performing Loans are non-standard. doubtful and non-performing Problem Loans are calculated on a gross basis (not deducted by Asset Allowances). Numbers are calculated per position (not annualized). ROA is a ratio that measures the ability of a bank to obtain a net profit from the total assets owned by a bank and shows whether the company uses all available assets correctly. Descriptive tables of this study are shown in table 3 as follows:

Table 3.

Results of Descriptive Statistics Minimum Maximum Mean Std. **Deviation** Disbursed loans 60 0.73 34.77 6.79 6.74 **Promotion expenses** 0.00 0.30 0.01 60 0.11 **Savings** 60 0.21 9.05 2.48 1.96 CAR 8.96 40.66 5.55 60 19.13 Gross NPL 60 0.04 9.22 1.84 1.79 ROA 60 1.27 7.44 3.88 1.19

Source: SPSS Secondary data processed

Based on descriptive statistics in table 3, it can be seen that in 2008-2012 the number of samples was 60, consisting of 12 BPDs in Indonesia. Based on tables 4.15 and 4.16, the variable loans distributed have a minimum value of 0.73 trillion, while the maximum value is 34.77. Promotion expenses have a minimum value of 0.00 trillion or ten billion seven hundred and forty six million and a maximum value of 0.30 trillion. The minimum value of savings is 0.21 trillion, while the maximum value is 9.05 trillion. The average value of CAR is 19.13%, and this indicates that banks are healthy because they have met BI standards

of more than 8%. The minimum value is 8.96%, while the maximum value is 40.66%. So, the value of CAR in the BPDs for the 2008-2012 period is in the healthy category. The average Gross NPL is 1.84%, and has met BI standards, which is less than 5%. The minimum value is 0.04% and the maximum value is 9.22%. The maximum value of Gross NPL does not meet BI standards. The average value of ROA is 3.88%, then it meets BI standards which is more than 1.5%. This shows better financial performance. The minimum value is 1.27% and the maximum value is 7.44%. The minimum value does not meet BI standards.

The classic assumption test in this study has fulfilled the BIRU criteria (Best Linear Unbiased Estimator), so that it can be used in the analysis of the resulting model, and can be compared with the theory. This hypothesis test consists of the coefficient of multiple linear regression analysis, partial test (t-test), simultaneous test (F-test), and determination coefficient test (R2).

# Partial Test (t-test)

Partial test (t-test) is conducted to determine the effect of each independent variable partially (promotion expenses, savings, CAR, Gross NPL, and ROA) on the dependent variable (disbursed loans). The t-test of this study is shown in table 4 below.

Table 4.

Partial Test on Promotion Expenses				
Model	В	Standardized Coefficients	t	Sig.
Promotion	-138.162	176		.009
expenses			2.7	
			28	

Source: SPSS Secondary data processed

Based on the results of the test, the value of t is calculated (-2,728) and a significance value (0,009). The significance value is less than 0.05 and the calculated t value (-2,728) is greater than t table (1,674). This shows that the promotion expenses at the BPDs have an influence on disbursed loans partially, so the hypothesis (H1) is accepted. The BPDs in this study tend to focus more on marketing to increase the collection of Third Party Funds, namely demand deposits, savings, and time deposits. Promotion expenses tend to be used to publish interest rate increases on Third Party Fund collection products. This has an impact on

the increase in lending rates plus the administrative costs of loans offered by banks, which has resulted in a decrease in public interest in borrowing funds from banks due to high interest rates. This chronology is consistent with the results of research conducted by Yoga and Ni Nyoman (2013) which shows that an increase in loan interest rates will result in a decrease in disbursed loans. This research is also very suitable with the research conducted by Lausu (2011) which states that promotion expenses have an influence on disbursed loans.

Table 5.
Partial Test on Savings

Model	В	Standardized Coefficients	t	Sig.
Savings	3.394	.988	14. 478	.000

Source: SPSS Secondary data processed

According to the partial calculation of the test, the value of t is calculated on savings (14,478) and significance value (0,000). Significance value is less than 0.05 and calculated t value (14.478) is greater than t table (1.674). This shows that savings have an influence on disbursed loans partially, so the hypothesis (H2) is accepted. Savings have an influence because the greater the savings of the community in the bank, the greater the disbursed loans. The results of this study are in accordance with the theory that the main

function of banks is as financial intermediaries, namely collecting funds from the public in the form of savings and channeling it to the public in the form of loans. The results of this study also support the theory of BI (2013) which states that banks are business entities oriented to increase profits through each operational activity in the form of loans to earn income. The results of this study support the research conducted by Mukhlis (2011) which states that an increase in the amount of savings will increase the ability of funds used as bank loans.

Table 6.
Partial Test on Capital Adequacy Rat

Model	В	Standardized Coefficients	t	Sig.
CAR	.107	.088	1.402	.167

Source: SPSS Secondary data processed

Based on the partial test calculation, obtained the value of t arithmetic (1.402) which is less than t table (1.674) and significance value (0.167) which is greater than 0.05. This shows that the CAR does not affect disbursed loans partially, so the hypothesis (H3) is rejected. Theory according to BI (2013) states that an increase in capital is greater than an

increase in Risk Weight Assets. This shows the bank's high ability to cover losses, so that banks can allocate funds to productive assets, one of which is in the form of disbursed loans. But, when an increase in CAR is smaller than an increase in Risk Assets, banks will be careful in distributing funds. So, CAR does not have an influence on disbursed loans.

Table 7.
Partial Test on Gross Non-Performing Loar

Model	В	Standardized Coefficients	t	Sig.
Gross NPL	.292	.077	1.2 83	.205

Source: SPSS Secondary data processed

According to the partial calculation, obtained the Gross NPL t value (1,283) and significance value (0.205). Significance value greater than 0.05 the value of t count (1,283) is smaller than t table (1,674). This shows that Gross NPL does not partially affect disbursed loans, so the hypothesis (H4) is rejected. According to the research of Yoga and Ni

Nyoman (2013) and Hasanudin and Prihatiningsih (2010), Gross NPL has no influence, because debtors are still obliged to pay interest on loans, so there is income for banks to increase disbursed loans to the public. The conclusion is that the increase or decrease in the Gross NPL does not have an influence on the disbursed loans.

Table 8.

Partial Test on Return on Asset				
Model	В	Standardized Coefficients	t	Sig.
ROA	496	088	-	.143
			1.4	
			87	

Source: SPSS Secondary data processed

At ROA, there is a value of t count (-1,487) and a significance value (0.143). The significance value is greater than 0.05 and the calculated t value (-1.487) is smaller than t table (1.674). This shows that ROA does not have a partial impact on the disbursed loans, so the hypothesis (H5) is rejected. ROA does not have an influence on disbursed loans because there are other factors that are more considered by the BPDs about disbursed loans. Another factor according to the BI report (2013) is the increase in competition among banks, so that the BPDs will continue to increase disbursed loans in the face of interbank competition by funding economic activities to people who need credit. Both high and low ROA levels are not expected to be a barrier for banks to provide loans to the public. This is in accordance with the BPDs' vision of channeling loans to the public to assist the government in implementing regional autonomy policies and regional economic development.

#### **Simultaneous Test**

The F-test was conducted to examine the effect of independent variables (promotion expenses, savings, CAR, Gross NPL, and ROA) on the dependent variable (distributed credit) simultaneously. The F-test in this study is shown in table 9. The calculated F value is 56,861 and a significance value of 0,000 which is less than 0.05 is obtained in table 9. This shows that the H6 hypothesis is approved, so that there are influences from independent variables (costs of promotion, savings, CAR, Gross NPL, and ROA) on disbursed loans simultaneously.

Table 9.

Simultaneous Test				
Model	F	Sig.		
Regression	56.861	0.000		

Source: SPSS Secondary data processed

#### **Coefficient of Determination Test**

The coefficient of determination (R2) serves to see the extent to which the overall independent variable can explain the

dependent variable. The coefficient of determination in this study is shown in table 10 below:

Table 10.
Coefficient of Determination Test

Model	R	R Square	Adjusted R Square
1	0.917	0.840	0.826

Source: SPSS Secondary data processed

Based on table 10, there is an Adjusted R Square value of 0.826 or 82.6%. It shows that 82.6% of the dependent variable can be explained by independent variables, while the remaining 17.4% is explained by other factors. The Adjusted R Square value that approaches 1 (one) indicates that the independent variable also provides almost all the information needed to predict the dependent variable.

# CONCLUSION AND SUGGESTION

Based on the data analysis and discussion in this study, the conclusion of this study is that Promotion expenses have an influence on disbursed loans in part to the BPDs, savings have an influence on the disbursed loans, CAR does not have an influence on disbursed loans, Gross NPL has no influence on disbursed loans, and ROA has no

effect on the disbursed loans. Independent variables (promotion expenses, savings, CAR, Gross NPL, and ROA) have an influence on disbursed loans simultaneously to the BPDs.

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# ANALYSIS AND DESIGN CASH SALES ACCOUNTING INFORMATION SYSTEM AT UTAMA ALUMINIUM STORES

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#### Abstract

This research was conducted at Utama Aluminum Store which is a companyengaged in general trading or general supplier and manufacture of various doors, frames, windows, X Panda, mosquito wire, and window displays. The purpose of this study was to determine and evaluate the cash sales accounting information system that was running at Utama Aluminum Store and to provide an alternative design of cash sales accounting information systems at Utama Aluminum Store. The data used in this study are primary data obtained directly from Utama Aluminum Store and secondary data obtained in the form that has been in the form of publications. The analytical tool used in this study is a qualitative descriptive analysis tool by analyzing the system using the COSO method, which then continues the conceptual design phase by designing a document flow chart (flowchart), Data Flow Diagram (DFD), Entity Relationship Diagram (ERD), Normalization. After that proceed to the physical design stage but only limited to designing database design, input and output design. Based on the results of the study, the researchers found that the cash sales system run by the company was less effective because there were still a number of tasks in the sales section, and the warehouse section, and also the documents used were still not meeting the system requirements. In addition, the resulting report is a sales report that is only recorded in a book that can cause the resulting report to be ineffective and cause fraud. Furthermore, the researchers designed a cash sales accounting information system that is able to overcome these weaknesses and shortcomings.

Keywords: Analysis, Accounting Information System, Cash Sales, Design

#### INTRODUCTION

In the current era of globalization the economy is growing rapidly, especially in the business world and the industrial world with the number of new companies emerging. The number of new companies creates competition in domestic companies increasingly stringent and every company wants to win the way that the company remains standing and can compete, named by working effectively, efficiently, and precisely with a high level of

accuracy in order to continue to run and survive in the competition competitive. For this reason, a very effective and efficient information system is needed. Companies are required to be fast, careful and precise in making decisions that have a significant impact on competition such as on-time delivery of goods, quality of goods, and order satisfaction. To meet the information needs of

internal parties and external parties, a system of accounting information systems is arranged.

An accounting information system is one type of information system needed by a company in handling its day-to-day operational activities to produce accounting information as well as other information regarding the company's business processes needed by management and other related parties in relation to decision making and other policies.

Utama Aluminium Store is a company engaged in general trading and manufacturing work on the manufacture of doors, frames and windows. Currently Utama Aluminum Store has 3 permanent employees and has several daily employees if there is a large project. This Utama Aluminum store has a turnover of around Rp.50,000,000 to Rp.300,000,000 per month where the presentation of the cash sales transaction is around 70% and the credit sales are 30%. But in the cash sales accounting information system that occurred in Utama Aluminum Store, it still uses a simple manual system in recording cash sales transactions. In the process of recording transactions into documents such as SPH, order letters, sales invoices, and travel documents are still manually. In addition, cash sales accounting records are still carried out in a simple notebook and the resulting report is in the form of an annual sales report.

Based on the results of the interviews conducted, there has been an error in recording the nominal number on the sales invoice which resulted in a decrease in sales at the end of December 2017 by 10% which should have

been around Rp. 65,000,000 while the cash received at that time was only around Rp. 61,000,000 with a decrease in sales resulting in reduced profits. This happens due to a lack of recording in the sales section and a human error. For this reason, Utama Aluminum Store is expected to implement an adequate accounting information system so that it can oversee sales activities so that it runs effectively and efficiently.

In carrying out its function there is a trap of tasks that occur, where the sales part concurrently as well as the finance and accounting department, and there is no part of the delivery of goods, so that the warehouse part that performs the task. For this reason, an improvement is needed in the current system and designing an accounting information system that suits the needs of the company so that the company's operating activities become better and provide good information for the company.

The purposes of this study are to analyze the cash sales accounting information system that was running at Utama Store Aluminum, to analyze whether the cash sales accounting information system in Utama Store of Aluminum is running according to the Internal Control Standards, and to make an alternative design of the cash sales accounting information system at Utama Aluminum Store.

### LITERATURE REVIEW

# a. Understanding of the System

According to Mulyadi (2016: 2) The system is a group of elements that are

closely related to each other, which function together to achieve a certain goal.

# **b.** Understanding Information

According Jogiyanto (2014: 8) explains that information is information is data that is processed then becomes a form that is more useful and more meaningful for those who receive it, describe an event (event), and real unity (fact and entity) and used for decision making.

# c. Understanding of Accounting

According to Diana and Setiawati (2011: 14) accounting is the process of identifying, measuring, recording and communicating economic events of an organization (business or non-business) to parties with an interest in the business information (information users).

# d. Definition of Accounting Information Systems

According to Moscove and Simkin in Jogiyanto (2014:17) accounting information systems are a component of an organization that collects, classifies, processes, analyzes, communicates information financially oriented on decision making that is relevant to external parties and parties within the company (in management). principle is Related functions in cash sales are: sales functions, cash functions, warehouse functions, shipping functions and accounting functions. Documents used in the cash sales system are: cash sales invoices, cash register ribbons, credit card sales slips, bill of lading, COD sales invoices, bank deposit

receipts and recapitulation of cost of goods sold. The procedures that make up the system are: sales orders, cash receipts, goods delivery, cash sales records, cash deposits to banks, recording of cash receipts, and recording of cost of goods sold.

# e. Internal Control System

According to COSO defining internal control as a process implemented by the board of commissioners, management, and those under the direction of both, to provide reasonable assurance that the objectives control are achieved by considering matters such as: effectiveness and operational efficiency of the reliability of organization, financial reporting and suitability with applicable laws and regulations. The five components in the COSO control model are the control environment, activities, control risk information assessment, and communication and supervision.

# f. System Analysis and Design

According Jogiyanto (2014: 129) system can be defined as analysis decomposition of a complete information system into its component parts with a view to identifying and evaluating problems, opportunities, obstacles that occur and the expected needs so that improvements can be proposed. While system design can be interpreted as preparation of implementation design, illustrates how a system is formed, in the form of depiction, planning and sketching or arrangement of several elements that are separated into a single

unit that is complete and functioning, concerning the configuration of software components and devices hard from a system (Jogiyanto, 2014: 197).

RESEARCH METHOD

The object of this study is the Utama Aluminum Store located on Jl. Raya Rawa Panjang, Bekasi Barat. Tel (021)824111333.UtamaAluminum Store was founded in 2012 which was founded by Mr. Suyadi as the sole owner in the Utama Aluminum Store. Utama Aluminum Store is engaged in general trading or general supplier and manufacture of various doors, frames, windows, etc. specialist in aluminum and glass. At present the company has 3 employees and 4 workers.

The data in this study uses primary data and secondary data. Primary data is collected from interviews with the company while secondary data is in the form of documents used in cash sales transactions at the Utama Aluminum Store. The procedure in collecting data for this research is by conducting interviews, observation documentation. While the analysis technique used is descriptive qualitative analysis using flowcharts, data flow diagrams (DFD), entity diagrams relationship (ERD), and normalization. Then conduct physical design which includes input design, database design and output design.

### RESULTS AND DISCUSSION

The procedure of the cash sales system that is applied at the Utama Aluminum Store will be explained as follows:

# 1. Sales Department

- a. Provide a price quote and design to the customer
- b. Receive POs from customers
- c. A copy of the PO received
- d. Sign and stamp the copy of the PO to be sent back to the customer.
- e. Make 3 sales invoices.
- f. Provide a copy of the PO, and sales invoice 1 to the customer, give sales invoices 2 to the warehouse and archive fixed sales invoices 3 and PO.
- g. Receive sales invoice 2 that has been authorized by the warehouse section and receipt transfer from the customer
- h. Make a 2-sheet travel letter.
- i. Make a sales report
- j. Provide travel documents 1 to the warehouse, archive fixed travel documents 2, provide sales invoice documents 2 that are authorized and sales reports to the chief

# 2. Warehouse Section

- a. Receive sales invoice 2 from the sales department.
- b. Prepare items to be sent according to sales invoice 2.
- c. Authorize Sales Invoice 2
- d. Submit a sales invoice 2 that has been authorized to the sales department.
- e. Receive travel letter 1 from the sales department.

f. Request customer signature

g. Submit road certificate 1 along with the goods to the customer.

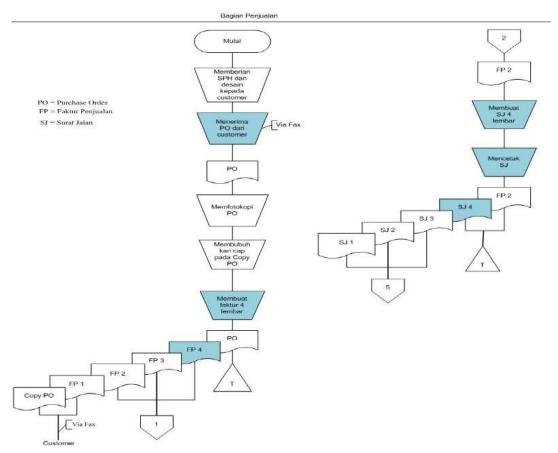
# Design of Proposed Cash Sales Accounting Information System

After analyzing the cash sales accounting information system that runs at Utama Store Aluminum and finding some

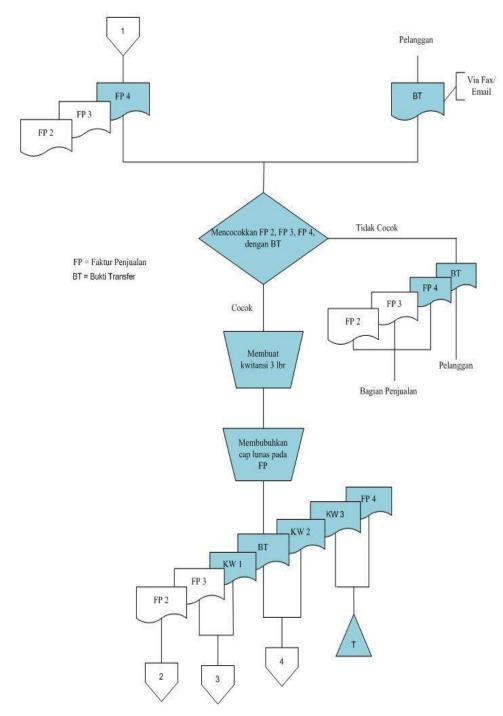
weaknesses in the running system, the researchers will design a proposed payroll accounting information system that is expected to help and simplify the work, especially when recording transaction data and generating accurate information, and effective. Based on the results of the analysis, the researchers propose cash sales procedures at Utama Aluminum Store as follows:

# a. Flowchart for Proposed Cash Sales

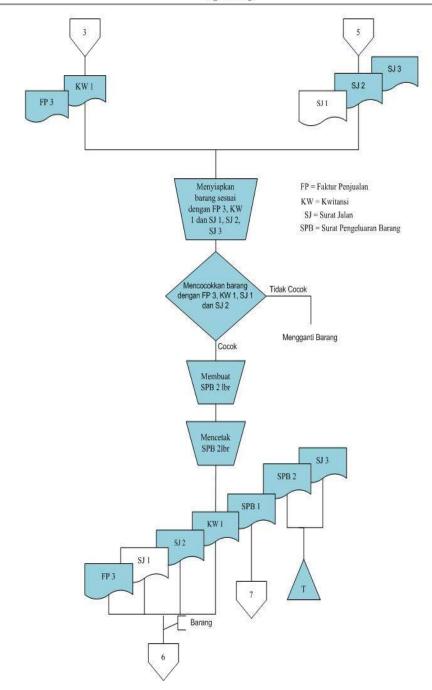
# Sales Department



Financial department

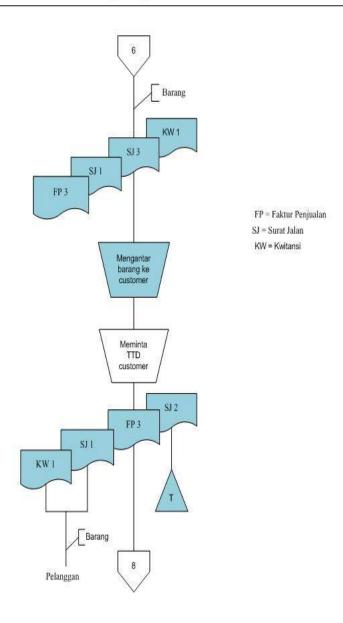


Warehouse Section



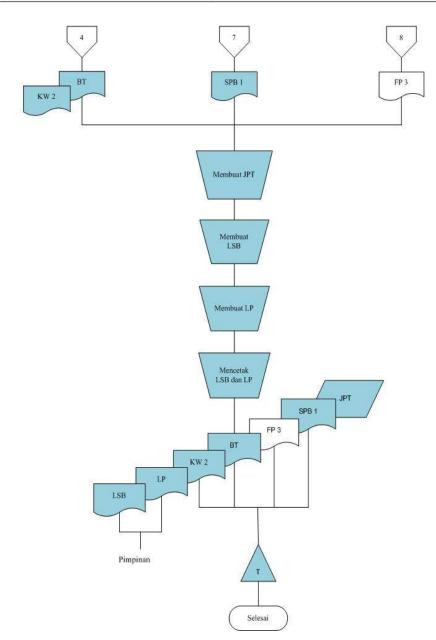
# **Shipping Section**

# Bagian Pengiriman



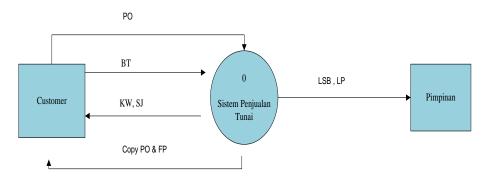
# Accounting Department

Bagian Akuntansi

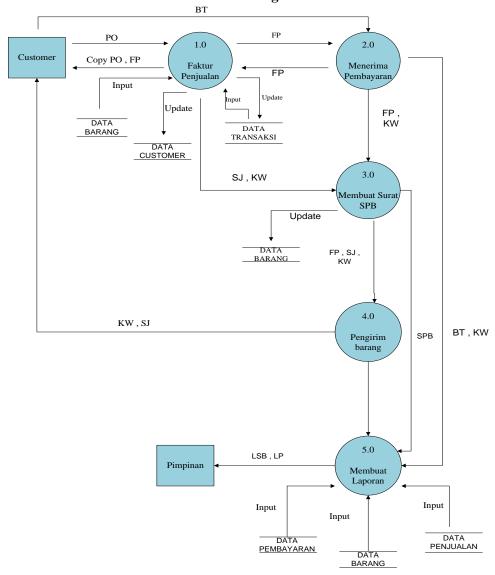


# b. Data Flow Diagrams (DFD) for Proposed Cash Sales

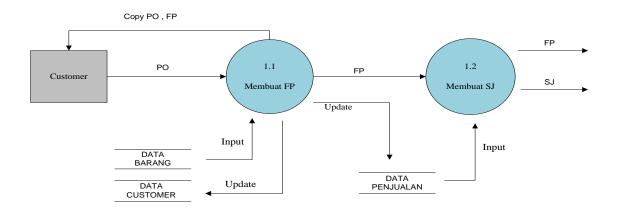
# **Context Diagram**



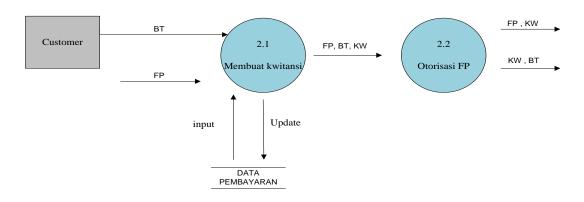
# Zero Diagram



# Level 1 Process 1 Diagram

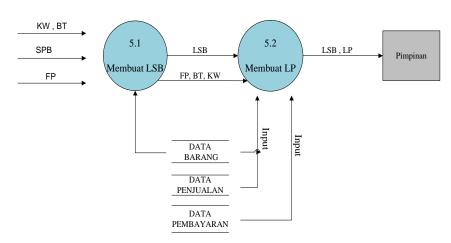


# Level 1 Process 2 Diagram

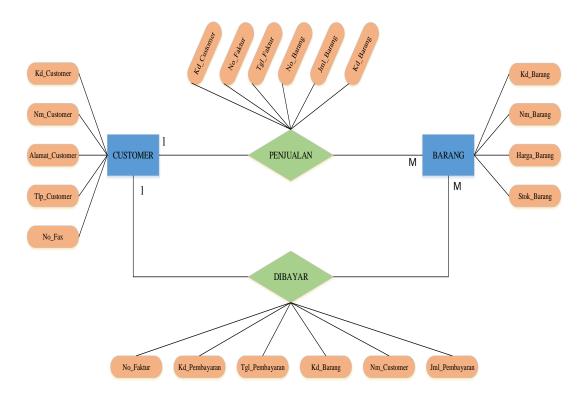


Level 1 Process 5 Diagram





#### c. ERD for Proposed Cash Sales

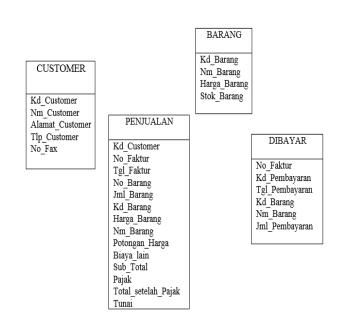


#### d. Normalization

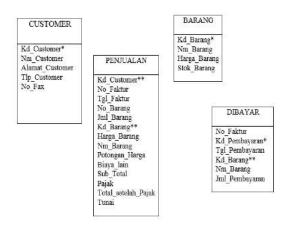
# Abnormal Form (UNF)

#### Kd Customer Harga\_Barang Nm Customer Nm Barang Kd Barang Alamat Customer Nm cBarang Tlp Customer No Fax Harga Barang Kd Customer Stok Barang No Faktur No Faktur Kd Pembayaran Tgl Faktur No Barang Tgl Pembayaran Jml Barang Kd Barang Kd Barang Nm Customer Jml Pembayaran

## First Normal Form (1NF)



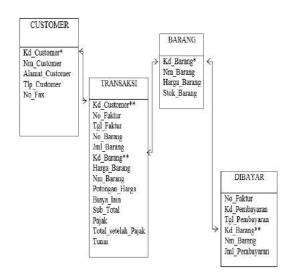
## Second Normal Form (2NF)



### e. Input Design



Third Normal Form (3NF)

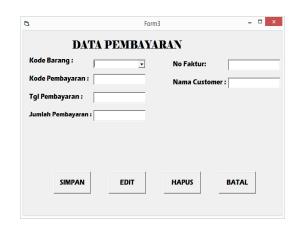


# Item Data Input



Input Sales Invoice





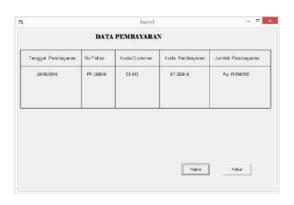
Data Payment Input

# F. Output Design

### **Sales Invoice Output**



**Payment Data Output** 



**Item Stock Report** 



Sales report

1						- 6	
			UTA	MA ALUMIN	MU		
				Rawa Parlang, Bai			
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			U	PORAN PENULAL	un .		
				Jul 2018			
organ	si Detak						Page 1 of 1
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# CONCLUSIONS AND SUGGESTION Conclusion

Based on the results of the analysis and design of cash sales accounting information systems that have been conducted at the Utama Aluminum Store, the researchers can draw the following conclusions:

- Cash sales accounting information system at Utama Aluminium Store is not sufficient enough and still has some weaknesses. There are several parts, namely the sales, production warehouse parts. The documents used are only 3 cash sales invoices and 2 sheets are not stored properly so that it is easy for employees to do fraud. The cash sales system is still carried out manually and in the process of recording transactions into documents and it is still manual so that there are some errors in recording. There are no reports as well. The chief only collects invoices and receipt payment and checks money irregularly
- Cash sales accounting information system at Utama Aluminum Store is still inadequate with the Internal Control

System (SPI) standards according to COSO including:

- Cash sales accounting information systems at the Utama Aluminum Store consist of sales, production, warehouse parts. There are doubles roles, namely the sales department which functions as well as the finance department and accounting department, the warehouse section which also functions as the shipping department. Therefore additional parts are needed, namely the finance department, shipping department and accounting department.
- b. Lack of routine in affixing a "paid off" stamp, affixing a stamp "already submitted", make a travel letter and record sales every day.
  - c. Every time there is a cash sale transaction activity, Utama Aluminum Store is only recorded in an ordinary notebook. When cash sales activities occur, the recording of cash sales is authorized by the sales department because there is no accounting department and the sales department often postpones recording which can lead to fraud.
  - d. In the cash sales invoice form that is used in the Utama Aluminum Store, it has not been well structured because there is no item code and type of goods, there are only a lot of goods named item, unit price and item payment amount.

3. Some design alternatives that proposed by researchers consist of flowcharts, DFD. proposed ERD. database design and designing input data for data, goods data, as well as customer data, designing input and output Sales Invoice (FP), designing input and output payment data, design of the Goods Stock Report (LSB) output and design of the Sales Report (LP) output. This design is expected to help in creating fast, precise and accurate recording and reporting

## Suggestion

In line with the development of the company, the system used also requires adjustments in order to support the company. These following are some suggestions that might be useful for the company in the future:

- 1. The company must separate duties and responsibilities so that there is no duplication of duties from the relevant section.
- 2. The company should pay more attention to the internal control system to procedures in the company's operational activities by looking the organizational authorization structure, system, recording procedures, and good implementation that the SO procedure runs in accordance with generally accepted standards.

- 3. The company should make improvements to the documents needed in the cash sales system.
- 4. The company should make monthly stock reports and sales reports.
- 5. The company should implement a cash sales accounting system that has been computerized to overcome system weaknesses and shortcomings. By implementing a computerized system, the information can be obtained quickly, precisely, and accurately.
- 6. The company periodically evaluates system requirements, especially those relating to cash sales procedures so that the system that has been designed can be developed and continuously updated to support the company's activities to achieve maximum profit.

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# ANALYSIS AND DESIGN ACCOUNTING INFORMATION SYSTEM OF FUNDING AND FINANCING AT KOPERASI SERBA USAHA SYARIAH BAITUL MAAL WAT TAMWIL BAKTI NURUL HUDA

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#### Abstract

This research conducted at Kopsyah BMT Bakti Nurul Huda and applied a computerized system of funding and financing activities. The purpose of this research is to find out and analyze how the accounting information system of funding and financing activities have been running, whether the system has been running well and how alternatives system is effectively applied in Kopsyah. The research method used is descriptive analysis method with qualitative data. Data analysis techniques consist of literature study, observation, interview, and documentation. The primary data were collected from interviews, notes, and documents which related to accounting activities, while secondary data consist of organizational structure, job description, documents, forms, and accounting records. The analysis tool consists of system analysis and design system with DFD, ERD, normalization, database, and design input as well as output. The results show that Kopsyah has double positions on Baitulmaal between secretary with accounting and cashier or teller with the head of KUB, on Baitultamwil between the cashier or teller with accounting. Documents and the copies have been made, although there are some documents that do not have copies. Recording and data storage are analyzed with daily cash book, control card and Excel. The researcher proposes to separation positions by adding cashier or teller for Baitulmaal, one accounting and one finance manager. The researcher also proposed to replace membership book from manual to printed form, eliminate the function of some documents in Baitulmaal, such as daily cash book, control card, and letter of application to become member, add documents and copies, such as receipt which consists of two sheets, deposit slip, withdrawal slip, slip of disbursement financing and slip of installment financing consists of three sheets and use computerized system and server as well as data storage with database.

**Keywords**: Accounting Information System, Design, Financing, Funding

#### INTRODUCTION

Financial institutions have an important role in a state. Financial institutions contribute in protecting financial stability and economic growth. In Indonesia, financial institutions are growing very rapidly. This development is caused by many factors; one factor is

technology development. In general, financial institutions can be distinguished in two forms named bank financial institutions and non-bank financial institutions. Financial institutions can also be distinguished based on its type, they are conventional financial institutions and sharia financial institutions

(Wiroso, 2009 : 17). Sharia bankings grow

very rapidly which is marked with the acceptance of sharia transactions principles internationally. It was started from the application of profit and loss sharing system residing in Pakistan and Malaysia around 1940s (Antonio, 2007 : 18). In Indonesia it began in 1991 with the founding of Muamalat bank. Before 1992, it has been established a non-bank financial institutions whose activities applied sharia. Until 1998, there was one sharia bank and 78 Sharia Rural Bank (literally means Sharia People's Financing Bank) (Nurhayati, 2013 : 2-3). In running its operational activities, sharia banking is regulated by SFAS Number 59 concerning Sharia Banking Accounting.

Based on Statistics Indonesia (known as BPS in Indonesia) stated that Indonesian population in in 2010, Indonesia 237.641.326 people in total. With 87,18 % of 237.641.326 Indonesian people are Muslims, 6,96 % Protestant, 2,91 % Catholic, 1,69 % Hindu. 0.72 % Buddhist and 0.05 Confucianism (Khonghucu). This makes Indonesia a country with the largest Muslim population. This factor may affect the development of financial services and sharia-based economy. It has been reflected in the development of the sharia financial services industry in Indonesia in the last five years from 2010 to 2014 which shows in Figure 1 from the Financial Services Authority (known as OJK in Indonesia.



Figure 1. The Development of Sharia Financial Service Industry in Indonesia Year 2010 To 2014 Source: www.ojk.go.id

Sharia cooperative or Sharia Financial Services Cooperatives (known as Koperasi Jasa Keuangan Syariah in Indonesia) is one of the activities of non-bank sharia institutions. Baitul Maal Wat Tamwil (BMT) is called Sharia Financial Services Cooperatives which is regulated by the Decree of State Ministry of Cooperatives and Small and Medium Enterprises Number 91, 2004 and Law Number 25, 1992. In addition, the operational activities of the BMT also regulated by SFAS Number 101 until 107. Basic concept operational in BMT implements profit sharing system which is in accordance with the contract that has been approved and then it is used by the manager to pay salaries and BMT operational activities (Sholihin, 2010: 175).In running the business, institution or company requires a language that can communicate and activities from explain the corporate transactions. Williams, et.al (2011: 4) stated that accounting as a business language. Before technology is growing rapidly, the accounting system applied is a manual accounting system. The government and BMT parties shouldnotice and improve the performance and services for consumers to be better. This manual accounting system is not effective if it is still appliednowdays, especially in the bigger institutions. The changing system used from manual to computerization is one of alternatives that can implement by BMT or By implementing other institutions. computerized accounting information system, the preparation and report management is expected to be easier and more efficient.

Accounting information system is

closely connected with the organization or company to achieve the expected objectives. In accounting information system, accountants company should be able to design and implement good accounting information systems to manage company finances. This research aims are to find out the accounting information system of funding and financing at Kopsyah BMT Bakti Nurul Huda that has been running, to find out the good stages of accounting information system evaluation, to analyze the effectiveness of accounting information system of funding and financing that are already running at Kopsyah BMT Bakti Nurul Huda, and to suggest alternatives of accounting information system of funding and financing which is effective to be applied at Kopsyah BMT Bakti Nurul Huda.

# LITERATURE REVIEW

# Accounting Information System and Information System Development

A company needs a language that can communicate economic information. Williams, et.al (2011 : 4) stated that accounting as a business language. Clarke (2012 : 3) described accounting as follow "accounting is the process of collecting, classifying, recording, reporting, analysing and interpreting financial data to meet the information requirements of the various interests, or users,

concerned with the operation of a business both internally (within the business) and externally (outside of the business)". Accounting information system can distinguished based on the process, they are manual and computerized (Bodnar Hopwood, 2004: 1). According to Krismiaji (2001:4) accounting information system is a system that processes the data and transactions to produce useful information for planning, controlling and operating the business. Accounting information is needed by the company to evaluate its performance. The company requires a computerized accounting information system that effective and efficient. Therefore, need a system development from manual to become computerizedThe definition of system development according to Bodnar and Hopwood (2006: 437) is the process of modifying or replacing part or all of the information system. In developing the system, it is usually consists of three steps, named planning and system analysis, system design and system implementation.

According to Bodnar and Hopwood (2006: 437-438) system planning is the process of identifying subsystems that exist on information system which the development need special attentions and system analysis is the process of identifying the subsystems that will be developed. McLeod and Schell (2004: 140) describes the system design is the determination process and data required by the

new system. According to Bodnar and Hopwood (2006: 23) implementation of the system is the process of implementing the procedures and methods that has been designed into operation.

#### **System Documentation Technique**

In the system documentation technique explains how this system works. Documentation tool is also used extensively on the system development process. (Romney and Steinbart, 2012: 69-70).

- a. Flowchart. Bodnar and Hopwood (2006: 41) flowchart is a symbolic diagram showing the data flow and operation phases in a system. There are symbols that are used in the flowchart, are the basic symbols, specific of input or output symbols, special process symbols and additional symbols.
- b. Data Flow Diagram. Is a network that describes a system of automatic or computerized, manipulation or a combination of both, which graphically arranged in the form of collection of system component that interconnected in accordance with the rules (Sutabri, 2004: 163).
- c. Entity Relationship Diagram (ERD). ERD is "a graphical modeling tool to standardize ER modeling" (Sumathi and Esakkirajan, 2007 : 32).
- d. Normalization. According to Kristanto (2004: 24) the normalization process is the

process of grouping elements data into a table that shows the entities and relationships.

#### **Baitul Maal Wat Tamwil (BMT)**

Definition of BMT according to Ilmi (2002: 65), baitul maal is a socio-religiousoriented financial institution which its main activities to accommodate and distribute society's wealth in the form of zakat, infaq and sadaqah (ZIS) based on the established provisions on the Our'an and the Sunnah of His Apsotle.BMT has role, among others (Huda and Heykal (2010 : 364): (1) Alienate the society from non-Islamic economic practices; (2) Perform coaching and small business financing; (3) Releasing dependence on moneylenders; and (4) Maintain society's economic justice with equitable distribution.

BMT should have status and legal entity cleary and is recognized by the state. Since BMT has just established, it causes status assortment and legal entities used by BMT in running the operations. Until now BMT is included into the Sharia Financial Services Cooperatives.

#### **Funding and Financing On BMT**

There are some activities on the collection and distribution of funds in BMT. However, these activities are based on the

BMT with sharia principles one of which is prohibits interest, because the interest is usury. In the Minister of Cooperatives and Small and Medium Enterprises Number 14/Per/M.KUKM/IX/2015 has activities to raise funds based on sharia principles, those are:

- a. Al-Wadi'ah Saving. It is an agreement between the owner of the goods (mudi') and the recipient of consignment (wadi') to maintain the assets or capital (ida') from damage or loss and for the security of assets (Arifin, 2006: 26).
- b. Al-Mudharabah Saving. A saving where the deposite and the withdrawal withdrawal can be carried out in accordance with the agreements that has agreed in advance. (Nuryadin, 2004: 124).

Financing funds given by BMT can be called by credit financing. Financing products at BMT, among others (Yunus, 2009 : 36-38):

- a. Mudharabah Financing. The working capital financing that is given by BMT to members, where its business management is fully assigned to its members as the debtor customer.
  - b. Musyarakah Financing. It is financing some capitals out of all which is to be given to its members. BMT can be involved in the management process.
  - c. Murabahah Financing. Financing is provided to

members for the purchase of goods that will be used as working capital and given for a short period not more than six until nine months or more from than that.

- d. Bai' Bitsaman Ajil Financing. This financing is almost the same as Murabahah financing, the difference is the payment's pattern with installments in rather long time.
- e. Al-Qardhul Hasan Financing. Namely a soft financing given to members who is lack of the capital or in

#### RESEARCH METHOD

The object in this research is Koperasi Serba Usaha Syariah (Kopsyah) Baitul Maal Wat Tamwil (BMT) Bakti Nurul Huda. The object of the research that examined by researcher is a non-bank financial institution in the form of sharia-based cooperative. The method applied by the researcher in this research is descriptive analysis. This is a method which examines the status of a group of people, objects, system of conditions, system of thoughts or class of events in the present (Nazir, 2005: 54).

The type of data which collected in this research is the qualitative data. Qualitative data is data in the form of ideas, perceptions, opinions and people's beliefs which has been researched and it cannot be measured with numbers (Basuki, 2006 : 78). Source of data collected in this research are primary and secondary data. Primary data is data obtained

or collected directly in the field by people who do researches or concern to require it (Hasan, 2002 : 82). The primary data are transaction documents, notes that is related for accounting activities and data from the results of the interviews to financial department or other departments related to financial, while secondary data is data which collected by people who do research from sources that already exist (Hasan, 2002: 82). The secondary data are general overview the object, organizational structure, iob descriptions, standard operating procedures (SOP), books and accounting records, such as ledgers, financial journals, statements, documents or forms used on the system for funding and financing.

The technique applied by researcher is includeare field study. Includeare field study is experiment activity actual an on environmental conditions or naturally (Santoso, 2010: 17). To collect the data directly from the company, the method applied by the researcher are observation, interview and documentation. Literature study, is a process in understanding, observing, analyzing and identifying the existing knowledge in literature to support the research (Hasan, 2002 : 45). Collecting additional data and information by the author from the books or other that should have been provided by Kopsyah BMT Bakti Nurul Huda related to the analysis and design accounting information system of funding and financing in Baitul Maal Wat Tamwil.

In this study, the researcher applied a qualitative descriptive analysis. Analysis tool applied in this research are system and design analysis.

- 1. System analysis is the process of decomposition from a complete information system into their component parts in order to identify and evaluate the problems, opportunities, barriers that occur and the improvements are being proposed later (Hartono, 2005: 64).
  - a. Examine the ssystemsthat has been implemented. At this step, the researcher applies document flowchart.
  - b. Identify the need for information. The second step is the researcher applies flowchart system.
  - c. Identify the need for system. The third step, the researcher applies data flow diagrams (DFD).
  - d. Proposal system analysis. The last step is making a proposal from a system analysis that has been done at Kopsyah BMT Bakti Nurul Huda.
- 2. System design is the determination process and the data required by the new system (McLeod and Schell, 2004: 140).
  - a. Evaluate various design. At this step, the researcher will choose various design in

- accordance with the objectives and funding as well as financing activities.
- b. Prepare design specifications. After selecting, prepare the specification of the system design.
- c. Submit the system design specifications. The last step, the researcher defines the system design. In designing of the whole new system, the researcher applied some tools, such as DFD, ERD, normalization database and design of input as well as output.

# **RESULTS AND DISCUSSION**

#### **Company Profile**

With the spirit of devotion to Allah SWT, Koperasi Serba Usaha Syariah Baitul Maal Wat Tamwil Bakti Nurul Huda which established on October 15, 2009 and at the beginning of 2011 Kopsyah BMT Bakti Nurul Huda was active in running the business and on the May 2011. In the beginning Kopsyah BMT Bakti Nurul Huda is a mosque cooperative named Koperasi Mesjid Jami' Nurul Huda. Koperasi Masjid Jami' Nurul Huda is build in accordance with At-Tawba verse 18 with the hope to prosper the mosque and its members. Then the Prosperity Mosque Council developed Koperasi Masjid Jami' Nurul Huda became Koperasi Serba Usaha BMT BaktiNurul Huda which Syariah activities include the unit of Islamic financial services, the unit of baitul maal for social activities, the unit of baitul tamwil for rill sector activities. The establishment background of Kopsyah BMT Bakti Nurul Huda is expected to overcome the environmental problems that occur around Kopsyah BMT Bakti Nurul Huda.

#### **Creating Logic Model Proposed**

#### 1. Context Diagram

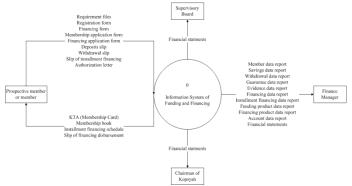


Figure 2. Context Diagram of Information System of Funding and Financing Source: Result proposed by researcher

#### 2. Zero Diagram

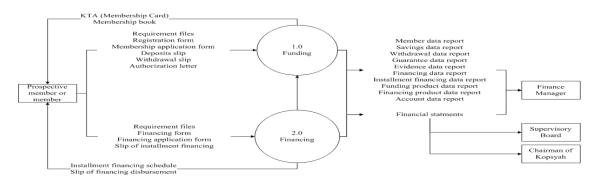


Figure 3. Zero Diagram of Information System of Funding and Financing Source: Result proposed by researcher

#### 3. Level Diagram

This level diagram is for funding and financing process. There are 5 in the funding process and 4 in the financing process. Here are some of the processes in funding and financing.

# 1. Level Diagram 1 Process 1.0 In Funding Process

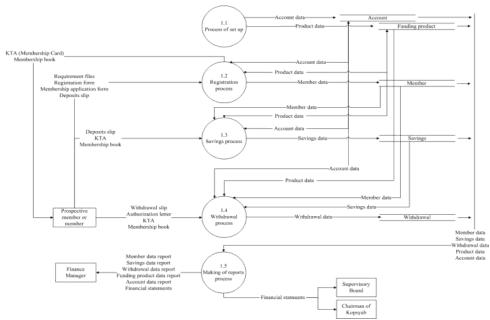


Figure 4. Level Diagram 1 Process 1.0 Source: Result proposed by researcher

# Level Diagram 2 Process 2.0 In Financing Process

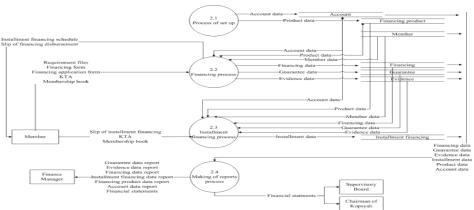


Figure 5. Level Diagram 2 Process 2.0 Source: Result proposed by researcher

### 2. Level Diagram 1 Process 1.2.0 In Registration Process

The process of registration in Kopsyah is distinguished into two, are in baitultamwil and baitulmaal. The first figure is process in baitultamwil and the second figure is process in baitulmaal.

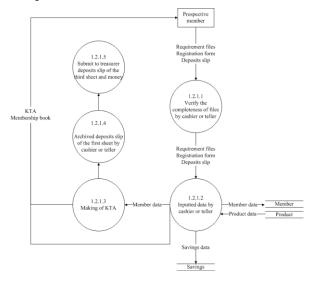
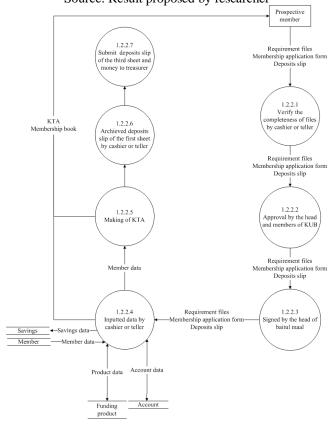


Figure 6. Level Diagram 1 Process 1.2.1.0 Source: Result proposed by researcher\_



### 3. Level Diagram 2 Process 2.1.0 In Process of Set Up

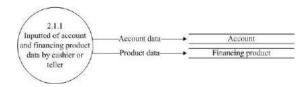


Figure 8. Level Diagram 2 Process 2.1.0 Source: Result proposed by researcher

#### 4. Level Diagram 2 Process 2.2.0 In Financing Process

The process of financing in Kopsyah is distinguished into two, are in baitultamwil and baitulmaal. The first figure is process in baitultamwil and the second figure is process in baitulmaal.

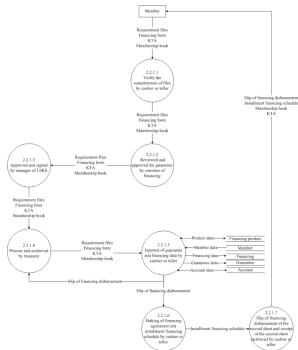


Figure 9. Level Diagram 2 Process 2.2.1.0 Source: Result proposed by researcher

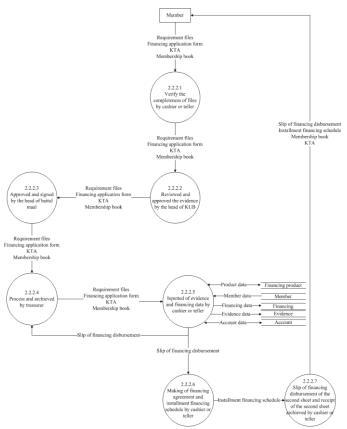


Figure 10. Level Diagram 2 Process 2.2.2.0 *Source:* Result proposed by researcher

### 5. Level Diagram 2 Process 2.3.0 In Installment Financing Process

In the process of installment financing also divided into two in baitultamwil and baitulmaal. This is the process in baitultamwil.

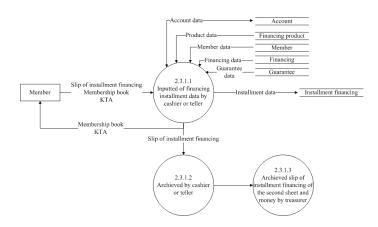


Figure 11. Level Diagram 2 Process 2.3.1.0 Source: Result proposed by researcher

#### 4. Making of Entity Relationship Diagram

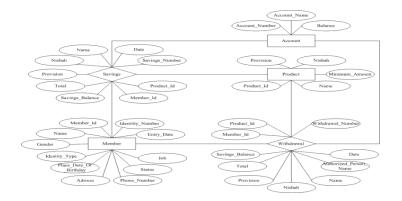


Figure 12.Entitiy Relationship Diagram of Funding Source: Result proposed by researcher

In Figure 4.17.shows the **Entity** Relationship Diagram (ERD) of funding. There are four relationships in the figure. The first relationship describes the member entity who has savings relation with the product entity. The relationship is one-to-many, while the second relationship describes the member entity who has savings relation with account entity. The third relationship is the member entity who has withdrawal relation with account entity. The second and third relationship has a relationship is one-to-one where each member can save and withdraw savings by using and updating one account or vice versa. The fourth relationship describes the member entity who has withdrawal relation with product entity. The relationship is one-to-many.

There are six relationships in financing

process. The first relationship in financing procedures is a member entity that has a financing relationship with an evidence entity. The second is that member entities have relationships with financing guaranteed entities. The third relationship is the member entity has a financing relationship with the product entity. The first, second and third relationships have one-to-one relationships. The fourth relationship is the member entity has a relationship with the installment entity. The fifth relationship describes a member entity having a financing relationship with an entity account and the sixth relationship is a member entity having installment an relationship with the account entity. The fourth, fifth and sixth relationship has one to many relationship.

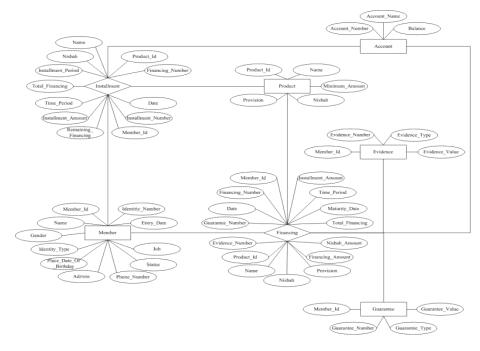


Figure 13.Entitiy Relationship Diagram of Financing Source: Result proposed by researcher

#### 5. Normalization

In normalization process consists of the first, second and third normal form. Here is a figure of normalization proposed in the third normal form.

#### 1. Third Normal Form (3nf)

2.

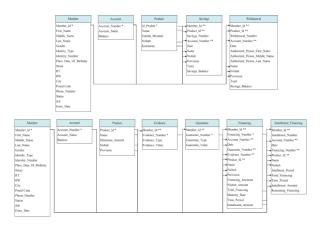


Figure 14. Third Normal Form of Funding and Financing Source: Result proposed by researcher

In the third normal form, the second normal form must have been fulfilled and may not have a transitive relationship or non-key attributes must not depend on other non-key attributes.

#### 6. Design of Database System Proposed

There are nine design of database systems proposed. Here is one of the database designs.

#### 1. Member Table

Table 1. Member Database Design

No.	Field Name	Type	Length	Description
1	Member_Id	Integer	10	Member Id number
2	First_Name	Text	7	First name member
3	Middle_Name	Text	7	Middle name member
4	Last Name	Text	7	Last name member
5	Gender	Char	5	Gender of the member (male of female)
6	Identity_Type	Text	3	Identity type for registration requirement (identity card or driving license)
7	Identity_Number	Text	16	Identity number of identity card or driving license
8	Place_Date_of _Birthday	Date	14	Place, date of birthday
9	Street	Text	15	Street name, residential or complex of member
10	RT	Text	3	RT from address member
11	RW	Text	3	RW from address member
12	City	Text	10	City from address member
13	Postal_Code	Text	5	Postal code from address member
14	Phone_Number	Text	15	Phone number
15	Status	Text	5	Member status (married or single)
16	Job	Text	10	The work of member
17	Entry_Date	Date	14	Date of entry be member

Source: Result proposed by researcher

#### 7. Design of Input System Proposed

There are eleven design of input systems proposed. Here are some forms of the input design.

#### 1. Main Menu Form 1



Figure 15. Main Menu Form 1 Source: Result proposed by researcher

#### 2. Member Data Form



Figure 16. Member Data Form Source: Result proposed by researcher

### 8. Design of Output System Proposed

There are eleven design of database systems proposed. Here is one of the output designs.

#### 1. Member Data Report



Figure 17. Member Data Report Source: Result proposed by researcher

#### CONCLUSION AND SUGGESTION

The accounting information system of funding and financing which runs in Kopsyah have done by manual system and be distinguished into two which are Baitulmaal and Baitultamwil. The funding procedures are member registration, savings and savings withdrawal, while the financing procedures are financing and installment financing. To conduct funding and financing procedures at Baitulmaal is through the head of the KUB as the intermediary between the members and the head of the Baitulmaal. The head of KUB serves in assessing and approving the prospective members or members who will register and apply for financing. The head of KUB along with other members of KUB are responsible if the member violates their obligations.

In addition, the head of KUB records the transactions on the daily cash book. After that, the head of Baitul maal and the cash card and control card, approve and save money. The treasurer deals with expenses and receives money to and from the head of Baitulmaal, and then the secretary makes the Baitulmaal's reports. This procedure is performed by cashier or teller to serves to input data into Excel, archive documents or forms of the first sheet. The financing committee assesses the amount of guarantee, then, UJKS manager considers the guarantee

value with the value of financing proposed then approves it. The treasurer deals with archive documents or forms of the second sheet as well as expenses and receive money to and from the cashier or teller.

The accounting information system of funding and financing that has already been running at Kopsyah BMT Bakti Nurul Huda is considered good. There are double positions. Although there double are positions, Kopsyah performance is still running well without fraud and mistake done employees. Double positions occur between the secretary section and accounting section, cashier or teller section and the head of KUB. The financial statements are conducted by the secretary. In serving and recording data relate to members are conducted by the head of KUB which should be done by the cashier or teller. While in Baitultamwil, it is between the cashier or teller and accounting section. The cashier or teller performs the function in recording the transactions that have occurred, achieving documents and forms as well as preparing financial statements. In the division of job description within the parties involved has been already running their respective functions. There is no double function.

The recording and reporting accounting are performed by manually. The needs of information

for both internal or external parties from Kopsyah with this manual condition have already been fulfilled. In Baitulmaal, the head of KUB is using daily cash book as well as control card to record and store data. In Baitultamwil, cashier or teller is using Excel to input and store members' data. The forms and documents at Kopsyah has been used properly. The numbered documents with copies have already been sorted, even though there are some documents that do not have any copy yet.

The researcher provides an alternative design of accounting information system of funding and financing activities in Kopsyah with flowcharts proposal, DFD, ERD, normalization, design of database, design of input for members, savings, withdrawals, set up products, evidence, guarantee, financing and installment financing as well as the design of output to member data report, savings data report, withdrawal data report, evidence data report, guarantee data report, financing data report, installment financing data report and financial statements consisting of balance sheet, income statement, cash flow statement, statement of economic promotion of member and notes of financial statements. In addition, for the design of input and output created with Otcreator software.

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# THE EFFECT OF ACCOUNTING INFORMATION SYSTEMS QUALITY, TRUST AND LOYALTY ON USER PERFORMANCE USING EXTENDED INFORMATION SYSTEM SUCCESS MODEL ON MULTIFINANCE COMPANY IN DEPOK

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#### Abstract

Globalization resulted in fiercer competition between the companies. To be top in the competition, companies must have good management in achieving the company's main objectives and obtain the maximum benefit effectively, efficiently and economically. Currently, the company has used information technology to carry out its business activities. However, any technology used by the company should always be evaluated, whether the use of these technologies provide a good contribution to the user and also companies that use them. This research is aimed to obtain empirical evidence of relationship between accounting information system quality, trust and loyalty of system with user performance. This study uses updated D&M IS Success Models categories to measure the system. Those categories are System Quality, Information Quality, Service Quality, System Use, User Satisfaction, and Net Benefits. This research has used questionnaires which were proceed and analyzed by multiple regression analysis method. The process of data analysis are validity and reliability test, classic assumption test, multiple regression analysis, and hypothesis testing analysis. The hypothesis analysis uses simultaneous regression analysis. The results show that System Quality, Information Quality and Service Quality have a significant effect on Use and User Satisfaction simultaneously. Use and User Satisfaction have a significant effect on Net Benefits, Trust and Loyalty simultaneously. Net Benefits, Trust, and Loyalty have a significant effect on User Performance simultaneously.

**Keywords :** IS Success Model, System Quality, Information Quality, Service Quality, Trust, Loyalty

#### INTRODUCTION

The rise of the globalization resulted in increasing tight competition. To be the top of the competition, companies should have a good management to achieve the company's main goal, reaching a maximum profit effectively, efficiently and economically. To maintain going concern concept of the organization, it should be realized that the business environment will continue to change, including information technology. The use of AIS which is a

computer-based application brings a new trend of change from the conventional way of accounting to a computerized way which most people are not prepared for or find very difficult to adapt to (Awosejo et al 2013). Therefore, knowledge and experience in the field of technology is also very important for the accountant. The use of AIS is seen to have improved the productivity and delivery of the users' work, this was found in this study (Awosejo et al 2013).

Maharsi (2000) explained that the presence of information technology provides many benefits for companies, like being able to alleviate the complex business activities and generate information that can be trusted, relevant, timely, complete, comprehensible, and tested in the context of planning, control and management decision making. Soudani (2012) wrote that Accounting Information System (AIS) is vital to all organizations (Borthick and Clark, 1990; Curtis, 1995; Rahman et al., 1988; Wilkinson, 1993; Wilkinson et al., 2000) and perhaps, each organization either profit or non profit-oriented need to maintain the AISs (Wilkinson, 2000: 3-4). The purpose of the application of Accounting Information Systems is to make effective the performance of an existing company, which was originally quite well to be better again.

information An system will successful if it is supported by several supporting factors, including user participation (Chandrarin and Indriantoro, 1997; Setianingsih and Indriantoro, 1998; Suryaningrum, 2003). One way that business organizations are able to compete with its competitors is to use information system. To support the purpose of accounting information system applications in a company, the quality of accounting information systems can be measured until the accounting information system is feasible to continue to be applied or not. According to Komara (2006), the application of a system in a company is faced with two things, namely the successful

implementation of the system or system failure. To avoid system failure, it is necessary to note the factors that determine the success of a system. According to DeLone and McLean (1992) the success factors of information systems can be measured by six categories: System Quality, Information Quality, System Usage, User Satisfaction, Impact on Individuals, and their impact on the organization.

Several studies have shown that the application of Accounting Information Systems can improve the company's performance, profitability, and efficiency of work/operations (S. Kharuddin, Z. Ashhari and Nassir, 2010; E. Grande, R. Estebanez and C. Colomina, 2010; Gullkvist, B., 2002; R. Kouser, A. Awan, G. and F. Shahzad Rana, 2011; H. Sajady, M. and H. Hashem Dastgir Nejad, 2008; SN Soudani 2012). In addition to improving the performance of the company, several other studies have also shown that the effectiveness of Accounting Information **Systems** improve can performance of individual employees (Salman Jumalili, 2005; Dwina Septinigtyas, 2012; Novia Fabiola P, 2014). Another factor that can affect the performance of the individual is the trust and loyalty of users of the system (Salman Jumaili, 2005; Novia Fabiola P, 2014). Accounting Information Systems users trust is very important because of user trust in the system is expected to increase performance. Trust in the system can affect the system user loyalty (Sri Maharsih, Fenny 2006), if the user does not have trust in the system that is being used, then loyalty to the system as well not exist.

Based on the description of the background that has been mentioned above, the author formulates the problem as follows: (1) Does the success of Accounting Information Systems improve individual performance of employees? (2) Does the trust users of Accounting Information Systems improve the performance of individual employees? (3) Does the user loyalty Accounting Information Systems improve the performance of individual employees? (4) Does the success of Accounting Information Systems and the trust and loyalty of users of the system together improve the performance of individual employees?

#### LITERATURE REVIEW

#### **Accounting Information System**

James A. Hall (2001) in his book explaines that the accounting information system is a system that consists of three sub-systems, (1) the transaction processing system, which supports the daily business operations through various documents and messages to users in the company; (2) the general ledger/financial reporting system, which results in the financial statements; and (3) the management reporting system, which provides for the internal management of a variety of special-purpose financial statements for decision-making. According to Neogy (2014), Accounting Information System process accounting transactions and supplies information for the

interested users which is used to take effective decision making process, to help management for performing business activities properly and finally to measure the performance of the company. In his book, Cushing and Romney (1994) wrote that the accounting information system supports operations by collecting and storing data relating to the transactions of the organization.

According to Romney and Steinbart (2006), Accounting Information System consists of five components:

- 1. People who operate the system and perform a variety of functions.
- 2. The procedures, both manual and automated, which is involved in collecting, processing, and saving data on the activities of the organization.
- 3. Data on the organization's business processes.
- 4. The software is used to process an organization's data.
- Infrastructure of information technology, including computers, ancillary equipment (peripheral device), and equipment for communications networks.

These five components together allow an accounting information system fulfills three important functions in the organization:

- Collecting and storing data about the activities undertaken by the organization, resources affected by these activities, and the actors involved in these activities, in order for the management, employees, and external parties concerned may reviewing things that have happened
- Changing the data into useful information for the management to make decisions in activity planning, implementation, and supervision
- Providing adequate controls to safeguard the assets of the organization, including the organization of data, to ensure that the data is available when needed, accurately, and reliably

Most organizations aim to provide value to their customers. This requires the implementation of a variety of different activities. Organizational value chain consists of five main activities (primary activities) that directly provide value to its customers:

- Inbound logistics consists of receipt, storage, and distribution of material inputs used by organizations to produce the products and services it sells.
- Operations are activities that transform inputs into products or services that are already finished.

- Outbound logistics are activities involving the distribution of finished products to customers.
- Marketing and sales lead to activities related to helping customers to purchase services or products produced by the organization.
- Services providing after sales support to its customers.

Organizations also carry out various support activities which allows the five main activities to be carried out efficiently and effectively. Supporting activities can be grouped into four categories:

- Infrastructure companies lead the activities of accounting, finance, law, and public administrations which are essential for an organization to operate.
- Human resources involve activities related to recruitment, contracting, training, and compensation and benefits for employees.
- 3. Technology is an activity that enhances the product or service.
- Purchase includes all activities involving the acquisition of raw materials, supplies, machinery, and buildings used to carry out major activities.

Accounting Information Systems are included in activities that support the company's

infrastructure. Accounting Information Systems can add value to the organization by providing information that is accurate and timely, so that the five major activities of the value chain can be implemented more effectively and efficiently. Accounting Information Systems are well designed can do this by:

- 1. Improving the quality and reduce the cost to produce the product or service.
- Improving efficiency. Accounting
   Information Systems are designed properly to help improving the efficiency of the course of a process to provide more timely information.
- Improving decision making. Accounting
   Information System can improve decision-making by providing information in a timely manner.
- 4. Sharing knowledge. Accounting Information Systems are designed to ease the process of sharing knowledge and expertise, which can further company's improve the operating processes, and even provide competitive advantage.

# The Quality of Accounting Information System with IS Success Model

Baroudi and Orlikowski (1987) used the information user satisfaction as a quality measurement system, while Doll and Torkzadeh

(1988) used the satisfaction of end users of the system to measure the quality of accounting information system. In their study, Doll and Torkzadeh measure end-user satisfaction with the system of five categories: (1) Content, indicating that the system has to provide information in accordance with the needs of system users; (2) Accuracy, indicating that the system provide accurate information; (3) Format, indicating that the system provides information in a format that is easy to understand; (4) Ease of use, indicating that the system is easy to use; (5) Timeliness, indicating that the system provides information up-to-date.

DeLone and McLean (1992) conducted a study to review the existing research to produce any category which can be an indicator of the success of an information system. Research DeLone and McLean produce any variables that can measure the success of Accounting Information Systems. DeLone and McLean outlined that the success of information systems can be measured by six categories, namely: (1) Quality System; (2) Quality of Information; (3) The use; (4) User Satisfaction; (5) Individual Impact; (6) The impact of the Organization.

In their new study about the IS Success Model, DeLone and McLean (2003) updated categories of the indicators to measure the success of an information system. There are different indicators from the previous studies, which are the quality of service and net profit. Quality of service indicates that the system has

support facilities that help the system work, while net profit indicates that by applying a system, the company will receive benefits such as reduced cost and increased decision-making process. Figure 1.1 shows update IS Success Model concept.

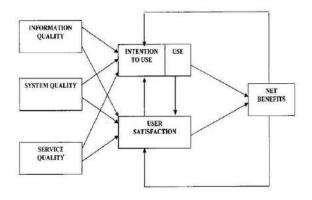


Figure 1.1

Petter dan McLean (2009) evaluated the relationships within the D&M IS success model using the quantitative method of meta-analysis and found that the majority of

the relationships posited in the updated D&M IS success model were supported. As businesses have become more reliant on IT in achieving success within their organizations, IS has become essential. A good information systems and quality will affect the habits and behavior of users in improving the performance of individuals and organizations (Hamzah, 2009).

#### **Trust**

In achieving the success of information systems, user trust towards the system is very important because of the presence of user trust in the system is expected to increase performance. Lau and Lee (1999) defined trust as an individual's willingness to rely on to other party with certain risks. This willingness arises because of the individual's understanding of the other party based on their past, their hopes that others will contribute positively, although there is also the possibility of other parties will give a negative contribution.

In 1948, Claude E. Shannon (in Gerck, 2003) created the theory of information and stated that the issue in the communication is whether the clone message from the starting point would be to start at another point when the message was sent to. In this case the trust on communication technologies are applied in a new information system that emerged from the user's information system expected to improve individual's performance (Jumaili, 2005).

#### Loyalty

According Shergill and Li (2005), loyalty is the intention of consumers to re-use technology based on experience and their expectations in the past. In the context of the use of information systems, loyalty is the intention of the user to continue to take advantage of information systems based on user experience and user expectations of the

systems used in the past. User loyalty system is closely associated with the quality system and quality of output given by the system, for example, with the rapid time to access or usefulness of output produced by the system, that will cause the user not to feel reluctant to reuse (reuse), thus the intensity of use of the system will increase. Repeated use of this can be interpreted that the use is beneficial to the user.

#### **User Performance**

According to Big Indonesian Dictionary (2002, p.570) in Tarigan (2011), performance is something that is achieved, achievement shown, the ability to work. In addition. Mangkunegara (2005) wrote that the term performance is derived from the word of job performance or someone's actual achievements that is quality and quantity output of work achieved by an employee in carrying out their duties in accordance with the responsibilities assigned to him. Performance is the output generated by functions or indicators of a job or a profession in a certain time (Wirawan, 2009). Employee performance is a measure that can be used to map the comparison of the results of the implementation of the duties, responsibilities given by the organization at a certain period, and can be used to measure the relative performance the performance of the organization (Septiningtyas, 2010).

One of the company's performance measurement is by measure the performance of individual employees of the company or institution. Employee performance is the result of the synergy of a number of factors. These factors are internal environmental factors, external environmental factors, and internal factors of the employee (Wirawan, 2009).

- Internal factors of employees are factors from their own selves that are a congenital factor and acquired factors when developing. Congenital factors are talent, personal characteristics, as well as the physical and mental state. Whereas, factors obtained when developing are knowledge, skills, work ethic, work experience and work motivation.
- 2. Internal environmental factors to the organization. In performing their duties, the employees need support from organization where he worked. This support greatly affects the level of employee. If the are compensation system and poor organization of work climate, employee performance will decrease. Internal factors of other organizations organization-al eg; strategy, support resources necessary to carry out the work, as well management and compensation systems. Therefore, the management of organization should create an internal environment that is conducive to support and improve employee productivity.
- 3. External environmental factors. External environmental factors are a state organization, events, or situations that occur in the external environment that affect the performance of the employee in the organization.

One of the first steps in developing an effective performance evaluation system is to determine the organization's objectives. These are then translated into departmental and then individual position objectives - working with employees to meet their personal performance targets. This allows the employees to know "up front" the standards by which their performance will be evaluated. This process involves clarifying the job role, job description and responsibilities - explaining how the role and responsibilities contribute to wider goals, why individual and team performance is important and just what is expected within the current planning period. Objectives developed in this way should be reflective of the organizational goals and provide linkages between employee and organizational performance (Ramlawy, Kafina 2011).

Goodhue (1995) proposed the concept of evaluating the user to see the successful implementation of an information system. In general, the concept of user evaluation is an assessment done to the user something about the attitude of goods or services or their trust in the use of these things. In the context of information systems research, the user will be given an evaluation based on the fact whether the information system implemented in the company according to their needs and abilities.

Goodhue and Thomson (1995) explained that the achievement of individual performance is expressed with regard to the achievement of a series of individual tasks with existing information technology support.

#### **Hypothesis**

# A Relationship Between System Quality with Use and User Satisfaction

Many studies measure system quality as perceived ease of use and find positive relationships with various operational-izations of use in a variety of systems at the individual level of analysis (Petter, DeLone, McLean 2008). Iivari (2005) found a positive relationship between system quality and use. McGill (2003) found that perceived system quality and perceived information quality are significant predictors of user satisfaction with the system, but not of system use. The analysis provided strong support for relationships between perceived system quality and user satisfaction, perceived information quality and user satisfaction, user satisfaction and intended use. and user satisfaction and perceived individual impact. A study by Wu and Wang (2006) has provided an expanded understanding of the factors that measure KMS success and implications of this work are discussed. The empirical results indicated that system quality and knowledge or information quality have a significantly positive influence on user satisfaction.

Based on previous research and the description above, the formulation of the first hypothesis is as follows:

H1: Accounting Information System Quality has an influence on Use and User satisfaction simultaneously.

# A Relationship Between Use and User Satisfaction with Net Benefits, Trust, and Loyalty

Empirical studies provide moderate support for the relationship between system use and benefits at the individual level. Several studies have found that IS use is positively associated with improved decision making (Petter, DeLone, McLean 2008). Many studies confirm these findings by finding significant relationships and/or correlations between system use and net benefits (Torkzadeh & Doll, 1999; Rai et al., 2002; Kositanurit et al., 2006). Empirical results also have shown a strong association between user satisfaction and system benefits (Iivari, 2005). User satisfaction has been found to have a positive impact to improve performance (McGill et al., 2003), to increase productivity and effectiveness (Rai et al., 2002; McGill).

Based on the description above, the second hypothesis can be formulated as follows:

H2: Use and User Satisfaction have an influence on Net Benefits, Trust and Loyalty simultaneously.

# A Relationship Between Net Benefits, Trust and Loyalty with User Performance

Sari (2009) conducted a study that discusses the effectiveness of the use of AIS with individual's technology trust performance. The results showed that the effectiveness of the use of information technology systems and trust in the information systems technology have significantly a positive effect on the performance of individual partially or simultaneously. Jumaili (2005) research results show that the new information technology systems that are supported by their trust in using the new information system has an influence in improving their individual's performance. According to Maharsi and Fenny (2006), loyalty arises because of the trust. In his research entitled "Analisa Faktor-Faktor yang Mem-pengaruhi Kepercayaan dan Pengaruh Kepercayaan Terhadap Loyalitas Pengguna Internet Banking di Surabaya", internet banking user trust is proved to have a significant influence on user loyalty for using internet banking. This may also be an effect on the use of accounting information system with individual's performance. If the users of the system have trust in the system that is being utilized, indirectly increases user loyalty to the use of the system. This is expected to improve the individual's performance of system user.

Based on the description above, the third hypothesis can be formulated as follows:

H3: Net Benefits, Trust and Loyalty have an influence on User Performance simul-taneously.

#### RESEARCH METHOD

This research is associative. This study aims to determine the relationship between two or more variables. There are independent variables (variables that affect) and a dependent variable (the variable that is affected). This study was conducted to determine and prove the relationship of Accounting Information Systems success, user trust, and user loyalty as the independent variables and individual performance as the dependent variable.

Populations in this study are all employees in three finance company branches in Depok which have implemented Accounting Information Systems Confins. Selection is done because not all finance companies apply Confins system for continuity of their business activities. In this study, the unit of analysis is the individual level, which is observed is the perception of the users of the system. The sample of this study are employees who use the Confins system in their works. All variables are measured using a Likert scale of 5 points: 1 = Strongly Disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5 = Strongly Agree.

The research hypothesis is tested using multiple linear regression analysis. Multiple linear regression analysis method is used to determine the effect or the relationship of the independent variables with the dependent variable. Data processing will be done using SPSS software application tool for windows.

#### **RESULTS AND DISCUSSION**

#### **Analysis of Accounting Information Systems**

There are so many systems for finance company such as E-Loan, EMF, and Confins. Confins is a system intended to finance company issued by PT Adicipta Innovation Technology (ADIns). Confins is an ERP which serves to support the business processes of a finance company as a whole, ranging from agreement to control the process of determining payments. Confins is a web-based system. Confins product is not only a computing system but also equipped with the system operation procedure (SOP) which is very thick with operational business processes for a finance company.

ERP Confins have an operational reporting application, which is useful for generating reports in various forms according to the needs of the company (Budiman, Harlin, Sugiharto 2014). Currently, Confins already implemented in 22 finance companies both in national and multinational scale, although it is not all branches of the company has been implementing this Confins system.

#### **Respondent Profile Description**

From 40 respondents who have participated, most of them work at the operation department (45%) and marketing department (40%), only 12.5% working in collection and just 2.5% are analysts. In term of gender, most respondents are female with a percentage of 60% and 40% for male respondents. In terms of age, respondent aged under 25 years as many as 14 people (35%), 26-35 years as many as 23

people (57.5%), while those over 35 years as many as three people (7.5%). In term of how long they are in that company, the majority of respondents had worked 1-3 years as many as 18 people (45%), work <1 year there were 12 people (30%), 3-5 years working there were 8 people (20%) and work> 5 year by 2 people (5%).

In terms of education level, the most respondents are bachelor graduates as many as 20 people (50%), followed by high school graduates as many as 11 people (27.5%) and diploma as many as 9 people (22.5%). A total of 25 people have received training or attended training of Accounting Information Systems.

# Data Analysis and Validity and Reliability Test Results

The validity of the instrument is tested by using KMO and Bartlett's Test. The reliability of the instrument is tested using Cronbach's Alpha test. The results of test calculations the validity and reliability of the questionnaire show the following results.

From table 4.1, all of the variables have KMO values more than 0.5. It means that the validity of each variable is acceptable, although there are a few variables that KMO value are less than 0.6. And all of the variables have Cronbach's Alpha value more than 0.6. It means that the reliability of each variable is acceptable.

Table 4.1 Validity and Reliability Test

Variable	KMO &	Cronbach's	
	Bartlett	Alpha	
System Quality	0.656	0.771	
Information Quality	0.500	0.741	
Service Quality	0.634	0.801	
System Use	0.606	0.718	
User	0.652	0.740	
Satisfaction			
Net Benefits	0.713	0.781	
Trust	0.515	0.635	
Loyalty	0.635	0.738	
User	0.598	0.784	
Performance			

#### **Classical Assumption Test**

To obtain an unbiased examination value and efficiently from a multiple regression equation by the least squares method, it should be tested to determine the output of regression models meet the requirements of the classical assumptions or not. Requirements classical assumptions are normality, multico-linearity, and heteroscedasticity.

Table 4.2 Classical Assumption Test

Classical	Description		
<b>Assumption Test</b>			
Normality	Normal		
Multicollinearity	No Multicollinearity problem		
Heteroscedasticity	No Heteroscedasticity problem		

The table showed that all of classical assumption tests have passed all regression models.

#### **Hypothesis Analysis**

# A Relationship between System Quality and Use and User Satisfaction

The first hypothesis is to know a relationship between System Quality with Intention to Use / Use and User Satisfaction. There are two models regressions to test this hypothesis.

The first model uses System Quality (System Quality, Information Quality and Service Quality) as the independent variables and Use as the dependent variable. Table 4.3, table 4.4, and table 4.5 show the result of the first model.

Table 4.3 t-Test of the First Model

Variable	t Test	Sig	Description
System Quality	2.930	0.006	Effect
Information Quality	1.261	0.216	No Effect
Service Quality	0.702	0.487	No Effect

Table 4.4 f-Test of the First Model

F test	Sig	Description
10.734	0.000	Simultaneously Effect

Table 4.5 Adjusted R<sup>2</sup> First Model

Adjusted R <sup>2</sup> First Model
Adjusted R <sup>2</sup>
42,8 %

The second model uses System Quality (System Quality, Information Quality and Service Quality) as the independent variables and User Satisfaction as the dependent variable. Table 4.6, table 4.7, and table 4.8 show the result of the second model.

Table 4.6 t-Test of the Second Model

Variable	t Test	Sig	Description
System Quality	1.664	0.105	Not Effect
Information Quality	0.919	0.364	Not Effect
Service Quality	1.161	0.253	Not Effect

Table 4.7 f-Test of the Second Model

F test	Sig	Description
6.175	0.002	Simultaneously Effect

Table 4.8 Adjusted R<sup>2</sup> Second Model

Adjusted R <sup>2</sup> Second Model			
Adjusted R <sup>2</sup>			
28,5 %			

System Quality is proven to have an influence on the Use and User

Satisfaction, while the Information Quality and Service Quality partially is proven not to affect. Users think that using a higher quality system will produce the same information. However, if the System Quality, Information Quality, and Service Quality work simultaneously it will affect Use and User Satisfaction.

# A Relationship between Use and User Satisfaction with Net Benefits, Trust, and Loyalty

The second hypothesis is to know a relationship between Use and User Satisfaction with Net Benefits, Trust and Loyalty. There are three models regressions to test this hypothesis.

The third model uses Use and User Satisfaction as the independent variable and Net Benefits as the dependent variable. Table 4.9, table 4.10, and table 4.11 show the result of the third model.

Table 4.9 t-Test of the Third Model

Variable	t Test	Sig	Description
System Use	-0.498	0.622	Not Effect
User Satisfaction	2.819	0.008	Effect

Table 4.10 f-Test of the Third Model

F test	Sig	Description

The state of the s	4.857	0.013	Simultaneously Effect	•
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Table 4.11 Adjusted R<sup>2</sup> Third Model

Adjusted R <sup>2</sup> Third Model
Adjusted R <sup>2</sup>
16,5%

The fourth model uses Use and User Satisfaction as the independent variable and Trust as the dependent variable. Table 4.12, table 4.13, and table 4.14 show the result of the fourth model.

Table 4.12 t-Test of the Fourth Model

Variable	t Test	Sig	Description
System Use	-0.213	0.833	Not Effect
User Satisfaction	2.301	0.027	Effect

Table 4.13

F test	Sig	Description
3.516	0.040	Simultaneously Effect

Table 4.14
Adjusted R<sup>2</sup> Fourth Model

Adjusted R <sup>2</sup> Fourth Model			
Adjusted R <sup>2</sup>			
11,4%			

The fifth model uses Use and User Satisfaction as the independent variable and Loyalty as the dependent variable. Table 4.15, table 4.16, and table 4.17 show the result of the fifth model.

Table 4.15 t-Test of the Fifth Model

Variable	t Test	Sig	Description
System Use	1.301	0.201	Not Effect
User Satisfaction	1.175	0.247	Not Effect

Table 4.16 f-Test Fifth Mode

f-Test Fifth Model				
F test	Sig	Description		
3.528	0.040	Simultaneously Effect		

Table 4.17 Adjusted R<sup>2</sup> Fifth Model

rajustea R Thin Woder
Adjusted R <sup>2</sup>
11,5%

User Satisfaction shown to have an influence on the Net Benefits and Trust partially and insignificant in Loyalty, whereas Use proved not to affect in the Net Benefits, Trust and Loyalty, this indicates that the higher frequency of use may reflect an inefficient system (McGill, 2003). However, if the Use and User Satisfaction work simultaneously it will affect the Net Benefits, Trust and Loyalty.

# A Relationship between Net Benefits, Trust and Loyalty with User Per-formance

The third hypothesis is to know a relationship between Net Benefits, Trust and Loyalty with User Performance. There is one model's regression to test this hypothesis where Net Benefits, Trust, Loyalty as the

independent variables and User Performance as the dependent variable. Table 4.18, table 4.19, and table 420 showed the result of the sixth model.

Table 4.18

Variable	t Test	Sig	Description
Net Benefits	0.562	0.578	No Effect
Trust	1.616	0.115	No Effect
Loyalty	2.313	0.027	Effect

Table 4.19 f-Test of the Sixth Model

F test	Sig	Description	
8.305	0.000	Simultaneously	
		Effect	

Table 4.20 Adjusted R<sup>2</sup> of the Sixth Model

Adjusted R <sup>2</sup> of the Sixth Model			
Adjusted R <sup>2</sup>			
36%	•		

Net Benefit is the combination of individual impact and organizational impact on the IS Success Model that has not been updated does not affect user performance. This can happen due to many things, such as the newly implemented system, users do not fully understand the use of the system, or the system does not evolve so the user feels that the use of the system inhibits their performance. It's the same with user

trust, they have not fully believed that the system would improve their performance. However, if the Net Benefits, Trust and Loyalty work together then it will affect the User Performance.

#### **CONCLUSION AND SUGGESTION**

Based on the research that has been described in the previous chapter, the following conclusions can be drawn:

- System Quality, Information Quality and Service Quality have a significant effect on Use and User Satisfaction simultaneously.
- Use and User Satisfaction have a significant effect on the Net Benefits, Trust and Loyalty simultaneously.
- Net Benefits, Trust, and Loyalty have a significant effect on User Performance simultaneously.

It is notable that the model paths that were supported in this study are those that reflect user perceptions rather than objective measures. User satisfaction reflects a user's perceptions of system quality, and the impact that an individual feels an information system has on their work reflects their satisfaction with the information system. This study indicates that Net Benefits (Individual Impact Organizational Impact), Trust and Loyalty play a significant role in User Performance simultaneously. The impact is felt by the user

and department if coupled with a tendency to believe and loyalty, will improve the user performance.

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