# E-Procurement Implementation in Malaysia Automotive Manufacturing Industry

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## ABSTRACT

Procurement plays an important role in company success. It has been identified as one of the major expenses for companies, therefore the reduction of purchase cost is the top priority for organizations when goal-setting in procurement. With the emerge of Internet and other technologies, e-procurement has become well-known. However, very few researches have been conducted on e-procurement in Malaysia automotive manufacturing industry. Thus, this research is aimed to identify the current practice of e-procurement and to analyse the challenges of e-procurement in Malaysia automotive manufacturing industry. Questionnaire is distributed to the person in charge in procurement function and those related with procurement in automotive companies. The collected data is analyzed using SPSS 22.0. The results show the investigated companies have practiced certain types of technologies and activities in their procurement. Challenges that are faced during e-procurement implementation in the companies are financial and people issues. It is hoped that the study will provide some insight into the current body of knowledge in e-procurement and helps both of the private and public companies to better perform e-procurement.

## INTRODUCTION

- In automotive industry, manufacturers obtain the raw materials and other supplies through procurement.
- Procurement has been identified as one of the major expenses with more than 50% of the total cost in industries and e-procurement is identified as a way to cut down costs and increase efficiency.
- Many research has been conducted on this topic in other countries and industries. (e.g Hashim et.al, 2013)
- There is lack of studies in this topic in Malaysia automotive manufacturing industry.

## OBJECTIVES

- To identify the current practices of e-procurement implementation in Malaysia automotive manufacturing companies
- To analyze the challenges faced by Malaysia automotive manufacturing companies in e-procurement implementation

## METHODS

| | |
|---|---|
| **Types of research** | **Quantitative research** |
| **Data collection** | Questionnaire (face to face and emailing distribution) |
| **Target sample** | Automotive manufacturing companies in Selangor (population=68; sample=59,received=41 ) |
| **Unit of analysis** | Employee of Automotive Companies |
| **Data analysis tools** | SPSS 22.0 |
| **Data analysis** | Descriptive Analysis, Cronbach's Alpha Coefficient, Normality Test |

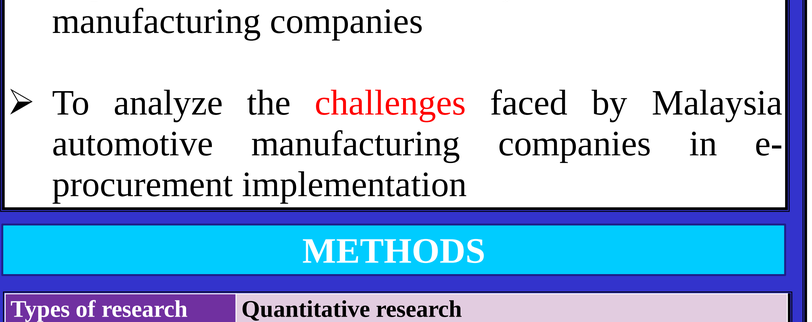


**Figure 1 E-Procurement Forms involved in Procurement Process Cycle**

## RESULTS

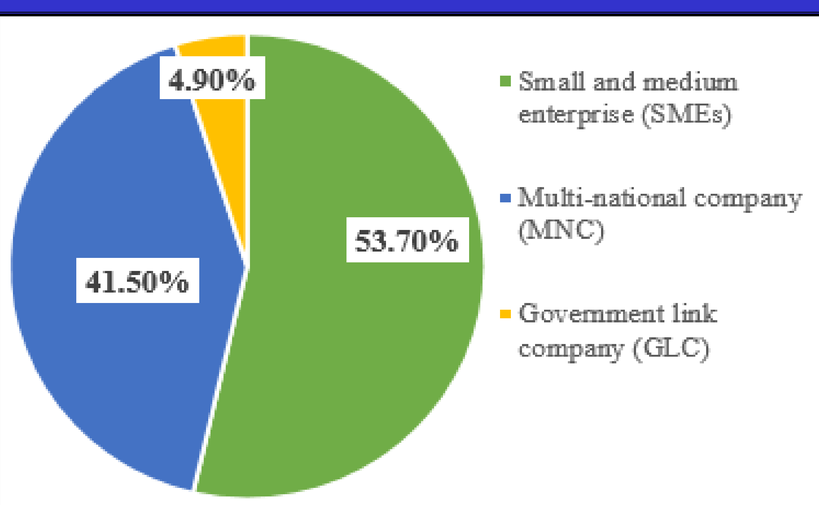


**Figure 2 Types of Companies**

### Current Practices of E-Procurement

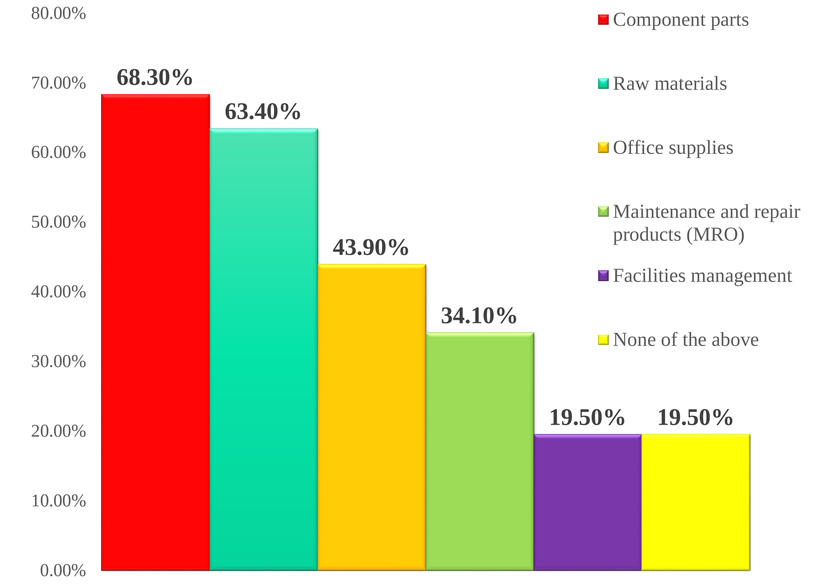


**Figure 3 Types of Product Purchased Electronically**

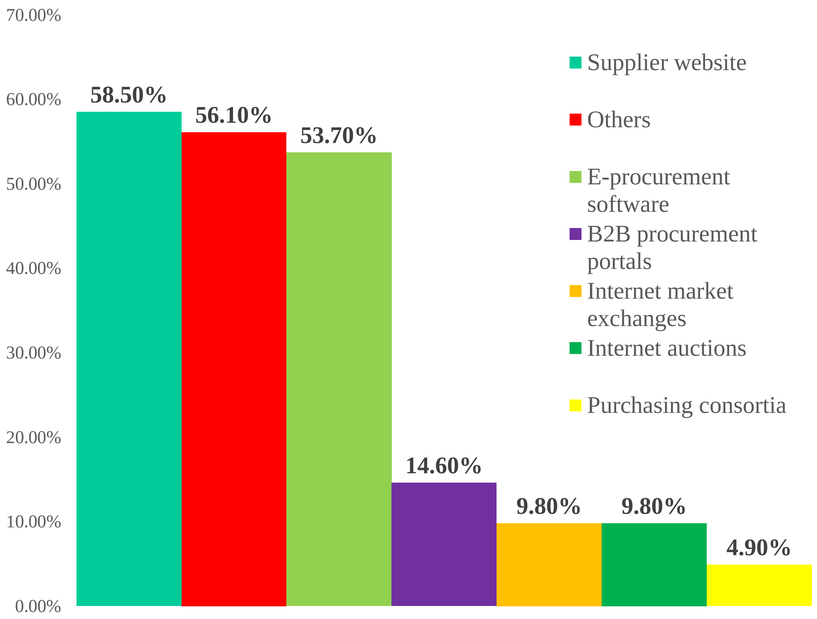


**Figure 4 Types of Technologies Applied by Companies in Procurement**

**Table 1 Activities Involved in Companies' E-Procurement**

| Activities | Extent | Mean ( M) | Standard deviation (SD) | Overall Mean |
|---|---|---|---|---|
| **E-sourcing** | Communicate with supplier electronically (includes e-mail) | 4.27 | 1.025 | **3.56** |
| | Checking price of goods and services electronically | 3.46 | 1.325 | |
| | Search for suppliers of goods and services electronically | 3.41 | 1.264 | |
| | Checking availability of goods and services electronically | 3.41 | 1.264 | |
| | Call for proposal (RFP) from supplier electronically | 3.27 | 1.265 | |
| **E-negotiation** | Negotiate contract (price & volume) with suppliers electronically (includes e-mail) | 3.98 | 1.172 | **3.98** |
| **E-ordering** | Place orders for goods and services online | 3.22 | 1.589 | |
| | Processes payment online | 3.12 | 1.503 | |
| | Generate purchase order online | 3.05 | 1.580 | |
| | Processes supplier invoices online | 2.83 | 1.595 | 2.99 |
| | Purchasing goods and services using e-catalogues | 2.73 | 1.415 | |
| **E-informing** | Order-tracking via online | 2.93 | 1.439 | 2.85 |
| | Tracks supplier performance online | 2.76 | 1.529 | |
| **E-tendering** | Electronic submission of tenders | 2.56 | 1.467 | 2.15 |
| | Advertising tenders online | 2.17 | 1.412 | |
| **E-reverse auctioning** | Purchasing goods and services via e-reverse auctions | 1.73 | 1.104 | 1.73 |

### Challenges of E-Procurement

**Table 2 Challenges faced by Companies in Adopting E-Procurement**

| Issues | Obstacles | Mean | Standard deviation | Overall Mean |
|---|---|---|---|---|
| **People** | E-procurement is not a top initiative or priority for company | 4.10 | 0.735 | **3.65** |
| | Readiness and willingness of supplier to change e-procurement | 4.05 | 0.805 | |
| | Resistance of employees to change | 4.02 | 0.851 | |
| | Lack of trust and reliable with online setting and trading partners | 4.00 | 0.949 | |
| | Lack of technical expertise on e-procurement | 3.37 | 1.113 | |
| | Lack of regular use of e-procurement by employee | 3.27 | 1.073 | |
| | Employee do not have any skills, knowledge or experiences towards e-procurement | 2.76 | 1.157 | |
| **Technological** | System integration issues | 4.22 | 1.013 | 3.61 |
| | Long development time | 4.20 | 0.641 | |
| | Inadequate technological infrastructure and immature of technology to support e-procurement | 4.07 | 0.985 | |
| | Security issues | 4.05 | 0.865 | |
| | Lack of user friendliness and user-acceptance solution | 2.95 | 1.161 | |
| | Lack of clear process and procedures | 2.90 | 1.221 | |
| | Lack of quality of master data and recognized standard | 2.85 | 1.131 | |
| **Financial** | High implementation and development cost | 4.39 | 0.919 | **3.84** |
| | Difficult to justify costs and benefits of e-procurement | 4.12 | 0.842 | |
| | Insufficient financial support | 3.00 | 1.118 | |
| **Governmental** | Lack of government policy and guidelines | 3.20 | 1.123 | 3.20 |

## CONCLUSIONS AND RECOMMENDATION

- ❑ All of the investigated companies have practiced e-procurement. From the results showed, most of them are carried out e-sourcing and e-negotiation activities in procurement process. While the most important challenges for them in adopting e-procurement are financial and people issues.
- ❑ Time constraints, low response rate from respondents and only target on automotive companies
- ❑ Study in case study to the company to have deeper understanding about the system. Conduct a greater scale analysis in other fields or countries to provide some insight into current body of knowledge in e-procurement.
- ❖ Reference: Hashim, N., Said, I., & Idris, N. H. (2013). Exploring e-procurement value for construction companies in Malaysia. *Procedia Technology*, 9, 836-845.