

An in-depth study of the period end closing process of Schlumberger Limited in order to redesign and streamline the activities therein

Ms. Manali Praveen Joshi
Student- D2F01
MBA Batch 2018-20
Indira School of Business Studies, Pune
manali.joshi@indiraisbs.ac.in

Dr. Komal Singh
Associate Professor & Deputy Director
Indira School of Business Studies, Pune
komal.singh@indiraisbs.ac.in

Abstract: The research paper is commissioned to design a financial period end closing process runbook and a dashboard for Schlumberger's corporate finance function in SAP Sustain by studying their transformation and new way of working of organization. The tool used for designing this runbook is Microsoft Excel and the tool used for designing the dashboard is Microsoft PowerPoint. SAP Financial Closing Cockpit is used for period end closing process data validation.

The research methodology used is exploratory research for process runbook and dashboard. The session and conference meeting were arranged for all the employees of Corporate Finance function of Schlumberger Limited from Pune, Kolkata and Bangalore offices to introduce them to this financial period end closing process runbook and the dashboard and use of the same in their daily job roles. The questionnaire had been prepared for the survey of usefulness the runbook and dashboard within the SLB's SAP Sustain Corporate Finance employees. Efforts are made to streamline the process by implementing automation of manual activities and to redesign the process by avoiding repetitive execution of activities. It resulted into reduction in complexity of accessing the required information about the activities and providing a central information resource to employees on global platform.

Key Words: Closing process, SAP, Automation, Runbook, Schlumberger

1. Introduction

Financial period end close process is an accounting procedure undertaken at the end of the period to close out the current posting period. It is part of a company's closing operations. Types of accounting procedures addressed in period-end closing can include depreciating fixed assets, reconciling inventory discrepancies, settling work in progress material, posting billing documents, and payroll.

This project is about studying the financial period end closing process in Schlumberger to redesign and streamline the process by automating the activities and eliminating repetitive execution of activities therein in order to reduce process execution time.

Monthly financial statements are the most important strategic tool for an organization. Accurate and timely statements provide key data to support fiscal monitoring and decision making, prevent costly mistakes, and prepares for tax time.

This result requires controlled and coordinated activities throughout the month. It also means processes and procedures that are well thought out, documented, and incorporate internal controls such as segregation of duties across all appropriate departments. Successful monthly (or other periodic e.g. quarterly) reports are critical to developing financial statements.

Many firms struggle with the financial closing cycle because its complex series of tasks must be executed on time and in the correct sequence to meet reporting deadlines. Typical closing cycles involve time-consuming manual tasks, such as journal entries, accruals, intercompany reconciliations, and the gathering of financial data from across different systems for consolidation and validation for final report production. Hence, the purpose of this project is to reduce the complexity of accessing the required information about the activities in FPEC process and provide a central information resource to employees on global platform.

Scope of the project includes a performative view of SLB FPEC process, documenting all the activities therein along with their details and identifying manual activities which can be automated and elimination of repeated execution of activities to reduce process execution time.

It provides a configuration definition runbook of financial period end closing process of Schlumberger Ltd. This runbook document is created from scratch and includes detailed information about all the activities related to financial period end close process within Schlumberger Ltd. This document is used by corporate finance and business finance team to ensure that all the jobs are implemented successfully within the organization.

Implementation of this project results in reducing the process execution time of SLB FPEC process by 18.75%. The SLB FPEC process runbook provides detailed information about all the activities therein. Hence, any employee who requires any information about FPEC activity would be in a position to retrieve the accurate information on a global platform at any point of time. It is designed as a Quick Reference Guide (QRG) of sequential activities in financial period end close using visuals for clear representation with ease of understanding. It reduces employee training time.

2. Theoretical Background

2.1 What is financial period end close process?

An accounting procedure followed by accountant at the end of every period to close the accounting records of current accounting period. Closing indicates that no entries will be posted in the closed period. It is processed according to a company's predefined closing operation or is established at the time of process migration. Different activities to be performed in period-end closing can include closure of accounting period in the software, accrual

entries of un-entered income & expenses, bank/ credit card reconciliations, mortgage & insurance entries, reconciling inventory discrepancies, comparison of budget vs. actual, analyzing and preparation of reports as per the requirements of management and investors. It is important to perform period end closing in every organization as this enables accountant to generate accurate and consistent financial statements accountant. It also helps in early identification of any accounting issues, bank related issues rather than at year-end. A simple walk through of month end closing process is described below.

a) Accounting Software Closing

Foundation of every accounting is the software, it is important to initially close accounting period in the software on specific closing date. This will stop everyone other than accountant to make any changes in the accounting software in that particular period. This helps an accountant to have full control of the software to perform month end closing process accurately. Most software nowadays have a closing date option.

b) Standard Journal Entries and Adjustments

On the income side, this includes any income reclassification entries (rental income booked under non rental income), concessions and vacancy reconciliations, writing off receivables, interest income entries, recognizing billbacks and utility incomes among others. Expense entries could include accruals of missing income/ expenses, prepaid adjustment entries, amortization of expenses, reconciliation entries among others. There is a checklist that is followed for such activities.

c) Reconciliations

Multiple reconciliations are needed to be completed before a book can be deemed to be closed for a month. These include merchant accounts, credit cards, operating bank accounts, central checking accounts among others. All credit card & bank charges have to be posted in relevant month and most of the discrepancies with bank should be sorted out within time period. This is very important from collection point of view as long pending discrepancies become very difficult to resolve. Mortgage, replacement reserves, tax escrow and insurance escrow are reconciled to lending statements issued by lender every month. Other reconciliations include reconciling AP and AR balances to specific sub ledgers/aging reports, security deposit balances to specific tenants' reports etc.

d) Variance Analysis

Most good property management firms maintain operating budgets. Tracking monthly expenses against budget and explanation of significant variances is an intrinsic part of monthly closing process. Analysis of actual against budget should be performed to get accurate position of company's financials. Variance analysis can help in rectifying mistakes and help in posting necessary adjustments of prepaid & accrual of expenses. Our accountants have good experience in preparing detailed variance comments in multiple formats.

e) Financial Statement Preparation

The preparation of financial statements can begin only after all adjusting entries have been entered into the accounting system. Most accounting systems have financial statement generation capabilities, reducing the

manual workload. Organisation's management reviews the income statement and balance sheet. In addition to these two reports, many companies also generate a statement of cash flows and a myriad of other data-rich reports.

f) Financial Review

Detailed review the financial statements and completion of monthly closing checklist is done by business finance team. Post preparation of financial statements, business finance team would typically respond in a structured and data oriented manner to multiple queries raised by senior management. If necessary, financial analysis of the statements is also done and information dashboards are prepared.

2.2 What is SAP Financial Closing Cockpit?

SAP Financial Closing Cockpit, a robust graphical application designed for the purpose of standardizing the closing cycle and giving you greater control over the entire process. It provides task scheduling and automation, collaboration, and monitoring across the entire entity closing cycle for all companies within the group. It helps individual task owners collaborate more effectively via an intuitive, powerful interface through which they receive assignments and report their status. It also helps ensure that they perform their work on time and in the proper sequence, resulting in fewer errors and delays. Standard reporting functionality in the SAP Financial Closing cockpit lets financial managers measure the efficiency of the closing cycle.

2.3 SAP Financial Closing Cockpit Business Benefits

The SAP Financial Closing cockpit provides your company with the ability to accelerate the financial closing cycle through enhanced user efficiency, greater automation, and central monitoring and control. The benefits include:

- Increased efficiency and greater control over the financial closing cycle
- Lower maintenance and administrative costs via standards-based, singleproduct solution, which is both powerful and intuitive
- Improved productivity through improved coordination and collaboration across distributed organizational units and through an intuitive display of dependencies across task owners, helping to ensure less time spent in communication lags and faster task execution
- Rapid time to deployment via simple configuration and powerful administrative tools
- Broad-scale deployment to all users across geographies and time zones via scalable, server-based, enterprise-class infrastructure
- Comprehensive storage ability, which records the history of all tasks performed and by whom, to support audits

2..4 Steps in designing FPEC process runbook and dashboard

The project methodology can be segregated into following parts:

- Understanding Schlumberger's financial period end closing process and identify its need
- Detailed information collection
- Compiling and uploading the documentation.
- Finding scope for improvement and redesign the process

Understanding:

Get clarity on key activities in PEC process from resource person.

Queries:

Arrange meetings with the heads of the projects and clear all doubts

Redesign:

Redesign the process by making necessary changes.

Review:

Take review from concern team to know about further improvements.

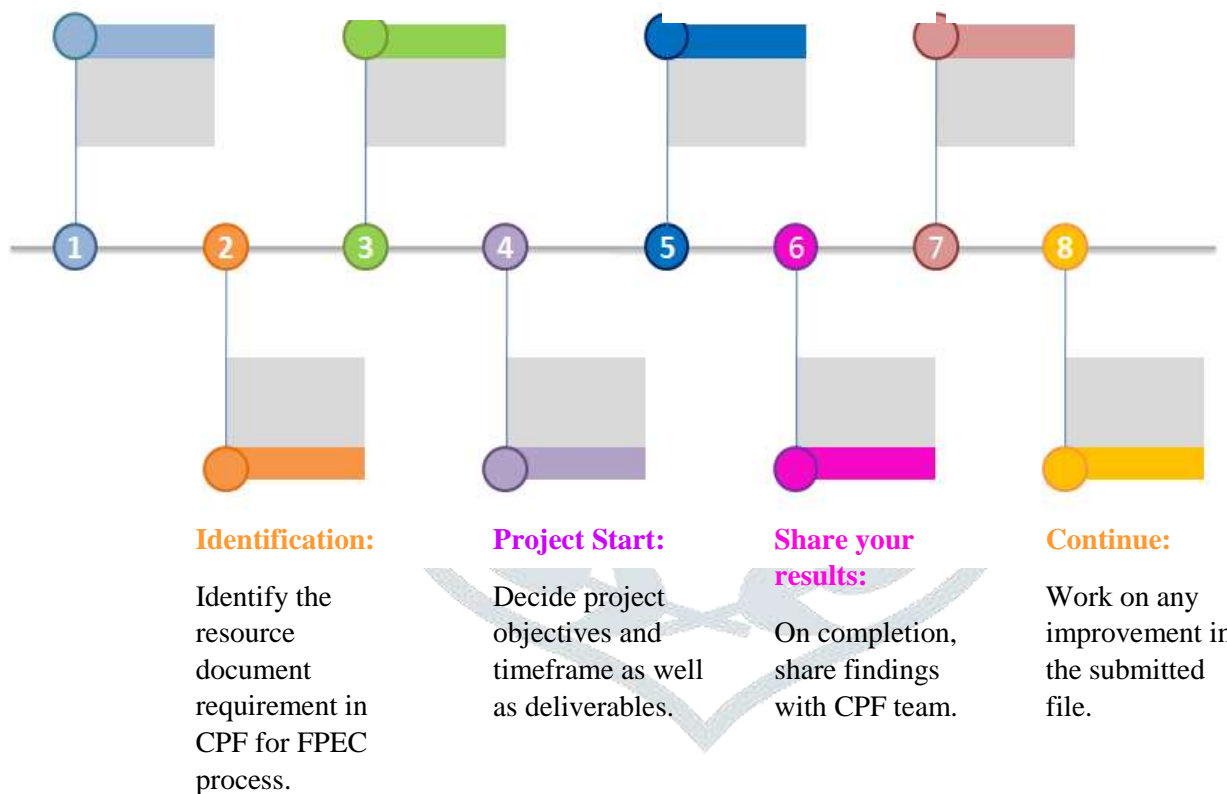


Figure 1: Financial Period End Closing Process Runbook and Dashboard Methodology Flow

All FPEC activities are recorded in sequential order in the runbook, Further day wise activity templates were created. Dashboard consisted for pictorial representation of the process for easy visual understanding.

In order to design the runbook semi structured interviews were conducted to carry out primary research. The main purpose was to understand the details of activities from the employees and to understand their expectations out of this documentation.

3. Research Methodology

Type of research

The type of research done in this project is exploratory research. Exploratory research means investigation into a problem or situation which provides insights to the researcher. The research is meant to provide details where a small amount of information exists. It may use a variety of methods such as trial studies, interviews, group discussions or other tactics for the purpose of gaining information.

Data Collection Methods- Primary as well as secondary sources of data has been used to collect the data. Primary data in this project is SAP job names, programs, variants, transaction codes and frequency of execution of FPEC activities. Secondary data has been taken from company booklets, intranet, information manual etc. this has been used to know about the history of the organization, market share of the company, sales policy etc. Secondary data in this project is task type, task identification numbers, automation text, day, time of execution of activities, processors and responsible person of FPEC activities.

Data Collection Tools: Data collection tools used for this paper are semi-structured interviews and questionnaire.

1. **Semi-structured interviews-** In-Depth Interviews include individual interviews. The data can be recorded written notes and in Microsoft excel. In depth interviews differ from direct observation primarily in the nature of the interaction. In interviews it is assumed that there is a questioner and interviewee. The purpose of the interview is to understand the activities performed by him in FPEC process and collect detailed information of the activities therein.
2. **Questionnaire-** In this project 'Questionnaire' is used as the research instrument. These questionnaires include open ended and closed ended questions. These restructured questionnaires designed with funnel technique. Here questionnaires are used for collection of information regarding the runbook, links, documentations, and business processes. Copy of questionnaire are given in the appendix.

Sampling frame: Business Analysis, Business Consultants, Associate Business Process Analysts. 63 employees from SLB SAP Sustain Corporate Finance team from Pune, Kolkata and Bangalore

Data analysis techniques

Data analysis was performed through excel datasheet where the collected data was compiled.

A runbook was created with the FPEC activities along with SAP task type, task ID, name of processor and responsible person, SAP job name, processing time, date and time of execution, SAP program and variant. The survey was conducted by using questionnaire to the concern business analysts, business consultants and associate business process analysts to understand their views, opinion and feedback about the run book and dashboard designed and to get feedback about usefulness of the documents created.

4. Data Analysis and Interpretation

4.1 Financial period end closing internal process mapping

Data Analysis and results

Number of activities in FPEC process: 374

Number of automated activities: 269

Number of manual activities: 105

Number of days required for period end close process: 16

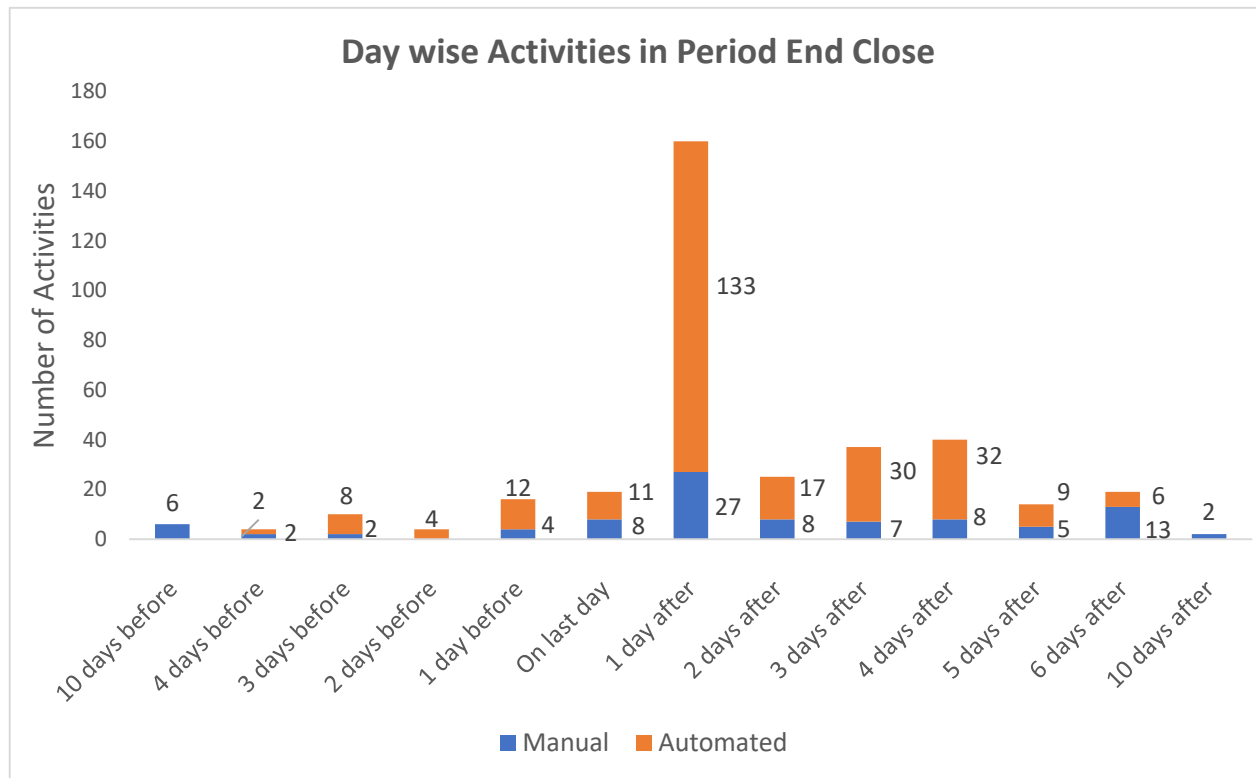


Figure 2: Day wise Activities in Current FPEC Process

In the above day wise activity chart, number of activities executed on particular day are mapped. Mode of execution – automated/manual are depicted with color coding. From above chart, it is clearly seen the majority of period end close activities are executed within the time span of 3 days before last day of period to 6 days after last day of period.

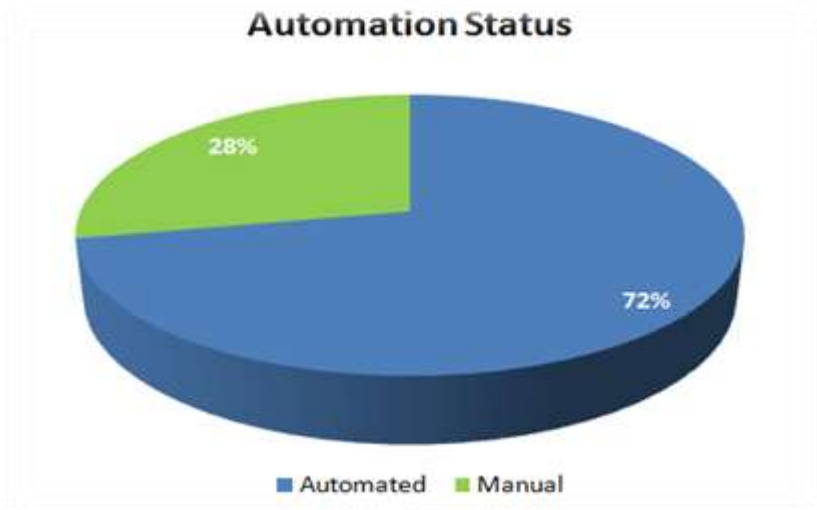


Figure 3: Automation Status of FPEC Activities

From the above mode of activity execution pie chart, it is seen 72% of period end close process is automated. 28% of activities are still performed manually leading to higher process execution time in current scenario.

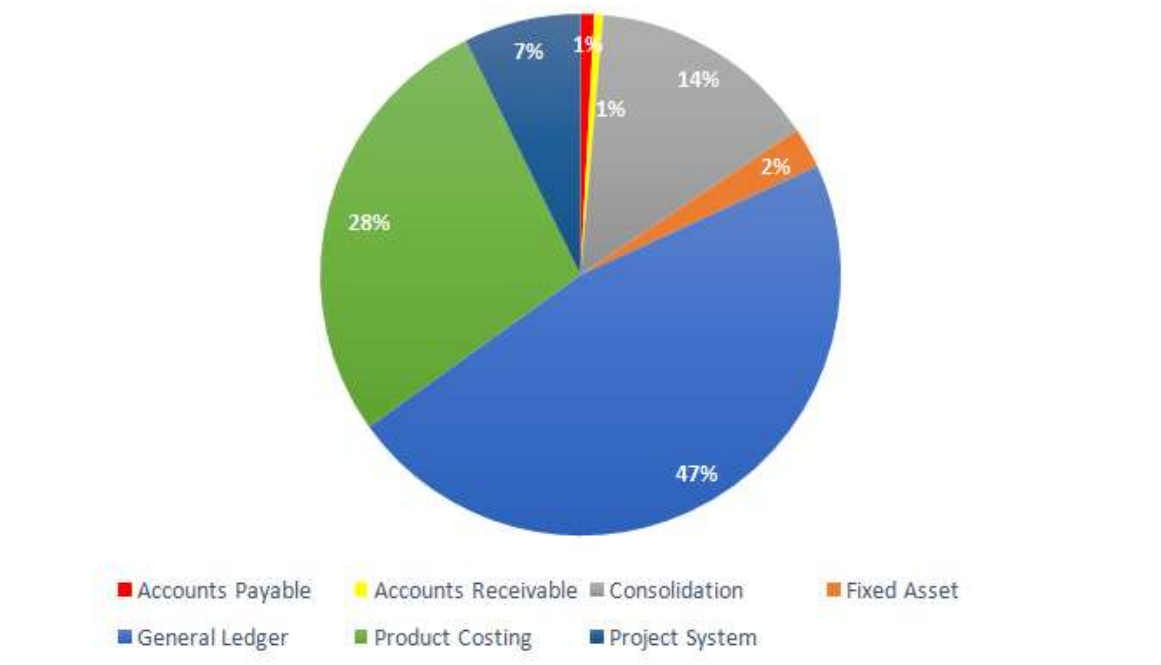


Figure 4: Financial Module wise Activity Mapping

Above modules pie chart depicts the contribution of different business processes in finance in period end close process. From above modules pie chart, it is seen general ledger accounts of 47% of activities followed by product costing with 28% activities and consolidation process with 14% of activities. Hence, focus is more on automating the activities in these modules to reduce process execution time of period end close

Following table depicts the activities which are repeated frequently along with their frequency.

Activity	Number of times execution
Run statistical forecast	8
Extract trial balance for consolidation	8
Extract capital expenditure for consolidation	8
Check automatic clearing completed	4
Depreciation Run	4
Post Recurring Entries	4
Post vendor invoice management accruals	4

Table 1: Activities with current frequency of execution

This table gives general idea about the activities and their frequency of execution. Internal processes are mapped. Objective behind process mapping is to understand the activities where maximum time is consumed and efforts are made to reduce the process execution time. Frequency of executing the activities is reduced thereby reducing total process time. Modified execution frequency is represented in interpretation of results.

4.2 Streamlining the activities and redesigning FPEC process

Interpretation of results

After analyzing all the activities, frequency of execution is reduced.

Activity	Modified number of times execution
Run statistical forecast	5
Extract trial balance for consolidation	4
Extract capital expenditure for consolidation	4
Check automatic clearing completed	3
Depreciation Run	2
Post Recurring Entries	2
Post vendor invoice management accruals	2

Table 2: Activities with modified frequency of execution

Following bar chart depicts the modified bar chart depicting day wise activity chart.

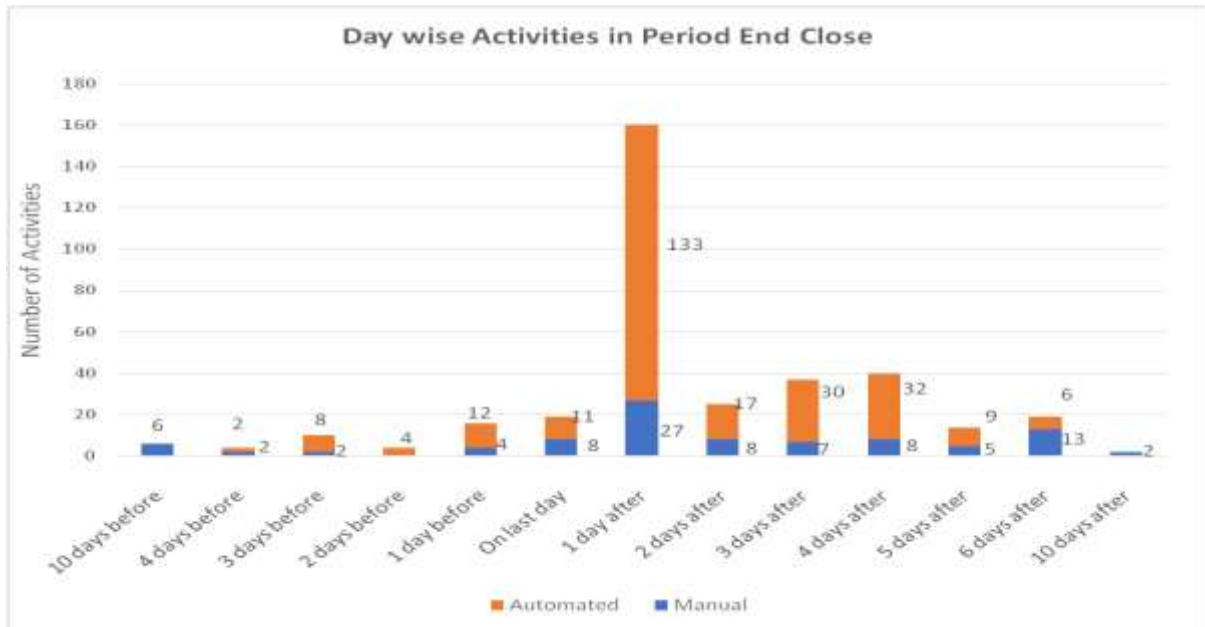


Figure 5: Day wise Activities in Modified FPEC Process

Modified number of days required for period end close process: 13 days
 Total time reduced: 3 days
 Hence, total 18.75% time is reduced with this project.

4.3 Usage of period end closing runbook, template and dashboard:

Number of respondents – 63

Session is conducted to introduce corporate finance domain in SAP Sustain to period end close runbook, template and dashboard which is useful in their process execution as a quick reference guide. Feedback is conducted to check the usefulness of these documents in their work and employee satisfaction level.

Employee satisfaction level- A survey to check the satisfaction level of employees in the program was conducted after the runbook, templates and dashboard were uploaded on the SharePoint of the company. A feedback form was designed and circulated to get the result. The purpose of the feedback survey was to check the usefulness of the documents and to find the flaws in the same.

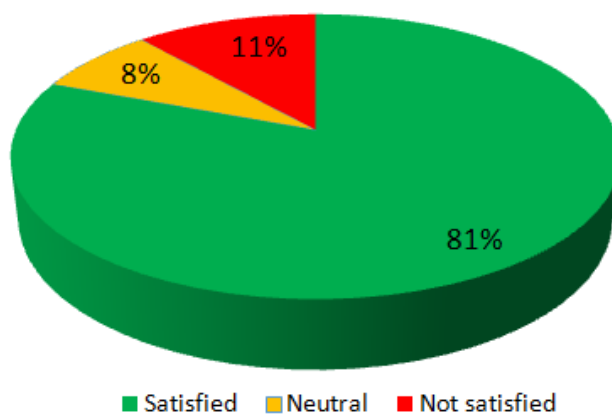


Figure 6: Employee Satisfaction Level

As per the results it was found that 81% employee were satisfied and only 11% employee were not satisfied and 8% employee chose to be neutral about it.

Conclusion

The project discusses the requirement of SLB SAP Sustain, Corporate Finance team, to represent the structure of SLB FPEC process centrally and a method to retrieve the detailed information about the activities therein from SLB's network. In this project, a performative view of this process is taken and such activities are identified. Efforts are made to streamline the process by implementing automation of manual activities and to redesign the process by avoiding repetitive execution of activities. It resulted into reduction in complexity of accessing the required information about the activities and providing a central information resource to employees on global platform.

In order to design the runbook semi structured interviews were conducted to carry out primary research. The main purpose was to understand the details of activities from the employees and to understand their expectations out of this documentation. Methods includes semi structured interviews. SAP financial closing cockpit helped to build a runbook as well as dashboard.

There is still much to explore and understand, and this work only addresses one small part of Schlumberer's financial period end closing process.

Strong detailed process can drive greater consistency and accuracy of data, which can be an asset in driving world class operations, providing the ability to use data as a competitive advantage, and reducing unnecessary waste. In contrast, without proper governance, there is limited accountability and ownership of data, which creates compliance risk as well higher expenses and lost revenue. In managing Master data, business and IT organizations work together to ensure the uniformity, accuracy, stewardship, semantic consistency and accountability of the organization's official, shared master data assets. Distorted and inconsistent process shows a huge gap in data quality, which is predominantly due to lack of governance, mismanaged work and disparate technology platforms. A lack of sound processes can cause serious issues that diminish the value of data and systems.

The automation of posting VIM accrual entries and allocation posting will be the decision taken by CPF team, Schlumberger. The key reason the automation is still pending is because it requires a detailed discussion with business finance team, Houston USA. Also, it requires SAP system configuration change which requires longer time duration to complete.

Bibliography

Websites

[1] Business Trainer, "Schlumberger Website Work area", [online]. Available:

https://sapwpbmanager.dir.slb.com:54001/WPBManager/wa/Prototype_test/~tag/published/tr

ainer/9_5_0_290/trainer.html#show=group!GR_3BA9C159B12999B17&hash=group!GR_3B5CD6F4347F7488

- [2] myHub, “Schlumberger myHub”, [online]. Available: <https://slb001.sharepoint.com/Pages/myHub.aspx>
- [3] “IT Enablement SAP SharePoint”, [online]. Available: <https://slb001.sharepoint.com/sites/ITT/ITT-SAP/SitePages/Home.aspx>
- [4] “Data Management SharePoint”, [online]. Available: <https://slb001.sharepoint.com/sites/ITT/ITT-SAP/DM/SitePages/Home.aspx>

Books

- [5] SAP Overview, “SAP Overview”, [Participant Handbook], Course Version:95, Material Number: 50100896
- [6] Hasso Plattner, Christoph Meinel, Larry Leifer (eds), “Design Thinking :Understand- Improve- Apply”, *Springer* © 2011
- [7] Thomas Lockwood, Edgar Papke, “Innovation by Design: How Any Organization Can Leverage Design Thinking to Produce Change, Drive New Ideas and Deliver Meaningful Solutions”, *Career Press* ©2018
- [8] Sean Robson, “Agile SAP: Introducing, Flexibility, Transparency and Speed to SAP Implementations”, *IT Governance* ©2013

