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THE CRITICAL SUCCESS FACTORS THAT INFLUENCE ORGANISATIONS TO ADOPT INTERNET TECHNOLOGY

Lloyed Tam Yew King
Business Advance Technology Centre,
Universiti Teknologi Malaysia, Jalan Semarak
54100, Kuala Lumpur.
e-mail: tyking@pc.jaring.my

ABSTRACT

This paper highlights the salient factors used by IT organisations to adopt Internet technology at different adoption period. Five organisational and two marketplace factors were used in this study. The final analysis confirmed that earlier adopters were influenced more by the five organisational factors: perceived direct benefits, organisational compatibility, trading partner pressure, organisational support, and perceived in-direct benefits. Both early and late adopters were not influenced by the technical complexity construct. Another factor, competitive pressure was not internally consistent.

Keywords: Electronic commerce; Internet technology; World Wide Web

INTRODUCTION

In Malaysia, the Internet is increasingly popular among local and multinational companies as a medium to advertise their business and enhance corporate performance on the electronic superhighway. However, the adoption rate among IT companies is still unsatisfactory, despite the numerous incentives provided by the government (tax exemption, modern infrastructures, globally competitive tariffs, no import duties, supportive cyber-laws, etc.) to hasten its acceptance. It is therefore necessary to identify the adopter characteristics exhibited by organisational and marketplace variables.

Previous studies on the characteristics of organisational technology adoption are often ambiguous or contradictory. This study will attempt to identify the critical success factors (CSFs) used in adopting Internet technology and its effect on early and late adopters.

The Five Categories of Adopters

Past studies indicate that individuals, work groups, departments, even business units have different levels of eagerness concerning any new technology. Therefore, if the information systems (I/S) departments truly want individuals in the organisation to accept a new technology, such as the Internet, they need

to understand their staffs comfort level (McNurlin and Spraque, 1998; Steinfield, Kraut and Plummer, 1996; Kwon and Zmud, 1987; Peter, 1981).

As old technology mature and decline it is essential that new technology be in position for the long-term success of a firm. In Malaysia, the government tried to create favourable prior conditions with its various IT awareness campaigns which it hopes would provide a climate which would encourage firms to become aware of the relevance of IT to their own organisation. However, one cause of resistance to adoption in some industries and markets is the belief that the technology is developing so quickly that it is better to wait until it has stabilised before implementing it. For that reason, more emphasis has to be placed on market segmentation to identify potential early adopters – even though these may not be the largest or most profitable customers.

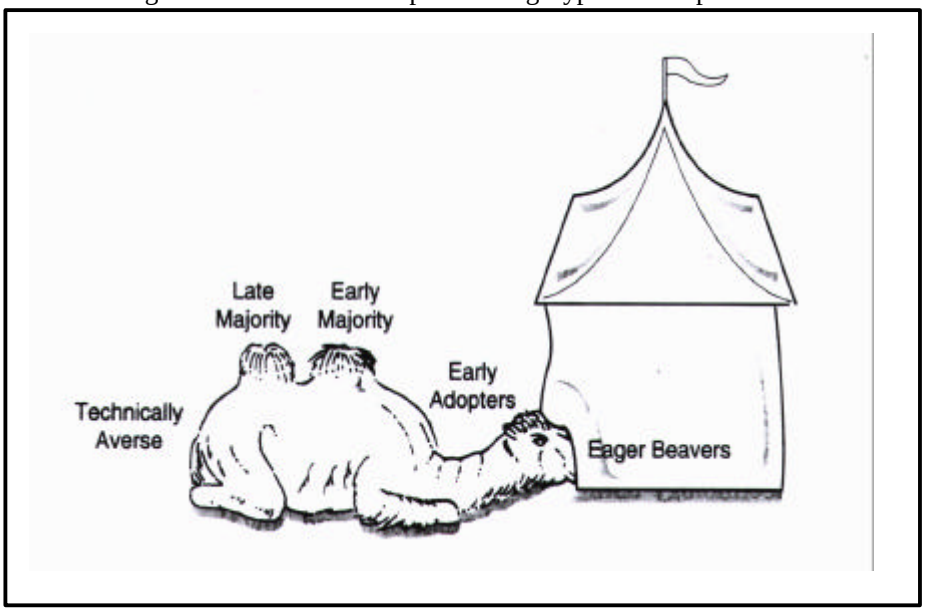
Although I/S innovations are constantly being introduced, not all firms adopt a particular innovation at the same time. Rogers (1983) stated that the adoption of a particular innovation is tied to the innovativeness of the organisation. An organisation's level of innovativeness is the relative earliness or lateness that an organisation adopts a particular innovation in relation to other organisations in the firm's social system. Organisations that choose not to adopt any particular innovations are identified as non-adopters. Because organisations adopt an innovation at different times, it is possible that firms in each category may have different perceptions about the importance of organisational and marketplace factors on the innovations adoption process (Brancheau and Wetherbe, 1996). The concept of innovation and adopter categories are integrated into the analysis of Internet adoption by organisations.

McNurlin and Sprague (1998) proposed that it was possible to classify the Internet adopters into five categories based upon the point in time when an organisation adopts an innovation in comparison to other organisations in their particular social system. These categories are early beavers, early adopters, early majority, late majority, and technically averse. McNurlin and Sprague cited two research firms, the Yankee Group and Find/SVP that distinguish levels of comfort with technology using five clusters. The Yankee Group uses these clusters to describe the 100 million US households and how they view contemporary technology. The households were categorised as follows: ½ million are early beavers constantly sniffing out new technologies, 5 million are early adopters, 30-35 million are early majority, 40-50 million are late majority and 10-15 millions are technically averse.

When graphed on a chart, these clusters look like a two-humped camel. The "Technology Camel" graph (Figure 1) has often been used to explain how businesses adopt Internet technologies. At first, early beavers within the

company try a technology early on, simply because they are interested in revolutionizing some aspect of their business to gain a competitive advantage. Eventually, Internet technology makes it into the mainstream, being accepted as an established part of the high-tech landscape. Early majority want to use technology products to improve their productivity in a non-disruptive fashion, while late majority look to get by within the safest, cheapest technology they can find. Finally, there are the technically averse, who might never adopt Internet technology (McNurlin and Sprague, 1998).

Figure 1: The Camel Hump Indicating Types of Adopters



Eager beavers are mostly large I/S companies that have an advanced technology group charged with tracking new technologies and determining when and how to begin testing and implementation. This group is ecstatic about the Internet and everything about it. The recommended I/S approach to the eager beavers is to support them with some funding and to learn from them. Perhaps 1 to 3 percent of the I/S budget is enough for R&D, provided there are some business objectives being supported that is, being at the leading edge of technology is the company's business. **Early adopters** are the disciple's apostles, not too far behind the innovators. They need I/S's help and encouragement, but they should not be allowed to overwhelm their department or the company. **Early majority** want to be informed. They want to understand, not just swallow the hype of the innovators and early adopters. Hence, I/S management must become adept at creating options that can be

tested for acceptance or rejected if they do not match needs. They would also be involved in providing training and briefing. **Late majority** people, departments, and companies are not afraid of a technology, but they do have serious concerns about risks and costs. On the Internet scene, late majority folks are waiting for some of the key issues to be resolved, such as security, compatibility, standards, bandwidth, and simplicity. For the late majority, I/S management needs to be as prepared to address risks and costs as they are to address technology opportunities. **Technically averse** are people, departments, and companies who resist technology and are not currently considering doing anything on the Internet. In many cases, their concerns about loss of privacy, security, control, and possible exposure to competition override any perceive benefits. The challenge here is education, not applications. These people need the greatest amount of time to assimilate all the change taking place in their lives.

OBJECTIVE OF STUDY

One of the most difficult challenges facing senior information systems (I/S) managers is establishing a flexible I/S infrastructure that will allow their organisations to successfully compete (Brancheau and Wetherbe, 1996; Neiderman, Brancheau and Wetherbe, 1991). Senior I/S managers must work closely with functional business managers to establish an I/S infrastructure that effectively supports existing systems, while remaining responsive to the constantly changing I/S needs of the organisation (Stephens, 1992). Establishing a stable I/S infrastructure is not an easy task as numerous factors, both internal and external to the firm, influence their decisions.

In recent years, a rapidly changing technical environment affects the problem of establishing a stable I/S environment. The I/S manager must decide whether to adopt emerging technologies based on both internal and external factor and on the firm's business objectives. Internal factors include top management support (Gordon and Gordon, 1992), perceived benefits (Banerjee and Golhar, 1994), technical compatibility (Iacovou, Benbasat and Dexter, 1995), complexity (Rogers, 1983), and organisational readiness (Grover and Teng, 1992). These impact both the type of technology adopted and the diffusion of the technology throughout the organisation. As firms attempt to leverage investment in IT, the I/S manager must determine whether emerging technologies support the firm's business plans and are compatible with the existing infrastructure. Several factors that are external to the organisation also impact the adoption decision. These include market competitiveness (Kunnathur, Ahmed and Charles, 1996) and pressure from other trading partners (Grover and Teng, 1992). Following these issues, the present study aims to find answers to the following questions.

Would early adopters who:

1 perceived greater benefits from adopting Internet technology;
2 perceived that Internet technology is compatible with their existing beliefs and work practices;
3 perceived that Internet technology is compatible with their existing information systems environment;
4 perceived the adoption of Internet technology as a less complex process;
5 receive pressure from their key trading partners to adopt Internet technology;
6 receive top management support for the adoption of Internet technology;
7 are in a highly competitive environment;

more likely to adopt Internet technology than later adopters?

Hypotheses

This study aims to test the following hypotheses:

(1) The means for *perceived benefits* are greater for earlier adopters than later adopters.

An organisation will only choose to adopt an innovation if it perceives that doing so will provide significantly greater benefits than existing technologies and processes (Rogers, 1983). The organisation must perceive that the adoption of the innovation will either resolve existing operational problems or provide the firm with new business opportunities.

(2) The means for *organisational compatibility* are greater for earlier adopters than later adopters.

Organisational compatibility is the extent to which a technology is consistent with the values, needs or experiences of the organisation (Rogers, 1983). Process oriented compatibility is the extent to which an innovation is congruent with the exiting practices and processes of the firm (Tornatsky and Klein, 1982).

(3) The means for *technical compatibility* are less for earlier adopters than later adopters.

If a new technology is incompatible with the firm's existing values, preferred work practices, or existing I/S infrastructure, it is less likely to be adopted (Kwon and Zmud, 1987). This is crucial point, because the adoption of Internet technologies often requires firms to modify existing business practices to realise benefits (Jarvenpaa and Ives, 1996). There is generally a positive relationship between compatibility and adoption behaviours (Ettlie, Bridges and O'Okeefe, 1979; Ettlie and Vallenga, 1979).

(4) The means for *complexity* are less for earlier adopters than later adopters.

Complexity is the degree of difficulty that users will experience when trying to understand or use an innovation or technology in the workplace (Kwon and Zmud,, 1987; Rogers, 1983). The introduction of a new technology can be a complex and an intimidating process for firm employees, particularly if the technology requires the organisation to change their existing business practices or acquire new technical skills.

(5) The means for *trading partner pressure* are greater for earlier adopters than later adopters.

In order for an organisation to fully realise the benefits associated with the adoption of the Internet technologies, it is essential that a significant number of other firms with which it shares information (trading partners) also adopt the technology (Swatman and Swatman, 1992). Firms that have fully adopted Internet technology will exert pressure on other trading partners to adopt (Davis, 1995). The pressure to adopt dependd on the firm's power over its trading partners and the extent of vertical dependence between firms in the value chain organisations (Provan, 1980).

(6) The means for *top management support* for the adoption of Internet technology are greater for earlier adopters than later adopters.

Strong support of the top managers is vital to innovation adoption (Ettlie, Bridges and O'Okeefe, 1984; Lederer and Mendelow, 1988; Zmud, 1984). Top management support goes beyond general approval for technology acquisition and includes a strong commitment to support the technology at all levels of the organisation (Lederer and Mendelow, 1988). Research indicates that securing top management support is a good predictor of the level of success of a new information technology (Ives and Olson, 1984).

(7) The means for *competitive pressure* are greater for earlier adopters than later adopters

Today's market place is increasingly competitive for many industries and firms are willing to explore the adoption of innovations in an attempt to gain a competitive advantage (Porter, 1990). The firm that perceives a high level of competitive intensity and rivalry, is more likely to allocate funds for the adoption of innovations; resulting in a greater level of overall innovation within the firm (Kimberley and Evanisko, 1981; Reich and Benbasat, 1990).

METHODOLOGY

This study is exploratory in nature and is designed to provide a summary of some aspects of the environment when the hypotheses were tentative and speculative in nature (Aaker and Day, 1990).

The data was secured by means of questionnaires, distributed to earlier adopters that were planning to adopt, currently adopting and those that had already adopted Internet technology. The respondents comprise top IT executives who are responsible for managing the assessment and adoption of innovative information systems technologies from IT organisations in Selangor and Kuala Lumpur. The final sample size consisted of 306 respondents randomly selected. A set of self-administered questionnaire was handed to each respondent and individually collected by the researcher. A total of 250 usable questionnaires were obtained for analysis. The remaining number was deleted because of incomplete data (6), non-respondents (25), and those whose organisation did not adopt the technology (25). Non-response bias between respondents and non-respondents was also tested using chi-square test and the result show there were no significant difference at á = 0.05 significance level for any of the respondent's demographic variables.

Roger's (1983) qualitative work on the adoption of innovations proposed that organisations could be classified into specific categories based upon the period of time it takes an organisation to adopt an innovation. In this study, respondents were placed into the five adoption categories based upon the number of years and months that their organisation had used Internet technology. The time frame for each of the adoption categories was determined by analysing the frequency of responses for a given year.

The commercial use of the Internet and the World Wide Web subset is estimated to have started around 1993 (Zwass, 1996), and as such, organisations that have been using Internet technology for five years or longer were placed in the eager beaver category. Based upon the clustering of responses on a given year and the position of natural breaks in the adoption time frame, respondents were placed into the remaining four adoption categories (Table 1). Although the percentages for the adoption categories do not precisely mimic the percentages recommended by Rogers in his adoption analysis, the use of years as basis for establishing the adoption categories provided a logical structure for assessing Internet adoption. This classification scheme was used throughout the remainder of the study to differentiate between the various types of technology adopters within business.

Table 1: Classification Scheme Used for Internet Technology Adoption

Category	Timeframe	Frequency	Percent
Eager Beavers	5 Years or Greater	36	14.4
Early Adopters	3 Years Up to less than 5 Years	55	22.0
Early Majority	1 Years Up to less than 3 Years	70	28.0
Late Majority	Less Than 1 Year	39	15.6
Technically Averse	Currently Developing	50	20.0
Total		250	100.0

Respondent Profile

The eight questions used to obtain demographics information on both the respondent and the respondent's organisation is shown in Table 2.

Table 2: Respondent and Organisational Profile

Category	Frequency (N)	Valid Percentage (%)
Job title		
IT managers	51	20.4
Chief Information Officers	47	18.8
Vice-Presidents	29	11.6
Director of IS	22	8.8
Others	101	40.4
Internet technology experience level		
Very experience	47	18.8
Somewhat experience	72	28.8
Experience	63	25.2
Limited experience	58	23.2
Not experience	10	4.0
MSC status		
Non-MSC companies	126	50.4
MSC companies	124	49.6
Total employees		
Less Than 10 (Micro)	68	27.2
More Than 10 Up To 100 (Small)	97	38.8
More Than 100 Up To 500 (Medium)	46	18.4
More Than 500 (Large)	39	15.6
Total IS employees		
Less than 3	73	29.4
More than 3 up to 10	91	36.7
More than 10 up to 50	29	11.7
More than 50	55	22.2
Missing	2	
Annual IS budget		
Less than 1%	82	36.4
More than 1 % up to 5%	113	50.2
More than 5% up to 10%	20	9.0
More than 10%	10	4.4
Missing	25	
Internet technologies		
Electronic Mail (E-mail)	241	91.6
Web-site	200	80.0
Intranet	199	79.6
Extranet	168	67.2
Electronic Data Interchange (EDI)	57	22.8
Electronic Commerce (E-commerce)	56	22.4
Electronic Fund Transfer (EFT)	27	10.8
Years company in operation		
Less than 1	38	15.2
1 to less than 5	136	54.4
5 to less than 10	55	22.0
10 years to less than 20	17	6.8
More than 20	4	1.6

Data Analysis Techniques

Data were analysed using descriptive statistics, factor analysis, Cronbach' coefficient alpha, and MANOVA. To analyse the respondent's background, descriptive analysis and common measures such as total, mean, frequencies and percentage were utilised. The demographic information included: a) job title, b) the respondent's level of experience, c) MSC status, d) total number of employees, e) total number of I/S employees, f) percent of firm's budget dedicated to I/S, g) use of other Internet technologies, and h) organisation's age. Factor analysis was subsequently used to assess unidimensionality and Cronbach's coefficient alpha was used to assess internal consistency. The output was then interpreted and related to the findings from hypotheses testing. The seven hypotheses were tested using MANOVA technique to determine they supported the data collected.

FINDINGS

Reliability of the Identified Constructs

An exploratory factor analysis was used to help assess the unidimensionality of the multi-item scales. The unidimensionality of a set of items used to measure a given construct is necessary, but is not a sufficient condition for construct validity. Construct validity was therefore assessed by examining the internal consistency, convergent and discriminant validity of each construct.

A principle components factor analysis using a Varimax rotation was performed using the twenty-nine items proposed to measure the following seven constructs: top management support, organisational compatibility, technical compatibility, complexity, competitive pressure, trading partner pressure, and perceived benefits. The criteria used to determine the number of factors to extract was an eigenvalue that was greater than equal to one (Zeller and Carmines, 1980). Table 3 indicated the seven factors with eigenvalues exceeding 1.00, which was extracted during this analysis.

The dimensionality of each factors was assessed by examining the factor loadings. Items with factor loadings of greater that 0.5 on the factor with which they are hypothesized to load were considered adequate indicators of that factor (Hair, et al., 1995). However, items with factor loadings of at least 0.3 on other factors were examined to see it they measured an additional factor.

Based on the rotated results, a new construct called "organizational support" was developed, which encompassed both the 3 items in the hypothesized construct *top management support* and 2 items from *organisational compatibility*. Another new construct called "technical complexity" was developed, which encompassed both the items in the hypothesized construct

technical compatibility and *complexity*. The 8 items hypothesized to measure the construct *perceived benefits* were loaded on 2 factors "perceived direct benefits" and "perceived in-direct benefits".

Table 3: Confirmation of the Seven Factors

Measurement Variable and Dimension	Factor Loading
Factor 1: Organisational Support (Reliability á = 0.8900)	
Organisation Values and Beliefs	0.838
Top Management Communicate	0.799
Top Management Interest	0.797
Favourable Attitude	0.797
Top Management Importance	0.788
Factor 2: Trading Partner Pressure (Reliability á = 0.9123)	
Trading Partner Business Needs	0.890
Adversely Impart Trading Partner Relations	0.849
Trading Partner Strategies	0.826
Trading Partner Recommendation	0.815
Factor 3: Perceived Direct Benefits (Reliability á = 0.8877)	
Reduce Transaction Costs	0.899
Improve Overall Productivity	0.865
Improve Cash Flow	0.822
Improve Operational Efficiency	0.759
Factor 4: Technical Complexity (Reliability á = 0.7953)	
Decrease Productivity-Time To Learn	0.818
Complex To Use	0.805
Disrupt Work Environment	0.783
Complex To Develop	0.680
Factor 5: Perceived In-Direct Benefits (Reliability á = 0.9173)	
Improve Existing Customer Relations	0.865
Reach New Customers	0.858
Increase Ability To Compete	0.837
Factor 6: Organisational Compatibility (Reliability á = 0.8444)	
Computerised Data Resources	0.856
Organisational Experience	0.820
Communications Infrastructure	0.772
Factor 7: Competitive Pressure (Reliability á = 0.5438)	
Customers Can Switch Easily	0.751
Intense Competitive Rivalry	0.726
Monitor Competitors Action	0.636

Reliability has been defined as the "degree to which measures are free from error and therefore yield consistent results" (Peter, 1981). One aspect of

reliability is internal consistency, which is an indicator of the level of homogeneity of a measuring scale (Cronbach, 1951). One criterion that has been widely used to assess the reliability of a multi-item measurement scale is Cronbach's coefficient alpha. Based on the reliability analysis, six of the seven constructs had coefficient alpha values exceeding 0.7 (Table 3). Only the construct *competitive pressure* had coefficient alpha of 0.54. Nunnally (1978) suggested that a set of items with a coefficient alpha greater than 0.7 is considered internally consistent. As this construct had a coefficient alpha less then the recommended level of 0.7, its internal consistency was considered weak and was not used in subsequent analysis.

Relationship Between Adopter Types and Identified Constructs

MANOVA was used to examine the relationship between five categories of adopters and the final six constructs hypothesized to impact Internet technology within organisations. The findings indicate that there is significant relationship between the adoption categories and factors for adopting Internet technology. The Wilks Criterion for the test of overall effect has an F-value equal to 3.05 (p-value = 0.0001), indicating that the means for the five adopter categories contained significant differences at the $\alpha = 0.05$ level (Table 4).

Table 4: MANOVA Statistic Results

Statistics	**F-value**	**D.F.**	**p-value**
Wilks' Lambda	3.046	28	0.0001
Pillai's Trace	2.752	28	0.0001
Hotelling's Trace	3.350	28	0.0001
Roy's Largest Root	12.755	7	0.0001

Tukey's Studentised Range (HSD) Test shows significant differences between the means of five of the seven proposed Internet technology adoption constructs and the five adoption stages as shown (Table 5).

Table 5: Summary of Mean Values by Construct for Different Adoption Stages

Constructs	**Eager beavers** = >5 Yrs	**Early Adopters** 3 - <5 Yrs	**Early Majority** 1 – <3 yrs	**Late Majority** <1 Yr	**Technically Averse** Currently Implementing
Perceived direct benefits	3.49	3.25	3.15	3.06	2.95
Organisational compatibility	3.73	3.60	3.40	3.25	3.15
Technical complexity	2.13	2.17	2.35	2.44	2.47
Trading partner's pressure	3.52	3.16	2.95	2.86	2.75
Organisational support	4.38	4.20	3.80	3.62	3.35
Perceived in-direct benefits	4.08	3.61	3.40	3.27	3.17

NOTE: The scale used for all constructs ranged from 1 (strongly disagree) to 5 (strongly agree)

Table 6 shows a comparison of adoption factors between early adopters and late adopters by using their respective mean values. Although there are some differences in the ranking, the overall adoption factors are similar, particularly the top three factors, organisational support, perceived in-direct benefits, and organisational compatibility and technical complexity. The differences were as follows. Trading partner pressure was fourth in importance for early adopters but fifth for late adopters. The perceived direct benefits construct was fourth in importance for late adopters and was fifth for early adopters.

Table 6: Comparison Between Early and Late Adopter

	Early Adopter		**Late Adopter**
1.	Organisational Support	1.	Organisational Support
2.	Perceived In-Direct Benefits	2.	Perceived In-Direct Benefits
3.	Organisational Compatibility	3.	Organisational Compatibility
4.	Trading Partners Pressure	4.	Perceived Direct Benefits
5.	Perceived Direct Benefits	5.	Trading Partners Pressure
6.	Technical Complexity	6.	Technical Complexity

Table 7 indicates that the F-values obtained from the univariate analysis of variance for each construct were significant for hypotheses (1) *perceived direct benefits*, (2) *organisational compatibility*, (4) *trading partner pressure*, (5) *organisational support*, and (6) *perceived in-direct benefits*. Since their level of significance, p, is lower than 0.05, which means that the value of p rejects the null hypothesis (H_0) and supports the alternative hypothesis (H_1). On the other hand, the univariate F-values for hypothesis (7) *technical complexity* was not significantly different among adopter categories (p-value = > 0.05) and therefore supports the null hypothesis (H_0) and rejects the alternative hypothesis (H_1).

Table 7: Summary of Research Findings by Adoption Stages

Constructs	**F-value**	**p-value**	**Expected Results**	**Actual Results**
Perceived Direct Benefits	3.047	0.0180	Greater Means for Earlier Adopters than Later Adopters	Supported
Organisational Compatibility	3.933	0.0040	Greater Means for Earlier Adopters than Later Adopters	Supported
Technical Complexity	2.084	0.0830	Lower Means for Earlier Adopters than Later Adopters	Not Supported
Trading Partner Pressure	5.648	0.0001	Greater Means for Earlier Adopters than Later Adopters	Supported
Organisational Support	17.993	0.0001	Greater Means for Earlier Adopters than Later Adopters	Supported
Perceived In-Direct Benefits	7.606	0.0001	Greater Means for Earlier Adopters than Later Adopters	Supported
Competitive Pressure (*)			Greater Means for Earlier Adopters than Later Adopters	Not Supported

NOTE: * not included in MANOVA because the factor was not internally consistent

CONCLUSION

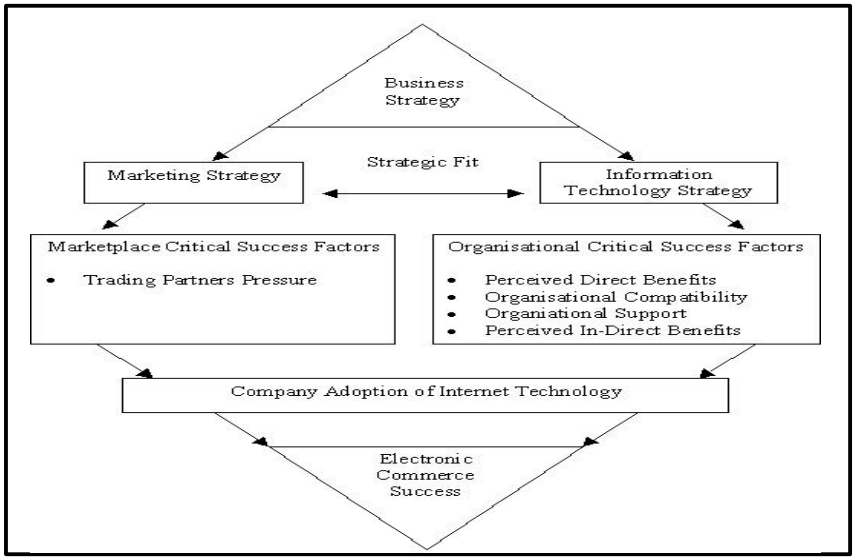
The main objective of this study was to determine the CSFs that influence early and late adopters of Internet technology. The overall result shows that there was significant difference between the adoption categories and five of the seven constructs (*organisational compatibility, trading partner pressure, organisational support, perceived direct benefits, perceived in-direct benefits*). In short, earlier adopters decision to accept Internet technology were greatly influenced by these factors than later adopters. The results also show that there is no significant differences between the adoption categories and *technical complexity* construct, which means both earlier adopters and later adopters were not concerned about technical issues before making a decision to adopt Internet technology.

Previous study indicates that earlier adopters are more likely to adopt Internet technology if it is *compatible with their existing beliefs and work cultures* than later adopters. Most of the later adopters are small and fairly new, thus, should face lesser problems to incorporate new technologies into their corporate cultures. As for the *technical complexity* issue, earlier adopters were less concerned about it than later adopters as they have more financial resources to spend on hi-tech equipments or/and hire external consultants to solve any problems they might face. In addition, earlier adopters have more I/S staffs per total company employees than later adopters. Earlier adopters also have to communicate their intention to more internal and external parties (employees, trading partners, and customers) to gain their support and adoption. Since earlier adopters have to deal with more trading partners, they tend to receive more pressure from them than later adopters. Finally, Earlier adopters are more particular about the direct and indirect benefits from adopting Internet technology because any decision they make will among others, affect their operations, productivity, competitiveness, customer relations, and cash flow. The final resulting research model showing the relationship and path analyses demonstrating the results on the hypotheses testing is shown in Figure 2.

Figure 2 illustrates the Internet technology adoption model. The process starts with the presence of a solid business strategy that aligns with the firm's marketing and information technology strategy. Strategic fit is the intersection of these three constructs. Next, organisational and marketplace critical success factors are the conditions that have to exist or be done correctly before an organisation adopt Internet technology. Organisational factors include perceived direct benefits, organisational compatibility, organisational support, and perceived in-direct benefits. The sole marketplace factor is trading partner pressure. Company's adoption of Internet technology represents a bar that most firms must still scale, but once accomplished, the Internet can be a productive

and viable medium for an extension of traditional business boundaries towards electronic commerce success.

Figure 2: Internet Technology Adoption Model



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