

Taking a look at different types of e-commerce

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Abstract: In this paper, we are going to take a short introduction to different types of e-commerce. So, we will talk about e-commerce and then the types will be presented. They are described in details. Different relationships between commerce sides are subjected here and the categorizing is done. The types that are talked include: B2B, B2C, B2E, B2G, B2M, C2B, C2C, G2B, G2C, G2E, G2G, and P2P.

Key word: e-commerce . e-commerce types . business

I. INTRODUCTION

E-commerce is the use of Internet and the web to transact business but when we focus on digitally enabled commercial transactions between and among organizations and individuals involving information systems under the control of the firm it takes the form of e-business. Nowadays, 'e' is gaining momentum and most of the things if not everything is getting digitally enabled. Thus, it becomes very important to clearly draw the line between different types of commerce or business integrated with the 'e' factor.

Based on the type of relationship between different sides of commerce, it can be categorized in different types. In this paper, we will get into them in details.

II. E-COMMERCE TYPES

There exist different transaction schemas that are forked from different types of e-commerce. Here, we are going to talk about them in details.

Business-to-business

Business-to-business (B2B) describes commerce transactions between businesses, such as between a manufacturer and a wholesaler, or between a wholesaler and a retailer. Contrasting terms are business-to-consumer (B2C) and business-to-government (B2G).

The volume of B2B (Business-to-Business) transactions is much higher than the volume of B2C transactions. The primary reason for this is that in a typical supply chain there will be many B2B transactions involving sub components or raw materials, and only one B2C transaction, specifically sale of the finished product to the end customer. For example, an automobile manufacturer makes several B2B transactions such as buying tires, glass for windscreens, and rubber hoses for its vehicles. The final transaction, a finished vehicle sold to the consumer, is a single (B2C) transaction.

B2B is also used in the context of communication and collaboration. Many businesses are now using social media to connect with their consumers (B2C); however, they are now using similar tools within the business so employees can connect with one another. When communication is taking place amongst employees, this can be referred to as "B2B" communication.

The term "business-to-business" was originally coined to describe the electronic communications between businesses or enterprises in order to distinguish it from the communications between businesses

and consumers (B2C). It eventually came to be used in marketing as well, initially describing only industrial or capital goods marketing. Today it is widely used to describe all products and services used by enterprises. Many professional institutions and the trade publications focus much more on B2C than B2B, although most sales and marketing personnel are in the B2B sector [1].

Business-to-consumer

Business-to-consumer (B2C, sometimes also called Business-to-Customer) describes activities of businesses serving end consumers with products and/or services.

An example of a B2C transaction would be a person buying a pair of shoes from a retailer. The transactions that led to the shoes being available for purchase, which is the purchase of the leather, laces, rubber, etc. However, the sale of the shoe from the shoemaker to the retailer would be considered a (B2B) transaction.

While the term e-commerce refers to all online transactions, B2C stands for "business-to-consumer" and applies to any business or organization that sells its products or services to consumers over the Internet for its own use. When most people think of B2C e-commerce, they think of Amazon, the online bookseller that launched its site in 1995 and quickly took on the nation's major retailers. In addition to online retailers, B2C has grown to include services such as online banking, travel services, online auctions, health information and real estate sites. Peer-to-peer sites such as Craigslist also fall under the B2C category.

B2C e-commerce went through some tough times, particularly after the technology-heavy Nasdaq crumbled in 2000. In the ensuing dotcom carnage, hundreds of e-commerce sites shut their virtual doors and some experts predicted years of struggle for online retail ventures. Since then, however, shoppers have continued to flock to the web in increasing numbers. In fact, North American consumers adopted e-commerce so much that despite growing fears about identity theft, they spent \$172 billion shopping online in 2005, up from \$38.8 billion in 2000.

By 2010, consumers are expected to spend \$329 billion each year online, according to Forrester Research. What's more, the percentage of U.S. households shopping online is expected to grow from 39 percent this year to 48 percent in 2010.

In October 2010, an extension of B2C, B2I was coined (sometimes referred to as B2I). While B2C includes all manners of a business marketing or selling to consumers, B2I is specifically targeted towards an individual. B2I requires specific Personalization for that individual. B2I requires Insight in order to create the personalized experience [2].

Business-to-employee

Business-to-employee (B2E) electronic commerce uses an intrabusiness network which allows companies to provide products and/or services to their employees. Typically, companies use B2E networks to automate employee-related corporate processes.

Examples of B2E applications include [3]:

- Online insurance policy management
- Corporate announcement dissemination
- Online supply requests
- Special employee offers
- Employee benefits reporting
- 401(k) Management

Business-to-government

Business-to-government (B2G) is a derivative of B2B marketing and often referred to as a market definition of "public sector marketing" which encompasses marketing products and services to various government levels - including federal, state and local - through integrated marketing communications techniques such as strategic public relations, branding, marcom, advertising, and web-based communications.

B2G networks provide a platform for businesses to bid on government opportunities which are presented as solicitations in the form of RFPs in a reverse auction fashion. Public sector organizations (PSO's) post tenders in the form of RFP's, RFI's, RFQ's, Sources Sought, etc. and suppliers respond to them.

Government agencies typically have pre-negotiated standing contracts vetting the vendors/suppliers and their products and services for set prices. These can be state, local or federal contracts and some may be grandfathered in by other entities (ie. California's MAS Multiple Award Schedule will recognize the federal government contract holder's prices on a GSA General Services Administration Schedule).

There are multiple social platforms dedicated to this vertical market and they have risen in popularity with the onset of the ARRA/Stimulus Program and increased government funds available to commercial entities for both grants and contracts [4].

Business-to-Manager

Business-to-Manager or B2M is a new mode of E-business. It refers to transaction between enterprises (product sellers or any other workers) and professional managers.

B2M schema consists of finding out the information on the net and earning commission by providing services for enterprises [5].

Consumer-to-business

Consumer-to-business (C2B) is an electronic commerce business model in which consumers (individuals) offer products and services to companies and the companies pay them. This business model is a complete reversal of traditional business model where companies offer goods and services to consumers (business-to-consumer = B2C). We can see this example in blogs or internet forums where the author offers a link back to an online business facilitating the purchase of some product (like a book on Amazon.com), and the author might receive affiliate revenue from a successful sale.

This kind of economic relationship is qualified as an inverted business type. The advent of the C2B scheme is due to major changes:

Connecting a large group of people to a bidirectional network has made this sort of commercial relationship possible. The large traditional media outlets are one direction relationship whereas the internet is bidirectional one.

Decreased cost of technology: Individuals now have access to technologies that were once only available to large companies (digital printing and acquisition technology, high performance computer, powerful software) [6].

Consumer-to-consumer

Consumer-to-consumer (C2C) (or citizen-to-citizen) electronic commerce involves the electronically-facilitated transactions between consumers through some third party. A common example is the online auction, in which a consumer posts an item for sale and other consumers bid to purchase it; the third party generally charges a flat fee or commission. The sites are only intermediaries, just there to match consumers. They do not have to check quality of the products being offered.

Consumer-to-consumer (C2C) marketing is the creation of a product or service with the specific promotional strategy being for consumers to share that product or service with others as brand advocates based on the value of the product. The investment into conceiving and developing a top of the line product or service that consumers are actively looking for is equatable to a Business-to-consumer (B2C) pre launch product awareness marketing spend.

This type of e-commerce is expected to increase in the future because it cuts out the costs of using another company. An example cited in Management Information Systems, is for someone having a garage sale to promote their sale via advertising transmitted to the GPS units of cars in the area. This would potentially reach a larger audience than just posting signs around the neighborhood. In the economic downturn which commenced in 2008 C2C commerce levels increased dramatically online [7].

Government-to-Business

Government-to-Business (abbreviated G2B) is the online non-commercial interaction between local and central government and the commercial business sector, rather than private individuals (G2C). For

example <http://www.dti.gov.uk> is a government web site where businesses can get information and advice on e-business 'best practice'. <http://g2b.perm.ru> is another example [8].

Government-to-Citizen

Government-to-Citizen (abbreviated G2C) is the communication link between a government and private individuals or residents. Such G2C communication most often refers to that which takes place through Information and Communication Technologies (ICTs), but can also include direct mail and media campaigns. G2C can take place at the federal, state, and local levels. G2C stands in contrast to G2B, or Government-to-Business networks.

One such Federal G2C network is USA.gov: the United States' official web portal, though there are many other examples from governments around the world [9] [10].

Government-to-employees

Government-to-employees (abbreviated G2E) is the online interactions through instantaneous communication tools between government units and their employees. G2E is one out of the four primary delivery models of e-Government [11] [12] [13].

G2E is an effective way to provide E-learning to the employees, bring them together and to promote knowledge sharing among them [14]. It also gives employees the possibility of accessing information in regard to compensation and benefit policies, training and learning opportunities and civil rights laws. G2E services also include software for maintaining personnel information and records of employees [15].

G2E is adopted in many countries including the United States, Hong Kong and New Zealand [16] [17].

Government-to-Government

Government-to-Government (abbreviated G2G) is the online non-commercial interaction between Government organisations, departments, and authorities and other Government organisations, departments, and authorities. Its use is common in the UK, along with G2C, the online non-commercial interaction of local and central Government and private individuals, and G2B the online non-commercial interaction of local and central Government and the commercial business sector. G2G systems generally come in one of two types:

- Internal facing - joining up a single Governments departments, agencies, organisations and authorities - examples include the integration aspect of the Government Gateway, and the UK NHS Connecting for Health Data SPINE.
- External facing - joining up multiple Governments IS systems - an example would include the integration aspect of the Schengen Information System (SIS), developed to meet the requirements of the Schengen Agreement [18].

Peer-to-peer

Peer-to-peer (P2P) computing or networking is a distributed application architecture that partitions tasks or workloads between peers. Peers are equally privileged, equipotent participants in the application. They are said to form a peer-to-peer network of nodes.

Peers make a portion of their resources, such as processing power, disk storage or network bandwidth, directly available to other network participants, without the need for central coordination by servers or stable hosts [19]. Peers are both suppliers and consumers of resources, in contrast to the traditional client-server model where only servers supply, and clients consume.

The peer-to-peer application structure was popularized by file sharing systems like Napster. The concept has inspired new structures and philosophies in many areas of human interaction. Peer-to-peer networking is not restricted to technology, but covers also social processes with a peer-to-peer dynamic. In such context, social peer-to-peer processes are currently emerging throughout society [20].

REFERENCES

- [1] Wikipedia, article available at: <http://en.wikipedia.org/wiki/Business-to-business>
- [2] Wikipedia, article available at: <http://en.wikipedia.org/wiki/Business-to-consumer>
- [3] Wikipedia, article available at: <http://en.wikipedia.org/wiki/Business-to-employee>
- [4] Wikipedia, article available at: <http://en.wikipedia.org/wiki/Business-to-government>
- [5] Wikipedia, article available at: http://en.wikipedia.org/wiki/B2M_or_Business-to-Manager
- [6] Wikipedia, article available at: <http://en.wikipedia.org/wiki/Consumer-to-business>
- [7] Wikipedia, article available at: <http://en.wikipedia.org/wiki/Consumer-to-consumer>
- [8] Wikipedia, article available at: <http://en.wikipedia.org/wiki/Government-to-business>
- [9] White, Jay D. (2007) *Managing Information in the Public Sector*. M.E. Sharpe. New York
- [10] Wikipedia, article available at: <http://en.wikipedia.org/wiki/Government-to-citizen>
- [11] "E-Government for Developing Countries: Opportunities and Challenges" (PDF). The Electronic Journal on Information Systems in Developing Countries (EJISDC). 2004. <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.127.9483&rep=rep1&type=pdf>. Retrieved 2010-01-18.
- [12] Raghavan, B.S. (10 August 2001). "E-the-people". Business Line. The Hindu Group (India). <http://www.thehindubusinessline.com/2001/08/10/stories/041039of.htm>. Retrieved 2010-01-19.
- [13] "On demand government". The Daily Telegraph (London). 18 November 2003. <http://www.thehindubusinessline.com/2001/08/10/stories/041039of.htm>. Retrieved 2010-01-19.
- [14] "U.S. Department of Labor E-Government Strategic Plan". United States Department of Labor. http://www.dol.gov/_sec/e_government_plan/p41-43_appendix.htm. Retrieved 2010-01-19.
- [15] "Government to Employee". Eon Technologies. <http://www.erego.com/solutions/G2E.htm>. Retrieved 2010-01-18.
- [16] Hafedh Al-Shihi (March 2006). "Critical Factors in the Adoption and Diffusion of E-government Initiatives in Oman" (PDF). pp. 13, 14. <http://wallaby.vu.edu.au/adt-VVUT/uploads/approved/adt-VVUT20060904.154748/public/01front.pdf>. Retrieved 2010-01-19.
- [17] Wikipedia, article available at: <http://en.wikipedia.org/wiki/Government-to-employees>
- [18] Wikipedia, article available at: <http://en.wikipedia.org/wiki/Government-to-Government>
- [19] Glossary of P2P terminology, available at: <http://www.p2pna.com/glossary.html>
- [20] Wikipedia, article available at: <http://en.wikipedia.org/wiki/Peer-to-peer>