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THE AUDIT OF CASHIER INFORMATION SYSTEMS IN PT. FOOD BEVERAGES INDONESIA (THE BRANCH OF CHATIME, BANTEN) USING COBIT 5.0

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Abstract

This research focuses on the audit of the cashier information system at PT. Foods Beverages Indonesia (Serang Banten Branch), known as the Chatime brand. The background of this research is the importance of an effective and efficient cashier system in the digital era, especially for a leading beverage company like Chatime. The main objective of the research is to analyze how Chatime's current cashier information system works and evaluate the results using the COBIT 5 framework. The research method used is an information system audit using the COBIT 5 (Control Objectives for Information and Related Technologies) framework. This framework was chosen because it provides a collection of principles, practices, and frameworks that help companies achieve business goals through effective management of information technology.

The results show several areas that require improvement, including the need for a clear classification scheme for managing service requests, strategic planning to address employee shortages, periodic evaluation of asset performance, and implementation of Total Cost of Ownership (TCO) analysis. The research conclusion emphasizes the importance of improvements in the management of Chatime's cashier information system, including better documentation, strategic human resource planning, regular performance evaluation, and implementation of comprehensive cost analysis. The recommendations resulting from this audit are expected to improve the efficiency and effectiveness of the cashier information system at Chatime Serang Banten Branch.

Keywords: Information System Audit, Chatime, COBIT 5, Cashier System, PT. Foods Beverages Indonesia

INTRODUCTION

In the rapidly developing digital era, effective and efficient information systems are the key to business success. For a leading beverage company like Chatime, ensuring smooth and safe checkout operations is a priority. A reliable cashier system helps speed up the transaction process, reduce human errors, and increase customer satisfaction. In addition, this system must be able to manage transaction data accurately for business analysis and financial reporting.

Data security is also an important factor to protect sensitive customer and company information. Implementing the latest technology in cashier systems, such as integration with digital payment applications and loyalty systems, can provide added value for customers and increase operational

efficiency. Chatime needs to continually update and optimize its information systems to remain competitive in the market and ensure high business standards are maintained.

Chatime Indonesia is part of F&B Indonesia which started operating in 2011. Offering more than 50 flavors of brewed tea drinks, Chatime has six main categories: Signature Milk Tea, Tea Presso, Smoothies, TeaRRIFIC, Coffee and Latte, and Mood Refresh. The serving process at Chatime uses high quality tea with a modern brewing machine, allowing adjustments to toppings, sugar content and amount of ice according to customer wishes. Available toppings include Pearl, Pudding, Grass Jelly, Rainbow Jelly, and others.

Chatime is committed to providing fresh and delicious drinks with friendly and fast service. The shops are spread across various big cities in Indonesia, making it easily accessible to many people. Chatime also frequently innovates menus and services to continue to meet the diverse tastes of consumers.

Chatime Serang City, Banten, is one of the branches of the leading tea drink chain in Indonesia. Strategically located in the city of Serang, this outlet provides various variants of tea drinks which are famous for their consistent quality and taste. Customers can enjoy a variety of topping choices such as Pearl, Pudding and Grass Jelly, as well as adjusting the sugar and ice levels according to taste. Chatime Serang City is also known for its friendly and efficient service, making it a favorite place to relax and enjoy fresh drinks.

This Point-of-Sale (POS) system is designed with an efficient cashier module to record sales and facilitate transactions at Chatime. Accurate transaction recording is essential for stock management, financial reporting and business analysis. With this POS application, every transaction can be recorded in real-time, reducing the risk of human error and speeding up the sales process. The app also supports multiple payment methods, including credit, debit and digital wallet cards, which increases customer convenience.

Integration with loyalty systems simplifies loyal customer program management, increases customer retention and encourages repeat sales. Chatime utilizes the latest technology in POS systems to ensure store operations run smoothly and efficiently, while maintaining high business standards. This system also provides analytical data that is useful for management to make better and strategic decisions. This POS application is an essential tool in Chatime's daily operations.

Discounts are a marketing strategy that is often used to attract customer interest and increase sales. Discount refers to a price reduction from the normal price of a product or service that a seller offers to a buyer. Implementing discounts can be effective in attracting more customers and encouraging impulse purchases. However, discounts can also have a negative impact if not managed well. For example, discounts that do not correspond to the value or quality of the product can damage the brand image and

cause customer dissatisfaction. Providing discounts too often can reduce the perception of the product's true value and make customers wait for promotions before buying. Companies must plan and implement discount strategies carefully to stay in line with business goals and maintain customer satisfaction.

The Chatime cashier system is currently facing problems related to discounts which are often not deducted or do not match the applicable promotions. This problem disrupts operational effectiveness and efficiency and can reduce customer trust. To overcome this problem, an audit of the cashier information system needs to be carried out. This audit will evaluate all processes related to discount application, including input validation, discount data processing, and output in the cashier system.

The goal is to identify weaknesses and discrepancies in the system, and provide recommendations for improvement to ensure that discounts are applied appropriately and consistently. In this way, Chatime can improve its operational performance, maintain customer satisfaction, and ensure compliance with established discount policies. A thorough audit also helps identify other opportunities for improvement in the cashier system, so that operations can run more efficiently and safely.

The author uses the Cobit 5 (Control Objectivies for Information and Related Technologies) Framework to audit this cashier information system. This framework provides a collection of principles, practices and frameworks that help companies achieve business goals through effective management of information technology and improve the quality and efficiency of cashier systems through the implementation of a structured and standardized framework.

Therefore, the author conducted research entitled: "**Cashier Information System Audit at PT. Foods Beverages Indonesia (Serang Banten Branch) Using the Cobit 5" Framework** to obtain an overview of the strengths and weaknesses and provide recommendations for the system *cashier* At the moment.

Based on the description above, a problem formulation can be drawn, namely: 1) How does the Chatime cashier information system currently work? 2) what are the results of the Cashier information system audit at Chatime Serang Banten Branch using the Cobit 5 framework?

Basic Audit Concepts

An audit is a systematic process carried out by an independent party to evaluate an activity, system, procedure or organization as a whole and present the findings in an audit report. The aim is to assess effectiveness, efficiency, reliability and compliance with applicable regulations and policies in an organization. This is carried out by auditors who have the qualifications and independence to produce opinions or assessments of the audited entity (Philippe Peret, 2022). Auditing is the process of collecting and evaluating evidence related to certain information to determine the extent to which the information

conforms to predetermined criteria (Alvin A. Arens et al., 2020). The main objective of an audit is to ensure that the information presented is accurate, complete and in accordance with applicable standards. In its implementation, the auditor will collect data, test evidence, and evaluate findings to create a report that describes the level of conformity of information with existing criteria. According to Sukrisno Agoes (2017), audit is an examination carried out critically and systematically, by an independent party, of financial reports that have been prepared by management, along with bookkeeping records and supporting evidence, with the aim of being able to provide an opinion. regarding the fairness of the financial statements. Meanwhile, according to Messier, Glover, and Prawitt (2024) audit is a systematic process for collecting and evaluating objective evidence related to statements about economic actions and events. The goal is to ensure the conformity of the statement with the established criteria. This process includes a thorough examination of financial records and reports to assess the accuracy and reliability of the information presented. The results of the audit are then communicated to interested parties, such as management, shareholders or other external parties.

Types of Audits

Internal, external, financial, operational and compliance audits are types of audits that aim to evaluate various aspects of an organization. Internal audits focus on the effectiveness and compliance of internal control systems, while external audits evaluate financials and compliance from an independent viewpoint. Financial audits examine financial reports to ensure accuracy and compliance with accounting standards, while operational audits evaluate operational efficiency and effectiveness. Compliance audits ensure that an entity complies with applicable regulations and policies, as well as identifying possible compliance risks. All these types of audits play an important role in increasing transparency, accountability and organizational performance.

System

A system is a set of interdependent elements that together achieve a certain goal. Where the system must have organization, reciprocal relationships, integration and main objectives (Ulric J. Gelinas, et al., 2011). Each element in the system plays a specific role and must work synergistically to ensure that the entire system runs smoothly. According to Muhammad Awwalul Ikhtiar et. al., (2021) a system is a collection of several interconnected elements, with smaller subsystems often providing more support for a larger system. Each element in the system functions synergistically to achieve certain goals.

A set of elements work together to achieve a certain goal. A basic system is a system consisting of many elements that interact with each other. Together they form one unit (Tukino Tukino, 2018). Together, they form an integrated and coherent whole, where each element has a specific role and

function that supports overall performance. Collaboration between these elements creates synergy, allowing the system to operate efficiently and effectively.

System Quality

System quality focuses on the performance of information system components, namely how well the system is able to provide information to users regarding hardware, software, people, processes, databases, communication networks, data, activities, networks, etc. technology. The quality of the accounting information system can be seen from whether the financial information received by the user is sufficient or even more than the required information.

According to DeLone and McLean (2003), system quality is the system's ability or performance in providing information according to user needs. Meanwhile, according to Jogiyanto (2008), system quality is used to measure the quality of the technological system itself. Information system quality is also defined by Davis, Bagozzi and Warshaw (1989), who explain that system quality is defined as perceived ease of use, which is how much computer technology is felt to be relatively easy to understand and use.

Information

According to Ainiyah, Permatasari, and Murwati (2022), information in the context of financial information systems is defined as information technology and the use of financial information systems which significantly influence the effectiveness of accounting information systems. According to Ismayilov and Yusifova (2022), information in the context of the information society is defined as a globalization process that makes national borders more open for trade, finance, investment and information, with revolutionary changes in the formation of global communications and the information society. According to Sales (2020), information literacy is defined as the relevance of information literacy in today's society, not only in the context of education but also in every aspect of life. Meanwhile, Hidayati (2021) defines management information systems as evaluation of management information systems needed to assess the quality of technology, the benefits obtained, and find potential problems that will be faced by users and organizations. This evaluation ensures that the information system runs effectively and efficiently, supports managerial decisions, and improves organizational performance. Thus, management information systems become vital tools in achieving strategic and operational goals, as well as increasing organizational competitiveness in the market.

Information Quality

According to Lima, Bastos, & Bastos, (2021) Information quality (IQ) can be understood as a measure of the value provided by information to consumers. In the learning ecosystem, information quality greatly influences user satisfaction, continued use, and acceptance of mobile learning. Additionally, in information volume theory, this quality is measured through a probability distribution based on Deng entropy to handle uncertainty. Meanwhile, according to Guan H. Yang Z. Gurnani H., (2023) Information quality based on information volume theory: Information quality can also be measured through probability distributions in information volume theory based on Deng entropy, which is considered more suitable for handling uncertain information.

Resources

An information source is the starting point at which information is generated, collected, or accessed. These sources can come from a variety of media, including books, journal articles, and digital sources such as websites. Information sources are divided into three main types: primary (original documents or raw data), secondary (analysis of primary sources), and tertiary (summaries of primary and secondary sources). The quality of the information source greatly influences the accuracy and relevance of the information produced. Quality evaluation involves assessing the authority of the author, the accuracy of the data, and the reputation of the publisher. Users must be critical in selecting sources to ensure the validity and reliability of the information used.

Cobit

Cobit is an open standard that is believed to help organizations ensure alignment between their use of information technology (IT) and their business goals. This framework emphasizes the business needs met by each control objective (Ridley, Young, & Carroll, 2004). COBIT provides clear guidance for managing and controlling IT resources effectively. It includes best practices and frameworks that help organizations achieve optimal IT governance. COBIT is also an internal control framework used to develop and evaluate technology-intensive information systems. This framework was originally developed by the Information Technology Governance Institute (ITGI) and has become a benchmark for best control practices (Tuttle & Vandervelde, 2007). COBIT provides a comprehensive model that helps organizations achieve their business goals through the efficient and effective use of information technology.

Thinking Framework

The following are images and brief descriptions for each element that forms the thinking framework, which is used to compile and organize steps in research or information system evaluation projects using the COBIT 5 framework:

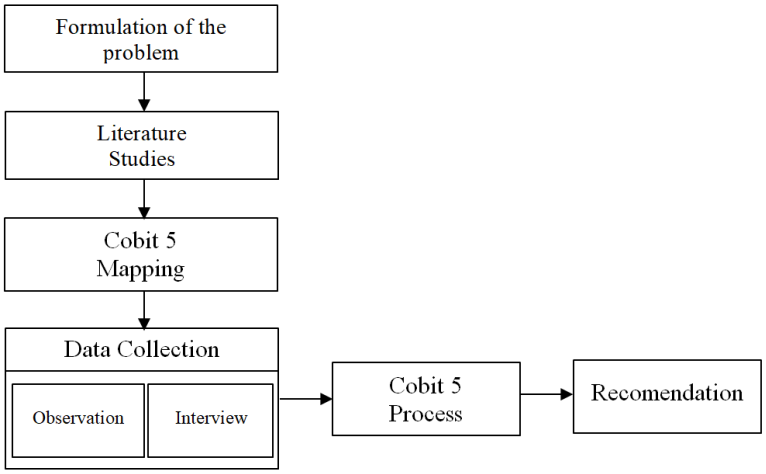

Figure 1 Thinking Framework

METHOD

Research Design

A cashier or cashier system is a system that functions to facilitate the sales transaction process efficiently and accurately in a retail business or shop. This system allows recording items purchased by customers through barcode scanning or manual entry, calculating the total price with applicable discounts and taxes, accepting various payment methods such as cash or card, printing proof of transaction receipts, updating inventory stock levels automatically, generating sales reports for business analysis, integrates with other systems such as inventory management and accounting, and has user management and security features to control cashier or store staff access.

Data collection

1. Observation

   Observation is part of collecting data directly from the field. Research observations were carried out at Chatime Kios Ace Serang Syafe'i which is located on Jl. Major Syafe'i No. 90 Lontar Pos Village, Kagungan, Serang District, Seramg City, Banten. Research has begun to be carried out in May. Data collection through observation was carried out by seeing directly how the process carried out by the cashier system at Chatime, then knowing the advantages and disadvantages of the Cashier System. This activity was carried out under the guidance of Mrs. Ida Maryani as Head of the Chatime Kios Ace Serang Syafe'i Shop.

2. Interview

   Interviews are one technique that can be used to collect research data. The interview was conducted by means of direct question and answer regarding research at Chatime Kios Ace Serang Syafe'i. In general, the results obtained from the interview are a general description of the Head of the Chatime Kios Ace Serang Syafe'i Shop. Interviews were conducted using COBIT 5 criteria in the DSS02 and BAI09 domains for each aspect. Next, the author evaluates the level of capability for each process in the running cashier system. Apart from that, the results of the interview also revealed how the cashier works, as well as what incidents have occurred. From the interview results, the Head of the Shop said that they had not experienced any serious problems with the Chatime Cashier System. There were only problems when the server was down or the network was slow which resulted in delays in the Cashier System application process.

Secondary and Primary Data Collection

Secondary data collection for research on Chatime cashiers involved readily available sources, such as news articles about tea drink trends, customer reviews on online platforms, and information from Chatime's official website. The aim is to get a comprehensive picture of the brand and its position in the market. In addition, COBIT 5 mapping is carried out to link the organization's strategic objectives with IT governance and management processes. In collecting primary data, researchers conducted in-depth interviews with cashiers at Chatime Kios Ace Serang Syafe'i to understand the implementation and management of the cashier Information System, as well as the technical challenges faced.

Cobit Governance Audit

In this stage, researchers carry out data analysis and design using tools and methodology based on the COBIT 5 framework. The following are the stages of the method for implementing information technology governance in COBIT 5 which have been carried out by researchers, namely Intitation,

Planning the Assessment, Briefing, Data Collection, Data Validation, Process Attribute Rating, and Reporting the Results.

Data Analysis Method

The initiation stage in the process assessment based on the COBIT 5 model includes introducing the object to be assessed, determining the scope, and identifying the information needed to support the determination of the COBIT 5 domain. Next, the assessment planning stage involves integrating the RACI Chart from COBIT to meet the needs of the activities to be evaluated . The briefing stage provides respondents with an understanding of the assessment process, including explanations of inputs, procedures, outputs and work schedules. At the data collection stage, data findings from the cashier system are collected and identified to ensure appropriate capabilities. The data validation stage verifies the accuracy and adequacy of the data for evaluating maturity levels.

RESULTS AND DISCUSSION

Cobit Mapping in the Cashier System

COBIT 5 provides guidance for mapping and selecting appropriate domains and processes so that assessments align with research needs. This guide of course refers to the strategic objectives of the research object, namely optimizing information systems *Locker* at Chatime Serang.

Table 1 *Enterprise Goal*

Figure 4—COBIT 5 Enterprise Goals				
		Relation to Governance Objectives		
BSC Dimension	Enterprise Goal	Benefits Realisation	Risk Optimisation	Resource Optimisation
Financial	1. Stakeholder value of business investments	P		S
	2. Portfolio of competitive products and services	P	P	S
	3. Managed business risk (safeguarding of assets)		P	S
	4. Compliance with external laws and regulations		P	
	5. Financial transparency	P	S	S
Customer	6. Customer-oriented service culture	P		S
	7. Business service continuity and availability		P	
	8. Agile responses to a changing business environment	P		S
	9. Information-based strategic decision making	P	P	P
	10. Optimisation of service delivery costs	P		P
Internal	11. Optimisation of business process functionality	P		P
	12. Optimisation of business process costs	P		P
	13. Managed business change programmes	P	P	S
	14. Operational and staff productivity	P		P
	15. Compliance with internal policies		P	
Learning and Growth	16. Skilled and motivated people	S	P	P
	17. Product and business innovation culture	P		

Table 2 *IT-Relate Goals*

Figure 5—IT-related Goals		
IT BSC Dimension	Information and Related Technology Goal	
Financial	01	Alignment of IT and business strategy
	02	IT compliance and support for business compliance with external laws and regulations
	03	Commitment of executive management for making IT-related decisions
	04	Managed IT-related business risk
	05	Realised benefits from IT-enabled investments and services portfolio
	06	Transparency of IT costs, benefits and risk
Customer	07	Delivery of IT services in line with business requirements
	08	Adequate use of applications, information and technology solutions
Internal	09	IT agility
	10	Security of information, processing infrastructure and applications
	11	Optimisation of IT assets, resources and capabilities
	12	Enablement and support of business processes by integrating applications and technology into business processes
	13	Delivery of programmes delivering benefits, on time, on budget, and meeting requirements and quality standards
	14	Availability of reliable and useful information for decision making
	15	IT compliance with internal policies
Learning and Growth	16	Competent and motivated business and IT personnel
	17	Knowledge, expertise and initiatives for business innovation

Mapping Results

Based on the guide table above, it can be seen that to achieve the Chatime cashier's vision and mission, the Enterprise Goals selected are in accordance with the following table:

Table 3 *Enterprise Goals* Selected

Figure 4—COBIT 5 Enterprise Goals				
		Relation to Governance Objectives		
BSC Dimension	Enterprise Goal	Benefits Realisation	Risk Optimisation	Resource Optimisation
Financial	2. Portfolio of competitive products and services	P	P	S
Customer	6. Customer-oriented service culture	P		S
	7. Business service continuity and availability		P	
	8. Agile responses to a changing business environment	P		S
	9. Information-based strategic decision making	P	P	P
Internal	11. Optimisation of business process functionality	P		P
Learning and Growth	16. Skilled and motivated people	S	P	P
	17. Product and business innovation culture	P		

Then the results of the Enterprise Goals mapping will be adjusted to the IT-Related Goals. So the results of the Enterprise Goals to IT-Related Goals mapping can be seen in the following table:

Table 4 *Enterprise Goals To IT-Relate Goals*

Figure 17—Mapping COBIT 5 Enterprise Goals to IT-related Goals								
	Enterprise Goal							
	Portfolio of competitive products and services	Customer-oriented service	Business service continuity and	Agile responses to a changing busi	Information-based strategic deci	Optimisation of business process functionality	Skilled and motivated pe	Product and business inno

				culture	availability	ness environment	sion making		ople	vation culture
			2	**6**	**7**	**8**	**9**	**11**	**16**	**17**
IT-related Goal			**Financial**	**Customer**				**Internal**	**Learning and Growth**	
Financial	1	Alignment of IT and business strategy	**P**	**P**	**S**	**P**	**P**	**P**	**S**	**S**
	2	IT compliance and support for business compliance with external laws and regulations								
	3	Commitment of executive management for making IT-related decisions	**S**			**S**	**S**	**S**	**S**	**S**
	4	Managed IT-related business risk			**P**	**S**			**S**	
	5	Realised benefits from IT-enabled investments and services portfolio	**P**	**S**		**S**		**S**		**S**
	6	Transparency of IT					**S**			

		costs, benefits and risk								
Customer	7	Delivery of IT services in line with business requirements	**P**	**P**	**S**	**P**	**S**	**P**	**S**	**S**
	8	Adequate use of applications, information and technology solutions	**S**	**S**	**S**		**S**	**P**	**S**	**S**
	9	IT agility	**P**	**S**		**P**		**P**	**S**	**P**
	10	Security of information, processing infrastructure and applications			**P**					
	11	Optimisation of IT assets, resources and capabilities	**S**			**S**		**S**		**S**
Internal	12	Enablement and support of business processes by integrating applications and technology into business processes	**P**	**S**		**S**		**P**		**S**
	13	Delivery of programmes delivering benefits, on time, on budget, and meeting requirements and	**S**	**S**						

		quality standards								
	14	Availability of reliable and useful information for decision making	S		P		P	S		
	15	IT compliance with internal policies								
	16	Competent and motivated business and IT personnel	S	S		S			P	S
Learning and Growth	17	Knowledge, expertise and initiatives for business innovation	P	S		P	S	S	S	P

From mapping Enterprise Goals to IT-Related Goals, the results are as shown in the table below:

Table 5 Mapping Results *Enterprise Goals To IT-Relate Goals*

No.	*Enterprise Goals*	*No EGO*	*IT-Related Goals*	*Not IGO*
1	Portfolio of competitive products and services	2	Realised benefits from IT-enabled investments and services portfolio	5
			Enablement and support of business processes by integrating applications and technology into business processes	12
2	Customer-oriented service culture	6	Delivery of IT services in line with business requirements	7
3	Business service continuity and availability	7	Managed IT-related business risk	4
			Security of information, processing infrastructure and applications	10
4	Agile responses to a changing business environment	8	IT agility	9
5	Information-based strategic	9	Alignment of IT and business strategy	1

	decision making		Availability of reliable and useful information for decision making	14
6	Optimisation of business process functionality	11	Adequate use of applications, information and technology solutions	8
7	Skilled and motivated people	16	Competent and motivated business and IT personnel	16
8	Product and business innovation culture	17	Knowledge, expertise and initiatives for business innovation	17

Mapping *IT-Relate Goals to Proses* Cobit 5

The mapping of IT-Related Goals to the COBIT 5 process is carried out after obtaining results that are relevant to the problem, then processed with COBIT 5, which can be seen in the following picture:

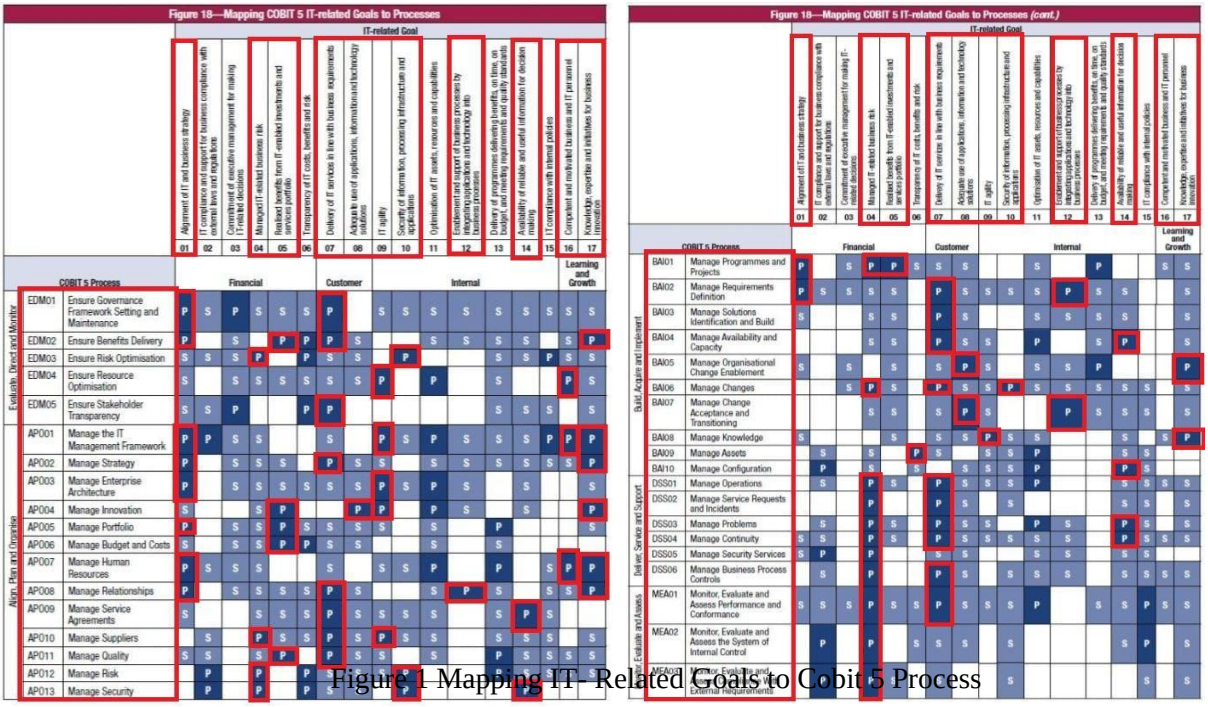

Figure 1 Mapping IT- Related Goals to Cobit 5 Process

From the mapping results above, it can be seen that the selected IT-Related Goals produce a cobit 5 process. So the results from the mapping are as follows:

Table 6 Mapping Results *IT- Related Goals*

No.	*IT-Related Goals*	*Process COBIT 5*
1	*Alignment of IT and business strategy*	BAI01, BAI02, EMD01, EDM02,

		APO01, APO02, APO03, APO05, APO07, APO08
4	*Managed IT-related business risk*	BAI06, DSS01, DSS02, DSS03, DSS04, DSS05, DSS06, MEA01, MEA02, MEA03, EDM03, APO10, APO12, APO13
5	*Realised benefits from IT-enabled investments and services portfolio*	APO04, APO06, APO11
7	*Delivery of IT services in line with business requirements*	BAI03, BAI04, APO09
8	*Adequate use of applications, information and technology solutions*	BAI05, BAI07,
9	*IT agility*	BAI08, EDM04
10	*Security of information, processing infrastructure and applications*	EDM03, APO12, APO13, BAI06
12	*Enablement and support of business processes by integrating applications and technology into business processes*	APO08, BAI02, BAI07
14	*Availability of reliable and useful information for decision making*	APO09, APO13, BAI04, BAI10, DSS03, DSS04
16	*Competent and motivated business and IT personne*	EDM04, APO01, APO07
17	*Knowledge, expertise and initiatives for business innovation*	EDM02, APO01, APO02, APO04, APO07, APO08, BAI05, BAI08

From the results of COBIT 5 *Process* It only selects two COBIT 5 domains that will be audited, namely DSS02 (Manage Service Requests and Incidents) & BAI09 (Manage Assets)

Evaluation Focus

Linking COBIT 5 is a process that connects an organization's strategic objectives with information technology governance and management processes within the COBIT 5 framework. The primary objective is to ensure that IT activities are aligned with business objectives, risks are managed well, and IT resources are used appropriately. efficient.

DSS02 (Manage Service Requests and Incident)

DSS02 in the COBIT 5 framework is a process that focuses on the delivery of regulated services and the management of incidents and service requests. This process ensures that IT services are delivered according to stakeholder needs and expectations. DSS02 covers the identification, classification and processing of incidents and service requests, with the aim of minimizing negative impacts on the business. With fast and effective handling, this process helps increase user satisfaction and maintain operational continuity. Good management of incidents and service requests is key to supporting business objectives and continuity of IT services.

BAI09 (Manage Assets)

BAI09 is a process in the COBIT 5 framework that focuses on managing change. This process aims to ensure changes implemented to the IT environment are carried out in a controlled and coordinated manner to minimize the risk of disruption to business operations. BAI09 covers planning, testing, and implementing changes, as well as assessing the potential impact on IT services and infrastructure. By implementing BAI09, organizations can increase their flexibility and responsiveness to changing business needs, while maintaining operational stability and integrity.

The following is a COBIT 5 IT-Related Goals to Process Mapping table that is relevant to Chatime's vision and mission as follows:

Table 7 IT Goals with the COBIT 5 Process

Mapping* COBIT 5 *IT-Related Goals to Process												
		IT-Related Goals										
		2	4	6	7	8	9	10	11	14	15	17
Domain COBIT 5		*Financial*			*Customer*		*Internal*					*Learning & Growth*
Delivery, Service and Support	2		P		P	S		S		S	S	S
Build, Acquire, and Implement	9	S	S	P	S		S	S	P	S	S	

The following is the cobit process that is assessed:

Table 8 Description of selected Cobit 5 processes

Process ID	***DSS02***
Process Name	*Manage Service Request and Insidents*
Process Description	Provide timely and effective response to user requests and resolution of all types of incidents. Restore normal service; record and fulfill user requests; and log, investigate, diagnose, escalate, and resolve incidents.
Process Purpose Statement	Achieve increased productivity and minimize disruption through rapid resolution of user questions and incidents.
Process ID	***BAI09***
Process Name	Manage Assets
Process Description	Manage IT assets to ensure that their use provides value at optimal cost, they remain operational (fit for purpose), they are recorded and physically protected, and that assets that are critical to supporting service capabilities are reliable and available. Manage software licenses to ensure that optimal amounts are obtained, retained, and used in relation to required business uses, and that software is installed in accordance with the license agreement.
Process Purpose Statement	Accountable for all IT assets and optimizing the value provided by these assets.

Planning Assessment

The following is a table of respondents who have been found using the RACI Chart:

Tabel 9 RACI Chart

No	CATCH COLD	Department
1	Responsible	IT Technician
2	Accountabel	Cashier
3	Consulted	Systems Programmer
4	Informed	Head of Shop and Cashier

The explanation of RACI itself means:

R: the party responsible for completing the task

A : the party responsible for making the decision

C : the party providing consulting services

I : the party receiving the information

Data Validation

In determining whether a condition is valid, it will be further strengthened, in this audit it is carried out by collecting evidence that has been determined in COBIT 5 Domain DSS02 (Manage Service Request and Incident) and BAI09 (Manage Assets). The results of the evidence that can be checked are in accordance with existing conditions that have been obtained and become a separate measuring tool. The following are the results of the collection of evidence obtained:

Table 10 DSS02 Evidence Collection

No	*Key Management Practice*	*Output*	*Exist*	Information
1	DSS02.01 Defines classification and service request schemes.	Incident classification scheme	Of	An incident classification scheme already exists and is in accordance with established standards.
		Service request classification scheme	No	A service request classification scheme is not yet available. Such as a price discount scheme, needs to be created and implemented to ensure consistency in the handling of service requests.
2	DSS02.02 Logging, classifying and prioritizing requests and incidents.	Classified and prioritized incidents and service requests	Of	All incidents and service requests have been properly recorded, classified and prioritized in accordance with existing procedures.
3	DSS02.03 Verify, approve and fulfill service requests	Approved service request	Of	Service requests have been verified and approved in accordance with applicable policies.
		Fulfilled service requests	No	Some service requests have not been fulfilled, such as price discounts, it is necessary to improve the fulfillment process to fulfill all approved requests.
4	DSS02.04 Investigate,	Incident	Of	Symptoms of the incident have been

	diagnose and allocate incidents	symptoms		clearly identified and recorded for further analysis.
		Root cause of incident	Of	The root cause of the incident has been properly investigated and identified to prevent the recurrence of the same incident.
5	DSS02.05 Resolving and recovering from incidents	Resolved incident	Of	The incident was resolved using the appropriate method and in the appropriate time.
		Incident resolution	Of	Incident resolution has been implemented and is effective in restoring service.
6	DSS02.06 Close service requests and incidents	Closed incidents and service requests	Of	All resolved incidents and service requests are officially closed with complete documentation.
7	DSS02.07 Track status and create reports	Status report	Of	Status reports are made regularly and provide the information needed for monitoring.
		Trend analysis report	No	Currently, there is no trend analysis report available. The process of collecting data and preparing the report is ongoing.

Table 11 Evidence Collection BAI09

No	*Key Management Practice*	*Output*	*Exist*	Information
1	BAI09.01 Identify and record current assets	Asset inventory list	Of	An asset inventory list exists and is updated regularly to reflect current assets.
		List of software licenses	Of	A list of software licenses is readily available and includes all licenses owned by the organization.
2	BAI09.02 Manage	Critical asset	Of	Critical asset maintenance plans have

	critical assets	maintenance plan		been prepared and implemented to ensure asset availability and performance.
		Critical asset performance reports	No	Important asset performance reports are not yet available, they need to be prepared to monitor and evaluate asset performance periodically.
3	BAI09.03 Manage the asset life cycle	Asset life cycle policy	Of	Asset lifecycle policies are in place and implemented to manage the entire asset lifecycle from acquisition to decommissioning.
		Asset decommissioning report	Of	An asset decommissioning report has been compiled and includes all assets that have been decommissioned.
4	BAI09.04 Optimize asset costs	Total cost of ownership (TCO) analysis	No	Total cost of ownership (TCO) analysis is not yet available, it is necessary to identify and manage asset costs effectively.
		Recommendations for optimizing asset costs	Of	Recommendations for optimizing asset costs have been prepared and implemented to reduce costs and increase efficiency.
5	BAI09.05 Manage licenses	License inventory list	Of	A license inventory list is in place and includes all licenses owned, making it easy to manage and monitor compliance.
		License compliance reports	Of	A license compliance report has been prepared to ensure that all software licenses used comply with applicable regulations.

Process Attribute Rating **DSS02 and BAI09**

1. *Process Attribute Rating* DSS02

The following is an assessment of the documentation that was collected in the previous process. Below can be seen that the process in DSS02 Manage Service Requests and Incidents has reached level 1 in the Capability level:

Table 12 *Process Attribute Rating* DSS02

No	*Key Management Practice*	*Output*	*Exist*	*Score*
1	DSS02.01 Defines classification and service request schemes.	Incident classification scheme	Of	50%
		Service request classification scheme	No	
2	DSS02.02 Logging, classifying and prioritizing requests and incidents.	Classified and prioritized incidents and service requests	Of	100%
3	DSS02.03 Verify, approve and fulfill service requests	Approved service request	Of	50%
		Fulfilled service requests	No	
4	DSS02.04 Investigate, diagnose and allocate incidents	Incident symptoms	Of	100%
		Root cause of incident	Of	
5	DSS02.05 Resolving and recovering from incidents	Resolved incident	Of	100%
		Incident resolution	Of	
6	DSS02.06 Close service requests and incidents	Closed incidents and service requests	Of	100%
7	DSS02.07 Track status and create reports	Status report	Of	50%
		Trend analysis report	No	
Average Score				79%

Based on the researcher's explanation of documents found in the BAI09 Manage Assets process. This process is at level 1, because the percentage in this process is 79%. Where this process is at the largely achieved level, namely between 50%-85%. Because it does not reach the limit in determining the level to go to the next level, namely Fully Achieved. So the BAI09 process is at level 1.

Table 13 Results of Achieving Level DSS02

Process Name	**Level 0**	**Level 1**	**Level 2**		**Level 3**		**Level 4**		**Level 5**	
DSS02		PA 1.1	PA 2.1	PA 2.2	PA 3.1	PA 3.2	PA 4.1	PA 4.2	PA 5.1	PA 5.2

Assessment Based on Criteria	**F (100%)**	**L (79%)**								
Capability Level Achieved		**1**								

Information:

N(*Not Achieved*, 0-15%), **P**(*Partially Achieved*, >15-50%), **L**(*Largely Achieved*, >50-85%), **F**(*Fully Achieved*, >85-100%).

Below is a graph from the Research *Capability Maturity* in the DSS01 process.

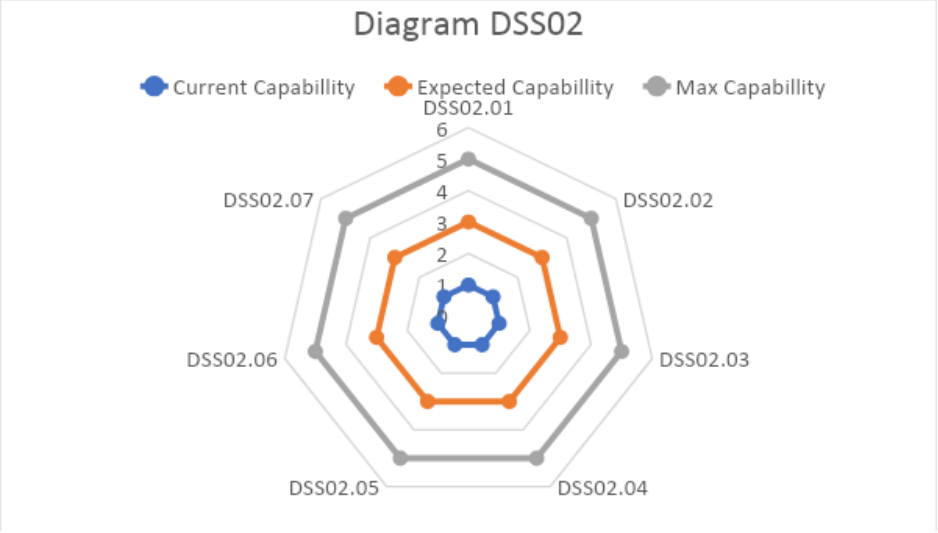

Figure 2 DSS02 Representation Diagram

2. *Process Attribute Rating* BAI09

The following is an assessment of the documentation that was collected in the previous process. Below can be shown that the process in BAI09 (*Manage Assets)* have reached level 1 on the Capability level:

Table 14 *Process Attribute Rating* BAI09

No	*Key Management Practice*	*Output*	*Exist*	*Score*
1	BAI09.01 Identify and record current assets	Asset inventory list	Of	100%
		List of software licenses	Of	
2	BAI09.02 Manage critical assets	Critical asset maintenance plan	Of	50%
		Critical asset performance reports	No	
3	BAI09.03 Manage the asset life cycle	Asset life cycle policy	Of	100%
		Asset decommissioning report	Of	

4	BAI09.04 Optimize asset costs	Total cost of ownership (TCO) analysis	No	50%
		Recommendations for optimizing asset costs	Of	
5	BAI09.05 Manage licenses	License inventory list	Of	100%
		License compliance reports	Of	
Average Score				80%

Based on the researcher's explanation of documents found in the BAI09 Manage Assets process. This process is at level 1, because the percentage in this process is 80%. Where this process is at the largely achieved level, namely between 50%-85%. Because it does not reach the limit in determining the level to go to the next level, namely Fully Achieved. So the BAI09 process is at level 1.

Table 15 Results of Achieving Level BAI09

Process Name	Level 0	Level 1	Level 2		Level 3		Level 4		Level 5	
BAI09		PA 1.1	PA 2.1	PA 2.2	PA 3.1	PA 3.2	PA 4.1	PA 4.2	PA 5.1	PA 5.2
Assessment Based on Criteria	**F (100%)**	**L (80%)**								
Capability Level Achieved		**1**								

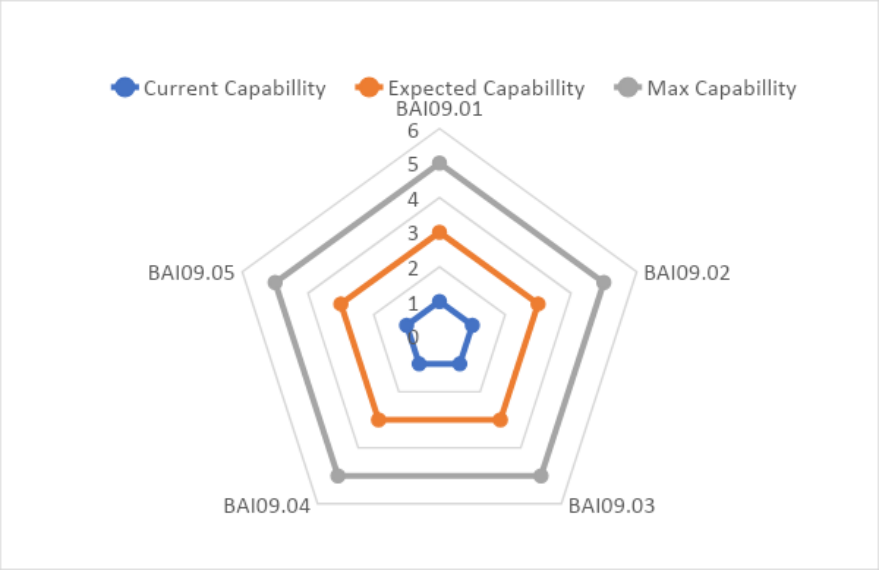

Figure 3 BAI09 Representation Diagram

Reporting the Result

In the reporting the results process, the results of the capability level assessment (Capability Level) will be analyzed and presented in report format. This report reveals the strengths and weaknesses identified during the evaluation phase of the process being studied. In addition, recommendations for improving this evaluation process are provided before reporting the results. The following is an explanation of the assessments carried out as part of this research:

Table 14 *Reporting the Result*

Process Name	***Target Level***	***Process Capability Level***					
		0	**1**	**2**	**3**	**4**	**5**
DSS02 Manage Service Requests and Incident	**3**		√				
BAI09*Manage Assets*	**3**		√				

CONCLUSION

Based on the findings and recommendations outlined, the conclusion of this study highlights several key points that are important for the management of organizational services and resources. First, managing service requests requires a clear and documented classification scheme to ensure that service evaluation is carried out effectively and consistently. Second, strategic recruitment planning is needed to overcome employee shortages, including considering emergency options to deal with unexpected situations. Third, regular evaluation of asset performance is a crucial step in identifying areas that require improvement and in efforts to increase operational efficiency. Furthermore, implementing Total Cost of Ownership (TCO) Analysis with clear guidelines is needed to support contract management and related policies, which can help organizations optimize expenditure and investment. Lastly, trend analysis reports are needed to identify patterns and changes that may impact an organization's operations and its long-term strategy. Overall, this research emphasizes the importance of a structured and proactive approach to resource management, as well as the need for good integration between strategic and operational planning to achieve long-term efficiency and effectiveness.

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