

MODIFIED TECHNICIAN CAREER PROGRESSION SYSTEM IN A
MULTINATIONAL FOOD MANUFACTURING FIRM IN MALAYSIA

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DEDICATION

This dissertation is dedicated to my family – my pillars of strength. To my parents, Mr & Mrs Arunandy-Boovanesuwari - thank you for believing that I can achieve anything and never doubting my capabilities. The both of you have encouraged me to pursue DBA and I would not have started it without your blessings. Thank you to my sister, Gayathri Arunandy who has motivated and encouraged me with words of wisdom. You stood by me and gave me the strength to carry on. You were my shoulder to lean on. My sincerest appreciation to my brother-in-law, Siva Prakash and nephews - Vishvaa, Nitesh & Theeran for their unwavering confidence in me.

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ABSTRACT

This study recommended a framework to guide an organization to successfully implement a technician career progression system, particularly to enable the technicians to become a skilled workforce. In the manufacturing industry, technicians are in the group of heavily relied upon employees. However, research on career progression for this group of employees in the manufacturing industry is limited. A conceptual framework was developed from literature reviews to comprehend the past research. A single case study was conducted in Malaysia's multinational food manufacturing firm with heavy reliance on technicians. A semi-structured interview was conducted involving ten technicians, two supervisors and two system developers. The validity and reliability of the data were obtained from the interview session with different categories of participants. The interview transcriptions were analysed and interpreted using NVivo. Findings from the study identified that the modifications performed on technicians career progression systems were successfully implemented to enable technicians to be promoted. A structured process to acquire the competency skills were established. The performance management process was developed and defined. Technicians achieved employee fulfilment by participating in this career progression system. Sustainable technicians career progression system is achievable provided the organisation continuously embark on the journey to produce a skilled workforce. This study demonstrated that career progression is workable for the technicians' category and potentially could be a medium of employee retention in the food manufacturing industry.

ABSTRAK

Kajian ini mengesyorkan kerangka kerja untuk membimbing organisasi bagi melaksanakan sistem kemajuan kerjaya juruteknik, khususnya bagi membolehkan juruteknik menjadi tenaga kerja mahir. Dalam industri pembuatan, juruteknik adalah tergolong didalam kumpulan pekerja yang sangat disandarkan. Walau bagaimanapun, kajian mengenai kemajuan kerjaya bagi kumpulan pekerja ini dalam industri pembuatan adalah terhad. Kerangka konseptual telah dibangunkan daripada tinjauan literatur untuk memahami kajian masa lalu. Satu kajian kes dilakukan di sebuah syarikat pembuatan makanan multinasional di Malaysia yang sangat bergantung kepada juruteknik. Satu temubual separa berstruktur telah dilakukan yang melibatkan sepuluh juruteknik, dua penyelia dan dua pengurus pembangun sistem. Kesahan dan kebolehpercayaan data diperoleh dari sesi temubual dengan kategori peserta yang berlainan. Transkripsi temubual dianalisis dan ditafsir menggunakan NVivo. Hasil kajian menunjukkan bahawa pengubahsuaian yang dilakukan pada sistem kemajuan kerjaya juruteknik berjaya dilaksanakan untuk membolehkan juruteknik dinaikkan pangkat. Proses berstruktur untuk memperoleh kemahiran kompetensi telah dibuat. Proses pengurusan prestasi dikembangkan dan ditentukan. Juruteknik mencapai kepuasan pekerja dengan mengambil bahagian dalam sistem kemajuan kerjaya ini. Kelestarian sistem kemajuan kerjaya juruteknik dapat dicapai dengan syarat organisasi berusaha untuk menghasilkan tenaga kerja mahir secara berterusan. Kajian ini menunjukkan bahawa kemajuan kerjaya dapat dilaksanakan untuk kategori juruteknik dan berpotensi menjadi medium pengekalan pekerja dalam industri pembuatan makanan.

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LIST OF ABBREVIATIONS

TCPS	-	Technician Career Progression System
PDP	-	Performance Development Plan
OJT	-	On-the-Job Training
KPI	-	Key Performance Indicators
SME	-	Subject Matter Expert
STF	-	Systems Theory Framework

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CHAPTER 1

INTRODUCTION

1.1 Overview

This study aims to recommend a framework to guide Kellogg Malaysia to successfully implement a workable and sustainable technician career progression system within the company. This chapter presents an introduction to the research described in this thesis by first presenting the study's background, problem statement, research questions and research objectives, followed by presenting the purpose of the research and the definition of key terms used in this study. This chapter also explores the nature of specific problems and practical and theoretical implications of this research to validate the study's contribution to the existing body of knowledge in the Human Resource Development and production operations departments in the Malaysia manufacturing industry.

1.2 Background of the Study

Employees perceive promotion as an accomplishment of their demonstrated performance record in progressing their career within the company. As such, the need for a career progression system is imperative to gain benefits for the career progression of employees at all levels. In a nation longing for the ability to grow its market share, Randstad Malaysia's (Q3, 2019) Workmonitor survey revealed that 90% of Malaysians polled would move to a different country for career advancement. The survey further states that, local Malaysians are looking for organisations that can meet employees' expectations on salaries and benefits as well as opportunities for career advancement. As we progress year to year many headhunter agencies and human resources association are focusing on career

development tool and educating employees to look further into this as a tool of attraction and not a tool to just keep the job (Randstad, 2019).

Career development is a fundamental component of Human Resource Development (HRD). HRD is set of systematic tasks to enrichment employees by skills, knowledge, and experiences to meet what are needs a current and the future to achieve the goals (Ferreira, 2021). Organisations, supervisors and employees as key agents that can influence employee career development while putting HRD as the central facilitator in that process (Yoon et al., 2021; McDonald & Hite, 2016). Yoon et al (2021) further states that through HRD interventions such as career planning affects employees state of hope in their career.

Organisations exist to attain high productivity and produce a competitive edge in the global economy especially more now than ever. To achieve this edge and high efficiency, organisations need talented and efficient employees whereby it can be attained through career development (Sinha, 2020). Employees in their early age group in 20's, unlike those who are in comfort zone, these young blood want to develop and be in control of their careers. Hence the career development programs enable employees to progress in an organisation from the start of their careers. Such programs also help determine career paths and remove obstacles to career progress (Loyarte-López et al., 2020). Meanwhile, according to Hakim (2020), career development is a formal effort made by an organisation to prepare an employee to develop employee potential to be able to occupy a higher position to achieve company goals, with the following indicators: 1) Promotion, 2) Movements, 3) Training, and 4) Job Performance. As such, organisations are becoming aware of the elements that must be incorporated to ensure career development programme is robust

In Malaysia, the population of technicians and machine operators has continued to increase over the last few years, indicating that these workers are of value to Malaysia's economy. Figure 1.1 is derived from the Department of Statistics Malaysia (DOSM) (2020), which shows the combination of technicians and machine operators represent almost a quarter of the total number of employees in Malaysia.

Furthermore, Talent Corp's critical occupations list (2018-2019) recognises that the manufacturing industry heavily relies on technicians from various backgrounds, such as mechanical, mechatronics, electronics, and others and these job categories are recognised in the critical occupations list. However, it has been reported that a lack of relevant job experience and technical skill are the most-cited reasons limiting this domain to attract the right resources. Hence, the need to acquire a structured skill development programme is important to generate skilled technicians having the necessary skills and experience through career progression system.

('000)

Tahun Year	Jumlah Total	Pekerjaan Occupation								
		1	2	3	4	5	6	7	8	9
2016	14,163.7	658.5	1,755.2	1,453.5	1,163.8	3,176.3	872.0	1,570.3	1,669.8	1,844.2
2017	14,476.8	690.3	1,771.6	1,522.9	1,236.5	3,212.6	898.9	1,517.1	1,766.5	1,860.4
2018	14,776.0	660.5	1,824.4	1,536.7	1,247.7	3,422.8	921.9	1,545.5	1,787.9	1,828.7
2019	15,073.4	694.5	1,883.5	1,573.9	1,272.1	3,411.6	932.8	1,577.1	1,865.4	1,862.5

Nota/Note:

¹ Pekerjaan dikelaskan mengikut klasifikasi "Piawalan Pengelasan Pekerjaan, Malaysia (MASCO) 2013". Kategori pekerjaan adalah seperti
Occupation is classified according to the "Malaysia Standard Classification of Occupations (MASCO) 2013". Category of occupation are as

1	Pengurus Managers	6	Pekerja mahir pertanian, perhutanan, penternakan dan perikanan Skilled agricultural, forestry, livestock and fishery workers
2	Profesional Professionals	7	Pekerja kemahiran dan pekerja pertukangan yang berkaitan Craft and related trades workers
3	Juruteknik dan profesional bersekutu Technicians and associate professionals	8	Operator mesin dan loji, dan pemasang Plant and machine-operators and assemblers
4	Pekerja sokongan perkeranian Clerical support workers	9	Pekerja asas Elementary occupations
5	Pekerja perkhidmatan dan jualan Service and sales workers		

Figure 1.1 Employed persons by occupation in Malaysia (2016-2019)
(Source: Department of Statistics Malaysia, 2020)

1.3 The Case Study Company

Kellogg America, situated in Battlecreek, USA, is the Headquarters of the Kellogg organisation for more than a century. Kellogg's vision is to enhance and pleasure the world by providing a variety of nourishments and brands. Kellogg's has extended its reputation and impression of all-inclusive in many countries. Currently, Kellogg's has over 30 sub-brands, and in 2012, Kellogg was recognised as producing

ground-breaking and inventive brands worldwide by Forbes and assigned as one of the world's best high-ranking brands by Inter-brand, the Nielsen Company, in the same year. Kellogg began its journey as a cereal organisation, and throughout the years, it diversified into other solid nourishment items.

Furthermore, in 2014, Kellogg America had invested resources into another plant at Negeri Sembilan, Malaysia, as a separate entity, Kellogg Asia Products Sdn Bhd ("Kellogg") as the first and largest Pringles plant in South East Asia (SEA). The concept surrounding the business is plainly on snack foods, having a capital of USD130 million. The plant positioned on thirty acres of land contracted a local workforce as task technicians ("technicians") to run the day by day operations of the company. In serving society, Kellogg offers work to the local community and society where it is located by employing technicians ranging from various races and ages, academically holding a technical certificate or diploma to suit the requirements of the job.

Kellogg America introduced the technician career progression system nearly 20 years ago, prior to its introduction. The system is a skill career progression model intended for the manufacturing plant that energises a culture of continuous learning and skills development (i.e. abilities). Interesting, technicians in Kellogg America represent 70% (Kellogg Jackson Plant Manpower report, 2021) of the workforce, and currently, 60% (Kellogg Jackson Plant Manpower report, 2021) of the employed technicians are advanced within the business utilising this career progression system. In 2015, Kellogg introduced the skill career progression system in Malaysia, with the number of technicians accounting for 90% (Kellogg Enstek Plant Manpower report, 2021) of the total workforce. This career progression system is devoted to individuals who are legitimately engaged with the business, given their occupation. Kellogg, as an American organisation, esteems itself in promoting and developing each facet of the workforce and qualities of human capacity. Accordingly, technicians can utilise the system as a career steppingstone; in fact, some of the technicians have progressed to leadership positions.

The technician career progression system fundamentally signifies "your career", which refers to the individual technician's training agenda to climb the career progression ladder. Though, it is dependent upon the person to decide on their career progression path. As this is a career progression initiative driven by the individual, there are some who would prefer to refrain from career advancement given they are in their comfort zone in their current job. Thus, the TCPS is not seen as a PUSH system (by the organisation) through a PULL system (by the employee). The responsibility for career growth is on the shoulders of individual employees (Gyansah & Guantai, 2018). Employees themselves should show an adequate level of accountability to develop their skills and abilities and perform effectively (Hughes, 2019) So, the individual employee should conscientiously build and progress his career.

Nevertheless, the TCPS is treated as a self-duty and an intentional procedure, not obligatory for all technicians to experience this form of appraisal in every facet or window of the organisation, but rather, the individuals who feel that they have achieved the abilities and requirements to achieve a specific level and are keen to advance their career. This methodology is in accordance with Super's theory, depicting the various phases in a person's career and across various age groups. A study conducted by Kakui & Gachunga (2016) mentioned that in each organisation analysed, the message was clear: Career development is employee claimed, manager encouraged, and organisation upheld. Similarly, along the same lines, as the job of a technician in Kellogg America is seen as a valued job, the same is true for Kellogg Malaysia. Then again, the requirement for this career progression is likewise critical to instruct the outlook of Malaysians to welcome each and every supporter towards the business. Kellogg's trust that each individual is recognised in the chain of importance, evaluation, capability and experience.

Furthermore, the career progression of technicians in Kellogg America was created to cater to and suit the needs of Americans. The technician progression system is a process designed to build the capabilities in technical, systems and leadership skill to deliver exceptional business results and rewards. While it has been seen as a success in America, there are differences in culture, society, education

qualifications, working experience and environmental factors in Malaysia. Since this is a relatively new concept in Malaysia, it has not been tested prior to the implementation of the system. The technician career progression system instead was implemented without prior to testing as the plant was almost two years old. In addition, the implementation was undertaken in English without considering the language and understanding of the technicians in Malaysia, given they were more familiar and conversant to communicate in *Bahasa Melayu* than in English.

Notwithstanding, age also needs to be considered. In America, when the career progression system was introduced, most of the workforce were aged on average between 7 and 10 years. Also, the intention of introducing the system was carried out differently, given the workforce was quite mature and experienced to understand the need for this system and the gained benefits. In contrast, in Kellogg Malaysia, the workforce is rather young since most have limited working experience; hence the level of their commitment and seriousness may be different to understand the need for this career progression system. Indeed, the younger generation of workers tends to be motivated through short term satisfaction needs such as money, rather than considering the long term aims of moving up the career ladder.

Moreover, within the system, there are three key competency skills identified: leadership skill, technology/technical skill, and system skill. In Kellogg, the company believes that these three key factors will make a well-resourced technician having a combination of skills and abilities contributing to their individual performance. In order to monitor the progress of competency skills, each technician is provided with a step-up card that enables the technicians to record and monitor their individual progress. In other words, the judge and decide their career progression, whereas traditionally, supervisors or management decided on their career progression. However, at times it does lead to inequity and mis-judgement. In this case, the technicians can defend their progression and justify to management why they deserve a promotion.

Currently, at Kellogg, there are five technician levels (T-levels) commencing from T0 to T1, T2, T3 and T4. All technicians are hired at the T0 level. Here, Kellogg provides training, coaching and knowledge at a basic level to all technicians. Using this progression system, Kellogg's future aim is to acquire a balanced bell curve of the technicians' level. A balanced workforce where all technicians are in different T-levels is important to ensure an efficient flow of instructions and production within the organisation. The below bell curve (Figure 1.2) illustrates the present situation at Enstek, which is skewed to the left, as technicians are still at the beginning of the career ladder. The bell curve indicates that at least 42% have advanced to T1 from T0. The balance 58% comprises of technicians who voluntarily not interested to advance in their career, technicians who did not make it to T1 as they could not fulfil the requirements and technicians who are not ready in experience and knowledge to participate in TCPS. However, within the next five to ten years, the bell curve, as shown in (Figure 1.3), should be well balanced across all levels. Career progression takes time but will benefit the individuals and the organisation as a whole.

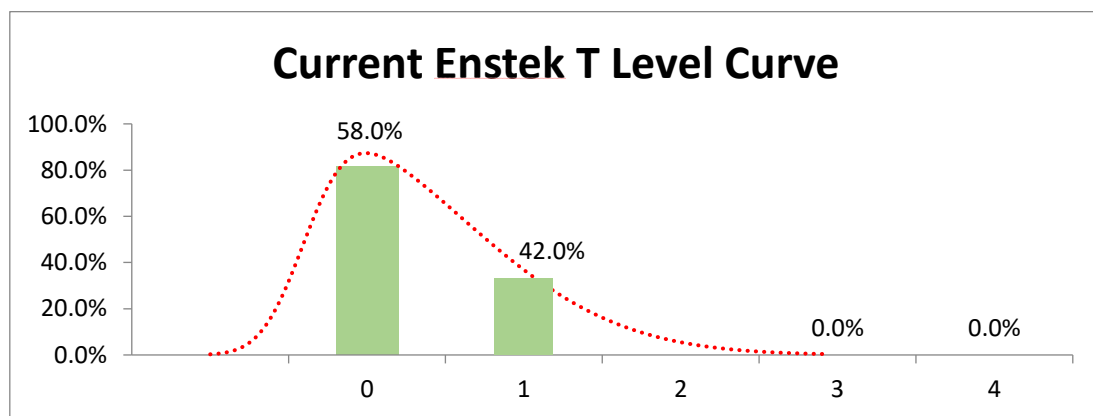


Figure 1.2 2021 Kellogg Enstek Plant technician level (Source: Kellogg Asia Products Low Speed Line (LSL) Playbook)

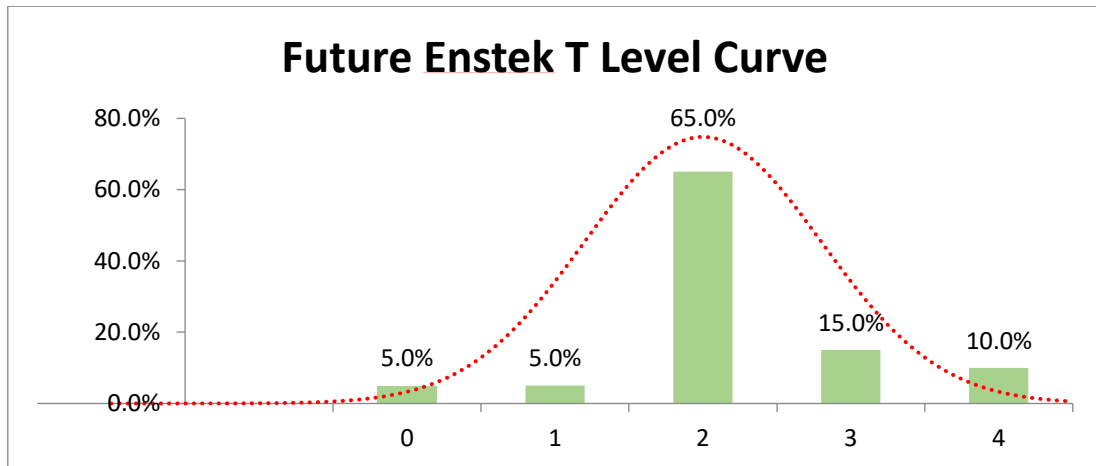


Figure 1.3 2025 Forecasted Kellogg Enstek Plant technician level (Source: Kellogg Asia Products Low Speed Line (LSL) Playbook)

The TCPS in Kellogg is intended to address the issues of technicians in two parts: extrinsic and intrinsic awards. It was also accepted that a portion of the general destination of the progression system would bring about business ownership (embedding the system within the organisation), improving decision making and critical thinking to technicians on the manufacturing floor consistently. Buchanan et al. (2016) referenced that organisation must understand the procedures associated with employee career progression and assisting employees in accomplishing their career aspirations, improving their work performance, and ensuring the process achieves the organisation's objective towards changeless leadership and development.

In the context of Malaysia, during the performance of this job, the acknowledgement level was not aligned with the intention and desire of the company. Moreover, the level of publicity surrounding the TCPS was silent, and the aftereffects of the underlying promotion in terms of half-year performance became quite stale. During an input session in 2017 with technicians as a medium to channel their interests and confront issues, about seventy-five per cent of the technicians present highlighted that the selection of the TCPS from America was not at the correct stage of implementation since the understanding level was extraordinarily low. There were three main areas that the technicians highlighted during the input session; the struggle to acknowledge the procedures surrounding the TCPS from

Jackson since they found it difficult to comprehend the notion behind the system; no support or help was offered to technicians in various aspects associated with the system; criticalness of the capabilities and abilities towards the job and individual performance commitment, and lastly the results attributed to the TCPS for the individual, as is depicted in Table 1.1.

Table 1.1 Challenges faced by technicians in the Kellogg Malaysia Plant using Jackson TCPS

	Kellogg Malaysia Plant
Challenges	<ol style="list-style-type: none"> 1. Difficult to understand & execute 2. Does not account for Performance 3. Long & cumbersome assessment process 4. The technician feels like there is no progression as they spend much time at the same level 5. Has not worked thus far since 2015 6. Technicians do not have sufficient experience and knowledge towards their career progression

For a genuinely new plant, Kellogg has introduced into the system two distinct aspects of performance. However, since the plant is still growing and developing is also important for the company to remain faithful and dedicated to its obligations and to guarantee technicians career advancement in a manner similar to the introduction of the system in America 2014. Present employees are increasingly becoming more cognizant than at any other time in recent memory in seeking self-awareness and promotion. In general, organisations that neglect to permit employees to meet their individual needs will fail to retain good employees. A good career progression system will help to guide employees towards meeting their objectives while proceeding to undertake work for the organisation. However, in many cases, technicians fail to understand the effect of the career progression system and the benefits received as individuals.

Solaja (2015) expressed that organisation tend to centre to a great extent around low-level needs (i.e. physiological, security and social needs) to the detriment of elevated level needs (i.e. confidence and self-completion) which result in a mix between organisational objectives and the employees desire, resulting in high staff turnover rate and misuse of resources in the organisation. Ismail et al. (2014a) proposed that the procedure in choosing our practices is also affected by the likelihood of perceiving those compensations. In this example, workers might be bound to work more diligently on the off chance that they were guaranteed a rise in compensation (and perceived the result as likely) compared to if just accepting that they may receive a rise (reasonably expected though unlikely). Prizes do not really need to be received as pay rises, rewards, or all-costs paid for evenings out. Applause, open-door policies for career progression and prizes would help to spur employees. Notably, career progression is something beyond financial prizes; it is a form of motivation to work hard and buckle down. A sound career progression system will offer both financial and work satisfaction to employees (Marr, 2016; Rossekhan e al., 2020).

1.4 Problem Statement

Organisations have a critical role to play in career development (Gyansah and Guantai, 2018; Yoon et al., 2021). The organisation that pays attention to career development planning stands a high chance to reap high productivity from a properly trained, skilled, and talented workforce whereby will possibly steer the organisation to places and enhance competitive advantage. Nevertheless, organisations do face challenges to implement career development program for employees. If an organisation fails to provide a substantial opportunities growth for employees, it will drive employees to actively search for alternative work in external market (Mahadi et al, 2020; Banarjee, 2019). It is equally important for organisation and employees to have the same understanding of career development to ensure the success of the career development implementation (Khan et al, 2015; Gyansah and Guantai, 2018; Sinha, 2020). Khan et al (2015); Pillay, Dawood & Karodia (2015); Hedge & Rineer (2017) and Tatar (2020) further described that lack of transparency and clarity in

career development plans and career paths led to employees dissatisfaction. The evidence shows that organisations are starting to implement career development initiatives but the emphasis and execution is not necessarily on the right path.

The need to modify the TCPS resulted due to the lack of support from the technicians and the job became dormant. From the breakout session conducted in 2017 (Appendix A), technicians shared their frustration in this session that was facilitated by human resources and the plant director. The challenges that were identified in this session were summarised. It was raised that there was no appropriate introduction to the TCPS and the process stream of the whole career progression system. This prompted little promotion opportunities and disappointment among the technicians. However, now there is a need to investigate the modified TCPS's success and discernment from the technicians, supervisors, and system developers. The discernment from these group of employees underpins the accomplishment of the modified TCPS since it will provide the organisation with a top-down approach to gaining knowledge and the method behind the system's achievement. Having said that, the gap of the modified TCPS begins with the acceptance of the system from the point of view of technicians, supervisors and system developers.

During the implementation of the TCPS from Jackson in 2015, the competency skills were not disclosed to technicians, which they raised as an issue. Technicians were unable to understand the competency skills and the rationale behind the system. Even though the criteria continued as before from Jackson, and now in Kellogg Malaysia, the gap, despite everything else, still exists in the comprehension of competency skills, the process to accomplish certain skills and the significance of competency skills in the modified technician career progression.

Indeed a robust career development and progression system will recognise that careers are neither static nor developed in isolation. Workers' decisions about their career movements are determined by current skills and interests (Hedge & Rineer, 2017). Besides, Kellogg Malaysia added a further element to the TCPS, which Jackson did not have. The new criteria investigate individual technician

performance at work. As such, performance is assessed, and the performance rating will reflect whether a technician fits the criteria to be promoted. As this is a relatively new feature of the system, the impression of the technicians, supervisors and system developers will be considered for better comprehension of these criteria. Accordingly, the system in Kellogg Malaysia now has two criteria, namely competency skills and performance. Though, the commitment of both towards the modified TCPS merits investigation.

The TCPS must be rewarding to both the individual and the organisation. This is evident when the 2015 TCPS implementation resulted in demotivation and turnover of technicians. A fragmented and ineffective career progression system will simply embed a feeling of instability in employees. In the ongoing modifications that have been undertaken, the result is investigated cautiously, and the impact on technicians is examined further since this will prove the success of the modified TCPS. The general TCPS might be successful if each element of the modified technician career progression system is well-understood and existing gaps corrected.

In the career progression related literature, the topic of modification or failure is not evident and tends to only emphasise success stories. Pryor and Bright (2012) emphasise that failure of career development is an opportunity to learn, encourage creativity, builds strategy and personal development. Having said that, the system theory framework (STF) that was founded by McMahan and Patton in 1995 acts as an overarching framework, believed to have an impact on career development, and co-connects multiple elements and individual life (Patton & McMahan, 2006). On the other hand, Super's theory in 1950's focuses on life and career development stages in which there are five stages relating to one's growth. These theories are often employed in non-technical professions (Hirschi & Pang, 2020; Patton & Lokan, 2001; Matthews, 2017; Kazuyuki & Kuo-Lin, 2006), though they lack focus on lower-level employees.

There is still little known about career progression system for technicians in the manufacturing industry, particularly in the food industry. Therefore, this qualitative study attempted to fill this gap. It seeks to contribute to the field of

succession planning, retention and employee development by exploring how Kellogg Malaysia successfully moved to a workable and sustainable technician career progression system through modifications to suit the population and work nature.

1.5 Research Questions

The purpose of this study is centred on the TCPS in Kellogg Malaysia and the performance of the modifications undertaken to the system. Hence, three research questions have been formulated to respond to the perceptions of the modified TCPS, the criteria of the TCPS towards the modifications and the outcome of the system to an individual's self-actualisation. The formulated research questions include the following:

- a) RQ 1- What is the inception and reception of modifications in the technician career progression system in Kellogg Malaysia?
- b) RQ 2- How do competency skills and performance contribute to the modified technician career progression system in Kellogg Malaysia?
- c) RQ 3- How does the modified technician career progression system contribute to the self-actualisation of an individual technician in Kellogg Malaysia?

1.6 Research Objectives

From the above research questions, the objectives of this study are derived. In this study, the modified TCPS and the criteria are later explored to understand the perception of technicians, supervisors and system developers in Kellogg Malaysia.

- a) RO_1: To explore the inception and reception of the modifications in the technician career progression system in Kellogg Malaysia.
- b) RO_2: To explore the contribution of competency skills and performance in the modified technician career progression system in Kellogg Malaysia.

- c) RO_3: To explore the contribution of the modified technician career progression system in Kellogg Malaysia on an individual technician's self-actualisation.

1.7 Significance of the Study

It is anticipated that this research will be a significant attempt to address the viability of the TCPS in the lower-level of an organisation's chain of importance. A technician career progression model is developed, intended for the manufacturing plant that energises a culture of continual learning and acknowledgement of ability. This research is also expected to be used as a reference or source in strengthening the human capital part of the organisation regarding staff turnover in addition to self-development for all technicians. Accordingly, this will assist managers in understanding the necessities of a talented workforce to assist them in growing and sustaining the organisation. This research will benefit most organisations for the most part in the manufacturing industry, particularly those having a workforce nearby in acquiring and developing neighbourhood abilities. By understanding this research, each organisation should be in a better position to plan and practice a well-created and implemented career progression system. It is important to achieve this outcome that a human resource office is established in helping to motivate and drive the agenda, reduce the staff turnover rate and accomplish a competent workforce (Osman et al., 2016; Keller et al., 2020).

In addition, this research shall provide an understanding of Kellogg's TCPS, which is quite unique, dissimilar to other systems in progressing the career of technicians and the ability of the workforce in Malaysia. By and large, the organisation's training, counter offer or promotion and refraining the technicians from being over-utilised by different contenders. Most organisation's, in general, tend to maintain a strong emphasis on the more significant level or 'hierarchy, to generate greater profit and benefits to employees. Be that as it may, a reputable company should consistently care for all employees since they all contribute in different ways to achieving the business objectives of the company. This research

does not intend to demonstrate the need to have a lifelong progression for technicians but demonstrate the value of technicians towards the accomplishment of the company's goals and objectives.

At Kellogg, each employee recognised as a valuable resource for the company. Similar to other distinct connections, a business-employee relationship functions in several diverse ways. First, it is linked to dealing with employee career development, and that employees will contribute towards the development of the business. Likewise, this study will assist Kellogg in managing criticism received from technicians since this was recently raised, thereby encouraging both the workforce and leaders to address and test this aspect of the business. Through the input gained during the interview process, this study will have the option to measure the viability of this career progression system, and if needed, making further adjustments to the system. On the other hand, this research will also assist Kellogg in measuring the success and pace of this TCPS. In view of the success of the system and progress, Kellogg will be in a position to concentrate on progressing zones within the business if necessary. In particular, how the TCPS effects employees.

Career progression and supporting systems often contrast between different organisations. Organisations that do benefit from this situation do not always direct their attention towards career progression or the prosperity of employees. At the same time, other placed organisations that accept their employees as resources will work with the human resources department to introduce a career progression programme as an element in maintaining the viability of the organisation and its employees. Accordingly, it is important to investigate the career progression system, particularly in the context of Kellogg Malaysia, a global organisation that was established initially in the United States (US). Indeed, it is additionally a well-established reality that generally, the starting point of the organisation is important in deciding the benefits the employee will gain.

Furthermore, it is anticipated that in 2021, the government will launch the 12th Malaysia Plan (2021-2025) which will focus on human capital advancement, given the recent Coronavirus (COVID-19) pandemic that has affected millions of

Malaysians and consequent job opportunities. As such, higher levels of skills will increase the talent pool and facilitate Malaysia's efforts to attract more local and foreign investment in advanced technology and state-of-the-art industries in equipping people with skills and knowledge.

1.8 Scope of the Study

The scope of the study focuses on the modified TCPS in a multinational food manufacturing firm in Malaysia, Kellogg Malaysia. In other words, the scope of this study defines the boundaries of what the study would attempt or would not attempt to do. The scope of this study is to understand the success of modified technician career progression system is assessed through the technician's promotion from one level to the next level. As such, this study only covers Kellogg Malaysia that can provide information and evidence of the modified TCPS. Kellogg Malaysia is a food manufacturing plant located in Negeri Sembilan and was built in 2014 as the biggest Pringles manufacturing plant in South East Asia. The intention of the organisation is to provide a structured career progression system for its technicians that are heavily relied upon for production.

Delimitation will affect the scope of this study as well as define the parameters of this study (Creswell, 2014). This study focuses on a single case study method. The intent of the single case study is for intensive data collection at the same site, requiring a "team" of investigators (Yin, 2009). Hence, the single case study is chosen for this study whereby there is need to investigate the modified TCPS using semi-structured interview method.

The target participants for this study are technicians, supervisors and system developers who are employees of Kellogg Malaysia and are involved in the production. The technicians are the main target population as they were affected by modifications that took place. The interviews are based on open ended questions to encourage participants to discuss their understanding and experiences in relation to the modified TCPS.

The data gathered through this study, contributed towards recommending a framework describing Kellogg Malaysia's successful implementation of modified TCPS. It may provide insights to other manufacturing companies in the same industry especially to develop a career progression system for technicians to promote skilled workforce.

1.9 Definition of Terms

The terms defined below are provided to assist in the understanding of the terminology used in the study:

Modified technician career progression system (TCPS): is a process intentionally designed to build capabilities in technical, system and leadership skill to deliver exceptional business results and rewards (adopted from Kellogg Asia Products Low Speed Line (LSL) Playbook).

Technology/Technical Skill: is defined as the ability to operate, troubleshoot, perform maintenance, and properly clean a unit operation (adopted from Kellogg Asia Products Low Speed Line (LSL) Playbook).

System Skill: is defined as the ownership of a technical skill specific to a certain area or result (adopted from Kellogg Asia Products Low Speed Line (LSL) Playbook).

Leadership skill: a set of key skills defined to measure an individual's ability to lead, coach, develop, and influence others at increasing levels of responsibility (adopted from Kellogg Asia Products Low Speed Line (LSL) Playbook).

Technician: a skilled person able to perform and execute maintenance, inspection, repairs, and replacement works accordingly (Au-Yong et al., 2014).

T-levels: are the level of technicians in Kellogg, comprising of five different levels starting from T0 to T4. The higher the T-level, the more responsibilities and expectations. Each level has a different scale regarding remuneration and position (adopted from Kellogg Asia Products Low Speed Line (LSL) Playbook).

Step-up card: is a tool used in Kellogg for recording and monitoring TCPS competency requirements (adopted from Kellogg Asia Products Low Speed Line (LSL) Playbook).

Self-actualisation: is conceptualised as the process of exercising one's highest potential in all individually relevant areas of life (Okech & Chamber, 2012).

1.10 Organisation of the Dissertation

The remainder of the thesis is structured into five chapters. Chapter 1 presents an overview of this research and discusses the issues that led to the purpose of this study. The key question for this study is to identify; “How Kellogg Malaysia successfully implemented a career progression system for technicians through modifications from a model that failed”.

Chapter 2 provides a detailed review of relevant literature in this field that includes a description of the theory and the practical implications of the study. The literature review explains the inception and reception of the modified TCPS, competency skills, performance management and self-actualisation as an outcome. This chapter further explores several theories: Super's theory and the System theory framework (STF), that supports this study.

Chapter 3 discusses the methodology employed in this study, beginning from the process of data collection through to data analysis. The sampling approach is also well defined in this chapter.

Chapter 4 further expands on the data analysis and findings of the study. The semi-structured interviews findings are described to identify the key themes.

Lastly, Chapter 5 provides a summary of the main findings, the practical contribution and theoretical implication followed by limitations of the research, future recommendations for research in this field and overall conclusions.

1.11 Summary

This chapter has provided an important introduction to this research regarding how career progression is critical to the growth of Kellogg (US and Malaysia) and for the personal development of technicians. This chapter covered the problem statement and the practical contribution of this research, highlighting a series of key questions to explore how Kellogg Malaysia successfully implemented a career progression system for technicians through modifications from a prior model that failed. Importantly, the study is conducted from the perspective of the technicians, supervisors and system developers who are directly involved in the modification of the TCPS. The discussion also supported the contribution of this study towards the development of human resources and production operations in both departments in the manufacturing industry. The following chapter presents the literature review, identifying the research gap in this area, guiding the development of the conceptual framework.

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APPENDIX

APPENDIX A

Breakout Session Summary

Breakout Session Summary

Action Status Indicator							18 May 17
Item No.	Gaps	Who	Impact	Effort	Status	Remarks	
1	For the step up card in all areas, it is different from our machines. We don't understand the step up card questions.	HR	High	High	On-Going	modification will be implemented	
2	When can we expect Kronos Implementation?	HR	Medium	Medium	Closed	HR to re-look at this with Vendor	
3	Management promised there will be career progression system for technicians, but why there is no training or plan communicated?	HR	High	High	On-Going	modification will be implemented	
4	OT not the same for techs who has same working hours	HR	Medium	Medium	Closed	HR has fixed the variance	
5	Will there be OT paid for 30mins earlier shift?	HR	Medium	Medium	Closed	Management agreed to pay the 30 mins OT	
6	What do we get from career progression?	HR	High	High	On-Going	modification will be implemented	
7	No improvement on step up cards. How for first batch to get promoted?	HR	High	High	On-Going	modification will be implemented	
8	Can the meal allowance be increased?	HR	Low	Low	Closed	RM10 will not have changes	
9	Why Line Manager cannot help technicians in career progression system?	HR	High	High	On-Going	modification will be implemented	
10	What technicians refer to understand career progression system? No any support for technicians. We are new to the machines and system	HR	High	High	On-Going	modification will be implemented	
11	No proper communication and training on career progression system. Lack of explanation.	HR	High	High	On-Going	modification will be implemented	
12	What will technician benefit from career progression system if we don't understand the system? We don't know what is result for technicians?	HR	High	High	On-Going	modification will be implemented	

APPENDIX B
Certificate of Attendance

No: **NV 023**



CERTIFICATE OF ATTENDANCE

DASHATHRI ARUNANDY

FOR PARTICIPATING IN

**NVIVO 11 APPLICATION FOR LITERATURE REVIEW
AND QUALITATIVE ANALYSIS**

HELD AT

**REEZQI ACADEMY
25 NOVEMBER 2017**

**BY
REEZQI TRAINING & COACHING**

A handwritten signature in black ink, appearing to read "Dr. Siti Uzairiah Mohd Tobi".

DR SITI UZAIRIAH MOHD TOBI

APPENDIX C

Internal Checker Appointment Letter



Date : July 2018

SHANE GILL
Supply Chain Director
Kellogg Asia Pacific

-PRESENT-

Dear Shane,

APPOINTMENT OF INDUSTRY EXPERT IN TECHNICIAN CAREER PROGRESSION SYSTEM

You are hereby appointed as Industry Expert to validate the study conducted by Dashathri Arunandy (Employee No. #5) in her study on Technician Career Progression System in the context of Kellogg Asia Products Sdn Bhd.

This study has been pre-approved by Nancy Gipson (former Plant Director).

Please take note that any sensitive or confidential matters are strictly not allowed to be shared in the studies.

Thank you.

Yours sincerely,
KELLOGG ASIA PRODUCTS SDN BHD

.....
SHIVENDU NADKARNI
Vice President

c.c: Personal File

Kellogg Asia Products Sdn Bhd
(formerly known as Willowscape Sdn Bhd)
Lot 1-5, Jalan Teknologi 5, Taman Teknologi Enstek, Techpark@enstek Phase 2A, Bandar Enstek, 71760 Negeri Sembilan, Malaysia
+606 7947124
Company No: 1042290-P
www.kelloggs.com



Date : July 2018

AZIZ RAHMAN
Plant HR Manager
Kellogg Asia Products Sdn Bhd

-PRESENT-

Dear Aziz,

APPOINTMENT OF INDUSTRY EXPERT IN TECHNICIAN CAREER PROGRESSION SYSTEM

You are hereby appointed as Industry Expert to validate the study conducted by Dashathri Arunandy (Employee No. #5) in her study on Technician Career Progression System in the context of Kellogg Asia Products Sdn Bhd.

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Yours sincerely,
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Kellogg Asia Products Sdn Bhd
(formerly known as Willowscape Sdn Bhd)
Lot 1-5, Jalan Teknologi 5, Taman Teknologi Enstek, Techpark@enstek Phase 2A, Bandar Enstek, 71760 Negeri Sembilan, Malaysia
+606 7947124
Company No: 1042290-P
www.kelloggs.com

APPENDIX D

Informed Interview Consent Form

***Title : MODIFIED TECHNICIAN CAREER PROGRESSION SYSTEM IN
KELLOGG MALAYSIA***

Dashathri Arunandy and Associate Professor Dr. Rosmini Omar

International Business School
Universiti Teknologi Malaysia

Dear Participant:

I am a Doctorate student at the International Business School, Universiti Teknologi Malaysia under the supervision of Associate Professor Dr. Rosmini Omar. I am conducting my research on the “Modified Technician Career Progression System in Kellogg Malaysia” as part of my doctoral research. The following information is provided for you to decide whether you wish to participate in the present study. Your participation in this study is voluntary. You are free not to participate in the study or withdraw at any time.

This study uses a qualitative methodology whereby it seeks to explore in depth information and insights through a semi-structured interview approach. The intent of this study is mainly to explore the modified technician career progression system. This study raises three research questions: (1) What is the inception and reception of modifications in technician career progression system in Kellogg Malaysia? (2) How do competency skills and performance contribute to the modified technician career progression system in Kellogg Malaysia? (3) How does modified technician career progression system contributes to the self-actualization of an individual technician in Kellogg Malaysia?. Based on the three research questions, the study generates three research objectives: (1) To explore the inception and reception of the modifications in technician career progression system in Kellogg Malaysia (2) To explore the contribution of competency skills and performance in modified technician career progression system in Kellogg Malaysia (3) To explore the contribution of modified technician career progression system in Kellogg Malaysia on an individual technician’s self-actualization. As an additional note: self-actualization in this context is defined as self-fulfilment that is growth motivated.

This study attempts to contribute to the success of the modified technician career progression in Kellogg Malaysia as well as it will be a great initiative other manufacturing companies can adopt to provide a good career path to technicians.

You will be interviewed only by the researcher. Each interview session will take approximately one (1) hour with audio recording after obtaining the entry permission. All the information obtained in the study will be used for academic purposes only and will be kept strictly confidential. Although participation will not directly benefit you, we believe the information which you provide will be useful to Kellogg to ensure the current technician career progression system is a sustainable approach to technicians and will lead to continuous results in the area of career progression.

The researcher assures you that your name will not be associated in any way with the research findings. If you would like additional information concerning this study before or after it is completed, please do not hesitate to contact me by phone or email.

Thank you very much for your time and cooperation.

Yours sincerely,

Dashathri Arunandy,

Contact Information – Email : dasha_23@hotmail.com / Tel: +6016 645 0522

Agreement by the participant:

I have read and understood the information on the form, and I consent to volunteer to be a part of this study. I understand that my responses are completely confidential. I also understand that my words may be quoted directly but to the knowledge of the researcher and University only. I have received an unsigned copy of this Informed Interview Consent Form and data collection approval letter from Universiti Teknologi Malaysia to keep in my possession.

() I agree to participate and allow researcher to include information shared for the study.

() I do not agree to participate.

Comments (if any):

Participant's Signature: _____ Date : _____

Position : _____ Years of service : _____

Education : _____

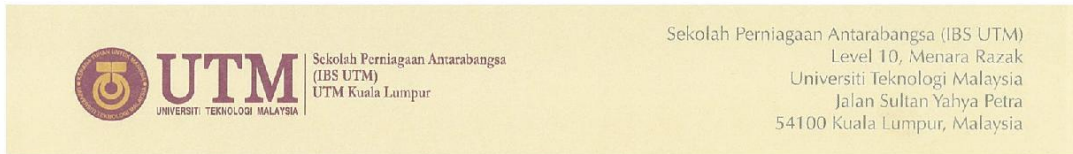
Prior working experience : _____ Age : _____

Acknowledged by:

Researcher's Signature: _____ Date : _____

APPENDIX E

Letter of Intent



Tel: +(6)03-21805023/5024/5031/5080 Fax: +(6)03-21805608 <http://www.ibs.utm.my>

RUJUKAN KAMI: UTM.K.63.02/13.11/1 Jld 15 (87)
RUJUKAN TUAN:

April 16, 2018

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

REQUEST TO CONDUCT AN ACADEMIC RESEARCH

Name : DASHATHRI A/P ARUNANDY
Passport No : 850923065728
Matric No : PBS142010
Admission Status : Full time
Registration Date : 14 February 2014
Medium of Instruction : English
Programme : DOCTOR OF BUSINESS ADMINISTRATION

With regard to the above, this is to certify that Ms. Dashathri A/P Arunandy (PBS142010) is pursuing Doctor of Business Administration at Azman Hashim International Business School, Universiti Teknologi Malaysia, Kuala Lumpur.

The student is currently conducting a research project under the supervision of Assoc. Prof. Dr. Rosmini Omar. In order to fulfill her research requirement, it would be greatly appreciated if you could assist her on data collecting.

Data collection will be used for academic purpose only and shall remain confidential and will not be identify in publication or media.

For further information regarding this matter please contact Datin Huzaimah Yahya (Deputy Registrar) at 03-21805018 or email to huzaimah@ibs.utm.my.

Thank you for your cooperation,

"BERKHIDMAT UNTUK NEGARA"

Yours faithfully,


NORHARYANI BINTI HAMID
Assistant Registrar
Azman Hashim International Business School
☎ : 03-21805027
✉ : norharyani@ibs.utm.my



www.utm.my

innovative • entrepreneurial • global

APPENDIX F
Translator Certification



APPENDIX G
Informed Protocol

Interview Protocol is a systematic approach of addressing the participants consist of technicians, supervisors and system developers. The intention to have this interview protocol is to ensure the consistency of the flow of the event with all the participants who are involved in the Modified Technician Career Progression System in Kellogg Malaysia.

Date :

Time :

Informed Interview Consent Form completed :

Interviewer :

Interviewee :

Participant Group :

Protocol :-

1. Hand over consent form to participant and allow them to read through. Explain to participant the research objective and questions and the interview process. One copy of the consent form to be given to participant.
2. The interview process will be recorded and participant will be informed before switching on the audio recorder so they will be prepared.
3. The interview will start by thanking the participant for their time. The questions will directly start from the research question's sub questions.
4. Any probing questions will be asked in between. Any further explanation will also be asked in between.
5. Participant will be given a break so they could stretch themselves, go for a smoke, get a quick bite or attend to anything work related which is urgent.
6. The interview will continue after the break and by the end of the interview, both the researcher and participants will be given opportunity to clarify or add anything.
7. Participants will be thanked for their cooperation. Participants will be notified if any additional follow up is required.
8. The audio recording will be switched off and the end of the interview.

APPENDIX H

Technicians Semi-Structured Interview Questions

TECHNICIANS SEMI-STRUCTURED INTERVIEW QUESTIONS

Title : System Evaluation of Modified Technician Career Progression System in Kellogg Malaysia

Dashathri Arunandy and AP Dr Rosmini Omar

Research Questions	Opening Questions	Main Questions
<p>RQ1: What is the inception and reception of modifications in technician career progression system in Kellogg Malaysia?</p>		<p>1) What is your opinion on the approach to modify the TCPS?</p> <p>2) To your knowledge, what are the modifications done in TCPS?</p> <p>3) How did the modified TCPS impacted you in your career progression?</p> <p>4) What is your current progress in the modified TCPS?</p>
<p>RQ2 : How do competencies skills and performance contribute to the modified technician career progression system in Kellogg Malaysia?</p>	<p>1) What area are you attached to now in the production floor?</p> <p>2) How long have you been attached to this area?</p> <p>3) How were you attached to this area?</p>	<p>1) What are the competencies skills required in the modified TCPS?</p> <p>2) How do each skills contribute to your career in Kellogg Malaysia?</p> <p>3) What is the process to attain a skill?</p> <p>4) What is your opinion on performance being a criteria in the modified TCPS?</p>

		<p>5) How do you demonstrate good performance?</p> <p>6) How does performance impact your career progression?</p>
<p>RQ3 : How does modified technician career progression system contributes to the self-actualization of an individual technician in Kellogg Malaysia?</p>		<p>1) What is your purpose participating in the modified TCPS?</p> <p>2) What do you want to achieve for yourself from this modified TCPS?</p> <p>3) What are the PULL factors for you in the modified TCPS?</p> <p>4) How do you see your personal growth in the modified TCPS?</p>

APPENDIX I

Supervisors Semi-Structured Interview Questions

SUPERVISORS SEMI-STRUCTURED INTERVIEW QUESTIONS

Title : System Evaluation of Modified Technician Career Progression System in Kellogg Malaysia

Dashathri Arunandy and AP Dr Rosmini Omar

Research Questions	Opening Questions	Main Questions
RQ1 : What is the inception and reception of modifications in technician career progression system in Kellogg Malaysia?		1) What is your opinion on the approach to modify the TCPS? 2) To your knowledge, what are the modifications done in TCPS? 3) What is your role as a supervisor in the modified TCPS?
RQ2 : How do competencies skills and performance contribute to the modified technician career progression system in Kellogg Malaysia?		1) What are the competencies skills required in the modified TCPS? 2) How do each skills contribute to technicians' career in Kellogg Malaysia? 3) As a supervisor what is your role for technicians' to attain a skill? 4) Do you agree that performance should be a criteria in the modified TCPS? 5) As a supervisor what is your role in technician's individual performance?

<p>RQ3 : How does modified technician career progression system contributes to the self-actualization of an individual technician in Kellogg Malaysia?</p>		<p>6) How do you evaluate technician's performance?</p>
		<p>1) What is the purpose of a technician participating in the modified TCPS?</p>
		<p>2) What is the achievement of a technician in the modified TCPS?</p>
		<p>3) What do you think are the PULL factors for a technician in the modified TCPS?</p>

APPENDIX J

System Developers Semi-Structured Interview Questions

SYSTEM DEVELOPERS SEMI-STRUCTURED INTERVIEW QUESTIONS

Title : System Evaluation of Modified Technician Career Progression System in Kellogg Malaysia

Dashathri Arunandy and AP Dr Rosmini Omar

Research Questions	Opening Questions	Main Questions
<p>RQ1 : What is the inception and reception of modifications in technician career progression system in Kellogg Malaysia?</p>		<p>1) What was your role in the modified TCPS?</p> <p>2) Being a subject matter expert, how did you establish the elements of the modifications to the TCPS?</p> <p>3) What was the reception level by technicians and supervisors on the modifications of TCPS?</p>
<p>RQ2 : How do competencies skills and performance contribute to the modified technician career progression system in Kellogg Malaysia?</p>		<p>1) What are the competencies skills required in the modified TCPS?</p> <p>2) Why are these competencies skills chosen for TCPS?</p> <p>3) How did you modify the competencies skill assessment process?</p> <p>4) Why is performance a criteria in the modified TCPS?</p> <p>5) How do you relate good performance to the modified TCPS?</p>

		6) What are the elements in performance to be able to participate in the career progression?
RQ3 : How does modified technician career progression system contributes to the self-actualization of an individual technician in Kellogg Malaysia?		1) What is the purpose of a technician participating in the modified TCPS?
		2) What is the achievement of a technician in the modified TCPS?
		3) What do you think are the PULL factors for a technician in the modified TCPS?

APPENDIX K

Sample Dough Making Step-Up Card

DOUGH MAKING T0-T1 STEP-UP CARD			
KNOW	DO	TROUBLE-SHOOT	Assessor Rating Y/N
			Assessor Rating Y/N
OPERATING PROCEDURES - System 10			
List the 5 ingredients used in R/M	Demonstrate how First In- First out rules are applied at the dry material staging area?	What should you check if the Dry Mixer discharge valve shows 'Open Fail' alarm?	
How many manual bag dump stations are there?	What must one do before dumping a bag of material into the dumping hopper?	What should you do if the HMI Dry /Ingredient batching page shows an error warning?	
How many holes dump stations are there?	Demonstrate what happens to the flour after it is dumped into the dump hopper.		
What is the blend ratio of the flour?	Demonstrate the sequence of events that initiate the weighing/blending cycle.		
How are the ingredients blended together?	Demonstrate the knowledge of the control panels of the R/M equipment.		
How is the flour conveyed from the ribbon blender to the holding hopper?			
What is the function of the Sifter?			
Where are the magnets located, what is their function, and how often are they cleaned?			
What is the capacity of 1 batch of material in the dry mixer?			
What is the maximum amount of flour the holding hopper will hold and what is its operating capacity?			
How often will the discharge valve open on the holding hopper?			
What type of drive system is on the loveyer?			
What pressure are the vibrators set on? Where are they located?			
What pressure are the air purges set on? Where are they located?			
OPERATING PROCEDURES - System 20			
What is the correct temperature for the Hot Water Tank?	Demonstrate the proper procedure for adding malto-dextrin and mixing water - Malto-dextrin ratio		
What is the sequence in order for In-Feed and liquid additive (Emulsifier, A-water) connection on wet mixer?	Demonstrate the control sequence for preparing malto-dextrin solution		
Explain the hot water/jacketing system and which area has hot water jacketing	Demonstrate the cleaning procedures for a mixer		
How do you verify that the mixer is ready to run?	Demonstrate proper procedure for sanitizing the mixer		
Explain why there is chilled water supply to the wet mixer, and the possible consequence of the chilled water is not turning on			
Explain why there is hot water on the outlet chute of the mixer, and how to control the temperature of the outlet chute			
What kind of pump unloads emulsifier from the barrels?			
What type of pump is used on the emulsifier system?			
Explain the liquids tank sizes and maximum batch sizes for water and emulsifier			

OPERATING PROCEDURES - System 30			
	If you see the doval at row 1 or row 13 is not complete, what could be the possible cause?	Demonstrate the ability to track sheelting conveyors	How would you remove crosses from the sheet?
	What pressure should the recycle blower be set on?	Describe what type of cutter is used and how many are on a cutter roll? What is the proper way to change a cutter?	Demonstrate the ability to detect and replace worn cutters
	What type of grease is used in sheelting?	How often is doval weight is measured? Demonstrate how it is done	Explain what happens if the metal detector alarm goes off and the affect it has on sheelting
	How often are bearings lubed?	How often to measure chip length? Demonstrate how it is done	
	Explain the difference in "Cycle Stop" and "Runout Stop" and when to choose one over the other to shut down	How often to measure chip moisture? Demonstrate how it is done How often to measure chip Fat percentage? Demonstrate how it is done	
OPERATING PROCEDURES - Overall			
	Describe what criteria must be met before startup can happen?	Demonstrate how to use HMI control panel - from system 10, 20 and 30	
	Explain what alarms will shut down the operation		
	Explain the importance of starting up a line well from a reliability and efficiency standpoint		
Quality			
	Explain what to do if your quality sample is OOL	Demonstrate your ability to correctly perform the quality tests and sampling for your functional area, including the proper use of and maintenance of test equipment	
	Explain the cleaning/sanitizing requirements for your area if you are is down for moisture	What should you do if doval weight is out of specification?	
	Explain the importance of your area during fogging preparation and after fogging	What should you do if chip weight is out of specification?	
	Locate Operating Standard Work for your area	What should you do if chip moisture is out of limit?	
	Explain the most important CA watch outs in your area	Explain what one must do if there are blisens on chips Explain what would you do if chips have a wavy edge	
Food Safety			
	Explain what types of Microorganism prevention are used in Doughmaking	What are the 4 conveyor belts in your area and how often do you need to inspect the condition?	
	What areas are most likely to have micro biological growth?	Explain what happens if the conveyor belt condition is worn out?	
	Explain what do you know about swab test and its main objective. Why Swab test must perform before Sanitization?	Explain 4 adverse event zones with the corrective measures	
	Explain the method for storage of the swab piece	What actions must you undertake on finding beetles, geckos or flies in your work area?	
	What are the possible adverse event in your area?	Explain the implications of a four leak on Food Safety Demonstrate when and how to do Swab test? What is the acceptable range? What do you do if the swab test is Out of Limit?	

Health, safety & Environment (ESH)	
Personnel Safety	<p>List at least 3 hazards in your work area and what are the controls in place to reduce the risk of injury or illness.</p> <p>Explain the personal protective equipment (PPE) required for performing tasks in your work area.</p> <p>Explain how to prevent slips and falls in your area.</p> <p>Explain the purpose of a LOTO tag.</p> <p>Explain the ergonomic risk (force, frequency, posture) in your work area.</p> <p>In case of a fire in your work area, what are the actions you would take?</p>
Technical safety	<p>What are the safety precautions you will take when using the crane at SPCC?</p> <p>What are the safety steps you shall take while receiving raw material from the Warehouse?</p> <p>What is the environmental impact of disposing down/drough directly into the drain?</p> <p>What action can you take to minimize the water usage in your area?</p>
Environmental	
Electrical	<p>What should you do when the alarm is triggered?</p> <p>Explain the proper way to use a fire extinguisher in your work area.</p> <p>Demonstrate the location and function of all electrical disconnects (push button, Safety Lock-out System)</p> <p>Describe the process for incident reporting</p> <p>Guide us to the nearest route for evacuation during an emergency</p>
Electrical	
	Tour the area, locate and explain the function of the following:
	E-Stop
	Local Disconnects (MSS)
	MCC Disconnects
	Control Panels

APPENDIX L

Sample Dough Making Written Test

Operational Procedures Dough Making		Score (33)
System 10	1 List the 5 ingredients used in R/M (2 marks) 1. 2. 3. 4. 5.	
	2 How many manual bag dump stations are there? (2 marks)	
	3 How many hoist dump stations are there? (2 marks)	
	4 What is the blend ratio of the flour? (3 marks)	
	5 How are the ingredients blended together? (2 marks)	
	6 How is the flour conveyed from the ribbon blender to the holding hopper? (5 marks)	
	7 What is the function of the Sifter? (2 marks)	
	8 Where are the magnets located, what is their function, and how often are they cleaned? (3 marks)	
	9 What is the capacity of 1 batch of material in the dry mixer? (2 marks)	
	10 What is the maximum amount of flour the holding hopper will hold and what is its operating capacity? (2 marks) Max.capacity: Operation capacity:	
	11 How often will the discharge valve open on the holding hopper? (2 marks)	
	12 What type of drive system is on the floveyor? (2 marks)	
	13 What pressure are the vibrators set on? (2 marks)	
	14 What pressure are the Rotato valves and Screw Feeders air purges set on? (2 marks)	

Participant's Name _____ **Date** ___ OCT 2017
Employee's ID _____ **Time** 2pm-4pm 7pm-9pm
Line 1 / 2 / 3 / 4 / 6 **Total**
Shift A / B / C **Score**

Operational Procedures Dough Making		Score (24)	
System 20	1	What is the correct temperature for the Hot Water Tank? (2 marks)	
	2	What is the sequence in order for in-feed and liquid additive connection on wet mixer (Dry Mixed from k-tron / spare / water / spare / emulsifier)? (2 marks) 1. 2. 3. 4. 5.	
	3	List down which area has hot water jacketing (3 marks) 1. 2. 3.	
	4	When Hot Water tank is set at AUTO mode: (3 marks) i) When the fresh water valve will open and top up water? ii) When fill water in, what trigger the fresh water valve to close? iii) What equipment is used to heat up the water? i) ii) iii)	
	5	How do you verify that the mixer is ready to run? (2 marks)	
	6	Explain why there is chilled water supply to the wet mixer, and the possible consequence of the chilled water is not turning on (5 marks)	
	7	Explain why there is hot water on the outlet chute of the mixer, and how to control the temperature of the outlet chute (3 marks)	
	8	What kind of pump unloads emulsifier from the barrels? (2 marks)	
	9	What type of pump is used on the emulsifier system? (2 marks)	

Operational Procedures Dough Making		Score (8)
System 30	1	If you see the doval at row 1 or row 18 is not complete, what could be the possible cause? (2 marks) 1) 2)
	2	What pressure should the recycle blower be set on? (2 marks)
	3	Explain the difference in "Cycle Stop" and "Runout Stop" and when to choose one over the other to shut down (2 marks)
All	4	Describe what criteria must be met before startup can happen? (2 marks) i) ii)
Quality		Score (8)
Quality	1	Explain 4 - what to do if your quality sample is Out of Limit? (4 marks) 1) 2) 3) 4)
	2	Explain the responsibilities for your area during fogging preparation and after fogging (2 marks) 1) 2)
	3	Locate Operating Standard Work for your area (2 marks)
Food Safety		Score (10)
Food Safety	1	Explain 2 - what types of Microorganism prevention are used in Doughmaking (2 marks) 1. 2.
	2	Where are the 2 areas are most likely to have micro biological growth? (2 marks) 1. 2.
	3	Explain what do you know about swab test and its main objective. Why Swab test must perform before Sanitization? (2 marks) 1. Swab test - 2. objective - 3. why swab before sanitize -
	4	Explain the method for storage of the swab piece (2 marks) 1.
	5	What are the 2 possible adverse event in your area? (2 marks) 1. 2.

Environment, Health & Safety (EHS)		Score (17)
Personnel Safety	1	List at least 2 hazards in your work area and what are the precautions you can take to prevent them (2 marks) 1. 2.
	2	List the personal protective equipment (PPE) required for performing tasks in your work area (2 marks)
	3	Explain 2 how to prevent slips and falls in your area (2 marks) 1. 2.
	4	Explain the purpose of a LOTO map (1 mark) 1.
Technical safety	5	In case of a fire in your work area, what are the actions you would take? (2 marks)
	6	What are the safety precautions you will take when using the hoist at Sys10? (2 marks) 1.
	7	What are the precautionary steps you shall take while receiving raw material from the Warehouse? (2 marks) 1.
Environmental	8	What is the environmental impact of disposing doval/dough directly into the drain? (2 marks) 1. 2.
	9	What action can you take to minimize the water usage in your area? (2 marks) 1. 2.

APPENDIX M

Sample Dough Making Demonstration

T1_Dough Making Step Up Card (Practical Assessment)

Participant's Name _____
 Employee's ID _____
 Line 1 / 2 / 3 / 4 / 6
 Shift A / B / C

Date _____ NOV 2017
 Time _____
 Assessor Name: 1. _____
 2. _____



Total Score

		Operating Procedures				
		Skill	Proficiency level			
Operating Procedures-System 10	1	Demonstrate how First-in - First out rules are applied at the dry material staging area	DO	1 2 3 4 5		
	2	What must one do before dumping a bag of material into the dumping hopper?	DO	1 2 3 4 5		
	3	Demonstrate what happens to the flour after it is dumped into the dump hopper	DO	1 2 3 4 5		
	4	Demonstrate the sequence of events that initiate the weighing/blending cycle	DO	1 2 3 4 5		
	5	Demonstrate the knowledge of the control panels of the B/M equipment	DO	1 2 3 4 5		
	6	What should you check if the Dry Mixer discharge valve shows 'Open Fail' alarm?	TS	1 2 3 4 5		
	7	What should you do if the HMI Dry Ingredient batching page shows an error warning?	TS	1 2 3 4 5		
	8	Demonstrate how to do sifter and magnet cleaning	DO	1 2 3 4 5		
	9	Demonstrate the ability to track sheeting conveyors	DO	1 2 3 4 5		
	10	Describe what type of cutter is used and how many are on a cutter roll? What is the proper way to change a cutter?	DO	1 2 3 4 5		
	11	How often is doval weight is measured? Demonstrate how it is done	DO	1 2 3 4 5		
	Operating Procedures-System 20	12	How often to measure chip length? Demonstrate how it is done	DO	1 2 3 4 5	
		13	How often to measure chip moisture? Demonstrate how it is done	DO	1 2 3 4 5	
		14	How often to measure chip Fat percentage? Demonstrate how it is done	DO	1 2 3 4 5	
		15	How would you remove creases from the sheet?	TS	1 2 3 4 5	
		16	Demonstrate the ability to detect and replace worn cutters	TS	1 2 3 4 5	
		17	Explain what happens if the metal detector alarm goes off and the effect it has on sheeting	TS	1 2 3 4 5	
	Overall	18	Demonstrate how to use HMI control panel - from system 10, 20 and 30	DO	1 2 3 4 5	
		Quality				
		Skill	Proficiency level			
Quality	1	Demonstrate how to do challenge test at your area?	DO	1 2 3 4 5		
	2	What should you do if doval weight is out of specification?	DO	1 2 3 4 5		
	3	What should you do if chip weight is out of specification?	DO	1 2 3 4 5		
	4	What should you do if chip moisture is out of limit?	DO	1 2 3 4 5		
	5	Explain what one must do if there are blisters on chips	DO	1 2 3 4 5		
	6	Explain what would you do if chips have a wavy edge	DO	1 2 3 4 5		
		Food Safety				
		Skill	Proficiency level			
Food Safety	1	What are the 4 conveyor belts in your area and how often do you need to inspect the condition?	DO	1 2 3 4 5		
	2	Explain what happens if the conveyor belt condition is worn out?	DO	1 2 3 4 5		
	3	Explain 4 adverse event zones with the corrective measures	DO	1 2 3 4 5		
	4	What actions must you undertake on finding beetles, geckos or flies in your work area?	DO	1 2 3 4 5		
	5	Explain the implications of a flour leak on Food Safety	DO	1 2 3 4 5		
	6	Demonstrate when and how to do Swab test? What is the acceptable range? What do you do if the swab test is Out of Limit?	DO	1 2 3 4 5		
		Environmental, Health & Safety				
		Skill	Proficiency level			

Personal Safety	1	Explain the proper way to use a fire extinguisher in your work area	DO	1	2	3	4	5
	2	Direct us to the nearest location of fire extinguisher from your work area	DO	1	2	3	4	5
	3	Demonstrate safety precaution steps when lifting the big bag	DO	1	2	3	4	5
	4	Guide us to the nearest route for evacuation during an emergency	DO	1	2	3	4	5
Electrical								
Electrical	1	Tour the area, locate and explain the function of the following: a. E Stops b. Local Disconnects c. MCC Disconnects d. Control Panels	Skill	Proficiency level				
			DO	1	2	3	4	5
			DO	1	2	3	4	5
			DO	1	2	3	4	5

APPENDIX N

Performance Development Plan (PDP)

KELLOGG Performance Review & Development Plan (PDP)						
Name:	Year Begin (Date):	Year End (Date):	Employee ID#:	Shift Manager:		
Position:						
ENSTEK GOALS						
Place a check in one of these columns	Expectations	Target	Actual	Exceeds Expectations	Meets Expectations	Below Expectations
Performance Area						
QFS	MQFS Grade	A				
COST	Factory Expenses	1.12/kg				
Safety	TRIR	0.68				
LINE DELIVERABLES						
Performance Area	Expectations	Target	Actual	Exceeds Expectations	Meets Expectations	Below Expectations
Service Productivity	Volume Adherence (%) Chip Waste + Dough Waste (%)	95%-105% 11.3% 30.5% Tortilla	Potato			
Productivity	Bleed Oil PR (Plant Reliability)	50 kg/ Hour 64.4%				
People	Training Hours Absenteeism	24 hours/ person				
QFS	PES % of (B+C)	<1.7%				
Evidence						
Passion						
Accountability						
Humility & Hunger to learn						
Integrity & Respect for Others						
Success						
Simplicity						
Individual's Goals:		Line Leader's Perspective & Actions:		Projects Participated in:		
List your goals and aspirations for the short-term & long term both		Suggest development plans to be able to achieve the desired goal				
Technician Signature		Line Leader Signature		Date	Final Performance Rating	

The weightage for each component is equal.
Enstek Goals (33.33%)