

**EXAMINING THE RELATIONSHIP BETWEEN TOP  
MANAGEMENT SUPPORT, PRODUCT STRATEGIES  
AND INTERNAL SUPPORT IN NEW PRODUCT  
DEVELOPMENT SUCCESS ON MANUFACTURING FIRM  
IN MALAYSIA**

**NAIMAH BINTI AMLUS**

**MASTER OF SCIENCE  
UNIVERSITI UTARA MALAYSIA  
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## ABSTRACT

New Product Development (NPD) has become a major concern in all types of companies particularly in the manufacturing companies and its success is undeniably vital to the viability, growth and prosperity especially in today's modern corporation. This research aimed to identify the relationships between the various factors that can generate a stream of market led and technical support for the business operation in Malaysia. The identified factors are top management support, internal and external support, product strategies and training. Through the mail survey, 250 companies have responded to the distributed questionnaires where 37.1 percent respondents were operation managers, 37.1 were marketing manager and 25.8 percent were managers in Malaysia. In this research we use SPSS to analyze the data and test of hypothesis using hierarchal regression with alpha value. However, only 229 or 91.6 percent of the responded questionnaires were usable. The respondents cover 71.2 percent of the manufacturing companies, where 28.8 percent were respondents from the electric and electronic companies. All the companies which responded were involved in product development, with a minimum of one product pattern and a maximum of five product patterns and this covers 59.8 percent of the respondents. The hypotheses used were tested by using correlation and regression techniques. The result of the study supported all the hypotheses. The multiple regression analysis indicated that there are significant relationship among the variables such as top management support, internal/external support, product strategies and training, on the usefulness of the new product development (NPD). It is believed that outcome of this study will benefit the manufacturers, government decision maker in making manufacturing policy, academician in formulating syllabus and the top management of companies into successfully implementing the new product development (NPD) and having the ability to counter any major competitions in future.

**Keyword: Manufacturing, New Product Development, Product Strategies, Training, External Support**

## ABSTRAK

Pembangunan Produk Baru telah menjadi satu keutamaan semua syarikat kini. Ini terutamanya melibatkan syarikat yang berkaitan pembuatan. Kejayaan pembangunan produk baru merupakan faktor penting yang menyumbangkan kepada daya maju, pertumbuhan dan kesejahteraan syarikat khususnya dalam perniagaan moden hari ini. Kajian ini bertujuan untuk mengenal pasti hubungan antara faktor-faktor yang boleh menjadikan sesebuah syarikat menguasai pasaran dan teknikal untuk menyokong operasi perniagaan di Malaysia. Faktor-faktor yang dikenal pasti ialah sokongan pengurusan, sokongan dalaman dan luaran, strategi produk serta latihan. Kajian ini menggunakan tinjauan melalui pos. Sebanyak 250 buah syarikat telah memberikan respons. Berdasarkan respons tersebut sebanyak 37.1 peratus responden adalah pengurus pembuatan, 37.1 peratus responden lagi adalah pengurus pemasaran dan 25.8 peratus adalah pengurus di Malaysia. Kajian ini menggunakan alat SPSS bagi menganalisa data dan menguji hipotesis menggunakan hierikal regresi dan nilai alpha. Namun, hanya 229 atau 91.6 peratus daripada respons itu boleh digunakan. Respons ini mencakupi 71.2 peratus syarikat pembuatan. Sebanyak 28.8 peratus adalah respons daripada syarikat berkaitan elektrik dan elektronik. Semua syarikat ini terlibat di dalam pembangunan produk dengan minimum pembangunan satu paten dan maksimum lima paten. Ini bersamaan 59.8 peratus daripada jumlah responden. Hipotesis yang terlibat telah diuji menggunakan korelasi dan teknik regresi. Hasil analisis korelasi ini menunjukkan semua hipotesis disokong. Analisis regresi menunjukkan bahawa terdapat kesan yang signifikan pada setiap angkubah latihan, produk strategi, sokongan luaran, sokongan pengurusan untuk pembangunan produk baru. Hasil kajian ini diharapkan akan memberi manfaat kepada pengeluar, pembuat dasar dalam kerajaan bagi membuat polisi pengeluaran, ahli akademik bagi membuat silibus pengajian dan pihak pengurusan tertinggi syarikat dalam menjayakan pembangunan produk baru dan mendepani persaingan di masa hadapan.

**Kata kunci: Pembuatan, Pembangunan Produk Baru, Strategi Produk, Latihan, Sokongan Luaran**

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# **CHAPTER ONE**

## **INTRODUCTION**

### **1.0 Introduction**

This study explores the impact of top management support, product strategies and internal/external support in new product development mainly in Malaysian manufacturing industry. In particular, it will touch to highlight the relationship and significance factors of top management support, external support, new product development strategies and new product development teams in new product development success. This chapter contains the discussion on the background of study, problem statement, research objectives, research question, scope and significant of study.

### **1.1 Background Of Study**

In Malaysia's manufacturing sector there is no end for nonstop development efforts especially in new product development (NPD). In order to accomplish the competitiveness level and innovative capability that up to the global standard, the manufacturing sector is trying to do its best. Malaysia also will be a country that manages to manufacture a higher-tech, higher-value added and more sophisticated

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**UNIVERSITI UTARA MALAYSIA**  
**OTHMAN YEOP ABDULLAH GRADUATES SCHOOL OF BUSINESS**  
**POST GRADUATES PROGRAMME**

Dear Respondent,

Sir/Madam,

I am a student Master of Science in Technology Management, Universiti Utara Malaysia. As one of the university's requirement, I am doing a research which the title is "Development of Top Management Support, Product Strategies and Internal Support in New Product Development Success On Manufacturing Firm in Malaysia". With reference to the above matter, kindly be informed that you have been selected as a respondent for this research.

I hope that you will spend some time to answer the attached questionnaire, as objectively and as sincerely as possible, and without fear or favor. Your responses will be treated as PRIVATE and CONFIDENTIAL and used solely for academic purposes.

I am looking forward to your cooperation in participating in this study, and for that I thank you.

May Allah bless you.

Yours sincerely,

Naimah binti Amlus,  
Master of Science in Technology Management  
Universiti Utara Malaysia



## QUESTIONNAIRE

### SECTION A:

Please select [ ✓ ] ONE answer to each question which best suit your opinion:

1. What is your working company age (years)?

[ ] 1-5 years    [ ] 5-10 years    [ ] 10-15 years    [ ] more than 15 years

2. What is the current number of employees?

[ ] 0-100  
[ ] 101-200  
[ ] 201-500  
[ ] 501-1000  
[ ] More than 1000

3. What is your company type of business?

[ ] Electric and electronics  
[ ] Automotives  
[ ] Equipments  
[ ] Furniture  
[ ] Manufacturing  
[ ] Others (Please specify if any) .....

4. Do you involve in new product development of your company?

[ ] Yes [ ] No

5. How many patents for product in your working company?

[ ] 1-5 products [ ] 5-10 products [ ] more than 15 products

6. What is your highest educational level?

[ ] Primary [ ] Secondary [ ] Diploma

- Bachelor Degree     Master / PhD
- Others (Please specify if any) .....

7. What is your position in working company?

- CEO  R&D Manager  Manufacturing Manager  Marketing Manager
- Manager  Others (Please specify if any) .....

8. How many percentage of your working company R&D expenditure?

- Below 1%
- 1-2%
- 3-4%
- 4-5%
- More than 5%

**SECTION B:**

Instruction: Please select [ ✓ ] **ONE** answer using the following scale.

<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly Agree</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

<b>Top Management Support</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
1.The leadership style from top management is important					
2.Top management provides the necessary resources for NPD programs					
3.Top management provides authority power for NPD programs					
4.Top management provides clear vision of the product concept					
5.Top management provides organizational support for change in NPD programs					
6.Top management generates enthusiasm for NPD programs					
7.Good communication between top management and the NPD teams					

<b>Product Strategies</b>	1	2	3	4	5
1.Product cost cutting implemented in NPD programs					
2.Product modification used in NPD programs					
3.Company must create product line extension					
4.Company must create new product line					
5.Using a formal NPD process is important					
6.Company using offensive/high risk strategy					
7.Company using defensive/low risk strategy					
8.Technology capability and product capability use as a strategy					
9.A specific strategy needed in NPD programs					

<b>New Product Development Success</b>	1	2	3	4	5
1.NPD strategies effects on the customer acceptance in new product					
2.NPD strategies effects on the customer satisfaction in new product					
3.NPD teams aware that company attain the profitability goal					
4.Top management aware that company attain return on					

investment goal					
5.Top management know that they achieve product performance goal					
6.NPD teams meet the quality guideline					
7.NPD strategies effects on percentage of sales by new product					

**TRAINING**

<b>TRAINING FOR NEW WORK STRUCTURE</b>						
	Task	1	2	3	4	5
1	basic skills (reading, writing etc.)					
2	Leadership training					
3	life skill (stress management)					
4	problem solving					
5	product knowledge					
6	quality product skills					
7	technical product skills					

**Thank You for Participation.**