

University Of Manchester,
Institute For Development Policy and
Management

Course Title : e-Business, Organization & Strategy

Course Code : IDPM60352

Lecturer : Ping Gao

Date Due : 6 May 2011

Title : “Theoretical analysis of the business model of Amazon.com”

Student ID : 7680680

Word Count : 3222

Introduction

Business model is defined as the logic way that a firm follows in order to create value for its customer segments (Aspara et al. 2011). However this definition is broad as the literature has identified at least twelve definitions of the term 'business model' between the years 1998-2002 (Shafer et al. 2005). The rising complexity of markets leads the organizations not only to serve customer's needs appropriately but also to find ways to capture value from providing innovative products (Teece 2010). Moreover, the internet has become a critical tool for the organisations to conduct international business electronically (Hanafizadeh & Nikabadi 2011). Although the dynamics of marketplace have benefited from the e-commerce market, the organisations often face challenges such as change and IT innovation (Mellahi & Johnson 2000). Therefore, organisations of that kind need to overcome these difficulties using effective business models. Amazon.com was the first organisation that changed the book selling industry by providing book retailing online (Munk 1999). Today, Amazon offers additional services and goods such as movies, music disks, computers, and clothing (Amazon.com 2011). Economist (2000) argued that Amazon.com is connected to e-commerce concept as it was the first firm that begun the whole industry. For that reason, the analysis of the Amazon.com business model is critical in order to understand business models of similar online retailers as the most of them follow the same model. Specifically, the purpose of this essay is to analyze the business model of Amazon.com using Gao's (2008) framework.

Literature Review

Basic Concepts

The Information and communication technology innovation has led to the creation of new business models. Botto (2003) explains that e-business models describe the work

conducted in electronic environments. E-Business models give description of relationships between customers, consumers, partners and providers who constitute of the organisation's internal and external environment. In addition, these models use the internet as the main tool to implement transactions, create value for customers and determine firm's strategy (Currie 2004; Shafer et al. 2005). Therefore, Papakiriakopoulos et al. (2001) argue that e-business models comprise of four main elements : coordination (management abilities), co-operation, customer value and core competence.

Amit & Zott (2001) note that e-business target to attract customers by automating the transactions using communication and computerized technologies such as local computers, e-mail, internet. Therefore, this new type of business seek to automate as much business transactions and processes as possible (Andrew et al. 2006). The positive impact of automation is the fact that errors during processes are minimized while the speed of processing increases (Rodgers et al. 2002). As a result, the firm that conducts business over the internet can improve its relationship with customers and increase their loyalty. Finally, some significant advantages are noted: sales increase, customer lock in by maximizing confidence, rendering services, business development, updated information availability.

The Analytical Framework

In the context of this essay, the business model of Amazon.com is analyzed through Gao's framework (Gao 2008). The particular framework is used as it covers the most essential elements for our case study such as Internet/IT, value, environment, the firm boundary and firm capability and resource. The following figure (figure 1) represents the relationship between the elements.

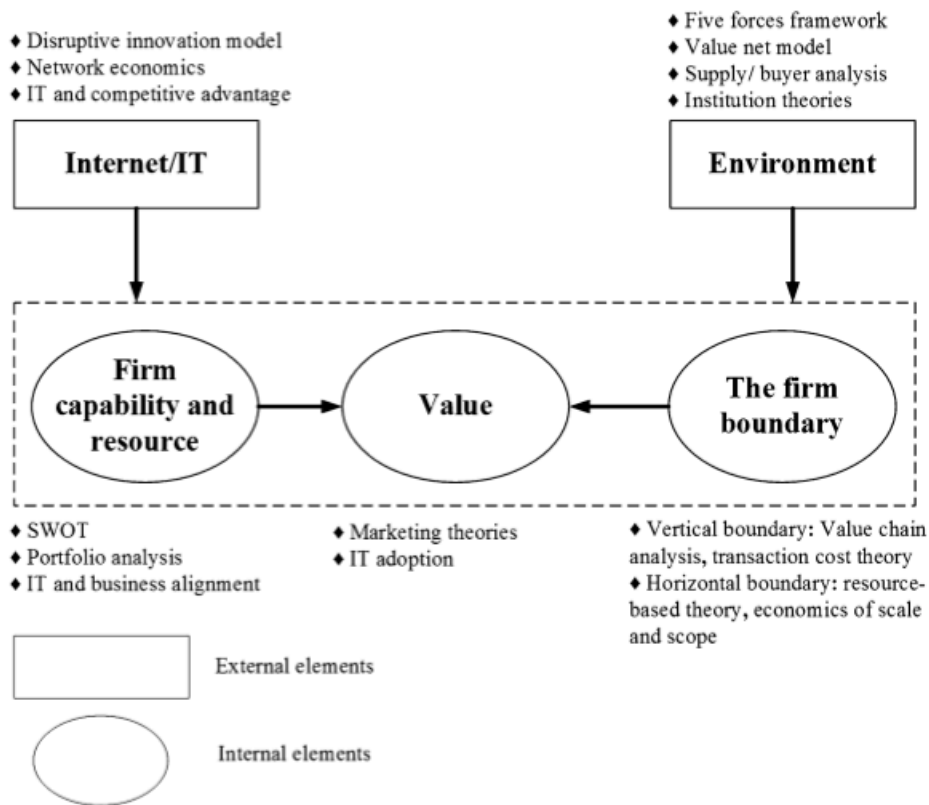


Figure 1 : “Source : Adapted from Gao (2008)”

First, the framework considers value as the main element of a business model. Although value is considered important across the literature, many firms do not succeed in delivering value consistently (Linder & Cantrell 2001). Moreover, Magretta (2002) explains that the business model should deliver answers regarding to which are the customer segments, what the customers consider valuable, how does the firm make money, and how the value will be delivered to customers at a low cost (Gao 2008). However, customers express different needs at different times (Linder & Cantrell 2001). Therefore, a unique array of value propositions could keep customers satisfied and the bond between the firm and customer safe. Additionally, the literature has noted the importance of revenue stream as firms often do not calculate correctly the revenues in advance. In the case of online stores, the main source of revenue is advertisement fees (Lunn 2002).

Moreover, the second dimension of the framework : firm capability and resources is linked to the value dimension (Gao 2008). In order for the firm to provide customers with valuable products and create value, it needs to take advantage of internal resources and utilize them (Giesen et al. 2010). To that extend, the resources that are unique for an organisation can lead to new opportunities and markets. In the context which the essay examines, the main resources for an online store are : money, IT knowledge, facilities, equipment, qualifications, skills and new resources such as software and protocols (Hanafizadeh & Nikabadi 2011). Finally, Hedman & Kalling (2003) explain that the above resources are used to coordinate and control the work and activities that take place according to a business model.

Regarding the third dimension of the framework : 'firm boundary', Gao (2008) argues that firms which target success, need not only to utilize internal capabilities and resources but also take advantage of external partners to acquire support. Methlie & Pedersen (2002) define the 'horizontal' and 'vertical' boundaries in which organisations maintain relationships with government and external stakeholders. For the firm's horizontal level, the economy of scale and scope are considered (Gao 2008). On the one hand, the scale is quantitative measurable such as the number of products sold in the economy whereas scope expresses the number of different products that are available to customer segments. The common characteristic of both scale and scope is that they are critical component of the marketplace. As Evans & Wurster (1999) note, the firm's scale increases when obtaining more customer segments, and firm's scope increases by rich products. Regarding the firm's vertical boundary, the value is measured upon theories such as value chain, and transaction cost economies (Gao 2008). Furthermore, a vertical-oriented organisation make exchanges internally, otherwise they would take place in open markets (D'Aveni & Ilinitich 1992). It is worth mentioning that many studies have taken place over

the years, to analyze the role of internal characteristics of firms in establishing firm's vertical boundaries (Hoetker 2005).

The fourth dimension that the framework examines is environment in which the firm runs its processes (Gao 2008). As the business environment gets more complex and fast-changing (Giesen et al. 2010) , organisations need to be able to adapt to these changing environments (Miller & Friesen 1982). Especially in the competitive e-commerce marketplace organisations have to shift the rules of the game constantly (Mellahi & Johnson 2000). According to Afuah & Tucci (2003) the environment is divided to micro-environment and macro-environment (Gao 2008). The macro-environment concerns cultural, legal, financial and social issues. Therefore, the marketing department of the organisation needs to take into consideration the differences in culture and lifestyle in order for the organisation to offer appropriate value to customers (Kim & Mauborgne 1987). Additionally, considerations of the firm boundary by top management must be aware of governmental restrictions (Papadakis 2002). Moreover, the micro-environment consists of stakeholders that a firm has regular dealings with (Gao 2008). Because of the fact that the competition grows everyday, it is essential for the organisations to make a market research and acquire knowledge about products of their competitors. These kind of interactions with competitors may provide the firm with a positive impact of profits.

Technology is the last dimension of Gao's framework. As this essay analyzes an online store (Amazon.com), it is assumed that the technology part can have a positive impact on firm's capabilities. This relationship is clearly defined on the analytical framework (figure 1). Generally, firms may use their IT resources to implement a variety of strategies such as: cost leadership, product differentiation, vertical integration, diversification strategies (Barney 1996). Organisations can choose either to develop internally their IT resources or to outsource IT. In the case of IT outsourcing, the most difficult problem that firms face is related to what part of IT to outsource (Adeleye et al.

2004). Conversely, Bain (1956) and Porter (1980) suggest that organisations that develop and maintain IT resources internally, can acquire a sustained competitive advantage. Although proprietary technology can be protected through secrecy (Porter 1990), IT applications are difficult to patent. Additionally, even if there was a possibility that IT could be patented, it has been proved that patents do not provide much protection against imitation. The innovation of electronic business has brought new challenges for the organisations, especially for those which operate online like our case : Amazon.com (Gao 2008). After explaining each one of the dimension of our analytical framework, it is appropriate now to move on to the analysis of the business model of Amazon.

Analysis of Amazon.com Business model

As it was mentioned before in the introduction part, Amazon.com founded in 1997, was chosen as the case study of this essay because it was the first company which introduced e-commerce and in detail online retailing of books and other goods later. Amazon has grown its reputation by letting its customers to buy from a variety of options without talking to an employee (Green 2009). For the purpose of the essay, the dimensions of value, technology and environment are analyzed.

In 1997, Jeff Bezos, the founder and chief executive officer of Amazon.com set the main objective of the organisation which was to look into the future (Economist 2006). Indeed, the word innovation has always been Amazon's continuous objective (PC Week 1999). At first, Amazon spends a lot of money on development in anticipation of customers who want to download music video and books right away on their hard drives instead of getting them through the post (Economist 2006). Indeed, Amazon entered the e-book market dynamically by launching kindle in 2007, an e-book reader device (Standage 2009). It is easy understood, that kindle strengthens more Amazon's relationship with its

customer segments and partly satisfies some of customer's requests for digitalizing products. However, Amazon uses a tactic that cannot survive for a long time. In order to stimulate Kindle sale numbers, offers a lot of e-books at a low price something which can be overcome by either raising retail prices which consumers would not like or asking publishers to reduce their wholesale prices which they often do not wish to do. However, Amazon could solve this problem by co-operating with Apple as Iphone could be an excellent e-book reader. Further, this solution is successfully tested with google maps which are available on iphone.

Amazon.com offers valuable products to customers at low prices (Economist 2006). That was the main reason why Amazon survived during the recession and reported sixteen per cent growth (Ante 2009). But what makes Amazon innovative and attractive to customers is the additional features when providing the main services. Specifically, the online store offers reminders and tracking of customer's orders through e-mail alerts (Hof et al. 1998). The fact that Amazon reserves its innovative attitude shows that the company could be the leader of online behaviour in the future. Green (2009) also notes that Amazon allows customers to rate their experience with products and merchants. The company make statistical analysis on how frequently customers give low scores, complain or a merchant cancels an order and those parties who fail to meet expectations are deleted from Amazon's network. For example, 5 million consumers approximately have posted tens of millions reviews on Amazon's website (Ante 2009).

In terms of technology, companies operate online by establishing a collection of business activities using computers for the exchange and storage of information in activities, customer's transactions, internet communication and data management using information systems built upon the website (Takao & Matsumoto 2004). In 1994, Bezos, founder of Amazon.com found out that the world wide web was growing 2,300% per year (Hof 2004). Today, Amazon.com instead of spending a lot of money for TV commercials

and magazine ads, it actually invests a lot of money into technology for updating its website, distribution capability, and good deals on shipping (Ante 2009).

Moreover, a significant feature of Amazon.com that expands the offered value and strengthens its relationship with customers is that it tracks each purchased book and records the books that the user browse but do not buy in order to recommend other books (Economist 2010). This information is very effective in acquiring new markets online and mass customisation (Mellahi & Johnson 2000). Although recommendation algorithms are well-known and widely-used on e-commerce websites (Schafer et al. 2001), Andreas Weigend, a former chief scientist at Amazon suggests that more effective systems can be built if data based on user opinion is generated than trying to improve existing algorithms (Economist 2010a).

The examined company has been following the 'innovation' strategy since its formulation. Indeed, the most well-known example of a patent technology is the 'one click' which was for the first time in online store during 1999 (Economist 2004a). According to the 'one click' programme the purchasing process is streamlined by saving details regarding customer's information such as personal details and credit card numbers (Mellahi & Johnson 2000). With this particular technology feature that Amazon.com provides, the user-customer saves time during purchasing. This feature could also lock in a significant number of customers.

Amazon.com do not offer computing services such as software and hardware products to both consumers and other companies (Burrows 2008). Amazon Web Services (AWS) was first used as a beta version running Microsoft Windows Server and Microsoft SQL Server (News Release 2011). The online Amazon.com gives other companies the opportunity to invest money on computing capabilities of its own data centers, therefore companies give money for the computing they really need and avoid the purchasing cost for operating their own gear (Burrows 2008). Cloud-computing provides the user with

technical capabilities whenever he/she wants. Amazon has improved the service adding Elastic Block Store (EBS) allowing persistent data storage, elastic IP addresses, static IP addresses especially designed for cloud computing (News Release 2011). Furthermore, the following services were added to Amazon's IT infrastructure : simpleDB, a database system which allows users to use additionally their IT capabilities to get a higher performance database system, Scalable DNS service, payment handling to avoid past payment mistakes and AWS specific APIs for the Mechanical Turk service.

The success of a business model is highly dependent on the degree to which the firm understands and adapt to business environment (Gao 2008). Amazon.com has reached a global consumer market in north America, Europe, Asia (Economist 2000). As free-trade agreement between countries maximizes the size of marketplace, so the Internet led to much bigger gains from the exchange of data and made rapid innovation possible (Economist 2010b). Nowadays more and more people get familiar with IT equipment and feel comfortable to shop online more than they do offline (Economist 2004b). Amazon.com invests a great amount of money to maintain the interactivity of audience with the firm (rating, reviews). In terms of partnerships, the firm has allowed over the years other retailers to sell through its website in order to expand the product options (Green 2009). However, this strategy can be an Achilles' heel. For example at eBay which follows the same partnership, deals with a lot of complaints about poor services. Amazon has tried to control the environmental impact by allowing its customers take control over the partners appraisal with reviews and voting.

Evaluation of Amazon.com Business model

Within this essay, the evaluation of Amazon.com's business model takes place, by detecting the advantages and disadvantages. The analysis part revealed the biggest

advantage of amazon.com business model which is the wide customer reach because of expanding internet and huge variety of products for sale. Online firms create virtual communities which mostly establish the offered value (Hanafizadeh & Nikabadi 2011). Indeed, company spends forty per cent of its operating expenses for its brand promotion (Margolis 1999) and thirty per cent for technology innovation and content (Hof & Himelstein 1999). However, the key weak point of the analyzed business model is low margins which may result low-value products. Indeed, online stores receive a small percentage of total revenues over the internet (Lunn 2002). For example, Amazon.com received eight million dollars in 2005 with a margin of five per cent while Google received twenty four percent margin and eBay twenty three per cent margin (Economist 2006). A high percentage of internet revenues come from irrelevant areas such as business sectors operating traditionally (Lunn 2002).

In order to overcome weak points in Amazon's business model, chief executive officer of the firm and top management set as a future objective to build on Amazon's model. At first, they chose to follow a customer-oriented approach in expanding the online retail shop with efficient fulfillment (Business Week 1999). Summarising Amazon's objectives the firm had to enter undeserved markets, acquire a significant growth, and take advantage of existing corporate capabilities to serve the customer differently within the marketplace. In order for the firm to reach its objectives, the top management decided to extend business model with two initiatives : Fulfillment by Amazon and new Amazon Web services (News Release 2011). Specifically, fulfillment centers give companies the opportunity to use Amazon's IT infrastructure to run their own business in exchange for a fee (Fulfillment By Amazon 2011). The firm holds a space for seller's inventory in its available warehouses, then picks, packs, and ships on the behalf of the seller when the order is received. In addition, Amazon web services with renting servers to developers

data storage fees were added to the business model to increase the total revenues of the firm.

Conclusion

The essay analyzes the business model of Amazon.com which is one of the most important e-commerce company around the world. In response, the comprehensive framework of Ping Gao was used in order to analyze key IT resources of the company, the value that offers and the environment in which it operates. Within this essay, it is argued that firms need to consider again their business models in order to be able to survive in the complex and innovative environment. The ideas highlighted in analysis and evaluation parts of amazon's case, provide chief executive officers and immediate managers with knowledge for improving business model in terms of e-commerce. Indeed, corporate CEOs have to be aware when to adapt the business model and how to execute the needed change (Giesen et al. 2010).

As the business model of Amazon.com has weaknesses, the challenge rests with chief executives officers to adopt innovative strategies to increase their firm's business model efficiency. Innovation is very important for online stores as the core services can be imitated easily and new e-commerce firms enter the electronic markets every day (Bolton 1993). Another reason why electronic firms choose to imitate rather than innovate is the much lower cost of imitation (Mansfield et al. 1981). Therefore, the essay argues that the challenge rests with the leadership of the online organisation to follow the path of innovation that the founder of Amazon.com, Bezos has been following. Finally, no matter how many challenges organisations may face within virtual environments success is important so they need to ensure that the gaps because of environmental changes do not increase (Giesen et al. 2010).

References

- Adeleye, B.C., Annansingh, F. & Nunes, M.B. (2004) 'Risk management practices in IS outsourcing: an investigation into commercial banks in Nigeria', *International Journal of Information Management*, vol. 24, no. 2, pp. 167-180.
- Afuah, A. & Tucci, C. (2003) *Internet Business Models and Strategies: Text and Cases*, (2nd edn), McGraw-Hill, Boston.
- Amazon.com (2011) Amazon.com [online], Available: <http://www.amazon.com/> [Accessed : 2 May 2011].
- Amit, R. & Zott, C. (2001) 'Value Creation in E-business', *Strategic Management Journal*, vol. 22, no. 6/7, pp. 493-520.
- Andrew, N.K., Sen, S. & Shao, B.M.B. (2006) 'Strategies for effective web services adoption for dynamic e-businesses', *Decision Support Systems*, vol. 42, no. 2, pp. 789-809.
- Ante, S.E. (2009) 'How amazon is turning opinions into gold', *BusinessWeek*, no. 4152, pp. 47-48.
- Aspara, J., Lamberg, J.A., Laukia, A. & Tikkanen, H. (2011) 'Strategic management of business model transformation: lessons from Nokia', *Management Decision*, vol. 49, no. 4, pp. 622-647.
- Bain, J.S. (1956) *Barriers to New Competition*, Harvard University Press, Cambridge.
- Barney, J.B. (1996) *Gaining and Sustaining Competitive Advantage*, Addison-Wesley, Reading, MA.
- Bolton, K.M. (1993) 'Imitation versus innovation: lessons to be learned from the Japanese', *Organisation Dynamics*, vol. 21, no. 3, pp. 30-46.
- Botto, F. (2003) *Dictionary of E-Business*, (2nd edn), John Wiley & Sons, New York.
- Burrows, P. (2008) 'Amazon takes on IBM, Oracle and HP', *BusinessWeek*, no. 4080, pp. 25.
- Business Week (1999) 'Q&A: Jeff Bezos: Amazon.com (the pioneer of online selling) says that eBay doesn't have to lose for Amazon to win', *BusinessWeek*, no. 3631, pp. 137-141.
- Currie, W. (2004) *Value creation from E-Business model*, Butterworth-Heinemann, Oxford.
- D'Aveni, R.A. & Illinitch, A.Y. (1992) 'Complex Patterns of Vertical Integration in the Forest Products Industry: Systematic and Bankruptcy Risks', *Academy of Management Journal*, vol. 35, no. 3, pp. 596-625.

- (the) Economist (US) (2000) '2000 Amazon's amazing ambition', The Economist, vol. 354, no. 8159.
- Economist (2010a) 'Clicking for gold', The Economist, vol. 394, no. 8671, pp. 9-11.
- Economist (2010b) 'The web's new walls', The Economist, vol. 396, no. 8698, pp. 11.
- Economist (2006) 'Click to download', The Economist, vol. 280, no. 8491, pp. 57-58.
- Economist (2004a) 'Still Pending', The Economist, vol. 371, no. 8376, pp. 58.
- Economist (2004b) 'E-commerce takes off', The Economist, vo. 371, no. 8375, pp. 9.
- Fulfillment By Amazon (2011) Amazon services Europe [online], available : <http://services.amazon.co.uk/services/fulfilment-by-amazon/how-it-works/> [accessed : 2 May 2011].
- Gao, P. (2008) 'A Framework for Analyzing Emerging Business Models: Cases of China's Media Industry', Electronic Markets, vol. 18, no. 4, pp. 333-344.
- Giesen, E., Riddleberger, E., Christner, R. & Bell, R. (2010) 'When and how to innovate your business model', Strategy & Leadership, vol. 38, no. 4, pp. 17-26.
- Green, H. (2009) 'How Amazon aims to keep you clicking', BusinessWeek, no. 4121, pp. 34-40.
- Haig, M. (2001) E-Business Essentials, Kogan Page, London
- Hanafizadeh, P. & Nikabadi, M.S. (2011) 'Framework for selecting an appropriate e-business model in managerial holding companies - Case study: Iran Khodro', vol. 24, no. 3, pp. 237-267.
- Hedman, J. & Kalling, T. (2003) 'The business model concept: theoretical under-pinnings and empirical illustrations', European Journal of Information Systems, vol. 12, no. 1, pp. 49-59.
- Hoetker, G. (2005) 'How much you know versus how well i know you: selecting supplier for a Technically Innovative Component', Strategic Management Journal, vol. 26, no. 1, pp. 75-96.
- Hof, R.D. (2004) 'The wizard of Web Retailing', BusinessWeek, no. 3913, pp. 18.
- Hof, R.D., Neuborne, E. & Green, H. (1998) 'Amazon.com: the wild world of e-commerce', Business week, no. 3608, pp. 106-114.
- Hof, R.D. & Himelstein, L. (1999) 'EBay vs. Amazoin.com (cover story)', BusinessWeek, no. 3631, pp. 128-132.
- Kim, W.C. & Mauborgne, R.A. (1987) 'Cross-Cultural Strategies', The Journal of Business Strategy, vol. 7, no. 4, pp. 28-35.

- Linder & Cantrell (2001) 'Five business-model myths that hold companies back', *Strategy & Leadership*, vol. 29, no. 6, pp. 13-18.
- Lunn, M. (2002) 'Using business models and revenue streams for digital marketplace success', *Information Management & Computer Security*, vol. 10, no. 1, pp. 20-27.
- Magretta, J. (2002) 'Why business Models Matter', *Harvard Business Review*, vol. 80, no. 5, pp. 86-92.
- Margolis, B. (1999) 'An Amazon.com storey lessons learned!' *Direct Marketing*, vol. 62, no. 761, pp. 243.
- Mansfield, E., Schwartz, M. & Wagner, S. (1981) 'Imitation costs and patents: an empirical study', *Economic Journal*, vol. 91, no. 364, pp. 907-918.
- Mellahi, K. & Johnson, M. (2000) 'Does it pay to be a first mover in e-commerce? The case of Amazon.com', *Management Decision*, vol. 38, no. 7, pp. 445-452.
- Methlie, L.B. & Pedersen, P.E. (2002) 'A Taxonomy of Intermediary Integration Strategies in Online Markets', *Proceedings of the 15th Bled Electronic Commerce Conference*, Bled, Slovenia, June 17-19.
- Munk, N.C. (1999) 'Title fight', *Fortune*, vol. 139, no. 12, pp. 16.
- News Release (2011) Amazon.com [online], Available : <http://phx.corporate-ir.net/phoenix.zhtml?c=176060&p=irol-newsArticle&ID=1216597&highlight=> [Accessed : 1 May 2011].
- Papadakis, V. (2002) *Business Strategy: Greek and National experience [Στρατηγική των επιχειρήσεων : Ελληνική και διεθνής εμπειρία]*, 4th edn, Benou, Athens.
- Papakiriakopoulos, D.A., Poylumenakou, A.K. & Doukidis, G.J. (2001) 'Building e-business models: an analytical framework and development guidelines', *14th Bled Electronic Commerce Conference*, Bled, Slovenia, June 25-26, available : [http://ecom.fov.uni-mb.si/proceedings.nsf/0/5ba2fc04f2174ec8c1256e9f0030b818/\\$FILE28_Papakiri.pdf](http://ecom.fov.uni-mb.si/proceedings.nsf/0/5ba2fc04f2174ec8c1256e9f0030b818/$FILE28_Papakiri.pdf)
- PC Week (1999) 'Bezos: Amazon is about value', 8 March, p. 16.
- Porter, M.E. (1980) *Competitive Strategy*, Free Press, New York.
- Porter, M.E. (1990) *The Competitive Advantage of Nations*. Free Press, New York.
- Rodgers, J.A., Yen, D.C. & Chou D.C. (2002) 'Developing e-business: a strategic approach', *Information Management & Computer Security*, vol. 10, no. 4, pp. 184-192.
- Schafer, J.B., Konstan, J.A. & Reidl, J. (2001) 'E-commerce Recommendation Applications', *Data Mining and Knowledge Discovery*, Kluwer Academic, pp. 115-153.
- Shafer, S.M., Smith, H.J. & Linder, J.C. (2005) 'The power of business models',

Student ID: 7680680

Business Horizons, vol. 48, no. 3, pp. 199-207.

Standage, T. (2009) 'The plot thickens', The Economist, 21 November, World in 2010 Supplement, pp. 121-124.

Takao, M. & Matsumoto, M.J. (2004) 'A consideration of e-business modeling value evaluation', Systems and Computers in Japan, vol. 35, no. 7, pp. 85-97.

Teece, J. (2010) 'Business Models, Business Strategy and Innovation', Long Range Planning, vol. 43, no. 2/3, pp. 172-194.