Application of Business Process Re-engineering in Enhancing Budgeting Process of PT Insurance Indonesia

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ABSTRACT: In the era of competition, understanding the position of the company is crucial in order to be able to set the strategy to strengthen and increase the position in the competitive market. It is important to have a strong budgeting and forecasting process to establish the target to be achieved which then set as the basis to plan the business strategy in more detail. Budgeting provides guidance, direction and target for the company to achieve within a period of time. However, it is no doubt that the budgeting process has been painful, taking much effort and time, that has led to the engagement team feeling the burden in doing the preparation. From the interview and analysis of internal workshop report, the research found the pain points of budgeting process. Among others, too many iterations while doing the work manually, lack of coordination and guidance, lack of supporting stable technology in performing the process led to the challenges faced during budgeting process. The pain points focused on three main areas; process, people and technology. To solve the business issues, the business process should be improved. The research proposes how Business Process Re-engineering (BPR) would give solutions to overcome the issues. The building of proposed new budgeting process follows through the six stages of BPR, which are envisioning, initiating, diagnosing, transforming, implementing and evaluating. Automation, Beyond Budgeting approach and establishing Standard Operating Procedures (SOP) are the proposed tools to be used to cater the pain points identified. Beyond Budgeting is expected to bring new approach in setting the target in the form of financial ratios instead of fixed number, hence the company has flexibility in setting the target and reduce the granularity of submission to the group. Automation reduces the manual processes and create one center of data stored. SOP provides clear guidance on how the budgeting process should be performed.


INTRODUCTION: Financial service industry has been one of the core industries in the world, playing significant role in the business world. The roles of the financial service companies are not defined only to support global economy from the regulator perspective, but also to support customers financially. While providing support for the customers, the companies have its own targets to achieve. The targets are usually set annually through budgeting process, in which the revenues, costs, balance sheets and cash flow are forecasted. Budgeting, according to Datar and Rajan (2021), is the process of quantifying the management’s action plan for a certain period and the tools to arrange the implementation acts based on that plan. Non-financial information supports the estimated numbers in the budgeting. They also believed that budgeting is best to integrate with the strategy of the company.

Having inefficient process to do budgeting process would be a catastrophe. It will consume too much effort and time to produce and present the numbers in required forms, it is lack of depth analysis due to time constraints leading to less understanding of the story of the target achievements. It is necessary that the budgeting process in the company to be improved to increase the efficiency, reduce the pain points experienced by the teams and deliver good quality of analysis of the number.

The objectives of the research are to understand and analyze the pain points from the current profit and loss budgeting process at PT Insurance Indonesia (a pseudo name), and to propose innovative solutions to overcome the pain points and define the benefits of implementation to the company.

LITERATURE REVIEW

Budgeting Process

Budgeting approaches can be classified into Traditional Budgeting, Better Budgeting and Beyond Budgeting (Lidia, 2014). The common budgeting process is maintained by Traditional Budgeting while Beyond Budgeting is a view to replace budgeting, Better Budgeting is the middle role to enhance budget instead of diminish it.
Traditional budgeting prepares a plan based on previous year’s budget, usually increases based on certain percentage to form the next period budget. It tends to be in depth of detail and cover the whole company (Weber and Linder, 2005). It is not too adaptive to handle a change in contrast to it handles complexity.

Better Budgeting is less detail concentrating on more important and sensitive parts of the organization. The planning scheme focuses more on market and future and frequent updates. Therefore, based on research of Libby and Lindsey (2007), budgeting is still important and needed in managing the company and will still be performed in the company by doing improvements towards the budgeting process (Better Budgeting).

On the other hand, Hope and Fraser (2003) proposed Beyond Budgeting method as opposed to traditional budgeting which is based on employee empowerment and alternative methods of performance management. Research of Alsharari (2020) found one of the important aspects of Beyond Budgeting is professionalization and elimination in changing the approach from fixed targets to a more relative performance evaluation. The approach will emphasize more on teamwork and expert power.

Budgeting process can be performed manually and automatically. The common manual budgeting process as portrayed by Ranjeev (2010) is where people involved submit spreadsheet workbooks through mail or email, then after collected the data from various teams, it is compiled. Iterations in performing this manual processes due to changes and updates consume energy and increase potential risks of inaccuracy.

Further, Ranjeev (2010) outlined the benefits from having automation in the budgeting process. Automation reorganizes the whole budgeting process from collecting data and compiling for completion and approvals. Consistency and accuracy of data are more sustainable and efficient by implementing automation in the budgeting process. A standard budget template would enable the company to work on the data using the same format, hence it provides more efficiency in the processing. Automation may eliminate the necessity to process reports deriving from different systems. A wider range of data can be incorporated into the budgeting templates through automation easier. Since automation enables time reduction in preparing the budget, company is able to defer the starting time of budgeting to later point and hence reflecting to a more meaningful numbers in the budget.

**Business Process Re-engineering**

Business Process Re-engineering (BPR) was initially introduced by Hammer and Champy (1993). This is one of the methods that a company can use in performing dramatic improvements through rethinking and redesign of the business process radically in order to fundamentally change in performance key measurements of a company. There are four key points of BPR which are fundamental, radical, dramatic and processes. To be able to do re-engineering, people must have the concept of what things should be instead of what is and then lead to the questions on how to do it more efficiently. Re-engineering requires radical redesign in terms of the capability to replace the existing processes with the innovations in order to solve the issues and achieve the target. The changes that should be made to the process are not to be bring only incremental benefits, rather it should bring a quantum leap to the process. By that, the changes should be replacing the old process and implement the new one. Re-engineering needs to ensure that the processes are run to achieve the final targets delivered to the stakeholders in the most efficient way defined.

Hammer (1990) in his article on re-engineering believed that new rules created to meet the change of modern environment requires a new way of thinking of the business process. Re-engineering enables the business process to start the effort for improvements with several principles which are organize around the outcome, not tasks; have those who use the outputs of the process perform the process; subsume information-processing work into the real work that produces the information; treat geographically dispersed resources as though they were centralized; link parallel activities instead of integrating their results; put the decision point where the work is performed, and build control into the process; and capture information once and at the source.

**METHODOLOGY**

The research is conducted by collecting information primarily by interviewing related respondents that are involved in the budgeting process. The interview was performed one-on-one virtually with semi-structured method. To analyze the interview results, codes will be assigned to whole paragraphs, sentences, phrases or even individual words to add meaning interpretation and allows clustering of key issues identified through interviews (Young et.al., 2017).

On the secondary data collection, an internal workshop report (Finance Department, 2021) will be used as supporting data. The report contains the result of discussion that was led by one engaged consultant and attended by major subsidiaries of the group in Asia
on the budgeting process. The report will support the analysis in this research by providing the inputs from the sites of the pain points experienced in the budgeting process, in particular the revenue and expense sides.

Following the results from interview and internal workshop report, improvements for the budgeting process pain points will be built using Business Process Re-engineering approach. In a journal written by Hussein et.al. (2014), a six-phase BPR models is the generic model of the most common stages used in development.

a. Stage 1 – Envisioning
   Top management needs to build its vision of the requirements to do a change, understand the concept of BPR and the process to achieve it. A special taskforce is to be established consisting of top management and participants from related departments with strong understanding of the current process including to have IT supports in BPR as an enable, support and catalyst. Including in this step is to understand the company’s strengths and weaknesses and the innovations that competitors have adopted.

b. Stage 2 – Initiating
   This stage determines the scope of BPR project, processes that needs to be redesigned, the measurements of objectives and the setting up the re-engineering project team, and the level of situation to be analyzed. The project team, at the minimum, should consist of people from departments involved in the processes selected in BPR project, and consultant when necessary. The purpose to be achieved is more efficiency in terms of time, cost and reduced errors. The measurement of achievement itself varies but should include quality, cost, service, and speed.

c. Stage 3 – Diagnosing
   The project team gathers the information on the current processes, review and document it, identify the pain points and benchmark the improvements. This stage is very important as the identifying of the issues will determine on what kind of steps will be taken to reengineer the current processes. When going through the detail in understanding the current processes, the members of the project team will have the same level of understanding of the challenges faced. With that, it is easier for the team to design of the new processes that can eliminate the pain points.

d. Stage 4 – Transforming
   This is the stage where the design is tested in smaller scale to see whether it can solve the issues and identify the progress and acceptance level. In other words, this is when the UAT (User Acceptance Test) is conducted. This stage enables the project team to assess whether the design works and acceptable in solving the pain points of the current process, or else to adjust the design to meet the needs. IT has a role not only to support the business processes but also acts as the enable of the re-engineering process.

e. Stage 5 – Implementing
   The importance of this stage is to ensure that the transformations implemented will be used to eliminate the pain points and achieve the efficient processes. Therefore, the implementation process should be carefully planned, may it be in phases, top down, or other approaches, to ensure minimal disruptions created to the company and customers. Factors to be considered is the existence of required IT tools as enablers and readiness of people for the changes.

f. Stage 6 – Evaluation
   After the implementation of the process re-engineering, review should take place to understand the impacts of the changes to the company. This is where the stage of evaluation takes place to understand whether the performance of the transformation reaches the intended quality. The evaluation does not occur only once, rather it is a continuous effort to monitor the implementation against design and solve the issues defined in previous step. Users are to validate that the new processes implemented work as replacer of the old ones and bring greater benefits for the customers.

FINDINGS AND ARGUMENTS

Business Issues
   From the interview results, there are many issues identified in the budgeting process. Identifying the keywords from the issues narrows the scope of the issues into several categorizations as can be seen in column “Subcode”. The main issues can be categorized into 3 (three) big groups, Process, People and Technology. These groups are the main components supporting the business processes run in a company. The most frequent items in the budgeting process comes from clarity and effort that cover 50% under Process. People issues follow where it also includes effort as the main pain points and coordination on the next item. Technology is also part of the pain points where lack of automation is the most seen by respondents as one of the main drivers to the pain points.
Process

Budgeting process was lack of clarity which start from unclear group’s top-down target number versus the local management decision to start on the bottom-up approach that created many discussions and iterations for the working teams to produce the numbers. The different periods of finance budgeting and strategic budgeting led to a level of unclarity, as one was conducted later than the other while both contents correlated to each other including projects were not agreed upfront or alongside the finance budget, hence there were long discussions as to agreeing on the prioritization. The timeframe of one forecast to another separated by only one month apart led to the question whether one-month difference would give effective results compared to the effort.

The second major point was the manual process in the budget process. Most of the processes were performed on spreadsheets which took manual work to calculate and process the numbers, and that led to long working hours to finish the tasks and staffs resigning. The effort spent to fill in detail number following the granularity that the templates required lessened the extent on strategic analysis over the number since most efforts were spent to produce the individual numbers required. Different submissions required different granularity of templates, no standardized templates, and led to the teams having preparing different level of work for different submissions.

Other challenges were changes of approach from new management and few respondents believed the process in the working teams would be better should there was better communication between the members of management. Minimum systems available in the process added with unstable system conditions added up to the long hours of budgeting processes. Although there has been intentions from the group for automation, the question remained whether it was done in line with the problem-solving processes in the local sites.

People

The significant issue related to People was the effort spent to perform the budgeting process. With average experience of 1-3 (one to three) years of experience, time is required to understand the technical perspectives of the work, especially since the process itself was mostly manual. Although the basic skills may be in existence, it took effort to adjust with new working method, to understand the working papers, to fulfill the requirements of the granularity of the templates.

The intention to communicate in management between one directory with another should be strengthened as that would give clear direction to the below of the message that was wanted to be achieved. The conditions of people were reluctant to accept new assignments due to unclear directions can be avoided.

Technology

Unavailability of advanced technology to support the working team fulfilling the granularity of submission templates led to high working hour and human error risks. The automation initiatives started at the group level may not be in line with the company’s needs. Lack of stability of the current system also created accuracy and completeness issues, and with the process needed to be reperformed due to that matter caused longer time to finish the work.

The results of internal workshop report are part of the pain points identified from the interview process above.

Business Solutions

Business Process Re-engineering helps companies to review their current processes, understand the shortcomings and design the transformations to solve them. It is important that the company takes radical steps to overcome the pain points and it should be as fast as possible. BPR is one of the tools that can be used for business process improvement. The radical approach that BPR offers may become the solutions to quicker kill the problems. Business solutions to the issues that were described previously will be presented through the BPR stages explained below.

a. Stage 1 – Envisioning

It is important that the company envisions the states of the processes when re-engineering takes place. The company should create a task force that includes the top management and key departments involved in the budgeting process. Top management needs to understand the concept of BPR and be willing to drive the company to commit to make improvements to the processes including in the implementation (Bayomy et. al., 2021). IT department will also be involved in the project as the use of system will certainly be enabler to the re-engineering process. The vision for re-engineering the process through BPR is having a transformation in
operating budgeting process through automation in more than 50% of the process while establishing clear procedures to strengthen the coordination during the process.

b. Stage 2 - Initiating
   In this stage, the scope of the project is to be set including the area to be covered and the depth of the processes to be assessed in the budgeting process. Project Management Institute (2013) describes the project scope definition as the process to create a detailed description of project. The requirements collected will be analyzed to decide which will be included in the project and which will not be. To manage the pain points, automation, clarity of process, managing people and good coordination are the actions to be focused of the BPR in budgeting process in the company.

c. Stage 3 – Diagnosing
   The company needs to assess its existing budgeting processes, the way it works, the dependencies upon other processes or other teams and the obstacles experienced. The analysis should be documented to include the process description, identification of the elements and resources, the performance of existing processes and the breakdown analytic of those processes (Hussein et.al., 2014). In the budgeting processes, one of the challenges is the discussion with group takes place at the later stage while the result of that discussion may determine whether the target numbers are accepted or not. When it is not accepted, the iteration needs to go back many steps, including to rerun of system that takes many hours to do so including redo the manual work performed that took effort and time. Automation will reduce the manual efforts and time to finish the task as well as the pain.

d. Stage 4 – Transforming
   The transforming stage of BPR is the period where the design and testing of re-engineering take place. The design needs to be tested to ensure that it can improve the processes and not adding more issues to the pain points. Focus of BPR will be on automation, coordination and clarity. However, before the design details the improvement programs per focus item, the business process flows need to be redesigned to enable the most efficient process to flow by creating more clarity on the guidance, creating rooms for automation and building better coordination between engaging teams and management. Author proposes these 3 (three) solutions to cater the business issues which are Beyond Budgeting approach, automation and creation of Standard Operating Procedures (SOP).

Beyond Budgeting Approach
Stange (2021) proposed that the radical concept of “Beyond Budgeting” challenges the traditional scheme of holding on to the target set and giving flexibility to the workers to make target adjustments as necessary. The measurement is compared to the peers in market and world-class benchmarks (Hope and Fraser, 2003). Beyond Budgeting does not eliminate target, rather it is set by the business units based on assumptions that the target is more on the financial ratios as top-level measurements (Stange, 2021). This is more effective in measuring achievements by setting targets to internal or external benchmarks which direct the performance by instilling clear ambition, purpose and strategic.

In the current case, the top target can be set as agreed with group and the detail can be trusted to the site level. Group can be assured that on the high level, the target is still set as expected to address the competition in the market. However, the granularity is left to each site to determine and that will leave flexibility to decide the direction and actions to take. This will also reduce the pain in submission as there is no need to submit in a very granular level while in the end it is impossible to estimate in such a way towards actual.

The approach is in line with the principles of BPR for having those who use the output do the process and to put the decision point at the place where the work is performed with control to the process. The company is the one who will be using the budgeting as its target and who can oversee the progress and perform necessary adjustment to it by comparing with the market condition. The group can monitor the progress from the higher level but still give the flexibility to the site to make its decision in the process.

Automation
The concept of proposed automation is to enable many manual processes automated through applications or systems. The automation is to have related processes built or added into current related systems and developing one system specifically for budgeting. The current related systems will integrate to the budgeting system to enable data flowing automatically and function as one data storage. Calculations are built in the system to reduce manual work and faster and reliable process, but system provides a function for adjustment to enable judgment consideration to the number.
The system enables the business users to submit their budget in the system, then the system will store the data in more detail and compile it based on the codes inputted. The users can access the system from different places and the results will be centralized in the system. Once data has been submitted by the business users, related teams are able to access and view it. The data stored can be retrieved to reports that will be used to analyze the budget numbers. The system will generate the final number in the standardized format as required for submission.

The one-stop concept of the proposed systems is in line with one of the principles of BPR which is treat geographically dispersed resources as though they were centralized. The operational areas of each business units are in different places and having a centralized budgeting system allows the processes to be managed in one direct control and respond to faster process. The second principle to accomplish is to capture information once and at the source, which the centralization is one place to capture all the data from the people doing the work. The database provides the information that is needed by the users and finance teams in setting up the budget target number for further use.

**Standard Operating Procedures**

Establishing a clear guidance on how the process should be performed, who will be doing what, when is the timeline and why the process should occur help solve the issue of clarity. One of the tools to provide it is Standard Operating Procedures (SOP) which is defined by Akyar (2012) as a document that explains how an operation should be conducted in a very detail way by a person. SOP provides guidance on how people conduct a task, the sequence, and the expected deliverance from each team. Clarity of this support the process to be smoothly conducted and also strengthen the coordination between teams as it is clear on who to do what. The deliverance is expected to be in the same consistent quality following the same methodology applied in doing the performance.

The management needs to oversee that the implementation results in better coordination and deliverance instead of creating boxes and silos.

A comprehensive SOP relates to the principle of capturing the information at its source in one go. The SOP acts as a tool to compile the tacit knowledge of the process being done and restore it at one place. People from different teams could look up to it to understand the process, requirements, tasks, and the correct teams to coordinate in finishing the tasks which will clear understanding and help finish the tasks faster with lesser errors occurring.

**New Proposed Budgeting Process**

The redesign of the budgeting processes is a step to be performed to understand how BPR helps to solve the pain points that have been identified in the budgeting process. The table below shows the comparison of the current process and the proposed steps, which pain points the new process will cater by using which methodology.

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<tbody>
<tr>
<td>Setting the revenue/expense target</td>
<td>Bottom-up from company overlayed by group with top-down approach.</td>
<td>Top-down target is agreed at initial phase and it is based on financial ratios instead of fixed numbers.</td>
<td>Beyond Budgeting</td>
<td>Process</td>
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<tr>
<td>Setting the target for line of business</td>
<td>Business units submits the estimation to be approved by company and group.</td>
<td>After the top-down financial ratios are agreed, business units are to determine the target for the budget period.</td>
<td>Beyond Budgeting</td>
<td>Process</td>
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<td>People</td>
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<tr>
<td>Compilation of data from business units on the target</td>
<td>Business units submitted manually to PIC team and compiled in spreadsheet file.</td>
<td>Business units submitted the target through system. System will automatically compile the data.</td>
<td>Automation</td>
<td>Process</td>
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<td>Technology</td>
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<tr>
<td>System calculates the revenue by product</td>
<td>System calculates one by one, i.e., sequential one product at a time.</td>
<td>System is able to calculate the revenue all products in one process time hence the time needed is much lesser.</td>
<td>Automation</td>
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| Revenue by product is used for further calculation by other teams | Revenue by product is distributed manually through email in spreadsheet form to other teams. | Actuary system is linked to the Budget system, hence the revenue by product data is fed directly to Budget system for further calculation by other teams. | Process Technology |

| Calculation of other data such as cash flow, loadings, variance | Calculation is done separately in spreadsheets and send through email to related stakeholders. | Calculation is built in the Actuary system and the results are able to be downloaded or viewed by users directly from the system | Automation |

| Calculation of variable expenses | Based on GL extraction and revenue target received from Actuary team, variable expenses are calculated manually in spreadsheet. | GL extraction is uploaded to the Budgeting system. Product mix data from Actuary system is fed into the Budgeting system. Set the ratios of variable expenses, system will be able to generate the number with the formula set in it. | Process Technology |

| Adjustment to expense budget number | Adjustment is done manually in spreadsheet. | Adjustment is done in the system to allow automatic calculation on the complete number. | Automation |

| Compilation of data to Budget Submission Template to group | Compilation is performed manually by linking the cell in the Budget Submission | Build the Budget Submission template in the system that enables data compiled automatically and directly linked to related tabs. | Process Technology People |

| SOP for conducting the process | None | Create a new SOP to provide guidance on how to perform the process, who are the person-in-charge, and what are the time expectation. | SOP |


| People | People | People | People | People | People | People | People | People | People | People | People | People | People | People | People | People |

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e. Stage 5 - Implementation

The implementation should be planned to be done in stages that would minimize disruptions and well accepted by the teams. It needs to be carefully planned to enable that the proposals that are implemented will be used in practice. The process of implementation requires support from the top management to emphasize the importance of the changes and the willingness of the company to do the changes. With that shown, employees understand the reasons behind the changes with knowledge in mind that the changes are for better conditions. The socialization of the program should be planned prior to the effective date to give room for the ones involved to ask questions and receive the information needed, hence understand the steps to be performed to have it in place.

f. Stage 6 – Evaluation

In this stage, the success of BPR is evaluated against the objectives that were set initial to the project start. The evaluation includes the review of potential achievements and downfalls through continuous monitoring of the new processes (Hussein et.al., 2014). The evaluation period will follow the budgeting and forecasting cycles in the Company. The implementation of new re-engineering initiatives will be covered completely in this annual budgeting, and hence a comprehensive evaluation plan will take place in this cycle.

The evaluation plan should cover the number of manual works that is reduced through automation; how many working hours reduced from the change of approach to Beyond Budgeting, automation and clear guidance on doing the processes; to increase of quality in the analysis of data for year-on-year and budget versus actual number; the uniformity of understanding between finance, actuary and business units of the data and processes; and the stability and reliability of system in producing the data that can be measured through no down time of the system.

CONCLUSION

From the research, pain points in the budgeting process can be categorized into 3 (three) groups, Process, People and Technology. These contribute to the pain points due to inefficiency and instability conducted throughout the budgeting process. The contributing causes of why the pain points occur in terms of Process are lack of clear guidance on how the budgeting process should be performed; significant effort spent in producing the number due to no standardization and automation, deep granularity of submission and many manual processes in performing the work. Weak coordination and communication between teams and management in People and minimum automation and unstable system capability in Technology also created the pain points.

Budgeting process can be improved by having automation, standardized templates, stable systems and integrated system with group to reduce the manual work and increase efficiency. Strong coordination and communication between teams and management, including having business units understanding the story behind the numbers, are also important to have in the budgeting process. And on top of those, the clear guidance on doing the budgeting should be set upfront to avoid iterations and impose alignment. To solve the pain points, the proposed solution is using Business Process Re-engineering (BPR) approach to make it in line with the expectation. Main focuses on the solutions are to implement automation, change of budgeting approach to Beyond Budgeting and create clear SOPs for budgeting process.

However, the research is limited to the proposal of Business Process Re-engineering application in budgeting process. The effectiveness is yet to be determined as that would require further research on the implementation and evaluation conducted.

REFERENCES