New trends in the electronic economy

INTRODUCTION

The existing classifications of online business models can be summarised in one typology consisting of ten core models. Many enterprises in the electronic economy use elements from more than one model. Social media are usually defined as undertakings which rely on the Advertising model. In practice, however, they also draw on elements from the Network and Infomediary models.

The purpose of this paper is to locate social networking solutions within the classification of online business models and to present new trends in the electronic economy against this backdrop.

ELECTRONIC BUSINESS

Business activity in the world wide web constantly evolves as the web develops and opportunities of exchanging ever larger data files emerge. The initial forms of online presence (i.e. some information about the company plus contact data being posted on a website) have dynamically expanded as new business processes were incorporated into the virtual space. One may also assume that the virtualization of business activities has been evolutionary, with brick-and-mortar enterprises being electronically transformed into virtual entities. The current degree of virtuality is reflected in subsequent stages of that evolution. Initial online presence is the first step towards electronic transformation leading to the establishment of an entity capable of running its business entirely in the virtual environment.

More than a half of enterprises registered in Poland have embarked upon the path to electronic business. According to the report published by the Central

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Statistical Office of Poland (GUS) in May 2010\(^2\), 57% of Polish enterprises presented themselves on their own website in 2008. One in two small businesses had its own website. The respective percentage for medium-sized enterprises was 77%, and the share for large companies was 88%\(^3\). For the sake of comparison, the share of Danish companies which had their own website was 87%, with 86% for Sweden\(^4\).

The virtual environment offers a new, dynamic space for running business. As an access vehicle, the Internet is available round the clock (24/7) on all days of the week. The access speed is only limited by the channel capacity. Mobile devices have made remote communication independent of specific location and time (spatial and temporary release). Moreover, the requested information can be reached not only quickly, at any time and from anywhere but also in an orderly manner thanks to search engines and portals which accumulate and structure large bodies of data. Given all of the above, social behaviours and business models necessarily underwent adaptive changes. Thus, the rules of business in the cyberspace have been profoundly altered.

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.

**TYPES OF E-BUSINESS MODELS**

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\(^5\).

Literature brings many classifications of e-business models. When synthesising various classifications of electronic business models\(^6\) we can identify ten core models:


\(^3\) *Ibidem*, p. 44.

\(^4\) *Ibidem*, p. 46.


1. Transaction broker [broker model] – the company acts as an intermediary which matches sellers and buyers. The revenues come from commissions on transactions actually executed. Examples of this model include eBay.com in the USA, travel agents or classifieds websites.

2. Advertising [advertising model] – 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 (quizzes, newsletters etc). Some authors distinguish two separate models instead: advertising model in social networking services (e.g. Facebook.com, Twitter.com, NaszaKlasa.pl) and advertising model on news websites7, with examples such as Yahoo.com or MSN.com.

3 Information broker [infomediation model] – such companies accumulate consumer 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. Examples of such businesses include Kbb.com, Insweb.com or Industrialmall.com.

4. Merchant or Virtual storefront [trade model] – this model involves online retailing and wholesaling, through catalogues and offers. This refers to traditional as well as digital products and services. Amazon.com is the best-known example. The most virtual stores in Poland include Merlin.pl, Empik.pl, Baza-rek.pl, Euro.com.pl and Bonprix.pl.

5. Manufacturer or Direct [manufacturer model] – this model assumes that a manufacturer wants to target customers directly via electronic means of communication, cutting out the middlemen. 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. Examples include Onduline.com.pl or Cora.pl in the construction industry, Wittchen.com in the leather goods industry, and Atlantic.pl in the clothing industry.

6. Network [network model] – a company establishes business relations with manufacturers and vendors and, on the other hand, with websites which are interested in promoting specific products yet cannot engage in direct collaboration with the manufacturer. Examples include advertising networks where one company matches online service providers with advertisers.

7 Cf. e.g. K.C. Laudon, J.P. Laudon, Management Information Systems...
7. Affiliate [tariff model] – 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.

8. Subscription or Content provider [subscription model] – 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 giving various kinds of access rights to broader data sets. Examples include full-text databases of academic publishers (e.g. Jstor, EBSCO, ProQuest) or electronic issues of academic journals, books (e.g. Elsevier.com).

9. Online marketplace [auction model] – auctions attract individuals who want to sell old items8 or buy various items at bargain prices as well as individuals who engage in buying and selling of goods, business, whether or not as an officially enterprise. Three main types of auctions are found on the Internet, i.e. Forward Auction, Reverse Auction and Dutch Auction. 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). As regards timing, we distinguish between blitz auctions (which have a predefined duration and the participant offering the highest price within the specified time frame 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).

10. Utility or Service provider [online business support model] – used by providers of applications for co-creation and sharing user-generated content, as well as providers of e-business infrastructure (information technologies, software, network systems etc.), as service.

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. The actual shape of e-business operations depends on the creativity of managers and owners of an new business on the Internet. 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, with business models cleverly leveraging all kinds of innovations9.

8 An old item is one which was bought at least six months earlier, starting from the end of the month when the purchase took place.

THE USE OF SOCIAL MEDIA IN ELECTRONIC BUSINESS

A company’s presence in any social networking service may be instrumental for achieving various business purposes. Depending on the purpose, the following types of activities in social media are undertaken:\(^\text{10}\):

1. **Promotion** – a corporate account is set up to promote a brand or a company; this is a new, complementary communication channel, usually working unidirectionally, to communicate updates about the company or its flagship product.

2. Building customer relations using an account:
   a) **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\(^\text{11}\). This kind of corporate account is targeted at customers who belong to elitist groups.
   b) **Fanpage** – this method has no constraints with regard to the number of likes (fans on Facebook and followers on Twitter), and new friends can join without the page owner having to confirm each new arrival; this kind of account is recommended not only for businesses but also for public figures\(^\text{12}\). A moderator responsible for maintaining a corporate account posts news about the company and its products and initiates discussions with interested users. Such pages offer an opportunity to run various marketing and promotional activities, e.g. voting, polls, contests, special campaigns etc.
   c) **Customer support page for a company or a product** – a corporate account established to offer quick, *ad hoc* customer support. Any reported problems are handled by specialists on duty through two-way public communication.

3. **Patronage** – an account devoted to 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.

\(^{10}\) This typology is an extended version of the typology proposed in: K. Polańska, *Biznesowy charakter mediów społecznościowych*, “Zeszyty Naukowe Uniwersytetu Szczecińskiego” No. 656 “Studia Informatica” No. 28, 2011, pp. 75–76.


\(^{12}\) Cf. T. Weinberg, The New Community…
4. *Inside e-commerce* – this idea is based on using relevant applications which enable transactions within a popular social networking site (e.g. trading in virtual goods);

5. *Advertising channel* – 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.

As regards social networks focused around a dedicated website, the following new business trends can be encountered:

1. Group buying
2. Crowdfunding
3. Cloud Computing
4. Long Tail (personalised niche products)
5. Freemium and virtual goods.

**Group buying**

*Group buying* takes place when a specialised social networking site is established with the main aim of concluding group transactions (participation of a pre-defined group of people is necessary for the transaction to be effectively executed). As a result, customers obtain significant discounts and vendors promote their products or services. The business model is based on engaging Internet users in seeking the best deals at the lowest prices. The most popular social media offering group buying opportunities include Groupon, Citeam, Gruper, MyDeal, Okazik, FastDeal, HappyDay, SweetDeal and Cuppon. Group buying is a highly promising solution on the e-commerce market in Poland. In December 2011 this method was used by approx. 30% of Polish Internet users.

**Crowdfunding**

There are two types of crowdfunding:

1. *Microdonation* (donations) – this involves voluntary support for initiatives which are beneficial for the community;
2. *Microfoundation* (investments) – it involves investing small sums of money in risky endeavours such as new ideas, arts and culture projects or under community lending schemes.

The former type is utilised in large social initiatives such as Wikipedia or Genoteka.pl via credit card systems (i.e. PayPal, Mastercard, Visa) or microdo-

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13 In practice, discounts may be offered on an overstated regular price for a service or goods, which means that the transaction price is the same as the regular price or even higher. Cf. G. Szymański, *Internetowe zakupy grupowe jako nowy trend w Polsce*, “Zeszyty Naukowe Uniwersytetu Szczecińskiego” No. 651, “Ekonomiczne problemy usług” No. 68, Szczecin 2011, pp. 109–110.


15 E.g. MegaTotal.pl in Poland, or Kickstarter.com in the USA.

16 E.g. Kokos.pl, Pozycz.pl, Ducatto.pl in Poland, Auxmoney.com in Germany, Zopa.com in the UK.
nation systems (e.g. Flatter.com). Microdonations come from users and are voluntarily transferred as financial support for valuable social initiatives or as a way to thank for the opportunity to access website content. Microdonations are also used in the case of charitable initiatives. Anyone can use the tools offered by portals which specialise in the collection of micropayments to describe their need, specify the target sum required to satisfy the need and notify a group of friends about it, e.g. on Facebook or another social networking site. Gofundme.com in the USA is the best-known site which enables fund raising via donations. In Poland, its equivalents include Siepomaga.pl and Chcepomagac.org.

Microinvestments are a way to finance business start-ups when big sums of money are needed and the success of the project is uncertain. In the case of failure, an individual investor will not lose much and in the case of a success each investor will have a gain pro rata to their financial contribution.

Community lending is offered via social networking sites and means that „people who have spare money lend it directly to people who want to borrow“\(^\)\(^1\)\(^7\). Such loans may be extended at a rate defined in a contract or as community support for those who want to open a new business.

In the United States, crowdfunding was initially allowed only in the form of donations to community projects in science, culture, arts and medicine\(^\)\(^1\)\(^8\). Crowdfunding taking the shape of investments was regulated by the federal law on games of chance\(^\)\(^1\)\(^9\). Once the crowdfunding act was signed\(^\)\(^2\)\(^0\), investors in the USA may now pool their resources to finance new promising undertakings, primarily in the sphere of new technologies and culture. Poland still has no relevant legal regulations sanctioning crowdfunding as an investment method. One problem for the legislators is to find the right classification for financial investments when the economic viability of a project is hard to assess in advance (taxation and capital market regulations). The inadequate law on public collections is another hurdle.

The success of crowdfunding, i.e. successful performance of a contract, depends on establishing links between the project initiator and its proponents via a social networking site\(^\)\(^2\)\(^1\). Examples of sites which match authors of creative

\(^{17}\) Cf. uk.zopa.com 19.07.2012.
\(^{18}\) In most cases, the idea is to provide support in the form of a donation to a person from one’s own social network who is struggling with insufficiency of funds for medical treatment. Cf. J. Sisler, \textit{Crowdfunding for medical expenses}, “Canadian Medical Association Journal”, 2012, Vol. 184, Issue 2, pp. E123–E124.
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ideas with potential small investors in Poland include PolakPotrafi.pl or, in the sphere of culture, MegaTotal.pl.

Cloud Computing

Cloud computing is currently among the fastest developing e-business models. It means that advanced IT infrastructure is made available as a service with an opportunity to add software tools (platform) and applications which can be available from any corner of the globe as long as there is Internet access. The payment is made for the use (rather than ownership) of the resources which are made available. Cloud computing may considerably reduce the costs and complexity of IT infrastructure in individual enterprises while helping to optimise the workload and quality of service. The use of cloud computing helps to eliminate the stage of infrastructure building, which means that the development cycle can be radically reduced for products and services. Instead of investing in, and maintaining, one’s own servers with applications, companies can use the hardware and software owned by other providers which are made available as an online service.

Cloud computing is a highly scalable model which flexibly adjusts to users’ changing needs and aptly addresses the new economic conditions where the Internet plays an increasingly important role as a universal and global communication space.

Long Tail

The Long Tail concept, known from statistics, has been read anew22 in the circumstances where transactions are being moved to the world wide web. A new look at the profitability of production, not only on the mass scale but also entirely personalised, is connected with the use of unlimited storage space of the virtual store and low costs involved in personalisation of electronically placed orders23. This gives the opportunity of earning extra profits from the sale of highly specialised and rarely ordered products which represent a solid source of business on the global market. This signifies a departure from the mass production and unification in favour of the diversity of products and niche production24 on a large scale. One example is Pakamera.pl, a website which enables the presentation of niche products of Polish artistic handicraft. Individualised products which use motives from Polish folklore as decorative elements are of interest for a small group of fans of functional art. The demand for such products on the local market is incomparably small in comparison with the demand on the global market.

**Virtual goods**

Virtual goods comprise virtual gifts, clothes for avatars etc. In fact, they are a service (services instead of goods) sold by companies operating within social networking sites or online gaming sites. Those are freemium games (a name coined by merging ‘free’ and ‘premium’) where microtransaction systems enable the purchase of virtual goods. While Anderson considers them to be two separate models (Freemium and Virtual Goods), both of them involve trading in intangible goods in the virtual space.

**CONCLUSION**

As new information and communication technologies evolve, this entails transformations not only our immediate social environment but also in the economy. This new dimension of the economy has necessitated changes in organisational, mental and material spheres. The Internet has become the reason and cause of uncontrollable behaviours, abuse and danger but also a space for unconstrained creativity in business solutions. The impressive success of social networks is the best example here: such media employ their key concept, i.e. attracting large groups of users, to build unique businesses.

While the crowd is not always right and does not always make rational choices, observation of collective behaviours can often become a source of inspiration for new business solutions.

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Summary

The virtual environment offers a new, dynamic space for running business. 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. A business model is defined in the article as an abstract term referring to an undertaking, its methods and manners of operation and sources of value generated by that undertaking.
The existing classifications of online business models can be summarised in one typology consisting of ten core models. In practice many enterprises in the electronic economy use elements from more than one model. Social media are usually defined as undertakings which rely on the Advertising model. Frequently, however, they also draw on elements from the Network and Info-mediation models.

The purpose of this paper is to locate social networking solutions within the classification of business models on the Internet and to present new trends in the electronic economy against this backdrop.

**Nowe trendy w gospodarce elektronicznej**

**Streszczenie**

Środowisko wirtualne oferuje nową, dynamiczną przestrzeń do prowadzenia działalności gospodarczej. Ogół działalności biznesowej odbywającej się na rynkach elektronicznych można określić mianem gospodarki elektronicznej. Obejmuje ona swym zakresem nie tylko wirtualne miejsce do dokonywania transakcji, ale także stanowi przestrzeń skutecznego marketingu dla firmy, począwszy od informacji aż po promocję firmy i jej produktów oraz utrzymywanie relacji z potencjalnymi klientami. Model biznesowy jest tu rozumiany jako abstrakcyjne określenie przedsięwzięcia, sposobów i metod jego działania oraz źródeł generowania wartości przez to przedsięwzięcie.

Istniejące klasyfikacje modeli biznesowych w Internecie sprowadzić można do jednej typologii zawierającej dziesięć modeli głównych. W praktyce wiele przedsięwzięć w gospodarce elektronicznej wykorzystuje elementy z więcej niż jednego modelu. Media społecznościowe z reguły definiowane są jako przedsięwzięcia wykorzystujące model reklamowy. Często korzystają także z elementów modelu sieciowego i infomediacyjnego.

Celem artykułu jest umiejscowienie rozwiązań społecznościowych w klasyfikacji modeli biznesowych funkcjonujących w Internecie oraz prezentacja na tym tle nowych trendów w gospodarce elektronicznej.