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# KNOWLEDGE MANAGEMENT PRACTICES TO MINIMIZE THE IMPACT OF STAFF TURNOVER

**K.P.A.N. Karunanayake[1], M.L.S.S. Fernando[2] and U. Kulatunga[3]**

## *ABSTRACT*

*Skilled staff turnover plays a wide role in continuous knowledge loss in manufacturing organizations. The result of staff turnover impacts organizational performance, productivity, effectiveness, employee performance and knowledge. The importance of managing an organization's knowledge is a need in organizations. This research identified the importance of knowledge management in the trailer manufacturing sector with high staff turnover. This enables project managers to take project knowledge management into practice within the organization. This study uses a qualitative research approach. The aim of the study was achieved by a case study research strategy along with 16 semi-structured interviews, which were performed as a data collection technique. Data were collected from the case study organisation, focusing on knowledge management methodologies used during the project phases and identifying the impact of staff turnover on organizational knowledge. The knowledge management techniques vary from one project phase to another project phase. Based on the outcome of this research, project managers can identify the most effective knowledge management techniques to be used at each phase. According to the study, the most frequently used KM techniques in the planning stage were "Learning & Idea Capturing" and "Refer Knowledge Base". The most prominently used KM techniques in the designing stage were "Brainstorming" and "Learning & Idea Capturing". While the most frequently used KM technique in the building, testing, and launching stages was found to be "Refer Knowledge Base". From this research study, project managers can identify the critical areas affected by skilled staff turnover, how to prepare in advance and minimize knowledge loss.*

***Keywords:*** *Knowledge Management; Staff Turnover; Techniques; Trailer Manufacturing.*

## 1. INTRODUCTION

Knowledge management needs to be understood as a process of systematically and actively identifying, activating, replicating, storing, and transferring knowledge (Sadq, et al., 2020). In recent years several ideas and concepts of knowledge management (KM) have been developed. Knowledge management is not a purely managerial activity

[1] Senior Manager, Design and Estimations, Dutch Lanka Trailers Manufacturers Ltd, ayomi.karunanayaka@gmail.com
[2] Research Scholar, Department of Building Economics, University of Moratuwa, Sri Lanka, shamalfernando96@gmail.com
[3] Professor in Building Economics, Department of Building Economics, University of Moratuwa, Sri Lanka, ukulatunga@uom.lk

because it may be performed by all project team members and the management team (Jayasuriya and Medis, 2019). The knowledge is passed from the project level to the organization level to distribute to other projects that are implemented by the organization or used in line with other processes. Furthermore, knowledge is passed from the organization level to the global level to use in global sources of knowledge.

Nowadays, staff turnover is one of the challenging issues in the business sector (Irabor and Okolie, 2019). Considerable attention has been given to the impact of staff turnover by senior management, human resources professionals and industrial psychologists. Staff turnover is proven one of the costliest and seemingly intractable human resource challenges confronted by several organizations globally. According to Meier and Hicklin, (2008), and Al Mamun and Hasan (2017), employee turnover harms organizations.

According to Mathis and Jackson (2007), employee turnover is the process where employees leave an organization and have to be replaced. Kreitner (2003) views employee turnover as the rate that which an organization's workforce terminates employment and requires replacement. Employee turnover is related to organizational commitment and job satisfaction. In any organization, staff turnover can occur either voluntarily or involuntarily.

Employee turnover is considered to be one of the persisting problems in organizations (Armstrong, 2009); especially if it involved quality employees that have worked for the organization for many years, and who are highly experienced, high performing and loyal individuals (Branham, 2005; Katcher and Snyder, 2007; Somaya, et al., 2007). On the other hand, employee turnover means that another organization may gain a new knowledgeable employee who can become its competitive advantage. Thus, knowledge loss is a threat to the former organization, which increases the significance of knowledge continuity. Management of the organization has to consider in advance, the ways to cope when a potential employee leaves for its competitor or on retirement. Staff turnover is one of the essential factors influencing organizational knowledge continuity; it is necessary to minimize its consequences by utilizing knowledge management. Further, high employee turnover reflects the instability of organizations (Brahmannanda and Dewi, 2020). Organizations will be greatly affected due to high skilled employee turnover. This will reflect badly on its product quality, targets, and performance; and ultimately increase the product cost. Hence, retaining organizational knowledge is more important in the manufacturing industry (Hickey and Kozlovski, 2020). Several studies were conducted concerning the assessment of staff turnover in the manufacturing industry (Ng, et al., 2019; Hristova, 2021; Barlow, 2003).

However, a research gap was identified in terms of a review of the impact of staff turnover in the trailer manufacturing industry. In this regard, a better understanding of knowledge management techniques and organizational knowledge management is essential to minimize the knowledge losses of the case study organisation. Accordingly, this study aims to identify the knowledge management techniques and minimize the knowledge loss in a high staff turnover environment in the manufacturing industry in Sri Lanka.

The paper is structured as follows; first, the literature review contains secondary information regarding the project knowledge management techniques. Thereafter, the research methodology is demonstrated with the justification of the selection of research approach, data collection and analysis techniques. Finally, the conclusion summarises the

findings of the research concerning knowledge management and its application for the reduction of the impact on organisations with staff turnover.

# 2. LITERATURE REVIEW

## 2.1 PROJECT KNOWLEDGE MANAGEMENT

Project Knowledge Management (PKM) is knowledge management practised in different situations of the project. It creates the link between the ideas and principles of knowledge management and project management. PKM involves two basic perspectives: the inter-project and intra-project perspectives. Depending on the size and structure of a project, subprojects, or inter-project constellation could exist within a project. Because of this, a clear differentiation between the two perspectives is not always possible. Nisar et al. (2019) made a valuable contribution by setting the base for understanding knowledge management in project environments.

Schindler and Eppler (2003) builds a framework of Project Knowledge Management (PKM) and identifies three major types of knowledge in project environments as knowledge about projects, knowledge within projects and knowledge from/between projects. The knowledge transfer from and between projects can be categorised into four main parts: such as expert knowledge, methodological knowledge, procedural knowledge, and experience knowledge. Knowledge from projects contributes to the organizational knowledge base. "*Despite recent advances in our understanding of how to manage knowledge, its capture and transfer remain acute problems for project-based firms and organizations*" (Hall and Irani, 2005). PKM contributes to the reduction of project risks through awareness of mistakes and pitfalls of former projects (Schindler and Eppler, 2003).

After completing the project, the team member attains a new level of knowledge. This forms the basis for the process of knowledge management planning, which produces the project knowledge management plan (PKM Plan). The PKM Plan addresses all the topics related to project knowledge management and covers both the personalized and codifying techniques of knowledge management (meetings, knowledge exchanging teams, and using knowledge repositories) in alignment with project type and needs (Stanislow, 2014).

## 2.2 KNOWLEDGE MANAGEMENT TECHNIQUES

In terms of understanding KM techniques, Raymund (2006) identified some KM techniques, which are IT-based and non-IT-based. As per his identification, these KM techniques were Brainstorming, Learning & Idea Capturing and After-Action Reviews were categorized as non-IT-based KM techniques. Blogs and Refer Knowledge Bases are categorized as IT-based KM techniques.

### 2.2.1 "Brainstorming" KM Technique

According to Raymund (2006), brainstorming is a simple way of helping a group of people to generate new and unusual ideas.

It is further defined as a process that involves a group of people who meet to focus on a problem and then intentionally propose as many deliberately unusual solutions as possible through pushing ideas as far as possible (Boamah, et al., 2021). The participants shout

out ideas as they occur to them and then build on the ideas raised by others. All the ideas are noted down and are not criticized.

### 2.2.2 "Refer Knowledge Base" KM Technique

It has the objective to collect knowledge, store it in databases and provide the available knowledge in an explicit and codified form. Then reuse of explicit knowledge and solutions can save time and money. Thus, the design of databases, document management and workflow management can be considered part of this strategy. The codification strategy is assumed successful for companies whose business strategy requires re-using existing knowledge (Hansen, et al., 1999; Snehvrat and Dutta, 2018).

### 2.2.3 "Learning and Idea Capturing" KM Technique

The learning and idea capturing technique takes place at a personal and team level to capture the learning and ideas collectively and systematically (Raymund, 2006). The objective of the personalization strategy is to transfer, communicate and exchange knowledge via knowledge networks such as discussion forums. If the business strategy focuses on generating new or customer-specific solutions or product innovations, the personalization strategy should be chosen rather than the above-discussed codification strategy (Hansen, et al., 1999).

### 2.2.4 "After Action Review" KM Technique

After the action, review (AAR) is a KM technique focused on learning from a specific event. During the process of after-action reviews, participants in an activity, event or project conduct a structured discussion of what happened and why to learn from the experience (Russell, 2017). Furthermore, AAR is a technique to evaluate and capture lessons learned upon completion of a project. It allows project team members to discover for themselves what happened, why it happened and how to sustain strengths and improve on weaknesses (Raymund, 2006).

### 2.2.5 "Blogs" KM Technique

A Blog is a very simple 'journal style' website that contains a list of entries, usually in reverse chronological order. The entries are typically short articles or stories, often relating to current events (Raymund, 2006). A person's weblog is much like an open diary. It chronicles what a person wants to share with the world on an almost daily basis (Blood, 2002). According to Ntsoereng (2021), a blog is a frequently updated, publicly accessible journal.

# 3. METHODOLOGY

## 3.1 RESEARCH APPROACH

From the researchers' perspective, the ability of qualitative data to describe a phenomenon more fully is an important consideration. Also, from the reader's perspective, it is applied the same. Lincoln and Guba (1985) mentioned, "*If you want people to understand better than they otherwise might, provide the information in the form in which they usually experience it*" (p. 120).

Referring to qualitative research reports, it is typically rich with detail and insights into participants, maybe epistemologically in harmony with the reader's experience (Stake, 1978) and thus it is more meaningful. Based on the above discussion, this research study

is following the qualitative methodology, as the research requires gathering in-depth investigation on the KM techniques that can be used to minimise the knowledge loss due to staff turnover in organisations.

## 3.2 RESEARCH STRATEGY

Yin (2009) stated that a case study strategy should be used when questions such as "*how*" and "*why*" are being asked and that it is preferable to use this approach to answer questions about a contemporary set of events over which the researcher has no control.

For this study, a case study research strategy has been selected as it involves investigating a contemporary phenomenon. A single case study has been carried out with a trailer manufacturing company that reports high staff turnover in Sri Lanka. Since trailer manufacturing is a unique industry in the Sri Lankan context only one case study was considered with the participation of 16 interviewees representing the case study organisation. The case study boundary was defined as the employees who are involved in the managerial and executive levels of the selected case study organisation. Berg (2007) identified that the value of interviewing is because not only does it build a holistic picture, analyse views, and report details of informants, but also it enables interviewees to speak in their voice and express their feelings and thoughts. Moreover, interviewing, as well as other qualitative approaches, differs from quantitative methods in the sense of its ability to analyse the resulting data making an allowance for participants' social life. The researchers have identified the usefulness of interviews. That it tends to provide detailed descriptions of individuals and events in their natural settings. Furthermore, interviewing is 'usually' thought of as a key factor in research design (Weiss, 1994).

In this study, the data were collected through semi-structured, in-depth interviews. Accordingly, 16 personnel ranging from managers to executives within the case study organisation were interviewed. Participants were approached via phone and email. They were informed of the nature and purpose of the study and were invited for a face-to-face interview with the researcher at their place of work or a meeting room during the lunch break/hour or normal working hours. As participants are at a managerial to the executive level, the interviews were conducted in both Sinhala and English. All interviews were audio-recorded with prior consent from the participants and were transcribed verbatim. A structured interview protocol with predetermined questions was developed based on the existing literature to guide the flow and direction of the interview. Table 1 provides the interviewees' profile.

*Table 1: Profile of the Interviewees*

| ID NO | Designation | Department | Experience (Years) |
|---|---|---|---|
| IN_01 | Engineering Manager | Engineering | 5 |
| IN_02 | Senior Design Engineer | Engineering | 6 |
| IN_03 | Supply Chain Manager | Supply chain | 5 |
| IN_04 | Operations Manager | Independent | 3 |
| IN_05 | Director In Charge | Independent | 24 |
| IN_06 | Manager Shipping & Logistics | Shipping & Logistics | 9 |
| IN_07 | GM- Marketing | Marketing | 9 |
| IN_08 | Assistant Manager Engineering | Engineering | 5 ½ |

| ID NO | Designation | Department | Experience (Years) |
|---|---|---|---|
| IN_09 | Assistant Manager HR | HR | 13 |
| IN_10 | Manager IT | IT | 9 ½ |
| IN_11 | Manager QC | QC | 4 |
| IN_12 | Assistant Production Manager | Production | 3 |
| IN_13 | Consultant HR | HR | 2 |
| IN_14 | Internal Auditor | Finance | 1 ½ |
| IN_15 | Assistant Manager, QA | QC | 2 |
| IN_16 | Assistant Production Manager | Production | 2 ½ |

### 3.3 DATA ANALYSIS

The data analysis procedure consists of examining, testing, tabulating, categorizing or otherwise recombining both qualitative and quantitative evidence to address the initial proposition of a study (Yin, 2009). Yin (2009) highlighted that to reduce potential analytical difficulties, a general strategy for data analysis should be developed. In addition, to the experience of various methods of data analysis, no specific data analysis has been found to accommodate case studies (Petty, et al., 2012). In addition, Easterby-Smith (2022) noted that it is important that the researcher follow analysis procedures that are consistent with the philosophical choices of the study. This research adopted a qualitative analysis procedure. The data collected from the semi-structured interviews were analysed using the manual content analysis method.

## 4. DATA ANALYSIS AND FINDINGS

The case study organisation is one of the leading global manufacturers of Port & Road trailers in Sri Lanka. They cater for the growing demand for trailers and related products in South Asia, the Middle East and Africa. Since its inception, the company has designed and manufactured a variety of trailers for both export and domestic markets. The case study organisation's specialization is in Port Trailer requirements as well as Road Trailer requirements including special needs for the logistic and mining industry.

### 4.1 CAUSES FOR HIGHER STAFF TURNOVER IN MANUFACTURING ORGANISATIONS

The interviewees mentioned that the skilled staff leaving organisations would have a direct impact on the organizational knowledge. As a project-based manufacturing company, because of these reasons, the impact is very high. The company need to address this issue very carefully and take precautions to retain the organizational knowledge within the company. According to the findings from the interview, several reasons have been identified that are causing to leave the organisation. They include lack of job satisfaction, low salary, future carrier development, environment, leadership, knowledge, skills, new opportunity, location, other personal issues, and internal issues. Low salary is the major issue causing to leave organisations. Additionally, future carrier development is affected to leave the organisation. However, location and other personal issues are the least concerns affecting the organisational leaves. Additionally, environment, knowledge, leadership, and skills are minor causes for leaving the organisation. This is concerning the interview question introduced to get ground information about the person who left the

organization for the past few years and to investigate any possibility of capturing his/her knowledge on the time he or she left.

## 4.2 KM TECHNIQUES IN THE DIFFERENT STAGES OF THE TRAILER MANUFACTURING PROCESS

The interviewees identified the impact on the project timeline, cost, scope, and quality caused by skilled staff leaving the organization.

The project timeline was identified as the most affected stage due to skilled staff turnover; furthermore, the quality of the product is affected and gives a direct impact on the organizational manufacturing process standards. When identifying the consequences of skilled staff turnover on the project timeline, cost, quality and scope, the company needs to follow proper knowledge management practices to overcome this issue.

The effectiveness of these techniques in each project stage was identified and the interviewees highlighted their importance. Considering the project stages, the plan, design, build, tests and launch stages were analysed according to the views of the interviewees.

### 4.2.1 Planning Stage

The KM techniques that have currently been practised within the organization for the planning stage were identified. IN_01 emphasised "*in this stage most effective KM methodologies will be Learning and Idea Capturing and Refer Knowledge Base. Sometimes we may use a little of the Brainstorming Methodology".* However, IN_ 02 mentioned, "*In the planning stage I think most of the time it is Knowledge Base. We can use our experience to tackle this stage. Mainly it is helpful to identify the lead-time, and delivery period estimations based on the past data. Brainstorming will not be important in this stage"*. In summary six interviewees identified brainstorming as one of the KM methodologies used in the planning stage. At the same time, 11 participants stated that Learning and Idea Capturing are used in this stage. Six participants commented that After-Action Review is being used in this stage. Eleven interviewees stated that Referring Knowledge Base is being used as a KM technique in the planning stage. Two participants commented that Blogs Techniques were also used in this stage. Accordingly, IN_04 highlighted, "*In the planning stage we use Brainstorming, Learning, and Idea Capturing, After Action Review as well as Refer Knowledge Base. As you know, planning is a mix of codification and personalization. So, I think we are using all the above techniques other than Blogs"*. Only one interviewee agreed that all the above five techniques will be useful in the planning stage.

### 4.2.2 Designing Stage

IN_02 commented, "*Brainstorming is the most important KM technique. We can develop a new design through brainstorming"*. Therefore, affirming these statements 15 interviewees identified Brainstorming as one of the KM methodologies used in the design stage. Nevertheless, IN_15 elaborated, "*Brainstorming is more important, but we are using it at a very low level. Learning and Idea Capturing are used too, which is how we improve our product design. After Action Review can also be used, but I see no use of it for our current practice".* Accordingly, 15 participants commented that Learning and Idea Capturing would be used in this stage too. Therefore, IN_12 stated, "*Learning and Idea Capturing is used in the design stage too; we need to share the experience and share*

*the knowledge among others to overcome practical problems and issues so that others can also share their knowledge to give a better output".* Only five participants commented that After-Action Review is being used in this stage. Eleven interviewees identified that Referring Knowledge Base is being used as a KM technique in the design stage. Two participants commented that Blogs Technique was also used in the design stage. Only one interviewee stated that all the above five techniques will be useful in the design stage.

### 4.2.3 Building Stage

Interviewees identified Brainstorming as one of the KM methodologies used in the building stage. IN_12 commented, "*In the building stage when the product comes to this stage, all the other parameters are already finalized. Therefore, we do brainstorm to streamline our process and see the possibility of improving the lead time, process quality and efficiency"*. However, IN_02 stated, "*Brainstorming is not much relevant to this stage. For this case most of the time it is experience-based, not much written in this stage"*. At the same time, 10 participants stated that Learning and Idea Capturing would be used in this stage. Accordingly, IN_05 elaborated, "*We are having pre-production meetings, actually that is also to discuss the project, what are the difficult corners, and share past experiences, which means that Learning and Idea Capturing is touched at this stage"*. Eight participants commented that After-Action Review is used. Thirteen interviewees identified that Referring Knowledge Base is being used as a KM technique in the building stage. One participant commented that Blogs Technique is used in this stage. At the same time, one interviewee stated that all the above five techniques will be useful in the building stage.

### 4.2.4 Testing Stage

IN_13 mentioned, "*There is no Brainstorming in this stage. Learning and Idea Capturing is not much important."* However, only two interviewees identified "*Brainstorming*" as one of the KM methodologies used in the testing stage. Nevertheless, IN 16 manifested "*When the product comes to this stage, most of the time delivery is very critical, so we do brainstorm with our team and see how fast we can do it, what are the points which help us to improve the productivity and efficiency"*. At the same time, seven participants stated that "*Learning and Idea Capturing*" would be used in this stage. Six participants commented that "*After Action Review"* is used. Twelve interviewees stated that *"Refer Knowledge Base*" is used as a KM technique in the testing stage. Only two participants commented that "*Blogs Techniques*" were used in this stage.

Considering all the responses received from the interviewees "*Referring Knowledge Base"* was used during the building stage for the KM methodology. Moreover, "Learning *and Idea Capturing*" is applied as another KM technique applicable in the manufacturing process. Furthermore, "*Blogs Technique*" and "*Brainstorming*" are utilised during the testing stage.

### 4.2.5 Launching Stage

Interviewees identified "*Brainstorming*" as one of the KM methodologies being used in the launching stage. IN_07 mentioned, "*When you launch your product you need to position your product in the correct market, correct time frame and correct price positioning. Those are the most important criteria"*. At the same time, five participants stated that "*Learning & Idea Capturing*" would be used in this stage. IN_12 elaborated,

"*I think we are not focusing much on this stage. You need to use Brainstorming and Learning & Idea Capturing to position our product in the market"*. Four participants commented that "*After Action Review*" is used. Eleven interviewees mentioned that "*Referring Knowledge Base*" is being used as a KM technique in the launching stage. Two participants stated that the "*Blogs Technique*" was used in this stage. Apart from that one interviewee agreed that all the above five techniques will be useful in the launching stage.

According to Figure 1, brainstorming technology is a common technology used in the planning, designing and building phases. However, in these phases brainstorming technology is less used compared to other phases. Blog technique is a common technique for testing and launching phases, where it is less used. However, in the building phase blog techniques are used effectively for knowledge management. In the building and launching phase, experience is used to tackle problems. Learning and idea capturing are used in the launching phase to position the product in the market. Furthermore, learning and idea capturing are in the building phase for knowledge management. During the testing phase, brainstorming is used as a critical KM technology. However, some emphasised that there is no use for brainstorming in the particular phase. Hence, it signifies that the use of brainstorming technology is varying based on the type of product. During the design phase, both experience and knowledge are shared to overcome practical problems in the manufacturing process.

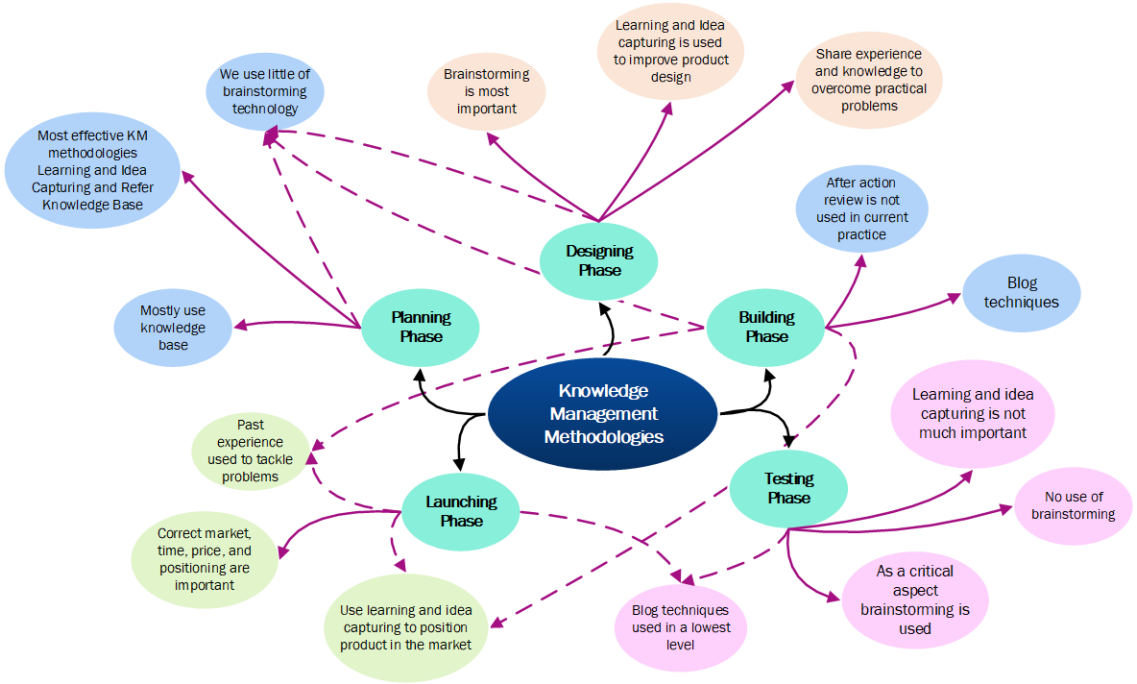


*Figure 1: Summary of KM technologies*

Summarizing all the views received from the interviewers, introducing a computer-based system to store knowledge is important. In addition, the preparation of a database to store past data and analysing will be helpful for continuity of the organizational knowledge as the other KM methodologies are used in different stages.

# 5. DISCUSSION

As demonstrated by the expert interviewees knowledge management techniques are applicable in all the five phases of the project, starting from planning to the launching stage. All the different phases of the manufacturing process are connected with a standard set of knowledge management techniques illustrated by (Blood, 2002; Raymund, 2006; Russell, 2017; Hansen, et al.,1999) and it was confirmed by the expert interviewees. The combination of different KM techniques is required throughout the process of manufacturing to ensure the reduction of staff turnover. Furthermore, as Raymund (2006) illustrated combination of both IT-based and non-IT based applications is required for KM techniques. A similar idea was presented by the research study findings.

Different KM technologies are demonstrating the connectivity among the practices to provide a basis for the minimisation of staff turnover. Accordingly, as the research findings demonstrated the use of diversified KM techniques is supporting the company to retain the information that is possible to leave the organisation with the staff turnover. The use of brainstorming is a session to share the knowledge among the staff members and ensure that the knowledge is retained within the organisation while shared with the employees.

Furthermore, the blog technique is an IT-based KM technique proposed for the manufacturing organisation to record and preserve the data which is required for the business aspects. The blog technique is providing accessibility to the staff for knowledge and knowledge sharing is a comparatively easy process. Use of learning and idea chaptering is possible to apply in different phases of manufacturing as a method of acquiring knowledge for other members to ensure the availability and the reliability of the information. Daghfous, et al. (2013) emphasised that the use of combined methods while transgressing the ordinary procedures effectively retains knowledge and mitigates knowledge loss in manufacturing companies. Additionally, coordination of knowledge and maintaining information systems are effective approaches for knowledge retention.

Furthermore, as Mohajan (2009) elaborated, this research confirmed that KM is a process of retaining organisation knowledge with the use of the KM techniques and ensuring that the available knowledge is shared among the organisation's staff. Therefore, brainstorming, learning and idea capturing, referring knowledge base, actions reviews, and blogs are available techniques for a better KM process.

Hence the key intention of KM techniques is to retain knowledge within the organisation while sharing the available knowledge among the staff and to avoid staff turnover and its impact on organisational development and success.

# 6. CONCLUSIONS

There is an impact on ongoing projects and continuity of organizational knowledge when skilled staff leaves the project. Concerning the impact of leaving skilled staff, the highest impact is reflected in the project timeline. This is mainly due to the commitment to product delivery time and lead time is already fixed and agreed upon by the manufacturer. In terms of the deviation of project duration, the staff turnover is directly impacted because of the knowledge loss. Then due to the scarcity of skilled labour within the industry will take time to recover. In terms of the outcome of the study, project timeline, quality, cost, and scope respectively affected due to skilled labour turnover in

manufacturing organizations. According to the study, it was identified design and building stages as the most impacted phases due to high turnover rates.

The KM method varies from one project phase to another. The KM methodologies used in manufacturing projects such as "Brainstorming," "AAR," Learning and Idea Capturing", "Refer Knowledge Base" and "Blogs" were identified. All above five methods are used in each project phase of the trailer manufacturing process. The most used methods for planning stage are "refer Knowledge Base" and for design, the stage is "Brainstorming" and "Learning & Idea Capturing." Considering building, testing, and launching stages, the most used technique is "Refer Knowledge Base." The effectiveness of KM methodologies is varying from one project phase to another. When considering the planning stage most effective techniques are "Learning & Idea Capturing" and "Refer Knowledge Base." In the designing stage, "Brainstorming" and "Learning & Idea Capturing" are the most effective KM methodologies used. Considering the building stage, the most effective technique is "Refer Knowledge Base." The most effective KM technique identified for the testing stage as well as for the launching stage is "Refer Knowledge base."

KM is highly in need within the organization, and the documentation and sharing of the knowledge have to be encouraged. In terms of capturing the knowledge, need to develop a bottom layer to transfer that knowledge. Team building and developing confidence between team players and offering ownership and responsibility are also identified as the best methods to retain organizational knowledge within the organization.

## 7. RECOMMENDATIONS

Considering the KM role identification of the trailer manufacturing organizations, the need for a role of project manager was identified. To improve the KM within the organization, recommended educating the managers regarding the KM practices and use of retaining organizational knowledge. The organization should take immediate actions to fill the gap of a knowledge manager as all the projects are implemented are does not have a knowledge manager. In addition, the organization should take immediate actions to maintain law turnover rates as it is directly affected on continuity of the organizational knowledge. In addition, the documentation of the project knowledge should encourage after closing each project.

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