Proposed Improvement of Monitoring and Controlling Process on Outstanding Customer (Study Case: XYZ Company in Jambi Area)

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ABSTRACT

PT XYZ is a company that provides telecommunications services, and for corporate customers, there is the BGES Unit. The payment process for corporate customers is managed by one of the BGES pillars, namely Collection Management. One of the tasks that Collection Management takes care of is outstanding data. The achievement of outstanding billing is only 14.75% per year, which means a payment delay of IDR 7,000,458,871.00 in 2021. Due to excessive workload, billing management does not supervise customers regarding billing so billing objectives are not achieved. In addition, billing information in the form of invoices is provided later than the 5th through 12th of each month so that customers do not know for sure the total bill. This research aims to make improvements in the monitoring and controlling processes of customer outstanding billing. This research uses the business process improvement method. This method also refers to a process that works but some activities need improvement. It does not design new activities but improves existing activities. The tools of business process improvement that were used in this research are application technique wheels and streamlining, which can be useful for simplifying a process and fixing a problem based on the outstanding billing problems by PT XYZ. The result of this research is a new business process as is dashboard monitoring and controlling shown by a context diagram that contains incoming and outgoing data on the billing information system and reminder notification will appear if the target is not achieved. The new business process is expected to assist the BGES unit in monitoring and controlling customers every month, and the target that is expected to be achieved is an outstanding figure of less than 1,000,000 by the end of the year.

1. INTRODUCTION

The ease and speed of internet access are the main things that users consider, especially to support business activities [1]. With the rapid development of internet technology, companies inevitably end up using various kinds of internet services to support business processes. The company hopes that the internet will increasingly provide convenience in business activities, especially in terms of communication between workers and customers [2]. PT XYZ is a state-owned enterprise that is engaged in information and communication technology services as well as the largest telecommunications network in Indonesia. To meet the need for telecommunications services for residents in the Jambi area, XYZ Company was established in the Jambi area. So, in this study, we will focus on the problems that exist in XYZ Company in the Jambi area and they cannot be generalized to XYZ Company in other areas.

The problem that exists at PT XYZ in the Jambi area is in the BGES Unit. The BGES unit is a unit that works in the field of marketing in three segments: business, government, and enterprise. This unit is tasked with finding the highest level of customers, namely corporate customers. In the BGES unit, there is collection management that handles payment processes for corporate customers who use the services of the BGES unit. The tasks managed by Collection Management are outstanding customer data.

Outstanding customer data is data on arrears or bills from DATIN (data and internet) that appear every month because the customer has not paid the bill for more than two months. Several reasons cause customer data to be classified as outstanding, including the lack of availability of information related to billing amounts and customers wanting to stop providing services or no longer extending their contracts. The existence of outstanding data certainly makes the company lose money due to delayed payments. The company's income has been delayed with the large number of customers registered as outstanding. The lowest collection achievement was in February, with a percentage of 2.33%. Meanwhile, the biggest achievement fell at the end of the year in December, at 62.77%. The average billing achievement in 2021 was very low, at only 14.75%.

Table 1 – Number of Outstanding Customers

| No	2021 Period	Outstanding Total	Outstanding Unpaid	Outstanding Already Paid	Ach (%)
1	January	377	362	15	3,98%
2	February	387	378	9	2,33%
3	March	392	378	14	3,57%
4	April	410	393	17	4,15%
5	May	410	379	31	7,56%
6	June	418	382	36	8,61%
7	July	418	378	40	9,57%
8	August	429	387	42	9,79%
9	September	488	424	64	13,11%
10	October	657	561	96	14,61%
11	November	692	436	256	36,99%
12	December	693	258	435	62,77%
Average Billing Achievement 2021					14,75%
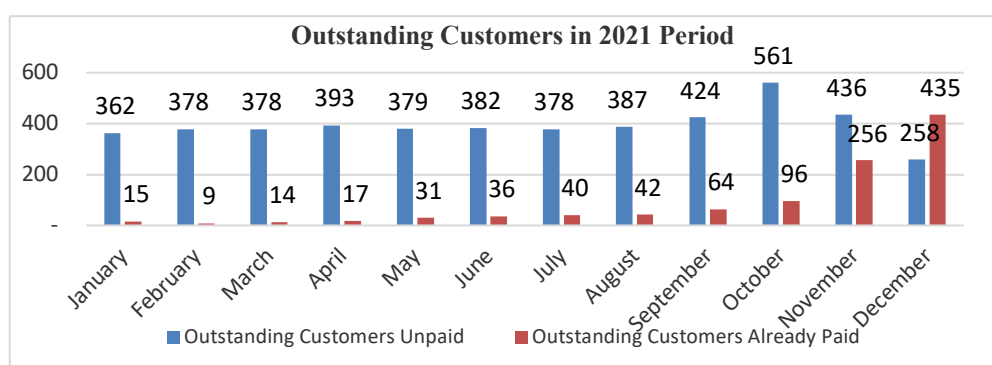
Figure 1 – Outstanding Data Gap Chart

In Figure 1, there is a large gap between outstanding customers who have paid their bills and outstanding customers who have not paid their bills. This confirms that there are still very few customers who have paid their bills.

The initial process of outstanding data is sending the name of the outstanding customer from the regional to the collection management of BGES PT XYZ and the completion of the outstanding data if the customer has paid off all existing arrears

costs and is recorded in the company's enterprise system and company spreadsheet. With a large number of customers on outstanding data, the company has the potential to experience delays in revenue. where each bill amount for each customer on the outstanding data is worth in the range of Rp. 50,000.00 to Rp. 358,000,000.00. Based on the outstanding amount that has not been paid, the company has the potential to have receivables as large as shown in Table 1.

Table 2 – Delayed Revenue

No	2021 Period	Outstanding Bill Amount	Cumulative Additions Outstanding
1	January	Rp 6,654,938,095.00	-
2	February	Rp 6,934,567,928.00	Rp 279,629,833.00
3	March	Rp 7,221,654,826.00	Rp 287,086,898.00
4	April	Rp 6,652,475,346.00	-
5	May	Rp 6,959,744,234.00	Rp 307,268,888.00
6	June	Rp 7,257,099,515.00	Rp 297,355,281.00
7	July	Rp 7,611,558,959.00	Rp 354,459,444.00
8	August	Rp 7,508,249,067.00	-
9	September	Rp 7,785,742,877.00	Rp 277,493,810.00
10	October	Rp 8,763,988,961.00	Rp 978,246,084.00
11	November	Rp 10,208,511,008.00	Rp 1,444,522,047.00
12	December	Rp 7,000,458,871.00	-
Average Cumulative Outstanding Addition			**Rp 528,257,785.63**

Collection management sets the target for the outstanding amount in the last period of the year to be less than Rp. 1,000,000.00, while based on Table 2, it can be concluded that the outstanding amount reaches Rp. 7,000,458,871.00 at the end of the year with an average addition of cumulative outstanding per month amounting to Rp 528,257,785.63. From the total outstanding results, it is known that there is a very large gap between the target that the company sets and the actual. From Rp. 7,000,458,871.00 to Rp 1,000,000.00 have a very large gap where the outstanding not achieved in 2021 Rp. 6.999.458.871. The Rp. 6.999.458.871 is revenue that the company cannot achieve in the 2021 period.

The factors why outstanding billing data is not achieved according to the company targets are:
- Workers are not optimal in monitoring and controlling outstanding customer bills. This is because workers have an excessive workload. For all payment processes in the BGES division, there is only one support collection person.
- The achievement of billing is always pursued at the end of the year, which indicates a lack of monitoring and control by the company regarding the performance of workers involved in the process of billing outstanding customers so that in the previous months billing did not seem to be too prioritized.
- The company has not routinely carried out monitoring and control.
- The habit of deadlines in the office environment is also the cause of billing targets not being met.

With the emergence of this problem, improvements will be made to the monitoring and controlling system in which there is a dashboard [3] that assists workers in viewing the recap of payment status. Monitoring or supervision is a process of observing, examining, controlling, and correcting all activities in a company [4]. In general, monitoring is used to check whether performance and targets set by the company are in line with the results obtained. In addition, monitoring is also useful to ensure that the process goes according to plan (on track) [5]. Monitoring can also provide information regarding the continuity of the process so that further steps can be determined toward continuous improvement. From the explanation above, it can be concluded that monitoring activities are carried out when a process is in progress [6]. Controlling is a set of components that can regulate and control the system. This control is carried out on one or several variables or parameters so that later they are in a certain range. The control system can also be interpreted as the effort of a system to get output or results that are following the objectives. In control, there is a reciprocal relationship between components in the form of response [3].

The dashboard monitoring and controlling will be applied in designing for monitoring and controlling system model by applying the wireframe models which the data obtained in the context diagram. The design carried out prioritizes monitoring and controlling payment status that can be viewed at any time without waiting for a monthly report and the design can reduce workload support collection.

This research was conducted using the BPI (Business Process Improvement) method, the systematic approach developed to assist a company in making significant improvements in business processes which can simplify a process, eliminate errors, reduce cycle time, maximize asset utilization, and adapt the process to changing needs to provide convenience and good results for the company [8]. BPI can improve the alignment and performance of certain processes regarding the

company's strategy and customer expectations. BPI includes the selection, analysis, design, and implementation of improved processes. The focus of business process improvement is the gradual improvement of process performance [9][10]. The improvement Technique Wheel will be used to make improvements to the process [11].

This research objective is to make improvements in the monitoring and controlling processes of customer outstanding billing in XYZ Company in the Jambi area. This is expected to help companies in improving performance in monitoring and controlling outstanding customers. Technically, the collection time and total outstanding at the end of the year will be shorter and less than normal conditions when monitoring and controlling are improved. The results of this study are new business processes following the monitoring and controlling dashboards as well as reminder notifications to BGES workers if the target is not achieved, which has been adjusted to XYZ Company in the Jambi area and needs to be used as best practice in outstanding billing.

2. METHOD

The method used in this research is an activity-based improvement. It combines two tools, namely streamlining and applying technique wheels. Based on literature study and observation, analysis and identification were made. The literature study was obtained from company data, the internet, and others, while observations were made to determine the workload of workers who handle billing problems, namely support collection. Broadly speaking, the phases of this study included five phases.

Table 2 – Methodology

| Aspects of the Methodology	Final Project	Description
Conceptual framework	Capstone project to design process proposal	In the capstone project, there are 6 chapters or stages that must be carried out, namely the introduction (there are problems raised to find alternative solutions). Furthermore, there is a literature study, design methodology, integrated system design, validation, and evaluation of the design results, and lastly, conclusions and suggestions.
Engineering methodology	Business Process Improvement	Business Process Improvement is carried out because it can improve the performance of a process, which includes consideration of one of the risk factors that become an obstacle in the business process. This is very appropriate following the problems in the field.
Method of collecting data	Literature studies, field studies, company historical data, observations, and interviews	Data collection is done to find the data needed in the design process. Based on the findings obtained from historical data and interviews, this data will later be used to help overcome the problems that exist in the company.
Methods of data analysis and system design	Perform analysis using improved technique wheels and streaming	The data is analyzed to find out which part of the activity needs improvement.
Tools in modeling (software)	Create business process models using iGrafx[10]	In business process modeling, iGrafx software is used. This software was chosen because it can help to model in detail at each flow.
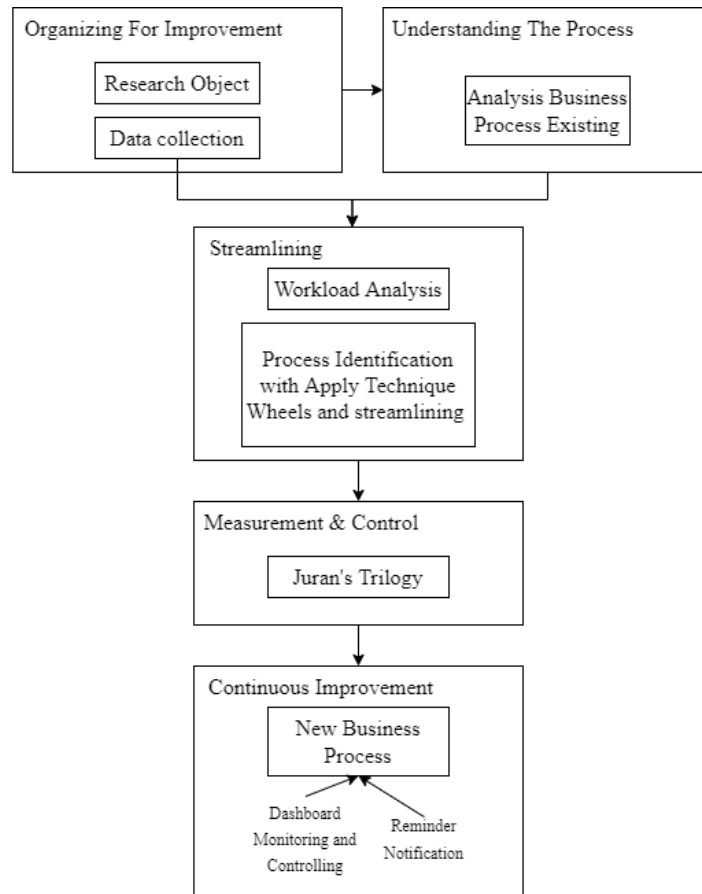
Figure 2 – Methodology Research

Data were collected from XYZ Company located in Jambi City. The data used is data processed by the BGES unit called data outstanding. The data collection process is obtained from the company's historical data from January to December 2021. Furthermore, to find out the actual business processes, interviews and direct field observations were carried out. The initial stage of this research is to identify various problems that occur in its implementation based on company data and observations. This stage is called the "organizing for improvement" stage.

Furthermore, at the stage of understanding the process, the analysis will be carried out. The analysis was carried out based on company data. From the company's data, it will be known the gap between reality and standards, which indicates that the work is not going well. At this stage, an analysis of the simplification of the process will be carried out using the tools of applying technique wheels and streamlining. After that, measurement and controls were carried out using Juran's trilogy on quality control [7], which included 3 stages, namely sensing, processing, and actuating. The last stage is continuous improvement. At this stage, the results of the design will be verified and validated before starting implementation.

Several previous studies are used as references in this study consisting of:

- Proposed Improvement Business Process for DBS Service Revocation Request at XYZ Company Using Business Process Improvement Method [3]. Based on the data from January to December 2021, discovered that there were 66.7% of service withdrawal requests that are not completed according to the standard time set by DBS, which is 1x24 hours. The company potentially gets an opportunity loss of IDR 385,875,000 to a maximum of IDR 3,252,375,000. This research identifies the causes of the service withdrawal request process not being completed following the standard time set as well as improving business processes for the service withdrawal request process. With the business process improvement method, the results of this research are monitoring information systems and work guidelines for the process of withdrawing service requests.
- Design of Business Process Improvement Survey of Business Activities of Business Process Improvement Survey of Business Activities With Business Process Improvement Approach [12]. In actual conditions, the SKDU process has not been implemented properly, causing a low level of validity and delays in processing time. So, this research aims to design a proposed business process to increase the level of validity and reduce processing time. The result of this research is that business process improvement by applying value added and automation techniques result in a reduced number of activities in business processes, and reduced process actors.

- Proposed Improvement Business Process Carrier Enterprise Pre Sales-Using Business Process Improvement Method at PT. Telekomunikasi Indonesia International (Telin) [13]. The purpose of the business process is to turn opportunities into profitable business transactions through process activities carried out within 25 days. Actual Carrier Enterprise Pre-Sales business processes have not been implemented perfectly marked by errors that should have been zero mistakes, based on five error audit criteria and the actual processing time of business processes more than the time they should, which is 37 days. As a result, the business process has been delayed and some transactions have the potential to experience negative margins. The result of this research is the proposed business process of carrier pre-sales business that is designed by applying value-added, simplification, automation, and eliminating bureaucracy techniques and involves the improvement of several new process components such as human resources, capabilities, facilities and infrastructure, motivation, and measurement.

3. RESULT AND DISCUSSION

3.1. Proposed Monitoring and Controlling Business Process

A. Sensing

Sensing is a process that captures the data. In this research, the outstanding customer payment status data is to be captured. The following is the payment status data for outstanding customers for the 2021 period. Data obtained from the company's historical data was taken from January until December 2021.

Table 3 – Outstanding Customer Payment Status

Period	SEGMENT	OUTSTANDING 2021		Total
		Customer Already Paid	Unpaid Customers	
2021	DBS	91	52	143
	DES	14	22	36
	DGS	330	184	514
Outstanding Total		**435**	**258**	**693**

Then there is data from the list of jobs that are being carried out by the support collection. The data was obtained from interviews with support collection. The following is a list of the work carried out by the support collection.

Table 4 – Support Collection Job List

No	Type of work	Description
1	DATIN NON-POTS	*Outstanding*, Asap Digital, Astinet, WMS, Mangoesky, VPN IP, and CPE
2	HSI POTS	Indihome and Telephone Cable

Some of these types of work include preparing invoices, sending invoices in the form of invoices, making collections, performing reminders, as well as monitoring and controlling the status of payments. Support collection has the task of recapitulating the status of payments to the company's spreadsheet, sending data on outstanding customers who have not paid more than the 20th to the account manager, and re-doing the reminder. Of the several types of work and job descriptions, several jobs can be replaced by computers, such as doing reminders and sending customer data to the account manager.

From Table 3, the gap will become an assessment for the BGES Manager in seeing the performance of workers, so that if the target is not achieved, it will be immediately evaluated. The data in billing status will become the database for the monitoring and controlling information system. Targets that have been determined, and the existence of an information system can make it easier. They can be directly handled so that billing times are more optimal and company income can be obtained quickly.

From the explanation above, technical specifications related to the automation of monitoring and controlling processes are obtained, namely that the information system that will be created must contain the reminder feature, which will send notifications directly and simultaneously to workers if billing goals are not achieved. Then the information system must also be accessible directly by the account manager, and the billing recap can be directly displayed on the main page in the form of a monitoring and controlling dashboard.

Several activities from the support collection were removed and replaced by automation and simplification. With the monitoring and controlling information system, the support collection workload can be reduced because some work has been replaced by the computer [14]. Identification of information needs consisting of input data and output data for each user can be seen in Figure 3.
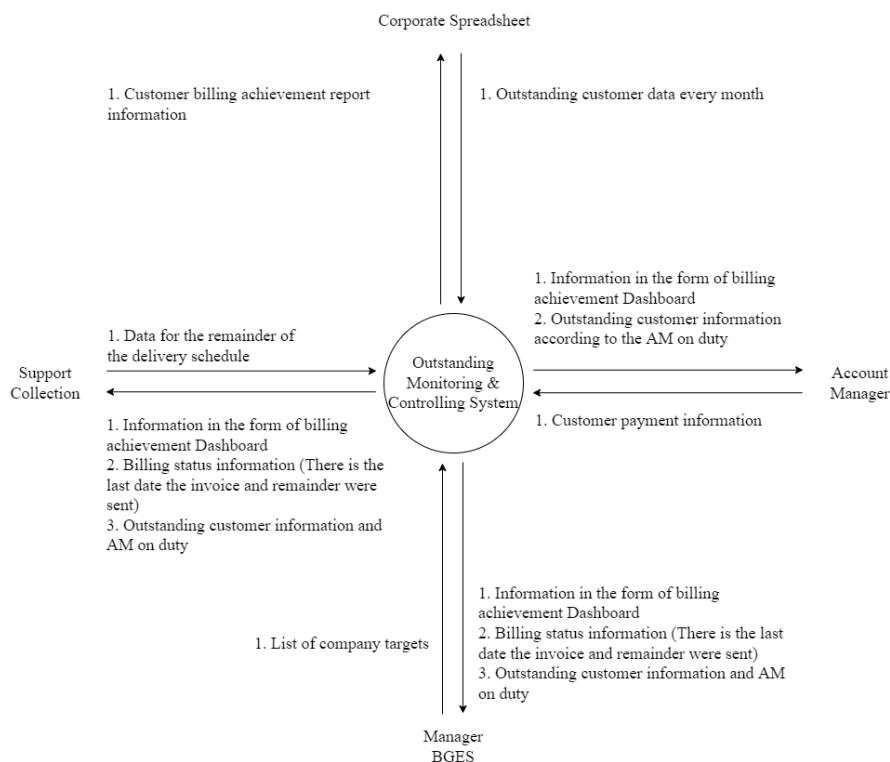

Figure 3 – Context Diagram

The following is a description of each incoming and outgoing data type:
a. The monitoring and controlling information system will only be accessed by people who are interested in and related to the billing process for outstanding customers, such as managers, AM, and support collection.
b. Admin login information: Admin login information is needed to view the login history so that every login activity can be recorded and become material for the manager, whether the workers involved have often done their work.
c. Outstanding customer data: Outstanding customer data is needed so that it can be processed by the monitoring and controlling information system.
d. Outstanding customer information and AM on duty: Outstanding customer information and AM on duty are needed to view and sort various customers by segment and AM.
e. Reminder delivery schedule data: Reminder delivery schedule data is also needed so that it can be processed as reminder delivery information.
f. Billing status information: Billing status information is needed to see the movement of billing status and payment of outstanding customers.
g. Customer billing achievement information: Customer billing achievement information is needed to view the amount in graphical form (statistics).
h. Information in the form of a billing achievement dashboard: Information in the form of a billing achievement dashboard is needed to make it easier for the workers involved in viewing billing status and statistics.

B. Processing

After identifying the data that will be captured in the monitoring process, the processing design will be carried out. In processing, it will compare the existing data with standard data. In outstanding bills, there is a gap between standards and reality. The standard number of outstanding receivables at the end of the year is IDR 1,000,000.00, while the reality is IDR 7,000,458,871.00 (end of 2021 period data) with a cumulative average per month reaching IDR 528,257,785.63.

Furthermore, for the workload, there is also a gap between the actual workload and the existing standard. Based on the Decree of the Minister of the Republic of Indonesia Ministry of Manpower 128 of 2016, the standard percentage of an employee's effective workload is 70% [15]. One way of calculating the workload is by making observations [16]. Observations were carried out for 2 days on weekdays (08.00 WIB to 17.00 WIB) by producing 30 samples. Of the 30

samples taken, 5 samples indicate that the support collection is not working. Then the percentage of effective working hours is obtained as follows.

$$\% \; Effective \; Working \; Hours = \frac{(30-5)}{30} = 83,33\%$$

Due to the percentage of observations that the support collection workload reached 83.33%, which is greater than the standard, it can be said that the support collection is experiencing an excessive workload. From there, further action will be taken which will reduce the gap between achieving the target and the workload.

C. Actuating

After the processing design stage has been carried out, the actuating design will then be carried out by acting on the proposals. In any quality control that functions properly, it requires a means that can assist in acting on the difference between the desired performance standards and the actual conditions that occur [17]. The following are the rules for following up on proposals made.

1. Reminder Notification

In the controlling function, the information system will send a notification to the support collection in the form of notification to give a reminder to the customer in the form of a message via email or customer's mobile number if it is known that the customer has not paid after the 20th of each month. If the customer has made a payment, the support collection will get a notification of a successful payment, and on the payment status page it will say "Complete". On the other hand, if after sending the reminder successfully for 3x24 hours, the customer has not paid the bill, the support collection will send another bill reminder until the customer pays the bill. The following is a flowchart of decisions from the reminder.
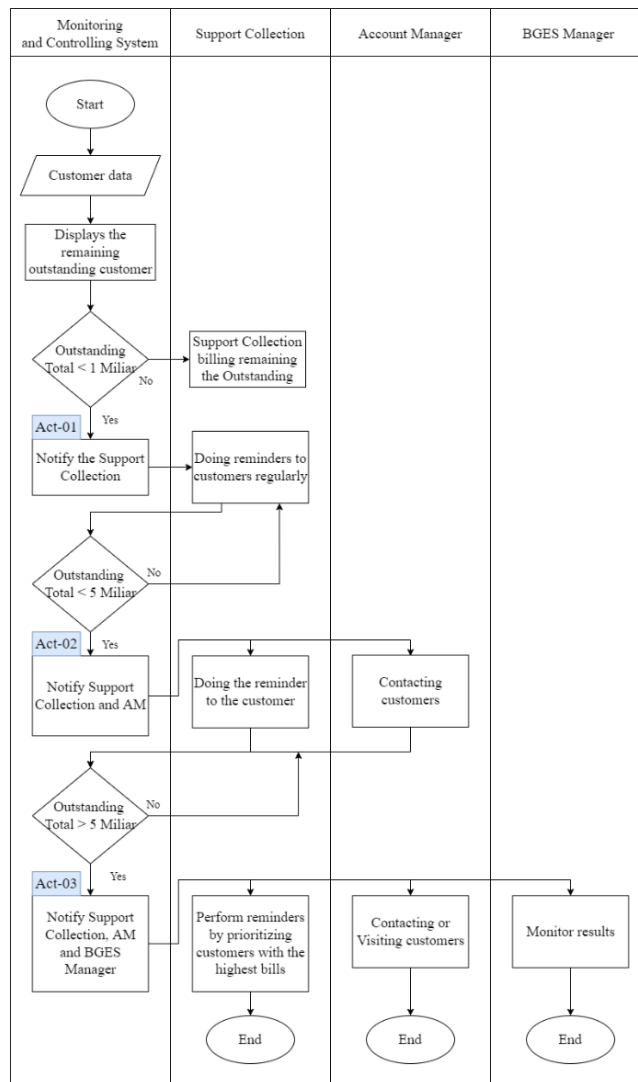

Figure 4 – Decision Flowchart

2. Achievement Target

In controlling the target to be achieved, there are several things to do.

Stage 1: Every month, the controlling function is carried out by sending notifications to the support collection when the total outstanding has reached IDR 1,000,000,000.00. After receiving the notification, it is hoped that the support collection will be able to continue billing actions through the customer reminder regularly.

Stage 2: If in stage 1, the total outstanding at the end of the month reaches 5 times the total in stage 1 (IDR 5,000,000,000.00), then the notification will go to the support collection and account manager. This will then be forwarded by contacting the customer through the account manager while also sending the reminder by support collection.

Stage 3: Then, if the total outstanding at the end of the month is greater than IDR 5,000,000,000.00, the information system will send a notification to the support collection, account manager, and BGES manager. When you have entered this stage, the task of support collection must prioritize customers with the largest number of outstanding bills while making the reminder available to other customers. Account managers contact and even visit customers to get payment confirmation, and BGES managers monitor the results of these actions.

After the improvement design process is carried out, the next step is the results of the improvement design from the customer's outstanding billing process. The results of the design in the form of a proposed business process pay attention to the details of the activities to be carried out by support collection and AM as the main characters in the process of billing outstanding customers. The new monitoring and controlling process can use an information system.
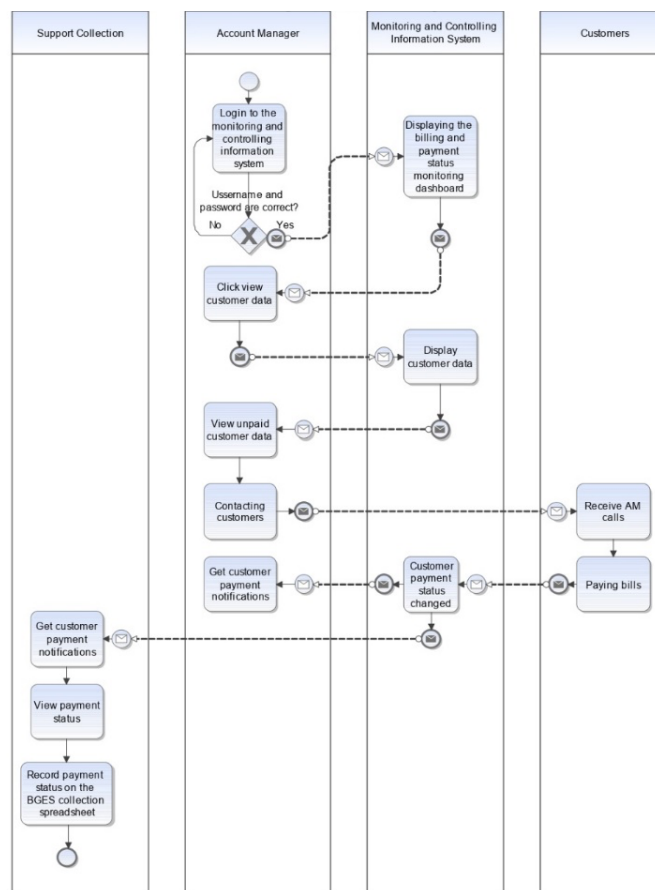

Figure 5 – Outstanding Customer Billing Business Process (New)

The proposal for suspension of outstanding customers is focused on the AM side because on the support collection side it meets company standards and is the beginning of the implementation of the outstanding billing process. So, there is no need to make improvements on the support collection side. Furthermore, for the proposed monitoring process, the support collection can directly check the achievement on the information system dashboard and can immediately record the status of payments afterward.
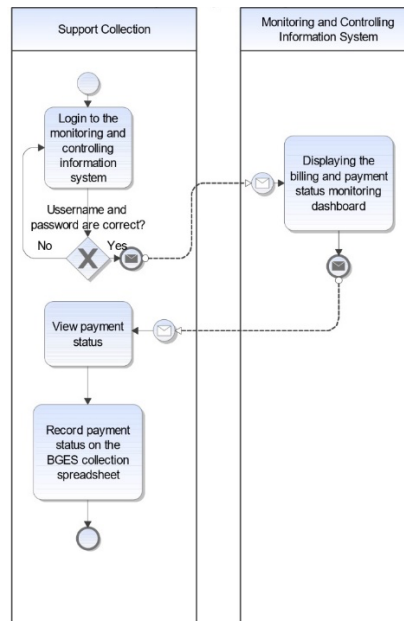
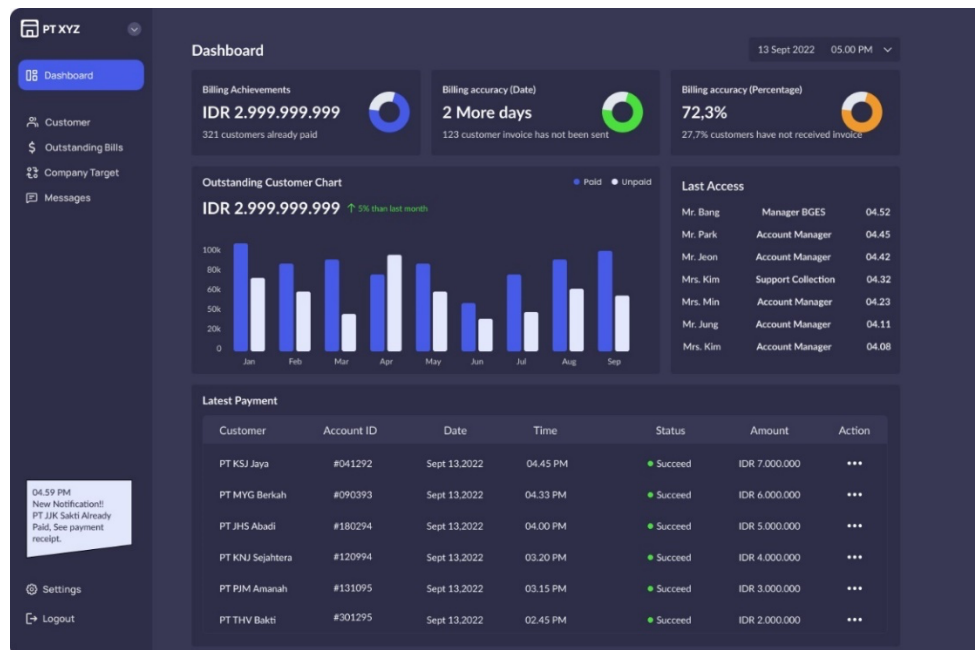**Figure 6 – Monitoring Process (New)**

Figure 7 – Mockup Dashboard Monitoring and Controlling

The research project is only carried out until the system design stage, monitoring and controlling information. Therefore, it is hoped that the next research can continue until the implementation stage by creating an interface design and the features needed for the system monitoring and controlling information.

The advantage of this information system is that it can monitor and control outstanding customers so that the desired target is achieved, making it easier for managers to assess their employees, and, of course, can reduce the support collection workload. However, the shortcoming of the results of this research is that there must be training related to the use of information systems if it is implemented, as well as a common understanding and good communication between support collection, AM, and BGES managers.

4. CONCLUSION

Based on the research results from the proposed improvement of the monitoring and controlling system at XYZ company, several conclusions can be drawn.

1. The design of the system model is based on the steps contained in the BPI method flow and produces a new business process where there are a dashboard of monitoring and controlling and notifications about a reminder to BGES workers to achieve the goals.
2. Future research can start by making the system information up to the implementation stage and can find other methods to accelerate the billing process.
3. Because the existing billing system already exists, it can be integrated into the design results. However, it must always be checked if there is a data change to get true results regarding the customer's payment status.
4. The weakness of the design results in this study is the readiness of workers. The system has been good, but the workers are still not enough, so it will not bring change.

Disclaimer

The authors whose names are written certify that they have no conflict of interest

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REFERENCES

[1] Y. Wiharto, A. U. Hamdani, and L. Suryadi, "KOMMAS : Jurnal Pengabdian Kepada Masyarakat Universitas Pamulang PENGENALAN TEKNOLOGI INFORMASI DAN PEMANFAATAN APLIKASI KOMMAS : Jurnal Pengabdian Kepada Masyarakat Universitas Pamulang Ada pun permasalahan yang dihadapi oleh Baksos We Care Community Ga," pp. 24–30.

[2] L. D. Warpindyastuti and M. E. S. Sulistyawati, "Pemanfaatan Teknologi Internet Menggunakan Media Sosial Sebagai Sarana Penyebaran Informasi Dan Promosi Pada Min 18 Jakarta," *Widya Cipta J. Sekr. dan Manaj.*, vol. 2, no. 1, pp. 91–95, 2018, [Online]. Available: https://ejournal.bsi.ac.id/ejurnal/index.php/widyacipta/article/view/2971

[3] N. Putu, A. Laksmi, W. Sutari, H. Lalu, U. Telkom, and B. P. Improvement, "USULAN PERBAIKAN PROSES BISNIS PERMINTAAN CABUT LAYANAN PADA DBS PT XYZ DENGAN METODE BUSINESS PROCESS IMPROVEMENT PROPOSED IMPROVEMENT BUSINESS PROCESS FOR DBS SERVICE REVOCATION REQUEST AT PT XYZ USING BUSINESS PROCESS," vol. 8, no. 5, pp. 8837–8845, 2021.

[4] M. Corps, "Design , Monitoring," *Evaluation*, no. August, pp. 1–63, 2005.

[5] R. Gondosubroto, "Implementing Consumer-based, Internet of Things-based Environmental Monitoring Systems within Smart Spaces," *Int. J. Innov. Enterp. Syst.*, vol. 2, no. 02, pp. 1–8, 2018, doi: 10.25124/ijies.v2i02.19.

[6] B. N. Faried Effendy, "Sistem Monitoring Online untuk Perusahaan Multi Cabang," *J. ProTekInfo*, vol. 3, no. 1, pp. 55–59, 2016, [Online]. Available: http://e-jurnal.lppmunsera.org/index.php/ProTekInfo/article/view/59

[7] J. Juran and A. Godfrey, *JURAN'S QUALITY HANDBOOK, 5th EDITION*. 1998.

[8] D. H. H. J., *Business Process Improvement : The Breakthrough Strategy for Total Quality, Productivity, and Competitiveness*, vol. 2, no. 1. New York, 1995. doi: 10.1007/BF02303700.

[9] D. N. H, W. Sutari, and S. Amalia, "PERANCANGAN TRACKING ORDER PADA SISTEM CUSTOMER RELATIONSHIP MANAGEMENT (CRM) TVF FOOTWEAR DENGAN PENDEKATAN METODE BUSINESS PROCESS IMPROVEMENT (BPI) DESIGN OF TRACKING ORDER ON CUSTOMER RELATIONSHIP MANAGEMENT (CRM) SYSTEM TVF FOOTWEAR WITH BUSINE," vol. 8, no. 5, pp. 8449–8456, 2021.

[10] Tony Benedict, *BPM CBOK Version 3.0*, 1st ed. New York: CreateSpace Independent, 2013.

[11] J. Maleyeff, *Business Process Improvement*. 2020. doi: 10.4324/9780429320750-12.

[12] A. N. Azizah, H. Lalu, and S. A. Salma, "Design of Business Process Improvement Survey of Business Activities With Business Process Improvement Approach," *JKIE (Journal Knowl. ...*, vol. 8, no. 2, pp. 141–153, 2021, [Online]. Available: https://www.jurnal.yudharta.ac.id/v2/index.php/jkie/article/view/2618%0Ahttps://www.jurnal.yudharta.ac.id/v2/index.php/jkie/article/download/2618/1870

[13] W. Hanisaputro, B I; Widaningrum, S; Sutari, "Proposed Improvement Business Process Carrier Enterprise Pre Sales-Using Business Process Improvement Method at PT. Telekomunikasi Indonesia International (Telin)," *e-Proceeding Eng.*, vol. 21, no. 1, pp. 1–9, 2020, [Online]. Available: https://www.jurnal.yudharta.ac.id/v2/index.php/jkie/article/view/2618%0Ahttps://www.jurnal.yudharta.ac.id/v2/index.php/jkie/article/download/2618/1870

[14] J. Rolos, S. Sambul, and W. Rumawas, "Pengaruh Beban Kerja Terhadap Kinerja Karyawan Pada PT. Asuransi Jiwasraya Cabang Manado Kota," *J. Adm. Bisnis*, vol. 6, no. 004, pp. 19–27, 2018.

[15] Kepmenakertrans, "Kepmen_128_Tahun_2016.pdf." pp. 1–25, 2016.

[16] L. W. Suwarsono, A. N. Aisha, and F. N. Nugraha, "The Role of E-Learning Readiness on Workload: Perspective Engineering and non-Engineering Students," *Int. J. Innov. Enterp. Syst.*, vol. 6, no. 01, pp. 85–94, 2022, doi: 10.25124/ijies.v6i01.165.

[17] C. S. Saraswati, W. Sutari, and H. Lalu, "Perancangan Proses Bisnis Tracer Study si Sekolah Menengah Kejuruan Telkom Bandung Menggunakan Metode Process Design Business Process Management," *e-Proceeding Eng.*, vol. 5, no. 2, pp. 2760–2766, 2018, [Online]. Available: https://openlibrarypublications.telkomuniversity.ac.id/index.php/engineering/article/viewFile/6935/6834