



**UNIVERSITI PUTRA MALAYSIA**

**PROSPECT OF E-COMMERCE FOR CUT FLOWERS IN MALAYSIA:  
CONSUMERS' PERSPECTIVES.**

**EBTESAM ABD ELKARIM SALMAN ABOU AZRA**

**FP 2003 18**

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**MASTER OF SCIENCE  
UNIVERSITI PUTRA MALAYSIA**

**2003**



**PROSPECT OF E-COMMERCE FOR CUT FLOWERS IN MALAYSIA:  
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**By**

**EBTESAM ABD ELKARIM SALMAN ABOUAZRA**

**Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in  
Fulfilment of the Requirements for the Degree of Master of Science**

**August 2003**



**This thesis is dedicated to my beloved country Palestine.**



Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfilment of the requirements for the degree of Master of Science

**PROSPECT OF E-COMMERCE FOR CUT FLOWERS IN MALAYSIA:  
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**August 2003**

**Chairman: Associate Professor Zainal Abidin Mohamed, Ph.D.**

**Faculty: Agriculture**

E-commerce is not well established in Malaysia despite its overwhelming invasion in the marketing of products and services worldwide and the potential benefits it offers. The study examines the prospect of Internet marketing of flowers in Malaysia from the consumers' perspectives. The research objectives are: to determine the pattern of flowers consumption and marketing; to assess the socio-economic profile of the flower's consumer in Malaysia; to assess Malaysian consumers' perception and attitude towards e-commerce; and to identify the factors that determine the adoption of electronic market for flowers. An online survey was conducted through [www.bluehyppo.com](http://www.bluehyppo.com) and [www.jaring.my](http://www.jaring.my) to solicit consumer profile as well as their behavioral dimensions with regards to flower consumption and marketing behavior. A total of 357 respondents participated in the survey. The findings show that currently, the usage of Internet as a medium of transaction is still minimal. Generally, Malaysian consumers exhibit positive



perception toward e- marketing for flowers. The pertinent factors underlying the consumers' decision framework are: delivery quality, speed of information; secure payment, sensory perception, quality of access and privacy. However, the study indicates that the relationship between the decisions to adopt e-commerce is positively related to delivery quality and payment security, whereas the relationship is negative with regards to privacy.

Moreover, the study also found that socio–economics factors such as gender, marital status and monthly income are significantly related to e-commerce adoption decision. On the basis of these findings, an integrated approach to research in Internet shopping is highly recommended.



Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Master Sains

**PROSPEK E-DAGANG UNTUK BUNGA POTONGAN DI MALAYSIA:  
PERSPEKTIF PENGGUNA**

**Oleh**

**EBTESAM ABD ELKARIM SALMAN ABOUAZRA**

**Ogos 2003**

**Pengerusi: Profesor Madya Zainal Abidin Mohamed, Ph.D.**

**Fakulti: Pertanian**

Perdagangan elektronik atau e-commerce masih belum membangun di Malaysia walaupun ia telah berkembang luas dalam pemasaran barangan dan perkhidmatan di dunia dan berpotensi memberi beberapa kebaikan.

Kajian ini meneliti propek pemasaran bunga di Malaysia melalui Internet dari perspektif pengguna. Objektif kajian adalah: untuk menentukan pola penggunaan dan pemasaran bunga, untuk menilai profil sosio-ekonomi pengguna bunga di Malaysia; untuk menilai sikap dan persepsi pengguna di Malaysia terhadap perdagangan elektronik; dan untuk mengenalpasti faktor yang menentukan penerimaan pemasaran bunga melalui Internet.

Suatu kaji selidik online telah dijalankan melalui [www.bluehyppo.com](http://www.bluehyppo.com) dan [www.jaring.my](http://www.jaring.my) untuk memperolehi profil pengguna serta dimensi gelagat pemasaran dan penggunaan bunga. Sejumlah 357 responden telah mengambil bahagian dalam kaji selidik ini. Keputusan kaji selidik menunjukkan bahawa penggunaan Internet sebagai medium transaksi masih lagi di tahap yang minimum.

Secara keseluruhan, pengguna di Malaysia menampilkan persepsi yang positif terhadap pemasaran elektronik untuk bunga. Faktor-faktor yang mempengaruhi keputusan pengguna adalah: kualiti penghantaran, kelajuan dan kesahihan maklumat yang diterima, cara pembayaran yang selamat dan terjamin, serta kesulitan transaksi. Walau bagaimanapun, kaji selidik ini menunjukkan bahawa hubungan yang positif wujud diantara keputusan untuk menggunakan perdagangan elektronik dengan kualiti penghantaran dan cara pembayaran yang selamat, manakala hubungan yang negatif wujud di antara keputusan penggunaan dengan kesulitan transaksi.

Selain itu, kaji selidik ini juga telah mendapati bahawa faktor-faktor sosio-ekonomi seperti jantina, status perkahwinan dan pendapatan berkait rapat dengan keputusan penerimaan perdagangan elektronik.

Berdasarkan penemuan ini, suatu pendekatan yang berintegrasi perlu digunakan untuk menjalankan penyelidikan mengenai pemasaran melalui Internet.



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support, this thesis would not have been written and my thoughts would have never found a way to progress beyond inception.

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I certify that an Examination Committee met on 20<sup>th</sup> August 2003 to conduct the final examination of Ebtessam Abd Elkarim Salman Abouazra on her Master of Science thesis entitled “Prospect of E-Commerce for Cut Flowers in Malaysia: Consumers’ Perspectives” in accordance with Universiti Pertanian Malaysia (Higher Degree) Act 1980 and Universiti Pertanian Malaysia (Higher Degree) Regulations 1981. The Committee recommends that the candidate be awarded the relevant degree. Members of the Examination Committee are as follows:

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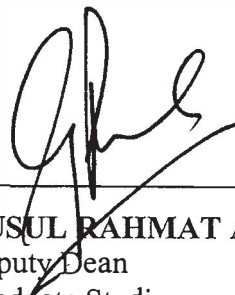
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## DECLARATION

I hereby declare that the thesis is based on my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any other degree at UPM or other institutions.

  
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EBTESAM ABD ELKARIM SALMAN

Date: 25 / 9 / 2003

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## LIST OF ABBREVIATIONS

ATIP	Asian Technology Information Program
B2B	Business to Business
B2C	Business to Customer
B2G	Business to Government
C2C	Customer to Customer
CAGR	Compound Annual Growth Rate
CIS	Customs Information Systems
E-agribusiness	Electronic Agribusiness
E-business	Electronic Business
EC	Electronic Commerce or E-commerce
E-market	Electronic Market
EPU	Economic Planning Unit
E-shopping	Electronic Shopping
FA	Factor Analysis
G2B	Government to Business
G2C	Government to Customer
GDP	Gross Domestic Product
IATFEC	Inter-Agency Task Force on Electronic Commerce
ICT	Information and Communication Technology
IDC	International Data Corporation
ISP	Internet Service Provider
IT	Information Technology



ITU	International Telecommunication Union
JARING	Joint Advanced Integrated Networking
MARDI	Malaysian Agriculture Research and Development Institute
MATRADE	Malaysian External Trade Development Corporation
MDC	Multimedia Development Corporation
MIMOS	Malaysia Institute of Microelectronic Systems
MYNIC	Malaysian Network Information Center
OECD	Organization for Economic Co-operation and Development
SEA	South East Asia
SMES	Small and Medium Enterprises



## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 General Overview of the Internet and E-commerce**

##### **1.1.1 Internet Usage**

The Internet has become a widespread information infrastructure in the 21st century. It has a world-wide broadcasting capability. The Internet was developed around 1965 to link selected universities with US military research laboratories. Although the World Wide Web was established in 1989, most people commonly date the origin of the Internet as 1993 when new technologies made it much more accessible. Individuals worldwide are able to communicate instantly transcending borders and have access to encyclopedia, newspapers, bulletin boards, video arcades, hyper malls, broadcast station, movies, grapevine, travel agencies, mail order and almost anything of interest to them.

One of the major effects of the Internet is in unifying many countries' markets. It has become just as easy to sell across the world, as it is to sell across the street. Today the use of the Internet is expanding at a rapid pace worldwide. More and more people and businesses throughout the world accept the Internet environment and the changes it brings as a vital part of their lives and the success of their businesses.



The statistics show that, no other medium has a global impact as widespread as the Internet. e-TForecasts in its 2002 report, projected that the number of worldwide Internet users would surpass 665 million by the end of 2002, the growth of Internet users would continue in developing countries for another decade and the worldwide number of Internet users would reach one billion in 2005. eTForecasts estimates that 111 million new Internet users have come online since the end of 2001. Table 1.1 provides a geographical distribution of Internet users between 2000 to 2004. According to emarketer forecasts (2002), the number of Internet users worldwide stood at 498.7 million people at the end of 2001. This represents an increase of 115 million since the end of 2000 (or approximately 30 per cent increase). In the year 2004, the global number of Internet users is expected to increase to 724.9 million, indicating a yearly rate of growth of 17.2 per cent. The growth rate of Internet users of Asian countries, which is the main focus of this study, is (19.4 %). This growth rate is very close to that of European countries (19.5 %).

Table 1.1: eMarketer Forecast of Internet Users Worldwide by Region 2000-2004 (mn)

Region	2000	2001	2002	2003	2004	CAGR (%) 2000-2004
North America	136.7	156.3	167.7	179.8	196.3	9.5
Europe	108.3	144.4	175.7	196.2	221.1	19.5
Asia-Pacific	115.9	165.0	181.5	205.0	235.8	19.4
Latin America	19.3	26.2	33.1	43.4	60.6	33.1
Africa	4.6	6.7	7.7	9.2	11.1	24.6
Total Worldwide	384.8	498.7	565.7	633.6	724.9	17.2

Source: [www.eMarketer.com](http://www.eMarketer.com)





Table 1.2 shows the distribution of Internet adoption by countries in 2002. The Table suggests that the adoptions of Internet in the Scandinavian are widespread. For example, Denmark is leading the world Internet consumer with 63% it's of total adult population connected online; it remains ahead of the USA (62%). The general country average Internet penetration has increased from 3% to 34% since 2001. The countries with lower Internet users are Indonesia and Ukraine with 6% and 4% respectively. This report also indicates that 21 per cent of the Malaysian population was online in 2002, which means that there were 4.83 million Internet users in this country at the end of 2002. Although this number is lower than the last official statistical figures released by Malaysian Multimedia and Communication Commission (MMCC), it shows the extent of Internet penetration in Malaysia.

Table 1.2: Internet users across the world at the end of 2002

Country	% use population on-line	Country	% use population on-line
Ukraine	4	England	38
Indonesia	6	Italy	38
Bulgaria	9	Estonia	39
Hungary	10	Germany	41
Romania	12	Israel	42
Argentina	15	Belgium	44
India	16	Ireland	46
Serbia	16	Taiwan	46
Latvia	17	Hong Kong	50
Lithuania	18	Korea	52
Mexico	18	Singapore	52
Poland	18	Australia	53
Thailand	18	Norway	58
Turkey	20	Finland	59
Malaysia	21	Canada	60
Slovak republic	24	Netherlands	61
Czech republic	28	USA	62
Spain	29	Denmark	63
France	37		

Source: Taylor Nelson Sofres– Global E- commerce Report, 2002