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### **E-Business from Islamic Perspectives: Prospects and Challenges**

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#### **Abstract**

This paper aims to examine e-business from Islamic perspectives. Among topics to be addressed in this paper, are e-business concepts, the legality of e-business from an Islamic point of view, prospects and challenges of Islamic e-business in a Malaysia context. This study introduces an Islamic e-business concept in addition to some interesting issues that can be found in this paper. In Islam, e-business is a permissible means of doing business provided it is performed in the boundary of Shariah Islamiyyah. More importantly, Islamic e-business provides services as permitted in the religion of Islam, in which they are deceit-free transactions and also free from gharar in a business transaction. All in all, this study provides fresh results of Islamic e-business, its prospects and challenges.

**Keywords: Islamic e-business; e-commerce; technology communications; Islamic banking institutions; Islam.**

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## INTRODUCTION

The need for e-business study from Islamic perspectives has been disregarded by previous studies. In view of the studies, most of the studies interested to investigate e-banking acceptances, however the study of Islamic e-business is still limited (Polatoglu & Ekin, 2001; Al-Ashban & Burney, 2001; Howcroft et al., 2002; Sureshchandar et al., 2003). In Malaysia, the study of Islamic e-business is also scarce. Say for instance Guriting and Ndubisi (2006), Sulaiman et al. (2005), Ramayah et al. (2003) and Guru et al. (2000) have investigated e-business from banking point of view. Still, none of these studies tried to study Islamic e-business specifically. By itself, the study of Islamic e-business is remained inconclusive and provides motivation for the current study to provide a greater picture of Islamic e-business by conducting a research. E-business is a growing application that needs to be given a proper attention by *Muslim* businesses.

In this study, Islamic e-business is introduced. E-business is defined as the practice of performing and coordinating critical business processes through the extensive use of computer and communication technologies and computerized data (Alter, 2002). As such, ***Islamic e-business is the practice of performing and coordinating critical business processes through the use of computer and other technologies that to better reflect the Islamic point of view.*** Indeed, Islamic e-business can also be defined as using electronic facilities in order to conduct business transactions electronically.

In view of the definitions as above, Islamic e-business provides a number of benefits to those who are using it. First, it offers convenience of doing business transactions since it has 24 hours operation. Second it offers quicker ways of doing business transactions as it also complements the traditional way of doing business transactions. Third, Islamic e-business is also important as it promotes economies of scale among businessmen. Indeed, a transaction per se, will consider expensive, but however the introduction of Islamic e-business (*as similar to that of e-business counterpart*), will enable to benefits of those businessmen. Islamic e-business, thus, is able to reduce a transaction cost, as the size for the transaction is elevated.

In this study, the term *homolIslamicus* and *homoeconomicus* are also introduced. *HomeIslamicus* refers to "Islamic man" and *homoeconomicus* refers to "economy man". As far as *homolIslamicus* is concerned, e-business provides a means to sell products and services electronically to an end customer. In this study, the characteristics of Islamic e-business are introduced, among others, are as follows:

1. Universal business→Islamic e-business provides a better look of e-business from Islamic viewpoint. It covers all layers of aspects in business that permissible in Islam;
2. Free-*gharar*→The term *gharar* refers as uncertainty. Islamic e-business ensures business transactions that are clean and free from ambiguity in which they are prohibited in the religion of Islam;
3. *Shariah* compliant transactions→Islamic e-business allows the transactions for any types of businesses that consistent with the law of Islam, namely *Shariah*; and

4. Interest-free transaction→Islamic e-business offers interest-free business transaction. Indeed, mark up is allowed if payment is deferred (Maali et al., 2006).

On the basis of the above argument, this paper aims to examine the e-business from Islamic perspectives where at the same time the term Islamic e-business introduced as noted earlier. Explained in more detail, this paper will examine the Islamic e-business, prospects of Islamic e-business and challenges of Islamic e-business in a Malaysia context. This study is using qualitative approach in order to analyze the mentioned topics. All in all, the data employed in this study, will not be of survey based, but it is of thinking from the author in exploring the objectives, through an analytical approach.

The rest of the paper is structured as follows: Section 2 attempts to present an overview of the Islamic e-business. Section 3 is constructed in order to discuss the prospects of Islamic e-business that emerge over time. Section 4 attempts to present the challenges of the Islamic e-business implementation in Malaysia. The last part considers conclusions and research implications.

## AN OVERVIEW OF ISLAMIC E-BUSINESS

By definition, business is defined as an organization that provides goods or services in order to earn profits. Profits in this context are defined as the difference between a business's revenues and its expenses (Ebert & Griffin, 1998). E-business describes the use of electronic means and platforms to conduct a company's business (Kotler & Keller, 2008). As discussed by Kotler and Keller (2008), the advent of the Internet has greatly increased the ability of companies to conduct their business faster, more accurately, over a wider range of time and space, at reduced cost and with the ability to customize and personalize customer offerings. In this paper, Islamic e-business stresses on an organization that sells goods or renders services to end customers, but forbids unethical practices such as gambling, deceit and fraud. At the same time, products and services are must be those of *halal*. Non-*halal* products and services are not permissible and condemned by the teaching of Islam.

The successful of Islamic e-business depends on four factors. First is the role of *homolamicus and homoeconomicus*. The practice of Islamic e-business must be started of among these people before it can be taken as an exemplary example to whole society. Pursuing Islamic e-business seems to be difficult and is hard to do, if these people are unwilling to attempt to sell their business products or services electronically. Second, the business environment also affects the utilization of Islamic e-business. If the environment stresses in Islamic businesses, as well as the use of e-business as a means of conducting business, therefore there is possibility that Islamic e-business will have a greater acceptance. Third, the rules or regulations must be in line with *Shariah Islamiyyah* as well as the need of businesses. It is better if the rules or regulations are supportive. Fourth, governments also play a role in encouraging the use of Islamic e-business. It is a plus point to encourage *homolamicus and homoeconomicus* to utilize Islamic e-business by providing a financial and non-financial assistance.

From an Islamic point of view, e-business is accepted for individuals business transactions provided it is conducted according to the *Shariah*. Worth to mention, the

following verse of the *al-Quran* presents an argument of the e-business permissibility:

“...Allah has permitted trade and forbidden usury. Those who after receiving direction from their Lord, desist, shall be pardoned for the past; their case if for God; but those who repeat the offence are Companions of the Fire; they will abide therein forever (2:275)”

Source: *Al-Quran, The holy book of Islam.*

Another verse which is related to recording or accounting is presented as follows:

“...O you who believe! When you deal with each other, in transactions involving future obligations in a fixed period of time, reduce them to writing...(2:282)”

Source: *Al-Quran, The holy book of Islam.*

The permissibility of e-business from an Islamic viewpoint is also outlined by the Prophet Muhammad S.A.W, which can be read as follows:

“A sale for a deferred payment by installment is good”

The above verses provide general guidelines for *Muslim* businesspeople in conducting business transaction electronically. Islam encourages *Muslim* businesspeople to charge a higher price for good if payment is done later or deferred (Maali et al., 2006).

Table 1 depicts some examples of Islamic e-business that are permissible from Islamic point of view:

**Table 1: Types of Islamic e-business (selected examples)**

<i>Types of businesses</i>	<i>Remarks</i>
E-banking	E-banking provides a new means of transacting banking products through internet banking, mobile banking and e-payment i.e. Well Fargo; Bank of America
E-commerce	E-commerce provides ways of selling products or renders services electronically. In this context, selling books, as one of the many examples regarding e-commerce types of businesses i.e. Walmart; Amazon

Islamic e-business is governed and guided by *Shariah*. Islamic e-business has several distinguishing features. The first and most important feature of Islamic e-business is the prohibition of interest (*riba*), regardless of its form or source. The practice of *riba* will lead to the wealth concentration in the hand of few. In more detail, the following provides the legality of Islamic e-business:

1. Goods or services→The Islamic e-business must be complied with the requirements that stated in *Quran* and *Sunnah* regarding the goods or services that can be transacting among *homolIslamicus*. It is, thus important to ensure that the commodity and service must be permissible by the *Shariah*. Therefore, any non-*halal* goods or services must be avoided as they are not in the true spirit of

- Islamic e-business. Worth to mention, products and services must be clearly defined;
2. Communication or connectivity→A transaction that is implemented electronically must have clarity in the communication. Those who are conducting Islamic e-business must receive the message through e-mail or through mobile phones. It is important to note that, a constant communication is able to reduce doubt by many transacting parties on the use of Islamic e-business;
  3. Click and brick→Although it is permissible to conduct business on cyber market. It is important to note here is that, the physical appearance (i.e having shop building) is also important in order to convince consumers on real existences of the business; and
  4. Delivery→It is also a condition to ensure that the products to be bought by a customer must be delivered at the promised date in order to make sure it is free from deceit and fraud. By having this matter in mind, it is reasonable to conduct e-business from Islamic viewpoint but, however it does not mean that everything from conventional is not fit. Explained in more detail, Islamic e-business stresses on selling *halal* goods or services and covered by the Islamic ethics.

In this study, the roles of e-business are also explained. The following lists the roles of e-business:

1. Provides an *opportunity for borderless business*→A business transaction can be conducted electronically where sellers and buyers could come from different countries and they are met in one central location, notably internet;
2. Provides *new markets*→The advent of e-business will render a benefit to those of businessman and businesswoman since their targeting market can also be expanded into cyber market. The cost of doing transaction can be small and smaller;
3. Cuts down *transaction costs*→The advent of e-business enables businesses to create a very complete website for businesses that will be utilized in order to serve the global market electronically. In this context, it enables businesses to reduce costs and times and more attention will given in the profit maximization;
4. Provides the easier way of doing business (*accessibilities*)→For customers, it is an easy for them to get a desirable goods or services by just surfing into a respective website. At the same time, the can do this easily at homes or offices at low cost; and
5. Provides *24 hours living advertisement*→E-business operates 24 hours a day, 7 days a week, which enables for businessman to sell products or renders services. A such, e-business offers 24 hours living advertisement to global customers.

## PROSPECTS OF ISLAMIC E-BUSINESS

### *The government support*

The Malaysian government is a friendly government to societies, businesses and to the foreigners too. In fact, this openness is also shown in the context of businesses, including for a company running a business both physically and electronically. The government support can be depicted as follows:

1. Regulation→The government ensures the business is fairly conducted among those of *Muslim and non-Muslim* businesspeople;
2. Loan/financing→The government provides financial assistance to Malaysians in order to run a business;
3. Advisory services→The government provides free of charges advises regarding business ranging, on how to run a business, on how finance it and on how to generate profits; and
4. Tax exemption→The government reduces tax for businesses from 28% (2006) to become 26% (2007).

### *Islamic financial system liberalization*

Worth to mention, one of the very potential branches of Islamic e-business is Islamic e-banking. Due to the government effort in opening the Malaysian banking door to foreigners, it is important to the existing banking institutions to offer Islamic e-banking in order to be remained competitive. Evidently, the issuance of licenses for foreign Islamic banks from the Middle East was created a pressure for the existing Islamic banks in Malaysia. In fact, their assets and market share in the home countries basically large compared to BIMB and BMMB. The mentioned foreign Islamic banks are al-Rajhi Banking and Investment Corporation (ARABIC), Kuwait Finance House and the consortium led by Qatar Islamic Bank parked their investments in Malaysia. Here, the consortium is also known as 'Asian Finance Bank'. Table 2 describes about the bank.

**Table 2: Asian Finance Bank**

<i>Founding shareholder</i>	<i>Country</i>	<i>Shareholding percentage</i>	<i>Shareholding amount (Malaysian Ringgits)</i>
Qatar Islamic Bank	Qatar	70%	RM 266,000,000
RUSD Investment Bank	Saudi Arabia	20%	RM 76,000,000
Global Investment House	Kuwait	10%	RM 38,000,000
Total Capital		100%	RM 380,000,000

Source: RUSD Investment Bank. RUSD, <http://www.rusdbank.com/afb-eng.html>

Evidently, Islamic finance is undergoing rapid transformation under the globalization mode. It calls for innovativeness and it is time for Islamic bank looks beyond its traditional modes of banking. Given this fact, Bank Negara Malaysia (BNM) has taken a

few steps in creating a high competitiveness level among existing Islamic banks. One of the steps is allowing Bank Islam Malaysia (BIMB) and Bank Muamalat Malaysia Berhad (BMMB) to offer e-banking in order to transact Islamic banking products and services electronically. In fact, offering this service may enhance certain area of Islamic banks concern such as competitiveness issue. Worth to mention, customers tend to compare services both nationally and internationally and demand variety and improved quality from Islamic banks. Thus it is a necessity for Islamic banks to have e-banking facilities that able to compete with other conventional and leading banks. In this context, e-banking is an integral part of e-business.

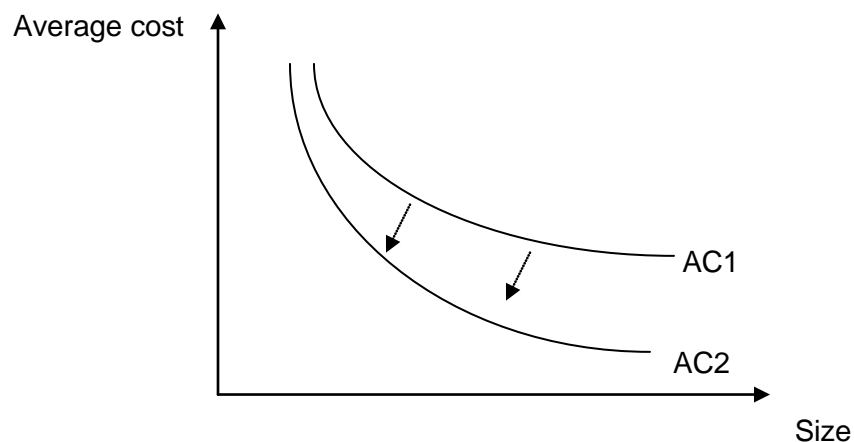
**Economies of scale**

The introduction of e-business enables *Muslim* businesspeople to obtain economies of scale. By definition, economies of scale can be defined as the cost reduction as a transaction per se increases (Mishkin & Eakins, 2008). The advent of e-business will enable businessmen to sell products or render services to many customers, which are expected to increase the size of transactions or the volume of transactions. In economies of scale context, the cost is expected to be declining with the advent of Islamic e-business. In order to understand this better, the following example is presented:

1. Without Islamic e-business: the cost for selling products to individuals, say for example RM 200/ 10 units (10 units refer to a size of transaction); and
2. With Islamic e-business: the cost for selling products to individuals, say for example RM200/100 units (100 units refer to a size of transaction).

In view of the above example, the volume of transaction increases when *Muslim* businesspeople attempts to use Islamic e-business since Islamic e-business provides a greater market accessibility to the uncover locations for the business, where only e-business can penetrate it. Furthermore, the following figure provides an indication of cost reduction once a size of transaction increases:

**Figure 1: Economies of scale for Islamic e-business**



In view of the above figure, the introduction of e-business will lead to the cost reduction as depicted by AC1. Explained in details, the effect of improving e-business system over time will shift the AC1 to AC2, reflecting the cost lowering effects of technology for businesses.

### **Growing number of young intellectuals**

There are growing numbers of Malaysians to obtain a high education at least, Diploma/STPM level. As such, the growing size of young intellectual communities is of course providing a new market segment for Islamic e-business. The young Malaysians are indeed, familiar the use of Internet and mobile phones which can be translated into an opportunity to have e-business in order to render services to these potential customers. As a result, this knowledge could be translated into the higher demand of service from the business. On the basis of this exposition, those of *Muslim* businessmen or businesswomen should strategize their operations by strengthening Islamic e-business services in which there will be of benefits to the intellect communities in obtaining their desirable products or services electronically.

**Table 3: Output of public high learning institutions (IPTA), 2002-2007**

<i>Year</i>	<i>Bachelor</i>	<i>Master</i>	<i>Phd</i>
2004	43826	6071	448
2005	51771	7172	581
2006	55524	6767	632
2007	59471	8499	702

*Source: Ministry of Higher Education (MOHE)*

Considering as a new platform of conducting businesses, Islamic e-business offers competitive weapons for *Muslim* businessmen or businesswomen to be remained competitive in the business industry. It is then a necessity to have a well-established Islamic e-business that will exactly be utilized by young intellectuals. Worth to mention, the increment in the young intellectuals' number can lead into a higher demand for Islamic e-business in the future. It is therefore, a chance for Muslim businessmen or businesswomen to grasp this prospect.

### **Growing users for internet**

It is an accepted fact to claim that, Internet provided many benefits to society including for banking transactions. On the other hand, it is sometimes also argued to be mixed-blessing. Nevertheless, there are three reasons of why Internet is so important to society. First, Internet is a library for all information including for business transactions. It is a complete platform to get invaluable information from the respective 'Uniform Resource Locator' (URL), say for instance, Amazon ([www.amazon.com](http://www.amazon.com)). Second, Internet provides interactive transactions such as for learning and teaching, in short it has cyber-education center, say for instance, Journal of Internet Banking and Commerce ([www.arraydev.com/commerce/jibc/current.asp](http://www.arraydev.com/commerce/jibc/current.asp)). Third, servers support the Islamic e-business by performing a variety of business transaction electronically. The growing facilities for the e-facilities will affect the utilization Islamic e-business. Table 4 depicts the growing size of Internet users among the Malaysian (2001-2006) that render good opportunities for enhanced Islamic e-business transactions:



**Table 4: Internet users (per 1,000 people) in Malaysia**

Year	2001	2002	2003	2004	2005	2006
Number	27	32	35	39	43	43

Source: World Bank

## CHALLENGES OF ISLAMIC E-BUSINESS

### **Consumer acceptance**

Evidently, not all of consumers know of how conducting e-business transaction. Using Islamic e-business indeed requires a substantial amount of commitment from consumers to understand in details the process of performing business electronically. Otherwise, the system will be under-used. This problem is not only end to customers and but also end to *Muslim* businessmen or businesswomen. As such, further education requires to consumers. The benefit will be greater to *Muslim* businessmen or businesswomen as it elevates their competitive advantages.

There are several reasons of leading consumers to take no notice of using Islamic e-business or e-business. The following lists those of the reasons:

1. *Security*→a consumer will use Islamic e-business if the security of his transaction is given priority by *Muslim* businessmen or businesswomen. For consumer, his money is considered important, and therefore he will make sure a purchasing transaction is hoped to be safe and he will not loss his penny if he is doing a transaction electronically; and
2. *Privacy*→a consumer afraid about his personal information to be penetrated by the illegal users that manipulate his particular. As such, a privacy issue is also important to address in Islamic e-business. A consumer will make a transaction electronically if his details to be protected and secured by *Muslim* businessmen or businesswomen who are implementing the e-business.

### **Pricing in Islamic e- business**

As far as pricing is concerned, pricing can be defined as the process of determining what a company will receive in exchange for its product (Ebert and Griffin, 1998). The pricing mechanism is very important as *Muslim* businessmen or businesswomen are competing in the open markets, where they are a lot of sellers as well as waiting buyers. In this case, it is important if *Muslim* businessmen or businesswomen can render an attractive pricing for the selling goods or services.

Since Islamic e-business enters the cyber market, therefore there is a concern regarding the pricing for a business transaction conducted electronically. More specifically, *Muslim* business people deal with different currencies from different countries. In this case, *Muslim* business people must aware on this issue and tend to solve it at fairly for all customers from different countries. As a suggestion, it is should be nice if the price is measured using of one currency such as Ringgit Malaysia (RM), where Malaysians

buyer can directly buy products or services using RM. On the other hand, those buyers from countries other than Malaysia should also use RM by converting their own country currencies to RM. It is then able to harmonize the pricing measure for a transaction conducted electronically.

**The need of complex Infrastructure**

In contemporary society, e-business provides a means for conducting business electronically. From the practitioners view point, setting up e-business requires a number of proper infrastructures which are expensive to pay. Further, the cost of setting up e-business facilities is generally expensive. Explained in more detail, businesspeople are required to spend a substantial and prudent investment in order to create, maintain and updating e-business services. Table 5 depicts the required for infrastructures for the e-business:

**Table 5: Infrastructures for Islamic e-business**

<i>Infrastructures</i>	<i>Explanation</i>
Firewall	To prevent from unauthorized access and hackers
Server	To maintain the operation and its availability
Webpage	To promote Islamic e-business products and services

The costs to develop a well-designed infrastructure initially involved a huge amount of funds. Among the attention should be concentrated by *Muslim* businessmen or businesswomen including expenses for having a proper hardware for Islamic e-business, software, proper training system to increase potential employees that expert in Islamic e-business and many more. In fact, Islamic banks cannot rely on the government assistance alone in escalating the users for Islamic e-business. They must be independent in this sense.

**Legal risks issues**

It is customers' priority to get a reliable service from Islamic e-business operation. It is true to claim here is that Islamic e-business will also encounter with a number of risks mainly for legal point of view. Table 6 depicts the selected legal risk issues of e-business:

**Table 6: Legal risk issues**

<i>Legal risk issues</i>	<i>Explanation</i>
Phantom withdrawer	Mainly for payment transactions involving credit card
Operator error, data error and inadequate system performance	Buyers unable to perform and to access the system
Unauthorized access and data sabotage,	The issue of privacy and security

Islamic e-business basically is mixed-blessing. For instance, e-commerce is one of the integral parts of Islamic e-business can provide a new market for *Muslim* businessmen or businesswomen. On the other hand, it is easily to be manipulated by irresponsible individuals who like to molest the system that will mar the ability of Islamic e-business to perform. Thus, internet business needs a continuous up to date surveillance to maintain

security such as preventing unauthorized access, phantom withdrawer, data sabotage, modifying data and illegal funds transfer. Other issues include such as protection of intellectual property rights and its commercial exploitation as well as management of fragile digital evidence (when a cyber crime takes place) is needed to handle properly. The invention of Internet business may entail copyright issue since the system is developed by a programmer who has the skills to perform the task. In order to keep the system free from legal risks, those *Muslim* businessmen or businesswomen should be upgrading their webpage for e-business in order to ensure the system covers the latest protection for enhanced security and privacy system. Other issues such as copyright and etcetera also need to handle properly.

### **Will “clicks” dominate “bricks”?**

With the introduction of e-business among *Muslim* businessmen or businesswomen, as a result there are two types of conducting business transactions. The first type deals with the reality business transaction such as counter services where “man-2-man relationship is established”. This way of conducting business is easier since any mistakes of conducting businesses can be adjusted easily by the time of transactions. The second type deals with e-business. In this type of business, consumers find a hardship if the bought products are not meeting their satisfaction since the complaining on its will take a long procedures. Explained in more detail the former business transaction may provide a wider range of products to customers, asking for information, asking for redemption or for returning defect goods. The latter is good for those who are preferred “man-2-machine” transactions, where everything is handled electronically.

**Table 7: Click and brick businesses**

<i>Types</i>	<i>Customer preference</i>	<i>Explanation</i>
Click business	“Man-2-Man”	It is a business transaction by human being
Brick business	“Man-2-Machine”	It is a business transaction that assisted by machine. In this paper, machine refers as computer

It is then important for *Muslim* businessmen or businesswomen to balance the need of click and brick businesses to customers in accordance to age, technology literacy, location/distance/ and service accessibility. Both should be fairly promoted in the contemporary banking practices.

### **CONCLUSION**

This paper has addressed an e-business from Islamic perspectives. As such, this paper introduces “Islamic e-business” concept. In this paper, Islamic e-business defines as selling products or renders services which are *halal* through an electronic means such as internet. The emerging application of e-business including e-commerce namely for selling goods electronically, and e-banking in which it is selling banking products electronically. The important condition in order to ensure the e-business to be called as Islamic e-business is that any e-business transactions are should be implemented and be handling carefully consistent with Islamic teaching (*Shariah Islamiyyah*). The elements such as deceit, fraud, not delivery of services and interest-taking are prohibited

in Islamic e-business practices. At the same time, *Muslim* businessmen or businesswomen must ensure click and brick businesses must be existed to complement each other all the time, since it is understood that the advent of e-business complements and enhances the brick and mortar businesses.

This study also leads into two practical implications:

1. On the academics' side, this study provides a latest thinking on Islamic e-business, thus creating a reference point for a future research among academicians. Further, this study contributes to existing body of knowledge by providing an investigation of Islamic e-business qualitatively. Indeed, this study is also considered as an 'eye-opener' for Islamic e-business that adds into limited knowledge in this area; and
2. On the practitioners' side, this study renders practitioners a room of understanding on the prospects and challenges of Islamic e-business. In that sense, the practitioners will be of their advantages to promote more *halal* and obvious way of conducting business electronically and enhance the Islamic e-business concept. As such, the Islamic e-business is a preferable way of conducting Islamic businesses at the moment and in the future too.

Last but not least, this study introduces the "Islamic e-business" to the Islamic body of knowledge in Islamic banking and finance. Worth to mention, the study offers an insight into Islamic e-business in Malaysia which has limited previously been investigated.

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