# Project-Based Marketing (PjBM) Module at Malaysian Technical and Vocational Colleges

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## ABSTRACT

Students in technical and vocational schools are increasingly interested in active learning strategies like project-based learning (PjBL) because all of the skills listed by the Malaysian Ministry of Education may be used in a way suitable for the twenty-first century. The research aims to create a module's development design based on the Sidek Module Construction Model, which was introduced in 2001. The Sidek Module Construction Model and the prototype of the PjBM Module produced can help the teaching staff implement the project approach systematically to apply key marketing competencies in the Sales Management course for the marketing diploma at Polytechnic Malaysia. The findings of this study are expected to help the government achieve the goals of two focus areas in the eleventh Malaysia Plan, 2016–2020, which are to transform TVET to meet the needs of the industry and strengthen the quality and delivery of TVET programs to improve the marketability of graduates simultaneously. Therefore, there is a need for studies that focus on the modules development related to the field of TVET, in line with the focus areas given by the Malaysian government in realizing the intention to increase the employability of graduates.

**Keywords:** Project-Based Learning, Key Marketing Competencies, Graduate Marketability, TVET Institution, Modules Development

## INTRODUCTION

UNESCO has recognized TVET as one of the four strategic priorities of UNESCO's Education for All because of its role in improving education and the socio-economics of the world community (World Education Forum, 2000). In relation to that, Malaysia's development and progress are no longer solely dependent on highly knowledgeable human capital. On the other hand, developing highly skilled human capital also needs attention to achieve the desire to make Malaysia a high-income country by 2025. This is important because a high level of skill in technical and professional fields and a high level of productivity are the main characteristics of human capital and the workforce of high-income countries. In addition, to become a developed and high-income country, many skilled workers are essential. For example, developed countries such as Germany have 82% of skilled workers, while Singapore has 52% (Daily News, 2016).

The Malaysian government has taken various steps to develop and empower TVET. These include various

incentives given to TVET institutions, from the 7th Malaysia Plan to the 12th Malaysia Plan. In addition, through the Economic Transformation Program (ETP), the government aims to increase 35% of the new highly skilled workforce in the economic sector and 60% of Malaysian Certificate of Education graduates entering the TVET stream by 2030 (EPU, 2010). Under the 2022 Budget, an allocation of RM6.6 billion is provided to empower TVET to produce manpower resources that meet the needs of the industry. This aligns with the 4th Leap in the Malaysian Education Development Plan (Higher Education) 2015-2025 to increase the quality of TVET graduates.

In an effort to develop and empower TVET in Malaysia, competent technical teaching staff play an essential role in producing quality TVET graduates who meet the needs of the industry. A technical teaching force responsive to any form of change in the industry will produce graduates who are highly skilled and compatible with the current and future needs of the country (Mohd Noor, 2011). In addition to gaining knowledge about current industry changes, competent technical instructors will also always prepare themselves for the changes and reforms that will occur in the curriculum. This is because teachers not only impart knowledge and skills to students but are also responsible for developing interests and developing students' talents and abilities (Siraj and Ibrahim, 2012).

The education system designed and implemented in TVET can produce good-quality students, well-behaved, responsible and able to adapt to real-life situations (KPM, 2013). Applying different learning strategies and methods compared to mainstream courses has created a high interest in TVET. One of the methods used is the project-based learning method or Project Based-Learning (PjBL). This method aligns with 21st-century learning skills, where all the skills outlined by KPM can be formed in implementing the project method. Although this PjBL approach has long been practised for technical programs in TVET institutions, this method is still unfamiliar to specialist programs such as Economics, Accounting, Business and Marketing.

Therefore, this study aims to build a prototype of a project-based marketing module or Project-based Marketing (PjBM). This module has a two-pronged purpose, which is, firstly to improve pedagogical competence and knowledge among teaching staff and secondly, to strengthen mastery of key marketing competencies among Diploma Marketing students at Polytechnic Malaysia. The findings of this study are expected to help the government to achieve the goals of two focus areas in the Eleventh Malaysia Plan, 2016-2020 (RMKe-11), which is to transform TVET to meet the needs of the industry and strengthen the quality and delivery of TVET programs to improve the marketability of graduates simultaneously. This is also in line with the Shared Prosperity Vision 2030 (WKB 2030), which targets highly skilled TVET graduates to contribute to the productivity and economic growth of the country.

## LITERATURE REVIEW

Competence is essential for an organisation to be more competitive. Researchers have given various definitions of competence in studies related to competence. For example, Ismail et al. (2017) defined competence as an individual's ability to use knowledge and skills in performing specific activities or tasks. Mulcahy (2000); Mulder (2001); Palaniappan (2003), and Volmari et al. (2009) also defined competence as an indicator of the level of individual ability, ability and performance shown by individuals in performing a task. McClelland (1973), in his writing, has five characteristics of competence: knowledge, skills, self-concept, traits, and motives. While Salleh et al. (2015) opined that a competent individual is an individual who has physical and intellectual qualifications or qualities to carry out certain tasks or jobs.

Meanwhile, other researchers have defined competence among teaching staff (which includes lecturers, teachers and instructors or tutors) of TVET. For example, Guthrie (2010) stated that a TVET teaching staff is trained, competent in delivery and assessment in his field, able to demonstrate skills and continuously develop and advance his career by exploring more knowledge and skills. Meanwhile, Andersson and Köpsén (2015) and Arifin and Rasid (2017) say that the competence of TVET teachers includes skills, knowledge, attitudes, values, tasks and appreciation related to teaching and training students in the field of TVET.

Accordingly, TVET instructors must be competent in managing classrooms and workshops, operating teaching aids, assessing and evaluating student performance, implementing various teaching methods, identifying student learning styles, identifying student needs, and delivering technical and vocational skills efficiently and effectively. Setiabudhi (2013) also asserted that TVET teaching staff should have competence in teaching methods, workplace knowledge, management, conducting research, and analysing the work process. In addition, Deitmer and Heinemann (2009) have outlined five competencies of TVET teaching staff: professionalism, management, analytical, social and communication, and knowledge of the framework conditions.

Indeed, competent and quality teaching staff is one of the important elements in efforts to strengthen TVET education to achieve sustainable economic development for a country. However, many countries, especially developing countries, still face the problem of the incompetence of teaching staff who run TVET programs. According to Paryono (2015), most ASEAN countries experience a shortage of TVET teaching staff in terms of quantity and quality. According to him, the lack of quality is caused by teaching staff who lack industry experience. In addition, Alazam et al. (2012) stated that teaching staff in TVET institutions in Malaysia generally have ICT skills at a low level, especially in programming and simulation.

Chua & Jamil (2012) also asserted that the level of knowledge of TVET teaching staff in this country related to Content Pedagogy Technology Knowledge (TPACK) needs to be improved. According to them, pedagogical skills, especially problem-solving skills, are still weak among teaching staff in TVET institutions. The incompetence of teaching staff who conduct TVET courses can bring problems to society and the country. This is shown by the findings of Lai et al. (2018), who showed that incompetent TVET teaching staff in HEIs in Nigeria have produced low-quality graduates, contributing to the unemployment problem.

Nowadays, TVET Education is getting more attention than mainstream education. TVET education solves many issues, such as poverty, unemployment and workplace skills (Marope et al., 2018); Chamadia & Shahid, 2018). TVET is a form of education that provides students with skills and knowledge that enable them to compete in the job market and make them skilled workers in specialised fields, making TVET education increasingly popular (Jane et al., 2017). Learning in higher education institutions has traditionally focused on theoretical learning. Still, over time, and driven by industry needs and demands, some institutions have incorporated project or problem-based learning into the teaching methods.

Most researchers nowadays recommend the project-based learning approach (PjBL) as the most suitable and best pedagogical method for graduates' development and main competencies (Guo et al., 2020; Bender, 2012). PjBL is a learning method based on constructivism theory through the principle of learning by doing, founded by John Dewey (Bender, 2012). Based on this principle, William Heard Kilpatrick further developed the idea of teaching and learning through a method known as PjBL (Beckett & Slater, 2019). This method allows students to engage in learning situations by applying ideas and project production (Guo et al., 2020; Pan et al., 2019; Syakur et al., 2020). In addition, PjBL is said to be an active and student-centred learning method that is believed to allow students to gain deeper knowledge through active exploration of real-world challenges and problems (Isa & Abdullah, 2013). In addition, this approach can be characterised by creating research teams among students to carry out hands-on projects that are integrated into real-world business practices and designed to solve real business tasks and problems (Almulla, 2020; Whatley, 2012). The summarization of the main contents of existing previous research related with TVET shown in a table 1, below.

Table 1. Summarization Of The Main Contents Of Existing Previous Research Related With TVET

| Researcher (Year) | Focus/Issues |
|---|---|
| Guthrie (2010) | Skills attached with TVET teachers. |
| Andersson & Köpsén (2015) | The competence of TVET teachers. |
| Arifin &Rasid (2017) | |

| | |
|---|---|
| Setiabudhi (2013) | TVET teaching staff should have competence in teaching methods, workplace knowledge, management, conducting research, and analysing the work process. |
| Deitmer & Heinemann (2009) | Outlined five competencies of TVET teaching staff: professionalism, management, analytical, social and communication, and knowledge of the framework conditions. |
| Paryono (2015) | Most ASEAN countries experience a shortage of TVET teaching staff in terms of quantity and quality. |
| Guo et al., 2020; Bender, 2012 | Most researchers nowadays recommend the project-based learning approach (PjBL) as the most suitable and best pedagogical method for graduates' development and main competencies. |

(Sources : Based on the Literature Review Explained)

Previous studies such as Guo et al. (2020); Setyorini (2019); Jesus (2021); Burcu & Ozlem (2018); Solihatin & Syahrial (2019); Bowen & Peterson (2019); and Yeop & Gapor (2013) found that the PjBL method was effective and showed a positive effect on student achievement. Thus, the PjBL method can positively impact the development of the student's learning process. Furthermore, this method is an appropriate PdP practice in line with education development that requires real-world problem-solving skills among students. Using extensive educational resources and integrating PjBL methods make the PdP process exciting and compelling.

Based on the detailed literature review, the objectives of the study are:

i. Build a prototype of the PjBM Module by combining the project approach and key marketing competencies.
ii. Examining the usability characteristics of the PjBM Module in helping teaching staff implement the project approach.
iii. Analyzing the implementation of the PjBM Module in improving the pedagogical knowledge of marketing diploma teaching staff in Malaysian TVET institutions.
iv. Analyzing the implementation of the PjBM Module in improving mastery of key marketing competencies among marketing diploma students at Malaysian TVET institutions.

## METHODOLOGY

In line with the objectives explained before, this type of research is research and development because this study aims to develop a project-based marketing module. This module must be suitable for instructors for the Sales Management course offered to marketing diploma students at Polytechnic Malaysia. The development design of this module is based on the Sidek Module Construction Model introduced in 2001. This more comprehensive integration model consists of 2 phases. The first phase is preparing a draft module which involves 9 steps. The second phase is the stage of trying and evaluating the draft module. The draft module will undergo a pilot study to determine its validity and reliability at this stage.

In addition, the Project Approach Model (Katz and Chard, 2000) was also used to produce a prototype of this PjBM Module. The two models are combined through a module construction application to help teaching staff implement a systematic project approach so that they can apply key marketing competencies in the Sales Management course for the marketing diploma at Polytechnic Malaysia. Based on previous studies, researchers have identified a set of key marketing competencies that a person needs to master to be efficient and capable in jobs related to marketing, namely: Creative thinking; Communication; Working independently; Effective team collaboration; Leadership; Negotiation; Evaluate and analyse information; Ability to manage budgets; Public speaking; and Ability to work under pressure.

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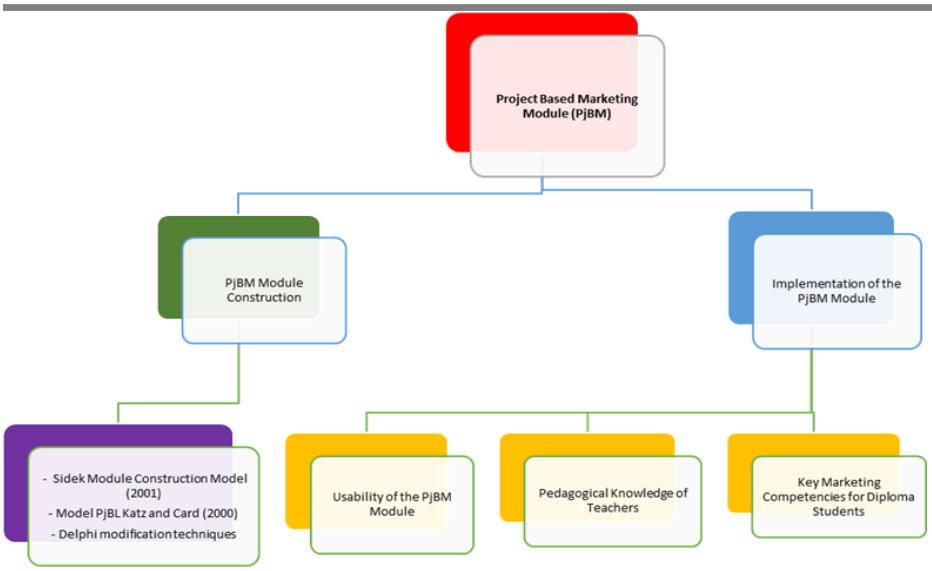


Figure 1: Proposed Conceptual Framework

Figure 1 summarises the study's conceptual framework, which aims to build and test the effectiveness of the PjBM Module based on the Sidek Module Construction Model. The module produced combines the application of the project approach using the Katz and Chard Model (2000) by applying the elements of key marketing competencies shown in Figure 2. The Delphi technique is used to strengthen the reliability of the PjBM Module prototype and the improvement process that can be implemented to perfect the Module. The views of Delphi experts who were appointed directly help the systematic implementation of this research to ensure the usability of the module, the teacher's pedagogical knowledge and even the students' key marketing competencies can be improved. Because of our focuses is for marketing courses taken by Diploma students, so our population and sample only focused on Diploma Students enrolled marketing course in semester 1.

Hence, missing critical sections on methodology part that we focused on is interrelated with the how we conduct the proposed conceptual framework to the marketing courses for Diploma Students.

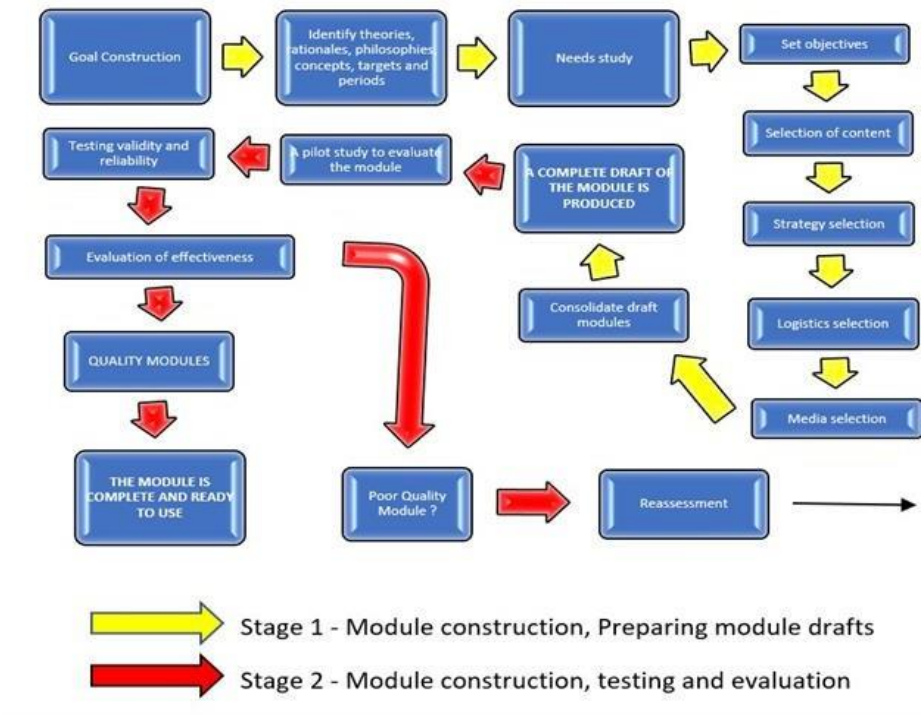


Figure 2: Construction Flow Chart of PjBM Module Based on Sidek Model

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Based on the framework proposed and flow chart constructed, the use of experiemental study will be use in order to collect the data. Based on the method practiced under experiemental study, we will compare the performance of the student involved to view the difference performance and achievement between before and after use the modul created.

## DISCUSSION

By referring step by step involved in doing process by process of the PjBM Module based on the Sidek Module Construction Model and the construction flow chart of PjBM Module Based on Sidek Model, the output from the development of PjBM Module as shown as below;


Figure 3 : Cover Page of PjBM Module Based on Sidek Model


Figure 4 : Table of Contents Focused in The Module

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DPM30053 SALES MANAGEMENT

UNIT 1

# SALES AND SALES MANAGEMENT



**General Objective**

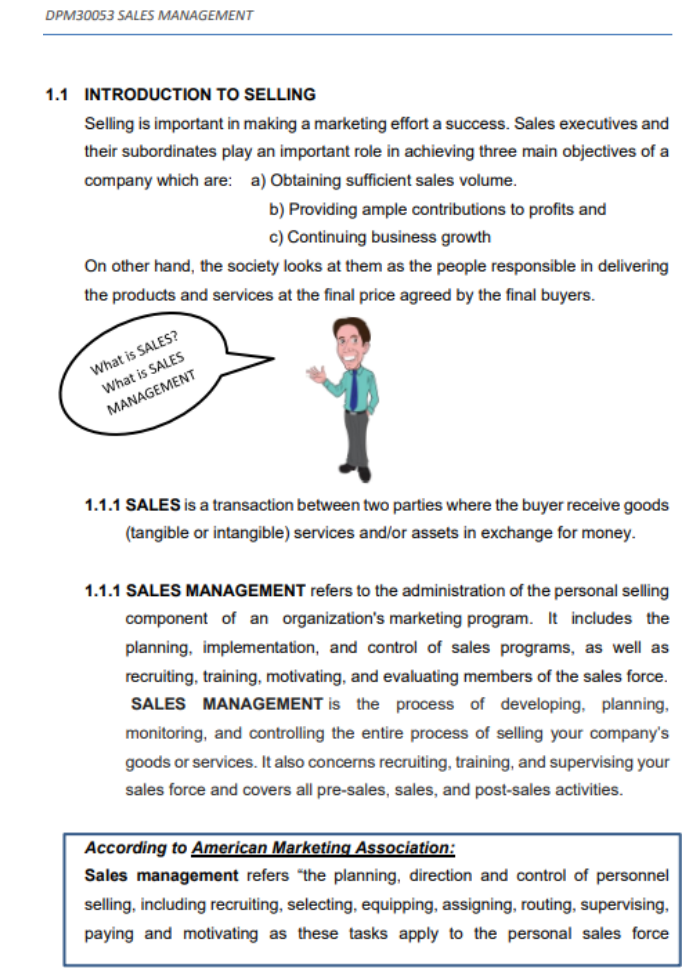
To understand the principles and practice of selling

**Specific Objectives**

At the end of this unit, you should be able to:

- Define sales and sales management.
- Describe the functions of salespeople.
- Describe the duties and responsibilities of a sales manager.
- Explain the problems and challenges faced by sales manager.
- Explain ways in which environmental factors impact success in selling.

Figure 5 : Each Unit Covered in the Module will be supported by their general objective and specific Objectives



DPM30053 SALES MANAGEMENT

**1.1 INTRODUCTION TO SELLING**

Selling is important in making a marketing effort a success. Sales executives and their subordinates play an important role in achieving three main objectives of a company which are: a) Obtaining sufficient sales volume.
b) Providing ample contributions to profits and
c) Continuing business growth

On other hand, the society looks at them as the people responsible in delivering the products and services at the final price agreed by the final buyers.



**1.1.1 SALES** is a transaction between two parties where the buyer receive goods (tangible or intangible) services and/or assets in exchange for money.

**1.1.1 SALES MANAGEMENT** refers to the administration of the personal selling component of an organization's marketing program. It includes the planning, implementation, and control of sales programs, as well as recruiting, training, motivating, and evaluating members of the sales force. **SALES MANAGEMENT** is the process of developing, planning, monitoring, and controlling the entire process of selling your company's goods or services. It also concerns recruiting, training, and supervising your sales force and covers all pre-sales, sales, and post-sales activities.

***According to American Marketing Association:***
**Sales management** refers "the planning, direction and control of personnel selling, including recruiting, selecting, equipping, assigning, routing, supervising, paying and motivating as these tasks apply to the personal sales force

Figure 6 : Each Unit Covered in the Module will be supported by the interactive notes

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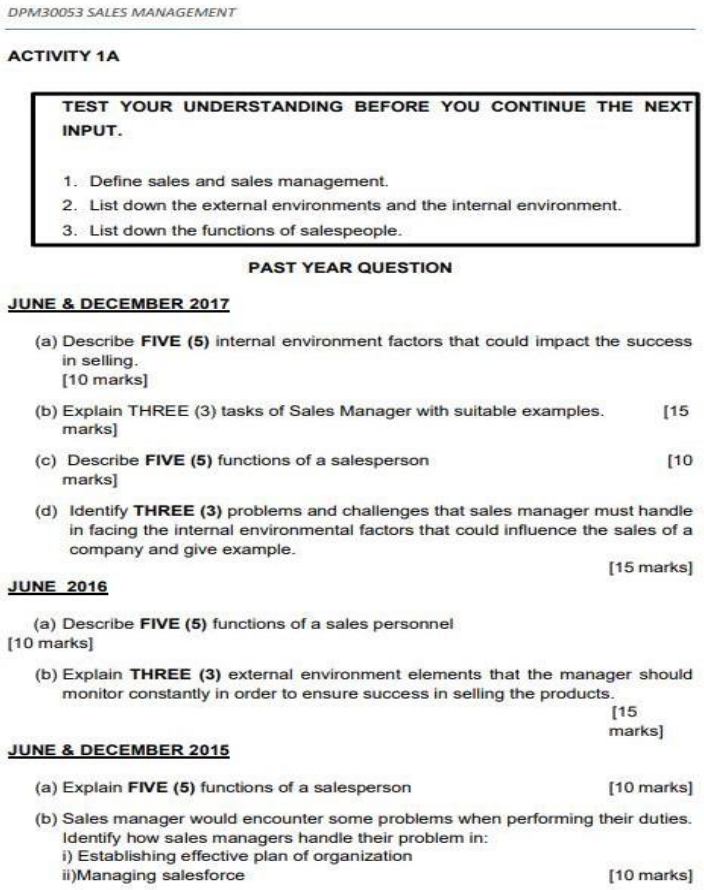

DPM30053 SALES MANAGEMENT

**ACTIVITY 1A**

**TEST YOUR UNDERSTANDING BEFORE YOU CONTINUE THE NEXT INPUT.**

1. Define sales and sales management.
2. List down the external environments and the internal environment.
3. List down the functions of salespeople.

**PAST YEAR QUESTION**

**JUNE & DECEMBER 2017**

(a) Describe **FIVE (5)** internal environment factors that could impact the success in selling. [10 marks]

(b) Explain THREE (3) tasks of Sales Manager with suitable examples. [15 marks]

(c) Describe **FIVE (5)** functions of a salesperson [10 marks]

(d) Identify **THREE (3)** problems and challenges that sales manager must handle in facing the internal environmental factors that could influence the sales of a company and give example. [15 marks]

**JUNE 2016**

(a) Describe **FIVE (5)** functions of a sales personnel [10 marks]

(b) Explain **THREE (3)** external environment elements that the manager should monitor constantly in order to ensure success in selling the products. [15 marks]

**JUNE & DECEMBER 2015**

(a) Explain **FIVE (5)** functions of a salesperson [10 marks]

(b) Sales manager would encounter some problems when performing their duties. Identify how sales managers handle their problem in:
i) Establishing effective plan of organization
ii)Managing salesforce [10 marks]

Figure 7 : The interactive notes and knowledge supported by the activity to test the understanding of topic covered

## CONCLUSION

The findings from this study are a project-based marketing module or Project-based Marketing (PjBM). This module has a two-pronged purpose: to improve pedagogical competence and knowledge among teaching staff and, secondly, to strengthen mastery of key marketing competencies among the students involved. This PjBM module will be built for the Sales Management course in the Marketing Diploma (DPR) program at the Trade Department, Polytechnic Malaysia, to achieve both goals. After that, this module will be tested on students who take this course at several polytechnics that offer DPR programs, such as Sultan Azlan Shah Polytechnic (PSAS), Sultan Abdul Halim Mu'adzam Shah Polytechnic (POLIMAS), Port Dickson Polytechnic (POLIPD), Kota Bharu Polytechnic (PKB), Merlimau Melaka Polytechnic (PMM) and Tuanku Sultanah Bahiyah Polytechnic (PTSB).

The findings of this study are expected to help the government to achieve the goals of two focus areas in the Eleventh Malaysia Plan, 2016-2020 (RMKe-11), which is to transform TVET to meet the needs of the industry and strengthen the quality and delivery of TVET programs to improve the marketability of graduates simultaneously. In addition, the module produced can be used by various interested parties.

The Project-based Marketing (PjBM) module produced from this study is expected to contribute ideas to policymakers in general and become a source of reference or guidance to the teaching staff for the Sales Management Course taken by Diploma in Marketing (DPR) students at Polytechnic Malaysia. In addition, interested parties can improve strategies to improve the knowledge and competence of instructors who run other TVET courses. In addition, it is expected that the module development that will be produced will also strengthen the mastery of key marketing competencies among marketing diploma students at the Polytechnic

so that the marketability of graduates from this TVET institution can be increased. It is hoped that this list will be useful during the final checking of an article prior to sending it to the journal's Editor for review. Please consult this Guide for Authors for further details of any item. In particular, the following must be addressed and met the requirements and guidelines.

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