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## Increasing Employee Motivation and Use of ERP System to Enhance Organizational Performance

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### Abstract

This action research aims to study how to enhance organizational performance level at AAA, an electrical engineering and manufacturing company in Myanmar, which has initiated technology use in the operations by implementing ERP (Enterprise Resource Planning) system. The current situations were diagnosed by SWOT and STAR analysis and it was found that employee motivation and use of ERP system were required to improve to bring higher organizational performance level. Therefore, appropriate organization development interventions (ODIs) for the independent variables, which are employee motivation and use of ERP system, were designed and conducted to sixty participants of the focal company to meet the organizational expectations. Data was collected qualitatively through participatory and non-participatory observations and semi-structured interviews and quantitatively through surveys at pre and post-ODI stages. The impact of ODIs was analyzed by paired sample t-test, regression analysis, and content analysis and the outcomes indicated that employee motivation and use of ERP system and the level of organizational performance level have improved after ODIs. The results proved that the improvements of the independent variables positively impacted organizational performance. In concluding the research project, the results were reviewed and the author gave recommendations for the further development of the focal company.

**Keywords:** Employee motivation, use of ERP system, ERP system implementation, organizational development, organizational performance

**JEL Classification Code:** C12, M15, O14, O31

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### 1. Introduction

Organizational performance plays an important role in business development for every organization. It is an indicator, which measures how an organization achieves its objectives (Hamon, 2003). In recent years, the concept of performance has got attention in the competitive world, and organizations in many countries follow and repeat the activities in organizational processes to successfully fulfill the objectives and to measure performance level (Jenatabadi, 2015). According to Robbins (2005), motivation is the

“willingness to exert high levels of effort toward organizational goals, conditioned by the effort’s ability to satisfy some individual need”. Hence, organizations need to identify the plans for internal and external motivation to obtain job satisfaction in the working environment (Varma, 2017). Moreover, technological innovations also have an impact on humans and have power for the economic growth. Since information technology (IT) has been introduced and businesses-initiated technology adoptions, employees need to have technical competence and be able to use properly to lead to further innovations and developments and to compete in the market (Akram et al., 2018). For the preliminary diagnosis at the focal company, the researcher explored SWOT analysis, which comprises strength, weaknesses, opportunities and threats as well as STAR model, which consists of strategy, structure, processes, rewards and people (Galbriath, 1973) based on personal

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interviews, meetings' minutes and documents. The outcomes indicated the current situations of AAA in terms of different levels. At the individual level, people were unmotivated at the workplace, reluctant to make changes and unwilling to use the new ERP system. They also have a deficiency of IT knowledge, business knowledge and were not prepared to use the technology-based system and there were high resistance and low motivation levels. At the departmental level, the Heads of Department (HODs) did not encourage the operational employees to cooperate and accomplish their tasks. They did not also have a good relationship not only inside a department but also among the departments. There was the poor organizational performance in the operations. As a result, there were many challenges to meet targeted performance at the organizational level. AAA anticipated making a positive shift by embracing change with the participation of all employee levels and enhancing their skill to possess higher organizational performance level in its industry. Due to those findings at pre ODI stage, research objectives, questions, and research hypotheses were identified as follows:

### 1.1 Research Objectives

1. To assess the current state of employee motivation, use of the ERP system, and organizational performance at AAA Company
2. To apply OD interventions at the individual and departmental levels to increase employee motivation and use of the ERP system to enhance organizational performance at AAA Company
3. To investigate the improvement of employee motivation, use of ERP system, and organizational performance after OD interventions

### 1.2 Research Questions

1. What is the current situation of AAA in terms of employee motivation?
2. What is the current situation of AAA in terms of the use of the ERP system?
3. What is the current situation of AAA in terms of organizational performance?
4. What are the appropriate ODIs to improve employee motivation and use of ERP system?
5. How do ODIs impact employee motivation and use of ERP system?
6. How does employee motivation impact organizational performance?
7. How does use of ERP system impact organizational performance?

### 1.3 Research Hypothesis

- H<sub>0</sub> 1: There is no significant difference of employee motivation between pre and post ODI stage.  
 Ha1: There is a significant difference of employee motivation between pre and post ODI stage.  
 H<sub>0</sub> 2: There is no significant difference of use of ERP system between pre and post ODI stage.  
 Ha2: There is a significant difference of use of ERP system between pre and post ODI stage.  
 H<sub>0</sub> 3: There is no significant difference of organizational performance between pre and post ODI stage.  
 Ha3: There is a significant difference of organizational performance between pre and post ODI stage.  
 H<sub>0</sub> 4: Employee motivation has no significant impact on organizational performance  
 Ha 4: Employee motivation has a significant impact on organizational performance  
 H<sub>0</sub> 5: Use of the ERP system has no significant impact on organizational performance  
 Ha 5: Use of the ERP system has a significant impact on organizational performance

## 2. Review of Literature

### 2.1 Employee Motivation

Employee motivation can be defined as a tool that internally drives the employees to be satisfied with their unsatisfied needs (Dobre, 2013). Leaders motivate people to follow a participative work design in which they are responsible for their performance (Sekhar et al., 2013). Motivated and excited employees perform their responsibilities to the best of their abilities and production numbers increase as a result (Navaneetha&Bhaskar, 2018).

Herzberg (1959) worked on people's preferences of what they like and dislike about their jobs and developed a two-factor theory. He categorized motivation into two factors: motivation factors as intrinsic factors and hygiene factors as extrinsic factors. Herzberg defined motivation factors as achievement, advancement, work itself, recognition and growth. The effective use of these motivation factors helps the individual to heighten their performance. Hygiene factors are company policy, relationship with peers, work security, relationship with supervisors, money, and working conditions, and these factors reduce the job dissatisfaction of the employees. When hygiene factors are promoted among the organization, the level of employee job dissatisfaction decreases, and when employees are exposed to motivation factors, the level of employee job satisfaction increases (Herzberg, 1966).

The accomplishment of the goals can also lead to

being satisfied and motivated. Having a goal motivates a person to develop the strategies to enable them to reach the target levels (Lunenburg, 2011). Locke's goal setting theory is one of the most well-known theories to guide to achieve the goals. The theory has five basic principles: clarity, challenge, commitment, feedback, and task complexity (Locke et al., 1990) and it can help to design to develop an action plan for guidance to people and organizations (Shaiza&Giri, 2016). Goal directed behavior and strategic feedback are expected to enhance organizational performance (Chenhall, 2005). Employees can also be motivated by forming teams to work together. The core purpose of team building is to improve motivation and productivity (Khan&Wajidi, 2019). It is suggested that all teams go through a relatively unproductive initial stage before becoming a self-reliant unit (Tuckman, 1965). Therefore, his team-building stages—forming, storming, norming, and performing were proposed to create effective teamwork and strong communication among the employees.

Employee motivation has a positive influence at individual and group levels ultimately affecting organizational performance (Risambessy et al., 2012). Internal motivation initiates through a psychological or physiological need that can then stimulate performance (Dobre, 2013). Improving their skills as well as making them more connected and motivated could support organizational performance to achieve the goals (Nabi et al., 2017).

## 2.2 Use of ERP system

Business organizations realized the benefits and functionalities of information systems and invested them to improve performance (Ifinedo et al., 2010). They have made major investments in such systems as ERP system, supply chain management (SCM) and customer relationship management (CRM), to achieve organizational performance (Torkestani et al., 2014).

The literature review reveals that the ERP system offers a number of advantages for firms in improving organization performance. The adoption of the ERP system can improve the interaction between the business functions and the information flows more smoothly. It can also improve the interaction between firms with their customers and suppliers (Shang & Seddon, 2000). Researchers also argue that the ERP benefits can be categorized into five major benefits: operational benefit, strategic benefit, IT infrastructure, managerial benefit, and organizational benefit (Sadrzadehrafiei et al., 2013).

Similarly to the ERP implementation process, effective use is also crucial for the organization (Gocer et al., 2011). In order to explore the individual's impacts on this accounting software adoption, the researcher needs to

studies the traits of potential users and their likelihood of adoption towards technology (Phyu& Vongurai, 2019). Recent investigation on the functionalities of ERP factors showed that use and user satisfaction are key precedents of individual performance (Tam&Oliveira, 2016). The usage of ERP system has played a key role in information system literature and success models, as effective system usage is regarded as a major determinant of productivity (DeLone&McLean, 2003). ERP technical skills training can provide unwilling users with updated knowledge on ERP systems and minimize undesirable failures in ERP adoption (Nicolaou & Bhattacharya, 2005).

It also requires analyzing a comprehensive set of key performance indicators that address all critical measures to ensure the success of the ERP implementation (Rosemann & Wiese, 1999). It is indicated that the balanced scorecard (BSC) is one of the most widely used methods, which accounts for a wider range of ERP effects from four perspectives—Financial, Customer, Internal Business & Learning, and Growth in addition to the traditional financial measures (Martinsons et al., 1999). Hence, many organizations apply the BSC and measure the performance from its four perspectives to evaluate the success of implementation and use of ERP system.

## 2.3 Organizational Performance

Organizational performance is the organizational efficacy that is achieved through the effort of an individual employee (Giauque et al., 2013). It is the process to increase the effectiveness of an organization as well as the well-being of its member through planned interventions (Mustaffa, 2012). Its improvement enables fulfillment of organizational goals without being to incapacitate its resources and means or putting excessive strain on its employees (Jenatabadi, 2015).

Organizations must rely on competitiveness, organizational practices and innovations for their survival under globalization pressures (Khandwalla&Mehta, 2004) and need to measure their performance level. Measuring the performance of an organization is very important as an indicator for achieving effectiveness in the organization (Wahid et al., 2019). There are many ways to measure performance. Dyer and Reeves (1995) indicated that there are four types of organizational performance measures, first human resource outcomes, second organizational outcomes, third financial accounting outcomes, and lastly capital market outcomes. The balanced scorecard can also be used to measure performance in four perspectives- learning and growth, internal business, customer, and finance (Kaplan & Norton, 1996), and the BSC is the most widely applied performance management system today.

There are also many ways to assess employee work

performance. A high performance work system and practices play a key role in achieving business goals and improving organizational effectiveness. Those work systems influence and align employee's attitudes and behaviors with the strategic goals of the organizations: they enhance employee commitment and subsequently organizational performance (Rowold, 2011). Therefore, employees must also acquire skills and required knowledge to keep up with challenges to compete in the market and to enhance performance (Adam, 1994).

## 2.4 Theoretical Framework

This study highlights enhancing employee motivation and the use of ERP system to bring higher organizational performance level in the organization. Based on the previous studies, the theories and methods of OD on the linkage of research variables were applied and the researcher also developed the theoretical framework for this study in which employee motivation and use of ERP system are enhanced to improve organizational performance.

In the employee motivation literature, Herzberg's two-factor theory has identified five motivation factors and six hygiene factors as the drivers of employee motivation. The survey questionnaire for measuring employee motivation was also developed based on Herzberg two-factor theory. Based on many literature reviews, the researcher used Tuckman's Stages for team building to improve teamwork and Locke's Goal Setting Theory to understand the company goals. In the use of ERP system literature, many researchers indicated that organizations need preparation to implement and use it successfully as well as the users also need to have adequate skills. Based on the previous studies, the researcher applied a socio-technical model, which comprises six perspectives: goals, people, buildings/infrastructure, technology, culture, and processes/procedures to enhance work performance by recognizing that employee behaviors affect technology operations (Vanasse, 2018). This also included the conscious competence-learning model to help the trainees understand their thoughts and emotions encountered during the learning process (Mehay, 2010). The survey questionnaire for measuring the use of ERP was developed based on balanced scorecard perspectives.

For the OD interventions, the above-mentioned theories, models and practices were applied to improve three variables at the focal company. The improvement of organizational performance was also measured by the survey developed based on balanced scorecard perspectives (see Figure 1).

## 2.5 Conceptual Framework

The core purpose of this study was to enhance organizational performance level through the benefits of increased employee motivation and the use of ERP system. The conceptual framework is illustrated accordingly in

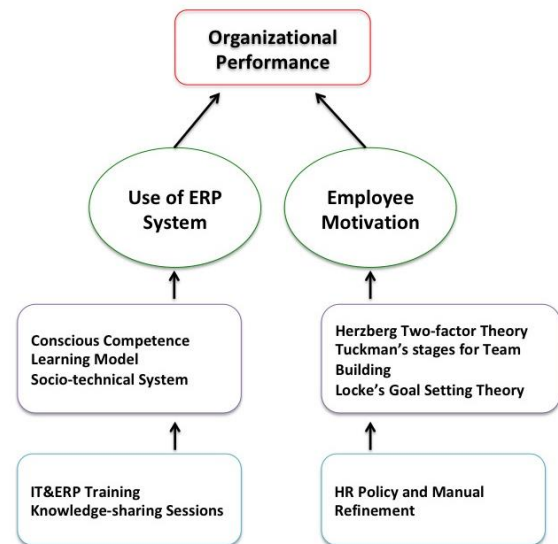


Figure 1: Theoretical Framework

figure 1, where the employee motivation and use of ERP system act as the independent variables and organizational performance acts as the dependent variables. The development of two independent variables can potentially enhance the performance of all levels at the focal company to meet its expectations by following the intervention plan.

Employee motivation is based on Herzberg's two-factor motivation theory and comprises five motivation factors and six hygiene factors. The ODIs on motivation were employed based on those factors to improve both of intrinsic and extrinsic motivation. Use of ERP system and organizational performance is based on the balanced scorecard, which comprises learning and growth, internal business, customer, and finance because the scorecard, has added features to evaluate performance at the organizational level or the business unit level as well as performances of ERP systems in three phases- implementation, operation and maintenance (Rosemann & Wiese, 1999). ODIs on the use of ERP were implemented based on these four perspectives and the advices of the IT and ERP experts.

The ODI process was conducted on employee motivation and use of ERP system by using Appreciative Inquiry and world café approach and their impact is measured through three sets of surveys for each variable to collect quantitative data and observations and the semi-structured interviews to collect qualitative data (see Figure 2).



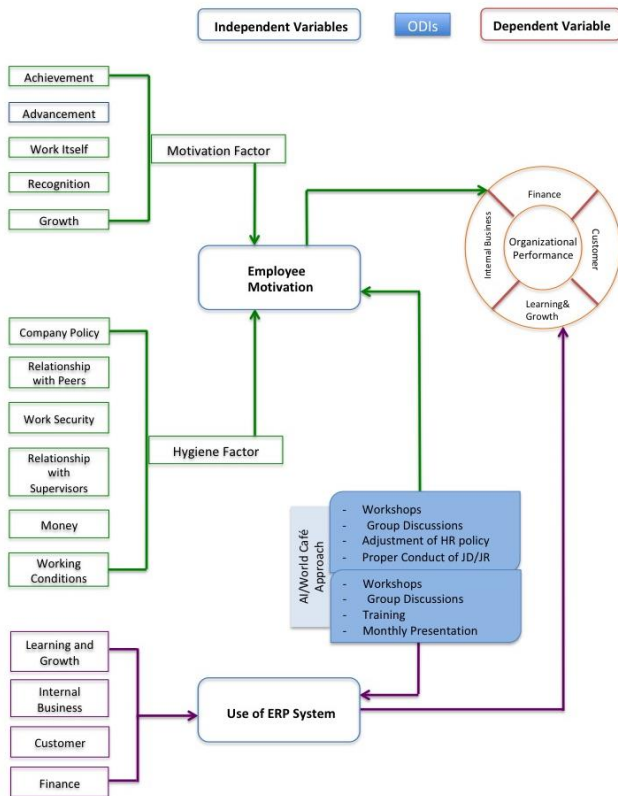


Figure 2: Conceptual Framework

### 3. Research Methodology

Given the current situations and background history, AAA anticipates becoming a well-performed organization while successfully responding to its challenges. In this study, the researcher prepared a research design in terms of three phases based on the idea of the action research model that included the techniques and procedures in collecting the required data to achieve the expected outcomes.

#### 3.1 Pre ODI stage

The current situation of AAA was accessed by SWOT and STAR analysis through Board of Directors' meetings, personal interviews with management team and employees, documents, meeting minutes, and circulations. Based on the results, the experts in the areas of IT and ERP system, organization development and management designed the surveys and the semi-structured interviews. Data from the respondents was collected through three sets of surveys, the participatory and non-participatory observations and semi-structured interviews. For the quantitative data, employee motivation was addressed with 29 survey questions, the use of ERP system with 38 items, and organizational performance with 20 items while 30

interview questions focused on gathering qualitative data. The surveys were sent to the departments. The researcher also sat the interviews with the respondents and collected data to better assess the current situations related to employee motivation, use of ERP system and organizational performance and tailored ODIs were designed to address the problems at AAA Company.

#### 3.1.1. Pilot Testing

In this research, survey questions were conducted in collecting quantitative data. Before the survey, questionnaires were pre-tested to be easy to criticize the questions and measure the reliability. A reliability test was performed based on 60 participants from another organization in testing the reliability of questionnaires whether those data are reliable and valid in quantitative analysis.

#### 3.2 ODI stage

The intervention process took place in three months from 1<sup>st</sup> June 2019 to 31<sup>st</sup> August 2019. After the pre ODI, the researcher obtained required data for employee motivation and use of the ERP system to increase the performance level. The researcher developed the interventions action plan based on the outcomes with the support of the management team to implement it during three months period. This action plan included the appropriate ODIs that could have a positive impact on research variables. It was conducted to 60 respondents of AAA Company and the detailed descriptions on ODI activities for each variable can be described as follows.

**Employee Motivation:** The researcher led happy at workplace workshop, team building development workshop, realizing visions, missions and values workshop, goal setting workshop, personal leadership towards organizational performance workshop, group talks, and discussions on daily operations and performance. Top management responded to the needs of employees and provided a performance-based reward system to develop its HR policy. HR manager and GM led to defining Job Descriptions (JD) and Job Responsibilities (JR) clearly during the ODI stage.

**Use of ERP system:** The researcher invited IT and ERP experts to investigate the ERP issues and provided orientations, focus group open discussions on work-related issues and interdepartmental workflow, business knowledge-sharing workshops, IT and ERP skills training for new and existing employees, and monthly presentations on performance by using the ERP system.

These activities involved listening to the problems, sharing the knowledge and discussing the requirements and opinions. All of these activities were audio-recorded and photographed for documentation of the change processes and record keeping.

### 3.3 Post ODI Stage

At this stage, the researcher concluded the ODIs by measuring their effectiveness on research variables. Data at the post ODI stage was collected using the same data collection methods and techniques as the pre ODI stage. The results at pre and post ODI stage were compared to evaluate the impact of ODIs. The intervention results were summarized and the researcher hosted the final meeting with the management team for the assessment and review of ODIs and mutual understanding among employees and the management team.

### 3.4 Research Sample Size <sup>i</sup>

The study used a simple random sampling procedure to select the participants in collecting qualitative and quantitative data. The focal company has a population of 600 employees. The required sample size with finite population was calculated by the standard formula (Cochran, 1963) and it resulted at 60 at 10% significant level (with estimated proportion = 0.5 and margin of error = 0.10). Therefore, the researcher chose all forty ERP users and another twenty employees from top, middle and all levels of all departments through the simple random sampling process.

#### 3.1.1 Data Collection and Research Instruments

The researcher collected data with qualitative and quantitative methods. The semi-structured interviews, observations, and content analysis made up the qualitative data. Surveys, paired sample t-test, statistical analysis, SPSS, and regression analysis were used for the quantitative data. Those results were used to identify how ODIs affected the research variables.

For the quantitative data collection, three sets of surveys were examined for their reliability and validity scores using Cronbach’s Coefficient Alpha and the Likert scale rating system to collect and define the opinions of the respondents. According to Cronbach’s Alpha method, the value, which is greater than .75, passes the reliability test. Since all the values of the three variables showed greater than .75, the variables were considered reliable to use in the research (see Table 1).

**Table 1:** Reliability and Validity Test

Variables	No. of Items	Cronbach’s Coefficient Alpha	Reliability
Employee Motivation	29	.973	Reliable
Use of ERP system	38	.967	Reliable
Organizational Performance	20	.873	Reliable

## 4. Results and Discussion

### 4.1 Quantitative Findings

The significance levels for the hypotheses testing used 5%(p-value < 0.05) and 10% (p-value < 0.10). The quantitative results showed that there was a significant difference between the means scores of Pre and Post ODI of research variables and the results through regression analysis at the post- ODI stage showed that one variable was significant at 5% and another variable was significant at 10%.

#### 4.1.1 Hypotheses Testing on Employee Motivation

The paired t-test was conducted in comparing pre and post ODI data of twenty- nine attributes of employee motivation. The overall mean score was 2.79 at the pre ODI stage and 3.72 at the post ODI stage. The overall employee motivation increased to 33.33% at the post ODI stage and hence, it can be said that the ODI series had a positive impact on employee motivation (see Table 2).

**Table 2:** Overall Mean Score of Employee Motivation between Pre and Post ODI

Employee Motivation		Mean		Standard Deviation	
		Pre	Post	Pre	Post
Motivation Factor	Achievement	2.99	3.88	0.82	0.42
	Advancemen t	3.06	3.91	0.81	0.62
	Work Itself	3.02	3.87	0.86	0.52
	Recognition	2.46	3.24	0.83	0.56

	Growth	3.03	3.87	0.82	0.47
Hygiene Factor	Company Policy	2.32	3.87	0.86	0.52
	Relationship with Peers	3.14	4.04	0.90	0.46
	Work Security	2.93	3.72	1.04	0.69
	Relationship with Supervisors	3.03	3.84	0.91	0.56
	Money	2.12	3.34	0.92	0.54
	Working Conditions	2.56	3.30	0.98	0.83
<b>Overall Employee Motivation</b>		2.79	3.72	0.89	0.56

**Table 3:** Paired sample t-test of Employee Motivation in Pre and Post ODI Stages

	Pre-ODI	Post-ODI	Improved /Declined	Sig. (2-tailed)
	Mean	Mean		
Employee Motivation	2.79	3.72	0.93	Sig= .000

Table 3 shows the results that there is statistically improvement in the scores between pre and post ODI stage. The Sig (2-tailed) (p-value) showed **.000** less than **.05**, that is there is a statistically significant difference between before and after ODI of employee motivation. The results showed ODI had an impact on employee motivation. Therefore, this result rejected  $H_0$  and accepted  $H_a$  of hypothesis 1.

**4.1.2 Hypotheses Testing on Use of ERP System**

The paired t-test was conducted in comparing pre and post ODI data of the use of ERP system. The overall mean score was 2.70 at the pre ODI stage and 3.68 at the post ODI stage. The overall use of ERP system increased to 36.3% at the post ODI stage and hence, it can be said that the ODI series had a positive impact on use of ERP system (see Table 4).

**Table 4:** Overall Mean Score of Use of ERP system between Pre and Post ODI

Use of ERP System	Mean		Standard Deviation	
	Pre	Post	Pre	Post
Learning and Growth	2.75	3.72	0.72	0.49
Internal Business	2.77	3.76	0.63	0.30
Customer	2.73	3.71	0.66	0.39
Finance	2.56	3.54	0.65	0.49
Overall Use of ERP System	2.70	3.68	0.67	0.42

**Table 5:** Paired sample t-test of Use of ERP system in Pre and Post ODI Stages

	Pre ODI	Post ODI	Improved/ Declined	Sig. (2-tailed)
	Mean	Mean		
Use of ERP system	2.70	3.68	0.98	Sig= .000

Table 5 presents the results that there is a statistical improvement in the scores of use of ERP system between pre and post ODI stage. The Sig (2-tailed) (p-value) **.000** is less than **.05** indicating there is a statistically significant difference between before and after ODI of use of ERP system. The results showed ODI had an impact on use of ERP system. Therefore, this result rejected  $H_0$  and supported  $H_a$  of hypothesis 2.

**4.1.3 Hypotheses Testing on Organizational Performance**

The paired t-test was conducted in comparing pre and post ODI data of organizational performance. The overall mean score was 2.62 at the pre ODI stage and 3.99 at the post ODI stage. The overall organizational performance increased to 52.3% at the Post ODI stage and hence, it can be said that the ODI series had a positive impact on organizational performance.

**Table 6:** Overall Mean Score of Organizational Performance Level between Pre and Post ODI

Organizational Performance	Mean		Standard Deviation	
	Pre	Post	Pre	Post
Finance	2.52	3.72	0.47	0.51
Internal Business	2.49	4.14	0.51	0.52
Customer	2.79	4.17	0.49	0.50
Learning and Growth	2.68	3.92	0.60	0.61
Overall Organizational Performance	2.62	3.99	0.52	0.53

**Table 7:** Paired sample t-test of Organizational Performance in Pre and Post ODI Stages

	Pre-ODI	Post-ODI	Improved /Declined	Sig. (2-tailed)
	Mean	Mean		
Organizational Performance	2.62	3.99	1.37	Sig= .000

Table 7 indicates the results that there is a statistical difference in the scores between pre and post ODI for

organizational performance. The Sig (2-tailed) (p-value) .000 less than .05 representing there is a statistically significant difference between before and after ODI stage. Therefore, the improvements in employee motivation and use of ERP system also positively impacted the level of organizational performance after ODI stage. Hence, this result rejected  $H_0$  and supported  $H_a$  of hypothesis 3.

#### 4.1.4 Hypotheses Testing on Significant Impact of Employee Motivation on Organizational Performance

The researcher used the regression analysis to assess the significant impact of employee motivation on organizational performance at pre ODI stage and post ODI stage.

**Table 8:**The Significant Impact of Employee Motivation on Organizational Performance at Pre and Post ODI Stage

Regression Result	Beta Coefficient		Standard Error		Sig. (2-tailed)	
	Pre-ODI	Post-ODI	Pre-ODI	Post-ODI	Pre-ODI	Post-ODI
Impact of employee motivation on organizational performance	.042	.412	.071	.188	.556	.033

Table 8 presents that the p- value at the pre ODI stage was 0.556. Hence, there was no statistically significant impact of employee motivation on organizational performance at pre ODI stage. After ODI series were conducted on employee motivation, the Sig (2-tailed) (p-value) became 0.033 less than 0.05, which is significant at 5% and it indicates there is a statistically significant impact of employee motivation on organizational performance at the post ODI stage. Hence, this result rejected  $H_0$  and supported  $H_a$  of hypothesis 4.

#### 4.1.5 Hypotheses Testing on Significant Impact of Use of ERP System on Organizational Performance

The researcher used the regression analysis to assess the significant impact of use of ERP system on organizational performance at pre ODI stage and post ODI stage.

**Table 9:** The significant impact of Use of ERP System on Organizational Performance at Pre and Post ODI Stage

Regression Result	Beta Coefficient		Standard Error		Sig. (2-tailed)	
	Pre-ODI	Post-ODI	Pre-ODI	Post-ODI	Pre-ODI	Post-ODI
Impact of Use of ERP system on Organizational Performance	-.103	.270	.092	.160	.265	.098

Table 9 presents that the p- value at the pre ODI stage

was 0.265. Hence, there was no statistically significant impact of use of ERP system on organizational performance at pre ODI stage. After ODI series were conducted on use of ERP system, the Sig (2-tailed) (p-value) became 0.098 less than 0.10, which is significant at 10% and it indicates there is a statistically significant impact of use of ERP system on organizational performance at the post ODI stage. Hence, this result rejected  $H_0$  and supported  $H_a$  of hypothesis 5.

According to the results, the p value of employee motivation at the post ODI stage showed 0.033, which is less than 0.05 and it is significant at 5%. For use of ERP system, the p value at the post ODI stage showed 0.098, which is less than 0.10 and it is significant at 10%. Therefore, it can be said that the impact of employee motivation is more significant than that of use of ERP system on organizational performance.

#### 4.2 Qualitative Findings

Qualitative data was collected through the semi-structured interviews and observations at pre and post ODI stage. The semi-structured interviews and observations for employee motivation were based on Herzberg’s two-factor theory while those of use of ERP system and organizational performance were based on the BSC perspectives.

##### 4.2.1 Employee Motivation

At the pre ODI stage, it was observed that employees did not have proper attitudes to accomplish tasks and were not assured about their development at work. They did not have good cooperation with their colleagues, peers and also have poor compliance with operational procedures. They were also not satisfied with salary and other allowances.

At the post ODI stage, it was observed that there were fewer arguments and dissatisfaction on performing tasks compared to the pre ODI stage. HR policy was adjusted based on labor law and the salary was increased by 10%. People turned into the professional manner and got to know to comply the rules and regulations. The following are the comparison of some of the representative comments of the respondents on “employee motivation”.

**Pre ODI Stage:** “Employees are not happy at work. They cannot build good communication with others and do not have mutual respect. HODs also do not want to collaborate and communicate.” (General Manager)

**Post Stage:** “Since people participated in workshops and open discussions, they realized that what they are doing is important to others. They got close, understanding one another and hence, the workflow becomes better.” (General Manager)

**Pre ODI Stage:** “I came to work here a few months ago.



*They did not welcome and reinforced us. Some colleagues who came together with me resigned now.”* (New employee from Admin/HR Department)

**Post ODI Stage:** *“Company provided departmental orientations to welcome new employees and explained about the business nature. So, I could learn the needs at work”.* (New employee from Admin/HR Department)

#### 4.2.2 Use of ERP System

At the pre ODI stage, it was observed that employees did not have IT skills and were not willing to learn the use of technology. They could not use and input the data correctly into the system. Hence, there were inaccurate data and the company encountered delivery delays and customer complaints. Accountants were also not familiar with the ERP system, instead of using excels sheets in which there were still errors, excess paperwork, and duplicate efforts.

At the post ODI stage, employees were trained to use the ERP system and its required functions. As a result, work accomplishment increased, and wasted time and cost were reduced. Customer addresses and information were updated and their feedback and complaints were recorded systematically. The finance department could use the system effectively and report to the management team in a timely manner. Following is a comparison of some of the representative comments of the respondents on “the use of ERP”.

**Pre ODI Stage:** *“I know ERP only a few related to my part. If I input incorrectly, I don’t know how to continue and to whom should I ask”.* (Junior Accountant)

**Post Stage:** *“I am confident that I could use the ERP system very well in my work because I learned about required functions at the training”.* (Junior Accountant)

**Pre ODI Stage:** *“I have to do the entry in both of ERP and excel because we can’t trust ERP data for not using properly. I often work overtime to finish it.”* (Senior Accountant)

**Post Stage:** *“After employees were trained to use and input data precisely in ERP, all management levels can check data through the computer timely. It really helps in decision making”.* (General Manager)

#### 4.2.3 Organizational Performance

At the pre ODI stage, it was observed that employees had the poor understanding of the business nature and using IT devices. Departments were losing mutual respect and had poor communication. Although customer requests and complaints were recorded, they were not necessarily checked and fixed. Production is delayed and financial reports also showed mistakes and some might affect the decision-making for the future.

At the post ODI stage, the respondents became more proficient and knowledgeable about business nature. They could reduce duplicate efforts, could solve the complaints properly, and eliminate the production delays so that their accomplishments have increased. The following are the comparison of some of the representative comments of the respondents on “organizational performance”.

**Pre ODI Stage:** *“When we receive a customer complaint, we informed to production and customer relationship departments. Sometimes, they fail to solve it. Sometimes, they forgot to pass the information. We know it only when customer reminded us again”.* (Senior Employee from Sales and Marketing)

**Post Stage:** *“We provided production knowledge and other required knowledge sharing by group talks and discussions. So, individuals get more understanding and they can even solve customer complaints themselves”.* (Supervisor from Production)

**Pre ODI Stage:** *“I think we cannot utilize our fixed assets completely. In production, the second process is delayed until the first process is accomplished.”* (Supervisor from Production)

**Post Stage:** *“We analyzed the reasons for production delay and it was because of insufficient employees, technology, and raw materials. We filled all these requirements and now we could use fixed assets efficiently.”* (Supervisor from Production)

## 5. Conclusion

This research focuses on enhancing employee motivation, use of ERP system, and organizational performance using a series of ODIs at the focal company. The researcher led the preliminary diagnosis and accessed the current situations through SWOT and STAR analysis. Subsequently, quantitative and qualitative data were collected from the respondents and the pre ODI results indicated that people were unmotivated and reluctant in the workplace and were not satisfied with the company’s provisions. Although the ERP system was implemented, they could not use its functions effectively. Hence, the performance level did not meet the targeted level.

The researcher and the management team designed the ODI strategy to eliminate the problems as well as to make positive changes in the organization. The ODI programs were conducted during the intervention period and the quantitative and qualitative findings proved that ODIs positively impacted the research variables at the post ODI stage. The results also indicated that employee motivation and use of ERP system had a significant impact on organizational performance.

Qualitative results revealed that people's mindsets and behaviors were changed and turned more professional. They became more proficient in using the ERP system and its functions and they also improved work-related business and IT knowledge. Quantitative results also showed that research variables improved after the ODI programs. The overall mean score of employee motivation increased 33.33% from 2.79 to 3.72 at the post ODI stage. The overall mean score of use of ERP system increased 36.3% from 2.70 to 3.68 at the post ODI stage and that of organizational performance at the pre ODI stage rose 52.3% from 2.62 to 3.99 at the post ODI stage. Therefore, both of quantitative and qualitative analyses showed that the intervention program on employee motivation and the use of ERP system for the respondents of AAA was successful in creating positive change in the organization. The results also proved that the ODI action plan addressed most of the AAA's weaknesses identified through SWOT and STAR analysis.

The research spotlighted how to overcome the common challenges that organizations in developing countries encounter when they start using technology. Prior studies and global research also indicated that 50% of ERP system implementation faced failure so it is hoped that this research will benefit those organizations in Myanmar, which are interested in implementing an ERP system or which have already implemented one but have not yet succeeded as well as other organizations already using ERP, such as software development companies and consulting companies, to enable smoother workflow and to help reinforce the increase of the GDP of Myanmar.

### 5.1 Recommendations

Taking the findings of this study into consideration, the intervention period was a short time period to allow for all positive changes in the focal organization. There were a few sub-variables that did not show the significance and one sub variable that showed negative impact because of the short time frame of the research. Therefore, consideration could be given to undergoing future research to see the degree of significant and positive impact in the long term.

The researcher recommended using Herzberg's theory of Self-Determination Theory, which comprises three key areas: autonomy, relatedness, and competence with twenty motivation dimensions to explore additional drivers to substantially improve employee motivation in the organization.

The researcher suggested that the management team regularly and systematically review their policies and procedures to modify them and/or to remove redundancy so that policies become compatible with real-life situations of employees. For technology application, the researcher recommended the use of the Business Intelligence (BI) Tool,

which can assist management in striving for maximum performance level (Ledford, 2017), and a Customer Relationship Module (CRM) module, which automates and integrates the customer-related activities such as sales and marketing and customer services (Naveeen, 2020).

AAA currently produces separate financial statements for eight departments and the researcher suggested that the management team also prepare a consolidated financial statement to expand the scope of the decision-making process. It would also be beneficial for the management team to introduce a regular performance appraisal in the organization to more easily evaluate individual performance. It would be interesting to incorporate these tools and research their long-term impact on organizational performance.

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## Endnotes

### i Sample Size Calculation

The required sample size was calculated based on the following formula.

- n = minimum required sample size  
 N = Population size  
 z = reliability coefficient (90% CI limit) = 1.645  
 p = the estimated proportion = 0.5  
 q = 1 - p = 1 - 0.5 = 0.5  
 e = precision error (margin of error = 0.10)

$$\text{Sample size} = \frac{z^2 \times p(1-p)}{e^2} \div \left( 1 + \frac{z^2 \times p(1-p)}{e^2 N} \right)$$

$$\begin{aligned} \text{Therefore, } n &= \frac{((1.645)^2 \times (0.5 \times 0.5) / (0.1)^2)}{(1 + (1.645)^2 \times (0.5 \times 0.5) / (0.1)^2 \times 600)} \\ &= 60 \end{aligned}$$

Therefore, the required sample size was at least 60.