
(Paper-ID: CFP/2009/2020)

Author: Diana Malumbe
Email: dianamalumbe@gmail.com
Dept of Business and Humanities
School of Business/Humanities
Information and Communication University,
Lusaka, Zambia

Supervisor: Mr. Kelvin Chibomba
Email: kelvin.chibomba@gmail.com
Dept of Business and Humanities
School of Business/Humanities
Information and Communication University,
Lusaka, Zambia

Abstract: Studies to do with project management soft skills in Zambia are more related to the banking sector, construction industries, education and health sectors as compared to manufacturing companies. Therefore, the study examined the role of project management soft skills on project success, a case of manufacturing companies in Luanshya district. The objectives were; to examine the extent to which motivation soft skills affect performance, the role of communications soft skills, the role of project leadership soft skills, assess the influence of decisions making soft skills on project success. The study adopted convenience and purposive sampling methods to select the sample size, and a total number of 50 questionnaires were administered, and only of 40 were completed and returned. Data was analyzed using SPSS. The study revealed that project management soft skills play a role on project success and the extent of effect is great, but the extent of effect of motivation is moderate. The most effective soft skill is communication (45%), followed by decision making (23%), then leadership (17%) and the least is motivation (15%). The study also revealed that manufacturing projects are not completed within time and on budget. The study further revealed that X2 test showed that the observed P-values (0.006, 0.004, 0.004, 0.004) were less than the standard P-value of 0.05, at 8 degree of freedom, hence, null hypothesis was rejected in all cases. Hence, there is a significant association in all soft skills i.e., motivation, communication leadership and decision making with success of manufacturing projects. Thus, manufacturing companies should engage project stakeholders with a combination of technical expertise and management soft skills. Further studies should look at risk management, team behavior, control and planning and conflict management in manufacturing companies.

Keywords: Soft skills, Motivation, communication, leadership, decision making
1) INTRODUCTION

1.1 Background

Luanshya district’s main economic activities are mining and agriculture. However, Luanshya district is privileged with having a number of manufacturing companies. Manufacturing companies contribute to gross domestic product (GDP) and promotes economic growth of the country (LDIP, 2013). Therefore, the success of manufacturing projects is dependent on the project managers. But project managers are required to manage the project activities of the manufacturing companies well. Hence, project managers play a critical role (Kendra and Taplin, 2004) and project management is regarded as a key pillar for the success of any project.

However, project managers need to have skills to carry out complex responsibilities that affects project success. Skills relate to knowing how to do something or the ability to use knowledge productively (Pires, 2005). According to Dainty et al. (2006), the integration of technical experience and skills, ensures good teamwork and communication. Project managers should therefore ensure that they continue to refine their technical skills while retaining the importance of soft skills which many organizations often overlook (Petter and Randolph, 2009). Project manager, on the other hand, should be able to craft accurate project plans, schedules, forecast time, keep work coordinated, staff well informed and motivated.

Management science has evolved, in the past, project management concentrated so much on hard skills, such as work breakdown structures, project budget, earned value assessments and critical path diagrams, but due to evolving developments in project management, soft skills are considered important too (Siguroarson, 2009). However, research places minimum attention on the topic of project management soft skills. Therefore, the study looked at the role of project management soft skills on project success in manufacturing companies in Luanshya district.

1.2 Statements of the problem

There are no studies to date in Zambia that have examined the role of the project management soft skills on project success in manufacturing companies. Most studies that have been conducted focused on the health sector (Mungaila, (2011); Mutale et al. (2013)), education sector (Adams, (2016); Nebo, (2015)), construction companies (Sunindijo, (2015); Nyaga, (2014)) and the IT industry (Corcoran (1997); Langer et al, (2008); Haddad, (2014)). Empirical literature on project management soft skills in manufacturing companies is few and does not explicitly deal with matters of project management soft skills. Therefore, there is an apparent yawn gap in the area of project management soft skills. In addition, a great deal of focus has been placed on technical skills (Petter and Randolph, 2009), as a result, project managers are hired on the basis of their technical knowledge and experience. Hence, there is a possibility that manufacturing companies engage civil engineers with sound technical knowledge but lack soft skills. Lack of soft skills can reduce project managers’ ability to carry out projects efficiently and effectively, resulting in project failure. On the other hand, researchers concentrate on exploring the effect of the project manager’s leadership style, rather than project management soft skills on project success (Yang et al, 2010). The study thus sought to fill in the knowledge gap by examining the role of project management soft skills on project success in manufacturing companies in Luanshya district.

1.3 Objectives of the project

To determine the role of project management soft skills on project success in manufacturing companies in Luanshya district.
Specific Objectives

i. To investigate the extent to which motivation soft skills affect performance of manufacturing companies in Luanshya district.

ii. To find out the role of communications soft skills on project success in manufacturing companies in Luanshya district.

iii. To examine the role of project leadership soft skills on project success in manufacturing companies in Luanshya district.

iv. To assess the influence of decisions making soft skills on project success in manufacturing companies in Luanshya district.

1.4 Theoretical Framework / Model

The framework highlights the role of the project management soft skill such as, motivation, communication, leadership and decision making on project success. However, the researchers argue that there is an association between these project management soft skills and success (performance) of manufacturing projects. Hence, the study sought to verify the argument.

Figure 1.1: Relationship of variables contributing to project success

Therefore, the frame work shows how these project management soft skills and confounding variables such as availability of funds and conflict management, are applied on the project management activities such as planning, organizing, execution and resource controlling to help achieve project success, which is established by the iron triangle aspect (scope, time, costs, and quality performance). The iron triangle helps to measures project management success against the factors of performance such as completing project within time, cost, budget, scope and quality. Project management soft skills, on the other hand, helps to understand the project manager’s strength,
behaviors, and methods that leads to successful project management (Aston, 2019).

Project management theory shows how activities contribute to the goals set to those activities. Project Management is the process of directing, managing human and material resources throughout a project’s life to achieve predetermined goals of scope, cost, time and quality. Hence, the soft skill of project management emerged from this concept (PMI, 2007). The project manager has two responsibilities according to Neuhauser (2007), the technical aspect which include planning, scheduling, budgeting, evaluating, monitoring and controlling, and the other aspect is the managing of people in such a way as to inspire the project team to complete the project successfully. Therefore, Project Management Competency Development (PMCD) concepts describes the competence of project managers as the process by which project managers actively apply their expertise, skills and personal behaviors in order to execute projects that meets the needs of various stakeholders (PMI, 2007).

2) LITERATURE REVIEW

2.1. Effect of Motivation Skills on performance.

Hitka (2018), conducted a study to examine the level of employee motivation in Central and Eastern Europe (Slovakia, Lithuania and the Czech Republic). Sampled a total number of 6,961 respondents, out of which 3,862 were males and 3,009 females. The samples were tested using HSD test from Turkey. In the analyzed countries, the order of eight (8) most important motivational factors were defined. The results of the study revealed that the most important motivation factors in all three countries is the basic salary, workplace atmosphere, supervisor’s approach, and fringe benefits. In Lithuania, however, the importance of motivation factors contrasted with those in Slovakia and the Czech Republic. Both Slovakia and the Czech, the importance of motivation factors was almost the same, as motivation factors applied to finances and relationships. On the contrary, differences were seen in Lithuania, where personal development motivation factor and career were considered the most important. Hence, motivation must be regarded as an important management skill in any organization or company.

Ayam, J.; Kusi. A.G.; Nyamekye. T.A.; Kyei, A.; Amoah. (2012), looked at the effects of motivation on employee performance at First Allied Savings and Loans Limited. Descriptive method was used, and 35 questionnaires were issued for data collection to Kumasi Branch, Adum employees in Ghana. The study aimed to examine the effects of motivation on the performance of employees at First Allied Savings and Loans Limited. The results revealed that 60% said their level of motivation was low, on the other hand, it was revealed that 68.65% respondents were willing to increase their productivity level if only they were given a reward. High salary was ranked as the number one motivational factor with 31.4% representing 11 respondents. The study concluded that motivation level of employees at First Allied Savings and Loans Ltd is low, therefore, motivation should be priority of management so that employees can deliver excellent service to their valued customers. The study was supported by the finding of Hitka, (2018), whose findings revealed that salary was the factors that motivates employees. Management therefore should consider salary or wages as the top motivational factor. Hence, manufacturing companies’ needs to consider motivational factors to influence project performance in positive way.

Dr Mweshi and Mubanga (2019), conducted a study to find ways of motivating the public service employees at TEVETA, Lusaka, Zambia. Discussions and questionnaires were used to gather data. The findings showed that non-financial rewards were equally important in addition to financial rewards and played a major role in motivating public service employees. The findings further assisted in defining a variety of motivational
factors, key motivators and measures that motivates employees. Therefore, the two groups into which factors were classified, were intrinsic and extrinsic motivating factors. The study findings helped to come up with the study’s practical effects as part of the recommendations, in terms of the means that TEVETA can use to address the gaps of low motivation among its employees. Therefore, directions of future research on Public Service Motivation (PSM) were suggested. The study was not related to research, but it revealed ways in which TEVETA employees can be motivated, that’s through financial reward. Boamah (2014), showed that salary and wages are the best motivating factors. Ayam et al. (2012), supported these findings. Therefore, the study recommended that even non-financial rewards play a major role in motivating employees. hence manufacturing companies should also consider non-financial reward as means of motivating their employee.

2.2. Role of Communication Soft Skills.
Alshammari (2020), recently conducted a study that aimed at providing a review on project manager's skills framework (PMSF), needed in improving complex construction projects in Kuwait. The researcher indicated that project managers oversee large and complex construction projects, deals with numerous factors to ensure coordination in achieving project success based on time, cost, and quality. Nonetheless, several large and complex projects in Kuwait face many delays and overruns. Prior research revealed the factors required by project manager’s skills framework (PMSF) to improve complex construction projects in Kuwait which includes, communication, teamwork & teambuilding, planning & coordination, problem solving, and interpersonal skills. However, after thorough analysis of literature on the project managers’ skills in the management of the project. It was revealed that skills such as teamwork, effective communication, effective resource management, effective planning and training, risk management are some of the important factors. The study had implications to research, because it revealed several skills important for project managers, and among them was effective communication. Durão et al, (2017) also showed that communication was cited as the most important skill. Therefore, effective communication is important. Hence, it is also important for project managers in manufacturing companies to effectively communicate to their project team members.

Mavuso and Agumba (2016), conducted a study in Swaziland’s construction industry that aimed at identifying the communication-management factors that influences project success and establish a conceptual improvement model that would help to improve communication-management practice for successful delivery of projects. Books, journals, theses, and published conference papers related to the objectives of the study were sources of information. A historical-research methodology was adopted to study the literature and twenty-five articles which existed from 1998 to 2015 were viewed. Eight communication-management factors were established to having influence to project success and a hypothetical model for improvement of communication management was proposed. Benita (2014), noted that managers’ communication skills mostly influence the success of construction projects. However, Zaccaro, et al, (2000), revealed that communication results in high group effectiveness. Turaga, (2013), indicated that, effective communication between project manager and team members mitigates intermediary problems that adversely affect the project success. Nonetheless, (Deepa and Seth, 2013), argued that in most organizations, teamwork is the most important. Yet (Belzer. 2004) indicated that effective communication, work within organizations’ culture, team motivation, stakeholder’s management and understanding business objectives can prevent failure of projects. Sukhoo et al. (2005), further suggested that communication skills are very important at
executing, controlling, and closing phases and less important at initiation and planning phases.

Nebo (2015), conducted a study to examine the role of effective communication on organizational performance in Nigeria, a case of Nnamdi Azikiwe University (UNZIK), Awka. The problem that led to the study was the disputes and delays in the access to information that would increase performance of staff. The study adopted the survey research method and the study focused on secondary and primary data. UNIZIK’s Academic and Non-academic staff of made the population of the research. Therefore, there were 170 non-academic and 130 academic staff. The sample size was calculated using Taro Yamane technique and stratified random sampling. Analysis of the hypothesis was achieved by using Chi-square $\chi^2$. Research findings showed that effective communication is the solution to effective and efficient management performance of employees in an organization. The study had no effect to research. However, it showed the importance of effective communication, this was supported by the findings of (Alshammari (2020) and Durão et al., (2017)), that showed that communication was the most cited important skills.

Klouda et al. (2018), stated that, concerns about poor attitudes of health workers from clients and communities still existed in Zambia, despite training of health workers in communication, complaints about poor health worker attitudes from clients and communities still exists in Zambia. It was discovered when More Mobilizing Access to Maternal Health Services in Zambia (MORE MAMaZ) initiative attempted to involve under-supported women in the community-based maternal and new born health system in five intervention districts. Under-supported women suffer an unequal burden of child mortality and poor health services. Klouda et al. (2018) therefore carried out a study, which included nurses from training schools and health facilities.

It was revealed that nurses were selective with whom and in what circumstances to communicate, yet they knew how to communicate well. Therefore, the under-supported, who had low confidence received poor communication. So, an experiential training program was proposed to help health workers focus on the reasons behind their poor communication. The research took 14 months at participating health facilities, using semi-structured interviews and focus group discussions with staff. The findings showed that improved inclusion of under-supported women and increased attendance mostly for ante-natal clinics, deliveries and under-five clinics was due to effective communication, improved communication between the health workers themselves, and a sense of job satisfaction among them. The study had no effect to research. However, it revealed that effective communication is very cardinal in any sector. The study did not satisfy research, but it illustrated how effective communication engineers work efficiently and effectively in any organization.

2.3. Role of Leadership Soft Skills.

Henarathgoda and dhammika (2016), carried out a study to analyze the impact of leadership development on employee performance in Sri Lanka’s large scale tyre manufacturing organizations. This research considered five leadership development factors such as empowerment, training and development, coaching, participation and delegation. Questionnaires were administered in the large-scale tyres manufacturing organizations to 225 respondents. Data was analyzed using correlation and regression. The study results revealed that the combined effect of these identified five factors has an impact on employee performance. However, leadership development factor proves a synergic effect and increase the overall employee performance. Therefore, all the hypotheses were accepted and they all positively correlated to employee performance. Hence, it was concluded that participation in leadership development has the
highest effect on employee's performance. This study had implication to research, in the sense that, it showed that leadership development influences employee’s performance. Therefore, manufacturing companies should consider hiring project managers that possess proper leadership skills.

Yanney (2014), examined the effect of leadership styles and business strategy on organizational performance of Small-Medium Scale Enterprises (SMEs) in Ghana’s manufacturing sector. A field survey using questionnaires was performed in Accra. 60 CEOs and senior managers from the 10 sampled organizations were chosen using random sampling method. On the other hand, a time series data from 2008 to 2013 on revenues, earnings before tax and job to establish performance indices for the organizations were collected from the 10 organizations. Relationships between leadership, strategy and organizational performance were investigated using regression and analysis of variance (ANOVA). The findings showed that leadership and business strategy have an effect on the success of the company, but strategy has more influence. It was revealed that transformational leadership style and cost leadership significantly influence organizational behavior, but transactional leadership style, differentiation and focus strategies did not. The study was just related to the study, it revealed that leadership skills affect performance. In addition, leadership style also influences performance. Therefore, project managers in manufacturing companies needs apply their leadership skills, but need to be mindful with the leadership style that support the organization structure of their manufacturing company.

Melamine (2016), examined the impact of leadership models, to assess if they have a significant relationship on employee satisfaction in a small and medium enterprises of Ndola, Zambia. Data collection was carried out using structured questionnaires. According to Malemuna, from the perspective of human resource management, leadership model is one of the factors with the potential to enhance the organizational efficiency in order to maximize business performance. Four styles of leadership models, Autocratic, Supportive, Custodial, and Collegial leadership were thus considered. The study results revealed that initiating Leadership models leads to job satisfaction being achieved. The study suggested that mentoring should be used as a way to develop and motivate employees towards entrepreneurship to achieve organizational sustainability and job satisfaction for the employees. Leadership is therefore an important factor that influences the organizational performance and in turn affects job satisfaction. Kabeta (2015) and Yanney (2014), supported these findings. Project managers in manufacturing companies’ needs to fully understand and adopt the right leadership model, depending on their company structure as they apply their leadership skills to the running of the project activities.


Tiainen (2014), investigated how to improve the decision-making process of a global IT-transformation programme operating in a complex multi- dependency environment in Finland. The study was qualitative and existing literature was analyzed to find the best practice guides for business decision making. An empirical research was carried out in two parts: first, by examining internal data from the program and by conducting semi-structured interviews with eleven staff from the program. The results revealed that there are already many procedures in place to formalize the decision-making. These procedures were well established and quite mature. The interviews provided an inside view of the current process and revealed that while most of them knew the process, parts of it were unclear. Post-decision activities were particularly seen as having room for improvement. On the other hand, the study revealed that the program needed to define the decision-
making process, create demand funnel to filter only relevant decision requests by management, application of a general theory-based decision-making model, improve post-decision activities through a four-step approach and the use of three key performance indicators to measure the quality of the process. The study was not in line with research but brought in the aspect of decision-making process needed to be used when making decisions.

Mbibi and Oluchi (2013), aimed at assessing the relationship between decision making and job satisfaction of work performance of teachers at junior high secondary schools in Abia state, Nigeria. A sample of 541 junior high school teachers was drawn from a population of 1082, out of a total of 230 junior high schools in Abia state, data was obtained using questionnaires from the respondents entitled teachers’ involvement in decision making and job satisfaction as it relates to job performance of teachers in junior high schools. For this reason, Abia State College of Education’s educational administration and Planning were the experts consulted to ensure the validity of the research instrument used. The study results showed that while teachers were involved in decision making, the school principals did not enforce any of the decisions made. As a result, in the junior high schools, there was lack of job satisfaction and low job performance among junior high school teachers. The hypothesis testing showed that no significant difference was found between decision making of teachers and job performance. Based on the findings, it was recommended that principals should include and implement decisions made by teachers in schools to improve their job performance in order to enrich Nigeria’s educational standards. The study had no implication to research. However, it clearly showed the importance of decision making.

Mungaila (2011), carried out a study in Lusaka on those who attended antenatal at Chainama clinic, to gain insight into decision making and reproductive issues as they exist in marriages, and also highlight the overall pattern of decision making on reproductive issues and the reasons for types of decision making. Furthermore, the study investigated the effects of male decision making on the wives. This was done from June through August 2005 and both qualitative and quantitative data was gathered. Research findings revealed that more decision-making power is exercised in husbands than wives. Further results showed very low shared decision making between wives and husbands. The study also showed that the wives made a marginal contribution to socio-economic of decision making on reproductive issues, mainly when to have sex and how many children. Thus, the study showed that wives suffer gender-based violence, contraceptive illness, divorce threats, marital rape and HIV/AIDS contraction due to unshared decision making. It was proposed that joint decision making on reproductive issues be approached with the urgency it requires, since women are the most affected and it would therefore be appropriate for them to be addressed quickly. The study did not have implications to research. However, it showed the importance of decision making and how it influences the operation of any sector or situation.

1.6 Establishment of the gap and Personal critique summary

It is evident that project management motivation soft skills have not been looked at intensely in relations to manufacturing companies in Zambia, motivation skills studies in Zambia focuses on the health and education sectors. However, globally, motivation soft skills studies are there but limited.

Another area not fully researched is communication soft skills in relations to manufacturing companies. Most researchers focus so much on the role of communication soft skills in the health and education sectors as compared to the manufacturing sector. On the other hand, focus has been on communication theories. However, the literature
obtained has revealed that, globally there are few studies done on the role of communication soft skills on project success.

Studies to do with leadership are rare in Zambia and the world at large, much focus is on leadership style as compared to leadership skills and also there are no studies on project management leadership soft skills on project success in manufacturing companies done in Zambia. leadership studies are more inclined to leadership style than to leadership skills and more related to the education and business sector as compared to the manufacturing industries. Most studies focus on decision making styles, nevertheless there are studies done on decision making skills in other sectors like, IT industries, health sector and education sector. However, these studies are still vague.

In conclusion, studies on the role of project management soft skills on project success in manufacturing companies are not there in Zambia. Hence, the study contributes in bridging the knowledge gap.

3.2 Sampling procedure
Non-probability sampling methods was used; therefore, convenience sampling method was used to select five (5) manufacturing companies in the district. This technique made it possible to select manufacturing companies that were nearby. On the other hand, employees were selected using purposive sampling method, this technique made it possible to select employees that were required to answer the research questions. Hence, the selected employees were those that work in the project management departments or plants.

3.3. Target populations and Sample size
The target population was the project managers, project coordinators and project team members that carries out day-to-day operations of project activities in manufacturing companies in Luanshya district. Selecting staff from departments or plants that carries out projects in manufacturing companies, helped to achieve responses that met the study objective. Therefore, a non-probability sampling method was used, specifically purposive sampling method, because it made it possible to subjectively select employees of interest in the manufacturing companies. On the other hand, the use of case study research design assisted the researcher in obtaining detailed information which gave a clear picture about the role of the project management soft skills on project success in manufacturing companies in Luanshya district.

A total number of 50 self-administered questionnaires were distributed to 5 selected companies out of 15 manufacturing companies (LDIP, 2013), in Luanshya district. Therefore, 10 workers were then selected from each selected manufacturing company and they were given questionnaires to provide answers to questions in the questionnaire. However, only 40 questionnaires were completed and returned.
3.4 Instruments of data collection
The instruments used in this research to gather primary data were self-administered questionnaires and the study used (structured) closed ended questions. Structured questions were used because data is easy to code, statistically analyze. The questionnaires were designed on 5-point Likert scale of 1-5 ranging from strongly agree to strongly disagree. A Likert scale was used since it’s commonly used for measuring, opinions. Hence, it helped the researcher to get opinions from respondents about the role of project management soft skills on project success in manufacturing companies in Luanshya district. Secondary data were collected from the library, internet, published articles and journals.

3.5. Data analysis techniques
Statistical package for social scientists (SPSS) was used to analyze data. Both descriptive analysis and Chi-square were used to analyze qualitative data. Descriptive analysis provided frequencies and percentages of variables, while Chi-square was used to test the associations of variables.

3.6. Ethical Considerations
The research did not violate the workers’ rights. Thus, informed consent was obtained before administering questionnaires. Information about the research was given to the project managers, who further enlightened their project team on the study to ensure that they make informed choices. Therefore, each respondent willingly participated in the study. The respondents’ privacy and confidentiality before and after the study had been complied with. No name of any of the respondents has been publicized

4) RESULTS AND DISCUSSION
4.1. Results / Research findings

Figure 3.1: Extent to which motivation affect performance of manufacturing companies

Firstly, the study wanted to assess the extent to which motivation soft skills affects performance of manufacturing companies in Luanshya district. A Likert scale of 5 to 1 was used, where 1 means very great extent and 5 no extent. The results obtained from the survey revealed that 50% respondents indicated that there is a great extent to which motivation affects performance of manufacturing companies, while 15% respondents indicated very great extent. However, 25% respondent indicated moderate extent and 5% respondents indicated little extent and 5% respondents indicated no extent, therefore, motivation soft skills affects performance of manufacturing companies.

Figure 4.2: Role of communication skills on project success

Secondly, the study assessed the role of communication soft skills on project success in manufacturing companies in Luanshya district. Questions and statements aimed at answering the communication research question were presented to respondents. A Likert scale of 5 to 1 was used,
where 5 is strongly agree and 1 is strongly disagree. The results of the study revealed that 50% respondents indicated that they strongly agreed and 37.5% respondents agreed respectively, that communication soft skills play a role on project success in manufacturing companies, while only 5% respondents were neutral about it. However, 7.5% respondents strongly disagreed.

Figure 4.3: Role of leadership skills on project success in manufacturing companies

Thirdly, to investigate the role of leadership soft skills on project success in manufacturing companies in Luanshya district. A likert scale of 5 to 1 was used where 5 means strongly agree and 1 means strongly disagree. The results of the study showed that 47.5% respondents strongly agreed and 33% respondents agreed that leadership soft skills play a role on project success in manufacturing companies. However, 10% respondents were neutral and 7.5% respondents strongly disagreed.

Figure 4.4: Influence of decision-making soft skills on project success in manufacturing companies

The last objective was to assess the influence of decision-making skills on project success in manufacturing companies in Luanshya district. A likert scale of 5 to 1 was used where 5 means strongly agree and 1 means strongly disagree. The results of the study show that 50% respondents strongly agreed and 30% respondents agreed that decision making soft skills has an influence on project success in manufacturing companies in Luanshya district. Whereas, 7.5% respondents disagreed and 2.5% respondent strongly disagreed. However, 10% respondents were neutral about it.

Figure 4.5: Most effective project management soft skills

The results of the study revealed that 45% respondents, indicated that communication is the most effective project management soft skills, followed by decision making (23%), then leadership (17%) and motivation (15%) as the least.

Figure 4.6: Duration of manufacturing projects

Respondents were asked to indicate whether they agreed or disagreed to projects completing within time in manufacturing companies. Therefore, a Likert of 5 to 1, where 1 is strongly agree and 5 strongly disagree was used. The results of the study showed that 40% respondents disagreed and 10% strongly disagreed, while 22.5% respondents were
neutral about it. However, 17.5% strongly agreed and 10% agreed.

**Figure 4.7: manufacturing project budget**

![Bar chart showing responses to manufacturing project budget]

Respondents were asked to indicate whether they agreed or disagreed to projects completing within budget in manufacturing companies. Therefore, a Likert of 5 to 1, where 1 is strongly agree and 5 strongly disagree was used. The results of the study revealed that 32.5% respondents disagreed and 12.5% strongly disagreed, while 22.5 were neutral about it. However, 20% strongly agreed and 12.5% agreed.

**Figure 4.8 importance of technical and professional expertise**

![Pie chart showing responses to technical and professional expertise]

Respondents were asked to indicate if technical and professional expertise is crucial to the success of a project in manufacturing company in Luanshya district. A Likert of 5 to 1, where 1 is strongly agree and 5 strongly disagree was used. From the analysis, 65% respondents strongly agreed, while 30% respondents agreed to the statement. However, only 5% respondents were neutral about it.

**Hypothesis testing using Chi-Square**

The alternative hypotheses for each independent variable were tested as shown below.

DF= 8, $X^2$ critical value is at 0.05= 15.5073 (in all cases)

**First Hypothesis Testing on Motivation Soft Skills**

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>21.368</td>
<td>8</td>
<td>0.006</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>12.923</td>
<td>8</td>
<td>0.115</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>17</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 4.1 Chi-Square Tests (motivation)**

**Second hypothesis testing on communication soft skills**

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>22.490</td>
<td>8</td>
<td>0.004</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>13.795</td>
<td>8</td>
<td>0.087</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>17</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 4.2 Chi-Square Tests (communication)**

**Third hypothesis testing on leadership soft skills**

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>22.490</td>
<td>8</td>
<td>0.004</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>13.795</td>
<td>8</td>
<td>0.087</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>17</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 4.3 Chi-Square Tests (leadership)**
Table 4.4 Fourth hypothesis on decision making soft skills

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>22.242a</td>
<td>8</td>
<td>0.004</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>13.751</td>
<td>8</td>
<td>0.088</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>17</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4.4 Chi-Square Tests (decision making)

The X2 test statistics revealed that the observed P-values of (0.006, 0.004, 0.004, 0.004) are less than the standard P-value of 0.05. Therefore, we reject the null hypothesis in all cases and conclude that there is a significant association between (motivation, communication, leadership and decision making) with performance of manufacturing projects, hence decision-making soft skills play a role on project success in manufacturing companies.

4.2. Discussion and Interpretation of Findings

The study’s overall objective was to investigate the role of project management soft skills on project success in manufacturing companies in Luanshya district. Therefore, the study investigated motivation, leadership, communication and decision making.

The first specific objective of the study was to assess the extent to which motivation soft skills affect performance of manufacturing companies in Luanshya district. The results obtained from the survey revealed that 50% respondents indicated that there is a great extent to which motivation affects performance of manufacturing companies, while 15% respondents indicated very great extent. However, 25% respondent indicated moderate extent and 5% respondents indicated little extent and 5% respondents indicated no extent. Therefore, project managers should motivate their staff members by considering the motivating factors. Hitka (2018), in his study, he revealed that the most important motivation factors are basic salary, workplace atmosphere, supervisor’s approach, and fringe benefits. These findings are also supported by Manyenga (2016) and Ayam et al (2012).

The second specific objective was to assess the role of communication soft skills on project success in manufacturing companies in Luanshya district. 50% respondents indicated that they strongly agreed and 37.5% respondents agreed respectively, that communication soft skills play a role on project success in manufacturing companies, while only 5% respondents were neutral about it. However, 7.5% respondents strongly disagreed. Therefore, it is important for manufacturing companies to hire employees that possesses excellent communication skills, so that communication can be very effective. On the other hand, project managers should also have good communication skills so that they are able to effectively communicate the cost, scope, time, quality and budget of their project to their project team members. Zilch’s (2014) study revealed that communication skill has an impact on the foundation areas of project management.

The third specific objective was to investigate the role of leadership soft skills on project success in manufacturing companies in Luanshya district. The results of the study showed that 47.5% respondents strongly agreed and 33% respondents agreed that leadership soft skills play a role on project success in manufacturing companies. However, 10% respondents were neutral and 7.5% respondents strongly disagreed. It is important for project managers in manufacturing companies to have proper leadership skills. Hence, managers in manufacturing companies should ensure that they lead, motivate and encourage others to carry out their assigned duties so that the outcome of the
project is a success. Mary (2012), indicated that a positive correlation between leadership and project performance existed. This was supported by finding of (Henarathgoda and Dhammika, 2016; Awan, 2015 and Musebi et al, 2018).

The last specific objective was to assess the influence of decision-making soft skills on project success in manufacturing companies in Luanshya district. 50% respondents strongly agreed and 30% respondents agreed that decision making soft skills has an effect on project success in manufacturing companies in Luanshya district. Whereas, 7.5% respondents disagreed and only 2.5% respondent strongly disagreed. However, 10% respondents were neutral about it. Therefore, decision making influences project success in manufacturing companies in Luanshya district. Hence, proper decisions in regards to resource allocation and the budgets must be made to avoid delays and project budget overruns.

Communication soft skills was listed the most effective soft skills. This was supported by findings of Durão et al, (2017), that revealed that communication was cited 15 times as the most important soft skills. Zielinski (2005), backed both findings, by pointing out that communication, negotiation, conflict management and persuasion are regarded as higher-order skills by most organizations. Therefore, poor communication can result into delays and budget overruns, which in turn can cause failure of a project.

The results of the findings further showed that majority respondent (40%) disagreed to projects in manufacturing companies being completed with the time frame and while 10% strongly disagree. However, 22.5% respondents remained neutral about it. But, 17.5% respondents strongly agreed and 10% agreed that projects are completed within the time frame. On the other hand, 32.5% respondents disagreed to projects completing within budget in manufacturing companies and 12.5% respondents also strongly disagreed, while 22.5% were neutral about it. However, 20% strongly agreed and 12.5% agreed to project completing within budget. Therefore, manufacturing companies should ensure that they apply proper project management soft skills on project management activities, such as planning, organizing, execution, monitoring and controlling as they carry out their projects. On the other hand, managers in manufacturing companies needs to ensure that the project team members are well informed and motivated so that they can work extra hard in achieving project success.

The results of the study showed that technical and professional expertise is crucial to the success of a project in manufacturing company in Luanshya district. Therefore, the majority respondents (65%) strongly agreed and 30% respondents agreed. However, only 5% respondents were neutral about it Therefore, it is important for manufacturing companies to hire employees that is able to balance technical expertise and project management soft skills so that project activities can be effectively carried out, which in turn will promote project success.

The X² showed that there is a significant association between all variables with performance of manufacturing project. Hence, these skills are important because they influence the performance of manufacturing projects. Therefore, these skills need to be applied on to the right tools and project management activities in order to achieve project success.

5) CONCLUSIONS
In conclusion, the study objective was to assess the role of project management soft skills on project success in manufacturing companies in Luanshya district. The research answered the research questions, thereby fulfilling the study objective. Therefore, it is evident that project management soft skills play a role on project success in
manufacturing companies in Luanshya district according to the results. However, even if the project management soft skills play a role on project success in manufacturing companies, the results revealed that manufacturing projects are not completed within time and on budget. Therefore, there is need for project managers in manufacturing companies to investigate the causes of delay and budget overruns and come up with risk response measures to assist them curb the problem of delay and budget overruns.

Project management soft skills are crucial for project success in all sectors. Hence, project managers in manufacturing companies needs to ensure that they motivate their team members, by adopting favorable motivational factors, that will enable project team members to be encouraged to effectively perform their project assigned activities so that a project goal is attained.

On the other hand, communication skills play a pivotal role, according to the findings, therefore project managers or coordinators in manufacturing companies’ needs to effectively communicate the areas of cost, scope and time, and quality to project team members, so that project budget overruns and delays are avoided by all means.

A successful project completion in a manufacturing company requires project managers with proper leadership soft skills. A leader capable of inspiring, encouraging good working relationships and motivating project team members, in order to build team morale, so that each project team member is keen to work towards a common project objective. Leadership soft skills are therefore also important in a manufacturing company. Hence manufacturing companies should ensure that they hire managers with proper leadership skills.

Decision making skills is also key in all the sectors. Therefore, Project managers in manufacturing companies needs to make proper decisions in regards to the cost of project activities, scope and time frame of the project, so that they prevent delays and budget overruns, thereby preventing project failure.

However, communication soft skills were listed as the most effective project management soft skills in manufacturing companies as compared to other soft skills. Therefore, it is very imperative for project team members and project managers to effectively communicate, so that project activities are effectively and efficiently carried out in order to achieve the project goal.

The Chi-square test showed that there is significant association between performance of manufacturing projects and project management soft skills. Therefore, performance of manufacturing projects is dependent on project management soft skills.

The study has therefore contributed in bridging the knowledge gap, in the sense that, most studies on project management soft skills are more inclined to construction industries, health and education sector, and IT industry. But this study specifically focused on project management soft skills in manufacturing companies. Thus, it contributed to the body of knowledge.

6) ACKNOWLEDGMENTS
I am indebted to thank The Almighty God for seeing me through every moment of my research. To my supervisor, Mr. Chibomba Kelvin (The best Research Guru!!), many thanks for the effort and support, guidance and the timely comments to this research. And finally, many thanks to all manufacturing companies in Luanshya district that opened up their door for me to collect data and to the employees that made themselves available for me to collect data for research.
REFERENCES


Issues in Informing Science and Information Technology, 2, 691–703.


