

BUSINESS MODELS AND SOCIAL MEDIA IN THE ELECTRONIC ECONOMY

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This paper presents common classifications of business models on the Internet. It also discusses the author's own typology of corporate presence in the social media. A new trend in social networks is to build communities around thematic portals. Examples of such solutions include group buying and crowdfunding. It has been pointed out that the existing legislation lags behind the dynamic growth of crowd funding in Poland.

Keywords: business model, social media, electronic economy, crowd funding

1. Introduction

All of the business activity occurring on electronic markets can be labelled as the 'electronic economy'. It does not only comprise the virtual marketplace but also represents a space where effective marketing efforts can be undertaken, from the provision of information to promotion of companies and their products, and management of relations with prospective customers.

The key areas of online business activity, as identified by Malara [14, 232–233], comprise the virtual space for information, communication, distribution and transactions. The virtual information space allows companies not only to provide information about themselves, their products or services but also to seek market data and customer information. The virtual communication space means that views are exchanged and communication with business partners and customers takes place. The virtual distribution space is a new channel to deliver goods and services,

particularly those distributed digitally. The virtual transaction space is used by companies to execute formal business transactions: electronic documents (such as invoices, purchase orders, bank transfer confirmations) are treated as equivalent to traditional hard-copy documents. Many companies which took their business online initially organised clones of their brick-and-mortar marketing and sales departments in the virtual space. As the results of such decisions were encouraging, an increasing number of companies started moving their business online, to a greater or lesser extent. The benefits offered by the Internet, particularly to small businesses, involve gaining a higher profile as a company, reducing costs, boosting sales and getting better access to market studies. That, in consequence, gives them better opportunities to enter international markets (in a fast and cost-effective way) [15, 91]. However, it is crucial to identify the so-called *ideal place* for a market opportunity in e-commerce. The main concept of such ideal place is presented in Fig. 1. Such opportunities should be sought at the customer-business interface, employing the right information technologies and operating at a distance from areas already captured by competitors.

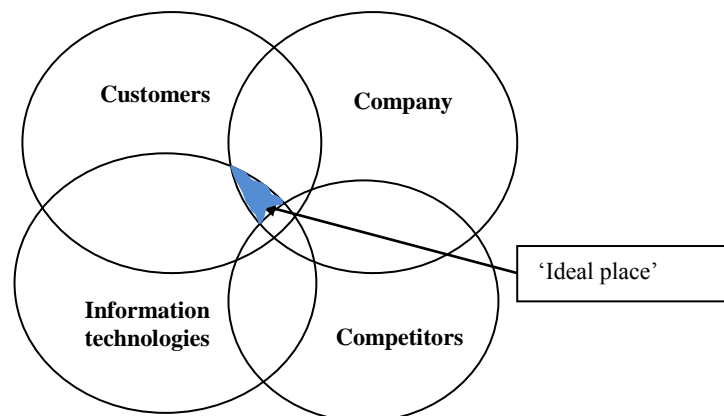


Figure 1. Ideal place for a market opportunity in e-commerce
Source: [5, 295]

Recently, many companies have cast their glance towards the social media as a new and promising business environment. While active presence in the social media does not generate direct revenues for enterprises, the use of such media indirectly supports their business by enhancing the image of companies and their products, by improving customer relations, offering consumer education on products and services from the company's portfolio, engaging customers in the development of expected products, mobilising them to make purchases, and influencing shopping trends within the virtual community. There are also businesses which essentially rely on their own user networks.

This paper aims at locating community-based solutions within the existing classifications of online business models.

2. Typologies of Internet business models

Business organisations which operate on the Internet can be subdivided into three essential types:

- 1) *Business groups or industry groups* [20, 89] – they comprise companies from a particular area of business, with key corporate data being available on the group's website;
- 2) *Catalogues* – commercial offers are available via a website as an electronic catalogue;
- 3) *Auction sites* – meeting places for sellers and buyers where sale-purchase transactions are executed. The subtypes distinguished here include various exchanges of commodities (raw materials, tangible and intangible products) and of services.

A business model is an abstract term referring to an undertaking, its methods and manners of operation and sources of value generated by that undertaking [11, 612]. In other words, a business model illustrates the overall business concept i.e. what will be offered to customers and how, and which payment mode(s) will be used (direct cash payments, indirect payments, e.g. when users represent a target audience for advertisers) [21, 191].

If we narrow down our area of interest to businesses operated via the Internet, we can subdivide the types of interactions between three key groups of actors on the electronic market, i.e. Government, Business and Customer, as presented in Tab. 1. The shadowed fields in Tab. 1 refer to business activities on electronic markets. They are described by many authors as the basic e-commerce models [6, 219–220; 10, 416]. The selection and identification of a basic model is useful for owners or managers not only order to understand their business but also to make crucial strategic business decisions [1, 61].

Hence, a question arises about the relationship between e-business and e-commerce. *E-commerce* is about purchasing or selling goods and services via the Internet or other electronic networks [11, 35]. *E-business* is operated using the Internet or other digital technologies for all business processes, including electronic commerce, understood as internal management of supplies to and from business partners [11, 36].

In the case of C2C transactions, interactions between customers which are open, transparent and visible to other customers are called *sociopetal*. B2C translations which are partially hidden from other customers are known as *sociofugal* e-services [16, 101].

Table 1. Relationships between key actors on the electronic market

E-market actors	Government (G)	Business (B)	Customer (C)
Government (G)	(G2G) process coordination, internal document flow	(G2B) circulation of business information	(G2C) circulation of business information
Business (B)	(B2G) public procurement	(B2B) 'classic' e-business	(B2C) 'classic' e-commerce
Customer (C)	(C2G) taxation	(C2B) price comparisons	(C2C) online auctions

Source: [17, 60]

2.1. Typology by Writz

Writz proposed a '4C' typology (*Content, Commerce, Context, Connection*), with e-business models relying on one of four key elements [24, 274–275]:

1. *Content* – accumulated content is made available to users; profits are earned from fees paid by users or advertisers;
2. *Commerce* – profits are earned from trade margins or commissions;
3. *Context* – information is collected and processed and then made available to users, and revenues are not transaction dependent but, instead, are usually earned from advertising;
4. *Connection* – advertising or fees and user donations within virtual communities are the source of profits.

2.2. Typology by Laudon & Laudon

In the U.S. edition of their book, Kenneth and Jane Laudon subdivide Internet business models into 8 groups [10, 413]:

1. *Virtual storefront* – sells physical products directly to end consumers;
2. *Information broker* – an intermediary which provides information on opportunities, goods and services available on the market to individuals and businesses;
3. *Transaction broker* – an intermediary between parties to a deal, providing essential information and matching partners to a transaction;
4. *Online marketplace* – a platform enabling sale-purchase transactions online;
5. *Content provider* – profits are earned from making content available online;
6. *Social network, virtual communities* – in order to create a community around a service, interesting features (based on Web 2.0) are offered to maintain communication within the group; profits are earned mostly from advertising placed on the site, from content/service subscriptions and sale of marketing-relevant data about users;
7. *Portal* – offers content and access to other services, with a section of the site being made available to advertisers;

8. Service provider – ‘provides (...) applications such as photo sharing, video sharing, and user-generated content (...) as services.’ [10, 413].

In the German edition of their book, the same authors, jointly with Detlef Schoder, identified one more model, called *Syndicator*. This term describes an undertaking where content and applications from a variety of sources are accumulated, processed and then sold further to other portals [11, 614].

2.3. Synthesis

When synthesising various classifications of electronic business models [10, 413; 11, 614; 19; 13, 140] we can identify ten core models which may exist in the business world either single-handedly or as sets of co-existing models. Those are:

- 1) *Transaction broker* – the company acts as an intermediary which matches sellers and buyers. The revenues come from commissions on transactions actually executed. The broker operates on B2B, B2C and C2C markets.
- 2) *Advertising* – revenues *come* from selling advertising space. The essential *success* factor is to ensure a sufficient number of hits/visits by users who belong to target groups of interest for advertisers. Examples of this model include social networking sites, news portals or motivational marketing operations (newsletters, quizzes etc). This model comes in two subtypes: advertising on social media and advertising on portals [10, 413].
- 3) *Information broker* – such companies accumulate customer information and *then* offers it to other organisations against payment. This model also comprises the so-called *trust services* which consist in selling information that guarantees compliance of business deals and agreements. Various methods are used to obtain such data, by motivating users to provide information about their preferences. A company or an individual may also engage in searching and selling information on a topic of interest for customers.
- 4) *Virtual store* – it engages in online retailing and wholesaling, through catalogues and *offers*. This refers to traditional as well as digital products and services.

The obstacles which still persist in e-commerce primarily consist in customs barriers, even within Europe. A success in overcoming such barriers will be particularly beneficial for elderly citizens (who sometimes struggle with mobility problems) and inhabitants of poorly urbanised areas as they will gain access to a broader and cheaper range of goods and services [4].

- 5) *Direct* – this model assumes that a manufacturer wants to target customers directly via electronic means of communication, cutting out the middleman. This model reduces costs and, consequently, the asking price and helps to improve the service quality through direct communication with customers and support offered to them.

- 6) *Network* – an online service is created to build a community of customers, manufacturers and suppliers.
- 7) *Affiliate* – users gain access to specific services against a pre-defined fee. Users pay only for services actually used, e.g. access to a research report, opportunity to download an article from a newspaper archive etc. Access to a catalogue of downloadable documents (and often also email newsletters with updates) and content snippets are free of charge. A fee is only charged for downloading specific content in full (e.g. IDC research database) [8].
- 8) *Subscription* – users gain access to, and the right to use, specific content against a subscription fee. A site might offer free-of-charge sections with basic information, with different subscription options to various kinds of access rights to broader data set. Examples include full-text databases of academic publishers or electronic issues of academic journals (e.g. in mathematical sciences [9]).
- 9) *Online marketplace* – auctions attract individuals who want to sell old items or buy various items at bargain prices (in this context, old' means purchased min. 6 months earlier, starting from the end of the month when the purchase took place), as well as individuals who engage in buying and selling of goods, business, whether or not as an officially enterprise.

A business may be an auction-type operation if it displays the following characteristics [23]:

- Purchasing for reselling (more than one item of the same kind, all of which remain unpacked);
- Buying and selling is organised (regular collaboration with business partners, regular use of courier companies, storage rather than use of purchased items etc.)
- E-commerce is the essential source of income.

Three main types of auctions are found on the Internet:

1. *Forward Auction* (also called an English auction [7, 843] or a classic auction [3, 13]) – the seller offers goods to multiple buyers on an 'open outcry' basis; the auctioned goods go to the participant who has offered the highest price. This format is used for selling older technologies, assets as well as problem goods and customer returns;
2. *Reverse Auction* [7, 842] – a buyer who seeks goods or services invites suppliers to take part in an auction (competitive bidding); the auction is won by the bidder who has offered the lowest price; bidders place their bids without knowing any of the other bids;
3. *Dutch Auction* [7, 843] – the asking price on goods or services is quoted at a particular moment and then gradually lowered by specific ticks at predefined intervals. Participants who are watching the auction press

‘buy’ once the price has reached an acceptable level. The first participant to do so wins the auction and becomes the buyer.

With regard to types of merchandise offered, online auctions may be *horizontal* (various goods are offered) or *vertical* (goods are of the same type, within a single industry) [7, 14]. As regards timing, we distinguish between *blitz auctions* (which have a predefined duration and the participant offering the highest price becomes the winner) and *parallel auctions* (many identical products are auctioned in parallel, and the winners are those who have offered the highest, albeit not necessarily the same, prices).

And, finally, the last model for online business:

- 10) *Service provider* – used by suppliers of e-business infrastructure (information technologies, software, network systems etc.), as well as providers of support for virtual businesses, whether start-ups or incumbents. *Cloud computing* is one particular example of this kind of business model.

The dynamics of e-business is so intense that any attempt at describing all existing business operations on the world wide web is hardly possible any longer. The e-business models presented here illustrate only the basic ways of generating revenues within electronic networks; they make up a set which is sufficient to describe the forms of business operations found on the Internet. The actual shape of operations depends on the creativity of those who set up an online business. However, it goes without saying that the huge and ever growing number of varieties within those basic business models is driven by the multitude of technologies typical of the digital era [12, 16–17].

3. Social media in electronic business

The essential ways of leveraging corporate presence in the social media are as follows [18, 75–76]:

1. *Promotion* – a corporate fanpage is set up to promote a brand or a company;
2. *Building relations with customers*, via the following:
 - *Personal profile* – a personified corporate account. A disadvantage is that the number of potential users, of ‘friends’, is limited, and each new friend request needs to be confirmed. Some social media have introduced ceilings on the number of friends per a personal profile (e.g. Facebook has set a ceiling of 5,000 people [22, 159; 2]). This kind of corporate account is targeted at customers who belong to elitist groups;
 - *Fanpage* – this method has no constraints with regard to the number of likes, and new fans can join without the fanpage owner having to confirm each new arrival; this kind of profile is recommended not only for

companies but also for public figures [22]. A moderator responsible for maintaining a corporate fanpage posts news about the company and its products and initiates discussions with interested users. Such fanpages present an opportunity to run various marketing and promotional activities, e.g. contests, voting/polls, special campaigns etc. A fanpage may also be established as a way to offer quick, *ad hoc* customer support. Any reported problems are handled by specialists on duty through two-way public communication, on as-needed basis`;

3. *Patronage* – a fanpage on a specific topic associated with a company, an industry or an event involving the company (e.g. through sponsorship or mentoring). Companies usually insert their logos on such pages and promote products or services that are strictly related to the main topic of the fanpage. Communication with target users is usually bidirectional and aimed at stimulating maximum activity on their part.
4. *Inside e-commerce* – this idea is based on using applications which enable transactions within a popular social networking site e.g. trading in virtual goods;
5. *Advertising* – this idea is based on using the community built around a site as potential target audience, and using the site as a vehicle for personalised marketing (based on the analysis of individual posts). One new idea here is to encourage users to follow their friends' shopping behaviour. Methods employed for this purpose include social sharing of information about purchases (*social buying*) or about web content read (*social reading*).

Efforts to build a community around an online site mark a new trend in the electronic economy. Examples of this trend include group buying and crowdfunding. Both ideas involve an intermediary between a large group of potential consumers/investors and sellers of goods, services or investment ideas.

The future of crowdfunding seems to be particularly interesting. This phenomenon has 3 varieties:

1. *Microdonation* – this idea enables sponsorship of socially beneficial or charitable initiatives through small donations from multiple donors;
2. *Microfundation* – this involves financing of major initiatives, especially at the start-up phase, when the risk of failure is high. If a failure does happen, the loss per individual investor is rather small;
3. *Community lending* – this is an idea to extend a loan through a social networking site, *bypassing* banks. The amount to be loaned may be divided between many people who are willing to lend money for a particular period at a particular rate.

In Poland, only microdonations are regulated by law to some extent: the existing tax legislation permits tax-free donations of up to PLN 9,637 during 5 years. The remaining forms of crowdfunding are still to be legislated.

4. Conclusion

The set of ten key models used in the electronic economy is sufficient to describe the forms of business operations found on the Internet. New e-business concepts rely on one or a combination of those models.

Companies increasingly resort to social media not only for marketing but also in order to improve their relations with customers. Moreover, social media are a space where new, creative ideas are implemented for large-scale business based on communities which have been built. Consequently, we are witnessing a plethora of ideas whereby communities are being built around thematic sites offering participation in significant, often global, undertakings. Wikipedia.com is a noteworthy example but we can also mention *OtwarteZabytki.pl*, a project designed to create a catalogue of historic monuments and sites throughout Poland. Moreover, crowdfunding has been gaining importance as a solution to accumulate funds for socially beneficial or charitable purposes as well as new, creative initiatives which would stand no chance of becoming reality without the support of numerous, albeit small, investors.

REFERENCES

- [1] Amarasena A. (2008) *The Internet in the Performance of Small Exporting Firms. A Developed to Developing Country Market Context*, Journal of Internet Business, 5/2008, 52-79.
- [2] Arrington M. (2008) *Facebook To Lift 5,000 Friends Limit*, TechCrunch.com, 5/2008 <http://techcrunch.com/2008/05/09/facebook-to-lift-5000-friends-limit> 10.02.2011.
- [3] Chmielarz W. (2006) *Próba analizy porównawczej serwisów aukcji internetowych w Polsce*, „Roczniki Kolegium Analiz Ekonomicznych” 16/2006, 13-26.
- [4] *Europe's need for e-freedom*, The Economist, 28.10.2010, http://www.economist.com/node/17361454?story_id=17361454 11.07.2012.
- [5] Figiel S. (2005) *Wybrane cechy handlu elektronicznego na tle handlu konwencjonalnego*, Oficyna Wydawnicza SGH, Warszawa, Poland.
- [6] Gupta U. G. (2000) *Information Systems. Success in the 21st Century*, Prentice Hall, USA.
- [7] Hansen H. R., Neumann G. (2009) *Wirtschaftsinformatik I. Grundlagen und Anwendungen*, Lucius & Lucius, 10. Auflage, Stuttgart, Germany.
- [8] IDC <http://www.idc.com/home.jsp?t=1341136449639> 22.07.2012.
- [9] IM PAN <http://www.impan.pl/cgi-bin/prices> 22.07.2012.
- [10] Laudon K. C., Laudon J. P. (2010) *Management Information Systems - Managing the Digital Firm*, XI edition, Pearson, Cambridge, USA.

- [11] Laudon K. C., Laudon J. P., Schoder D. (2010) *Wirtschaftsinformatik: Eine Einführung*, 2. Auflage, Pearson Studium, München, Germany, 612, 35-36, 614.
- [12] Levis K. (2009) *Twórcy i ofiary ery internetu*, MUZA, Warszawa, Poland.
- [13] Li F. (2007) *What is e-Business? How the Internet Transforms Organizations*, Blackwell Publishing, Oxford.
- [14] Malara Z. (2006) *Przedsiębiorstwo w globalnej gospodarce. Wyzwania współczesności*, WN PWN Warszawa, Poland 2006.
- [15] Moini H., Tesar G. (2005) *The Internet and internationalisation of smaller manufacturing enterprises*, Journal of Global Marketing, 18(3/4)/2005, 79-94.
- [16] Nicholls R. (2008) *Customer-to-customer Interaction in the Word of e-Service*, Scientific Journal, 499(3)/2008, Szczecin, Poland, 97-104.
- [17] Nojszewski D. (2006) *Przegląd modeli e-biznesowych (część I)*, e-Mentor, 5(17)/2006, 59-62.
- [18] Polańska K. (2011) *Business nature of social media*, Zeszyty Naukowe Uniwersytetu Szczecińskiego Nr 656, Studia Informatica, 28/2011, 73-87 (in Polish).
- [19] Rappa M. (2010) *Business Models on the Web*, (last update 7.01.2010) <http://www.digitalenterprise.org/models/models.html> 23.07.2012.
- [20] Szpringer W. (2000) *Handel elektroniczny – konkurencja czy regulacja?*, Difin, Warszawa, Poland.
- [21] Teece, D. J. (2010) *Business Models, Business Strategy and Innovation*, Long Range Planning, 43/2010, 172-194.
- [22] Weinberg T. (2009) *The New Community Rules: Marketing on the Social Web*, o'Reilly Media, Sebastopol, USA.
- [23] Wojtasik P. (2010) *Handel na Allegro może być działalnością gospodarczą*, Rzeczpospolita. 6.10.2010.
- [24] Writz B. W., Schike O., Ullrich S. (2010) *Strategic Development of Business Models. Implications of the Web 2.0 for Creating Value on the Internet*, Long Range Planning, 43/2010, 274-275.