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## Business-IT Models Drive Businesses towards Better Value Delivery and Profits Making

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### Abstract

Businesses face a changing environment every day. The changing environment will increase the complexity of the businesses that deal with it. Thus, the Business Models have been used to address this problem. However, this paper proposes the Business-IT Models, which are formed by working closely with IT. There are several varieties of the Business-IT Models, and this paper addresses three of them, which are the Social Model, the Search Model and the Crowdsourcing Model. All these are proven models for today's challenging business environment and have already been implemented by successful companies.

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### 1. Introduction

Businesses face a complex environment every day. Today's solutions in the form of products and services provided by businesses are getting obsolete at a rapid rate. Businesses need to change their business models to suit the current challenges and the ever-changing environment in order to maintain their viable. The complexity of the environment has forced the companies to find ways in managing complexity more effectively. The use of a business model can help to ease the burden of companies facing the complexity of the environment. The model will act as an

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interface between the business and the environment and also in controlling the effects of the environment towards the business, so that the business will remain viable [2] [8]. The model used must be easily comprehended by the whole organization, and becomes the blueprint for every part of the organization to work as a whole, in order for the business to respond to the current environment better [2].

The focus of this paper is not solely on the business model itself, but rather on how IT is a very important part of an organization for it to implement the business model in order for the company/business to respond to the change in the business environment. Without IT taking part as the catalyst, the business will not be able to build a business based on the business model that will help it to survive. IT is thus, the savior in this case and it should not be regarded as the black box of the company, or as a liability, or just for the sake of improving the efficiency of the business operation [4]. In the current situation, IT plays a major role in shaping the world of business and making it sustainable. The proof of this matter is already visible to everyone, to be perceived without the need of any special equipment. This paper also acts as a trigger to businesses, in order for them to realize and understand the importance of bringing IT as part of their business development process. This paper would also like to stress that people in the IT world should not be offended by the way businesses perceive at them. The IT people have the authority to implement the business models by using IT, and thus become part of the business profit-making process and are thus, considered as an extremely valuable asset to the business [1].

There are many successful business models that are implemented using IT. Without IT, important business processes might not be able to be realized and thus fail to help businesses raise the profit in the changing environment. This paper will discuss three types of business models (other models will be revealed in future papers). However, it is quite unfair for the term “Business Model” to be used. It is rather suitable to label it as a “Business-IT Model” since both the IT and business aspects have been used in designing the model. The Business-IT Models to be discussed in this paper are the social, the search and the crowdsourcing models. Examples of businesses that are viable and are already making profit under these Business-IT Models are companies such as Google, Yelp, Kickstarter, Facebook, Wikipedia, YouTube, Twitter and many more. Those Business-IT Models could only be realized and be made possible with the intervention of IT. Real businesses which have already implemented those models are already making profits and are becoming disruptive against businesses that still rely on old business models which do not involve IT. Therefore, this paper will investigate what those models are, the method of their application (how they work) and how businesses are able to use them to achieve similar results as those businesses which have already implemented the three Business-IT Models mentioned previously.

## **2. Business-IT Models**

The Business-IT Models is a term coined from the combination of business and IT together, to model the business environment. Previously, before the use of these models, the role of IT is merely as a backbencher, to provide support and services to the business sector. IT is viewed as a way of making a business more efficient, and not to become part of the business itself in delivering value and also in increasing company profit [4]. In the worst case scenario, IT is perceived as a liability, costing a lot of money to a business with unclear Return on Investment (ROI). Previously, IT is also required to align with what the business is doing, yet it is not expected to participate in the business process itself. However, today things have changed; with the emergence of a new reign of information technologies, customers’ behavior has changed drastically. A lot of businesses have launched from simple static websites to complex e-commerce websites to cope with the change in customers’ needs. Now, with the emergence of information technology, it is more than possible to build a profitable business [5]. Today, business people do not have the option of putting the aspect of IT aside in modeling their business solutions in order to face the Internet-savvy customers, who are equipped with tones of information from various resources on the Internet.

The term Business Models used in this paper should be taken as referring to the old business models, which have not included the participation of IT and are considered only as businesses’ support activities [9][10]. The term Business-IT Models on the other hand, refers to the concept of Business and IT joined together to respond to the changing business environment, in order to deliver value to the customers, to become viable in the fierce competitions, and most importantly to increase revenue into the business and thus, becomes profitable.

### 3. Social Model

IT has made the Social Model possible and proven. As social beings, humans need to socialize and stay in a community to feel the sense of self-belonging, security, survival, sharing and caring. IT has made it possible for this model to be nourished in the cyberspace and creates a new paradigm shift in the concept of socializing.

The business environment has also seen that people are "moving away" from the old concept of socializing to the new way in the virtual world. Facebook, Twitter, Instagram and LinkedIn are some of the evidences of this phenomenon. However, the social websites as well as their mode of operation would not be described here since they would have been familiar to the readers. The discussion here is focused on the Social Model, which could be adopted by companies in facing the current environment

The situation companies are facing is that, people are actually connected to each other and build their own trust systems [3]. Customers today are equipped with adequate information on which product to choose. The social network is also the top place where people on the cyberspace spend time, either through the desktop or by mobile devices. The Social Model makes socializing more structured, organized and visible on the Internet.

With social web pages such as the Facebook, a company does not have to spend a lot of money in order to connect and socialize with the customers. Businesses can even build their own social networks, instead of using public social network sites. There is no difficulty in performing or achieving that, as long as businesses are aware that by having their own social network sites, they are able to respond to the specific needs of their customers, vendors, staff and so on. Furthermore, the ownership of their own social network sites will help to improve customers' loyalty to their businesses, for example the customers of the mass markets of big retailers such as Tesco and Amazon. By having their own social networks, businesses can set up their own set of rules, instead of being obliged to follow the rules of certain sites, such as the Facebook. They are also able to customize more on socializing the business with not only their customers, but also with anybody who wishes to be connected to or become part of the businesses' social network. The values of the Social Model are tremendous for the customers, and the following values are notexhaustive:

- People and their social friends are connected to the business and would talk about the services or products provided in the cyberspace and form new cultures or tribes
- People would be updated with new promotions and information provided by the company
- People would feel proud because they are part of the business community
- People know that the business will listen for and see what the customers expect for
- People would accept the fact that the business is already part of their lives, which cannot be missed, both in their physical and virtual lives

Below are the available features of the Social Model:

- Messaging
- Friends or members' list
- Current status
- Picture sharing
- Rating/Like/Star
- Review/Comment
- Profile
- Search for people or information

The Social Model can help to increase business profit in the following ways:

- The features of the social model, for example customer rating and review can help to provide information about products or services that are most favored by the customers, thus helping companies from selling or developing unsuccessful or low-selling products

- The costs of advertising could be reduced down tremendously as advertising with the social network is almost free since information or personal review about the products and services may be passed around by words of mouth among the customers themselves
- Retaining existing customers, while at the same time gaining new customers for the business

#### 4. Search Model

The Search Model is the oldest model found on the Internet. The key factor to the search becoming very popular and extremely important is its ability to organize scattered information on the Internet. Among the first to use this model are of course Yahoo.com and Google.com. Both companies are focused on providing search services for free to their customers to search for information from scattered websites on the Internet. This type of model is also considered a successful Business-IT Model. This is because; no traditional models would be able to make that type of search possible. Only with the invention of IT, the search becomes possible. The information found in cyberspace is both tremendous and complex. The information, which may be in various forms, such as texts, videos, images, 3Ds, various file formats, and locations, may be difficult to be found without the use of a search engine. Through the involvement of IT, the search application is now applicable for businesses, where businesses are able to detect and know what the customers are looking for, and is thus provided with the insight on the current customer trends for product searching and buying. Apart from that, since businesses aim/strive to be found by the consumers during information searching, especially a search related to the products and services provided by them, hence the availability of the search function made available by combining IT into the business model is truly an advantage for the businesses. Here is the list of values (not exhaustive) offered by the Search Model:

- A search engine organizes and orders unorganized information in the internet, therefore making it easier to find the information
- With improved algorithms of the search engine, users will get the most relevant search results based on the keywords provided
- Search engine provides information about the trend in the search keywords that can be used as an insight to the business
- It adds value to e-commerce websites by making it easier and faster for the customers to find and obtain their product information without having to browse individual sites, such as the Amazon or to search for people in the Facebook
- Semantics technology has made search process even better in searching for and understanding unstructured information. This creates a seamless and hassle free search because the search is performed not only by using keywords but also its meaning and context

The features that can be found in this model are:

- A search of not only the web pages but also documents, blogs, social media, tweets, images, apps, games, books and more Friends or members' list
- A search based on the provided criteria e.g. year, author, price and color
- Theranking of search results relevant to the search keyword
- The use of filters to refine the results
- Search according to the location or context e.g. local websites
- Search for trend and information e.g. location of search query

So, how can a Search Model increase the profits of a company?

- Most consumers will get information about products and services from the business website, therefore company websites must apply the strategy of being listed on the first page of any search engine. In order to do this, there are two key points; a business website must be rich in content and it must also be linked to social websites such as Facebook and Twitter. A company that is listed on the first result page is considered a good company, which is

also a social company trusted by the social community. Therefore, the chances for the company to increase the number of new customers are very high

- Company websites which provide search capabilities will make the sites more customer-friendly since customers are able to find information quickly and more precisely. The customers will see this as an added value and a must-have feature in every website, and thus makes them more satisfied with the service and become loyal to the business
- A company website can act to provide advertisements for other businesses based on keyword search; similar to what is being done by Google. Usually, this type of website is big and contains vast information of content, products and services. This will provide new revenue stream to the business and thus increases company profits

## **5. Crowdsourcing Model**

The Crowdsourcing Model can be regarded as the heart of many popular internet businesses today. Facebook itself does not only use the Social Model but also the Crowdsourcing Model. The Crowdsourcing Model is based on the concept of information provided by an individual that is to be pooled together with information from other individuals. This type of information-gathering method provided by a lot of people regarding certain subject matters is called crowdsourcing. Wikipedia is another example where anonymous people from diverse background and locations could contribute to a specific topic by providing a variety of information for that topic such as science, business, IT, religion and more. The invention of Wikipedia by harnessing the Crowdsourcing Model has disrupted the traditional encyclopedia popularized by Britannica and also electronic encyclopedia such as Encarta [7].

Another example of businesses which use the Crowdsourcing Model is Kickstarter. This business helps inventors in finding the funding for their creative projects, but not from rich investors alone. The fund is received from the crowds, who are interested with the project and are willing to contribute the fund at an affordable amount. The crowd will be rewarded by the inventor based on the amount of funding given by them. Usually, the rewards would be in the form of the products invented by the inventors themselves. Through this way, the Crowdsourcing Model has been successfully utilized by Kickstarter, and to date the company has already helped inventors to fund their projects, which amount to \$435 million [6]. The advantages which could be obtained by the customers from companies which adopt this model are:

- It will create a sense of belonging and responsibility in the customers towards the websites, since they would feel appreciated that their contribution of information, money, tasks and others are useful to the whole society
- The customers are not compelled to give large contributions, when in the end, even small contributions would lead to something big
- It helps customers to find a variety of information, which is also reliable at the same time, since the information is provided by a range of people from various backgrounds
- It helps customers in organizing self-organizations since this model supports self-organizations in a more organized manner
- The information provided is always updated since the information is self-organized by the members, and uses the intelligence of the crowd in updating and organizing the info

Among the features available in this type of models are:

- Search and browse resources shared by others
- Social connection – as in Facebook
- Contribution channel – money, information, photos, videos
- Membership
- Processes and activities e.g. posting new case, posting ideas to solve the case and vote for the ideas
- Categories and organized (ranking) information

So how is the Crowdsourcing Model able to help increase a company's bottom line?

- The use of the Crowdsourcing Model in building a web platform for the customers, suppliers or even employees to provide them with unique information is more than valuable. The web platform will become a place which supports self-organization and self-regulation among the suppliers, customers and the employees. This will then improve the communication and between the company and its stakeholders since the company has become more responsive by implementing this model
- This model is also helpful in introducing new products to the customers. Just as what is being done by Kickstarter for new inventions, companies wanting to fund or buy product prototypes may first create the new products and then test the market. If the test is successful with the product prototype, the complete products may be massively produced. This may help a company from spending a lot of resources, especially money, in marketing new products
- Human intelligence is irreplaceable by computers, even until now. The attempt at creating a computer system which possesses intelligence comparable to the human brain and could truly function like a human being is still far stretched. The best solution is in using the intelligence of the human brain which is realized into the form of the Crowdsourcing Model in solving complex problems which are not easily solved by the computer systems. For example, human perception can be used to translate languages such as Chinese language into English in helping the English people who travel to China, and the process is being done using the crowdsourcing web platform. This will create a new form of business and will also save companies a lot of money, since any problem which could not be solved by the computer may be solved quickly and easily with this type of solution

## 6. Conclusion

IT and Business must work together hand-in-hand and IT should not only support the business or act as a black box, but IT is also part of the business where business models today work on IT to respond to the changes in the business environment, while increasing company revenues and profits. This paper has shown the importance of looking from the perspective of business and IT working together in the form of Business-IT Models and not just the Business Models alone, since IT must be integrated into the business cycle or process in order to make it happen. The models presented in this paper are by no means exhaustive. However, the models described in this paper have been proven to be successful, and have currently been implemented by the companies mentioned above. Moreover, those models could be used as they are, or in hybrid form, or modified to suit business cases and innovate accordingly to achieve higher profits for the company. This also proves that businesses today cannot be separated from IT and that IT must be an integral part of any business through the implementation of business models which suit the needs of each business, thus enabling businesses to gain instant benefits.

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