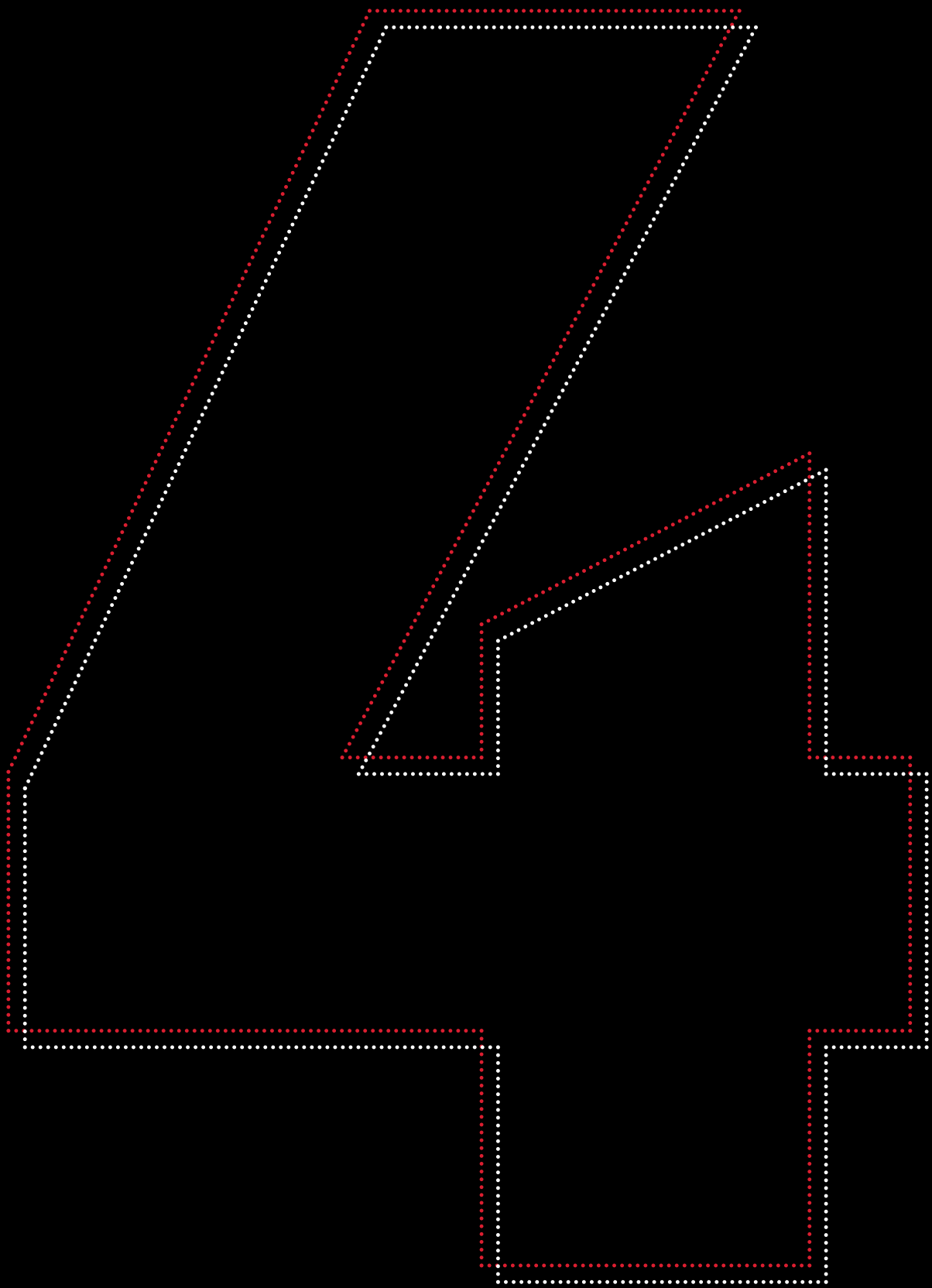

INTERNET BASED START-UP AND BUSINESS – ENTREPRENEUR DILEMMA ABOUT “ON-LINE ADDED VALUE”

ABSTRACT Internet has become a environment of virtual enterprises which like on traditional market change their owners (are sold and bought). There are also many new on-line initiatives (“start-ups”), which are the object of trade just after or even before they were put on-line. To perform such a transaction the price must determined. As on traditional market also Internet companies are trying to increase their value. The problem here is that the share of tangible assets is very often less than “1%” of their final price. The question which appear in that moment is what factors really influence and determine something, which for the final customer is just a Web site. This article presents most popular types of commercial websites with a set of methods, which enable to price commercial Web site. There are also pointed factors, which are used for such a calculation. Those factors should be crucial entrepreneurs of Internet business cause they create something which can be called “on-line added value”.

KEYWORDS

Methods of pricing website
Web site value
“On-line added value”



1. INTRODUCTION

Research done on Polish Internet initiatives shows that the number of new on-line companies is constantly increasing. The main reasons of that situation are considered UE support programs for e-business development and new groups of graduates (young entrepreneurs) for whom Internet usage is natural from elementary school. There are also performed many contests for "start-up" where ideas are the most valuable assets. 99% of them are doomed to failure but this 1% is successfully programmed, published in Internet and creates profit for it's owner. Considering willingness selling or just pricing such a company the market value must be determined. Pricing of such a Web site in case of direct connection (e.g. electronic commerce) is rather simple. The problem appears when the role of Internet site or portal is not e-commerce but the purpose (sometimes very deft hidden) is still to generate income for its owner.

The problem can be found on several Internet forums, where entrepreneur who adds to a partnership an Internet portal is asked by proper government office for the value of his share, but there is no law regulation how to prepare such a calculation [Money.pl, 2007]. In practice of Internet based business we can also notice sale, takeovers, accessing the stock market of websites among big, middle and small companies. An interesting issue in this process, is how the seller and buyer calculate the value of specific set of Internet Web site and what factors (economic, technological or very often social) are chosen. To determine even the initial price such a data must be prepared (collected or searched and analyzed). Taking care of good level of these factors can be a crucial for the e-business entrepreneur who considers present or future sale of his business. Other important thing to remember is that each Web site has a back-

ground called usually "back-office". If we consider Internet shop than there is a set of suppliers, some logistic organization, storage etc. This can an asset in transaction but very often is just left behind – domain, database of registered customer/visitors or an application is the most valuable for new owner. An a example from the last moment in Poland – the domain "gmail.pl" was sold for over 120 thousands PLN (which is 30 thousands EUR). As we can see Internet really creates added value.

2. THE SOURCES OF WEB SITE INCOME

Surfing the Internet we can find two main types of Web sites: strictly commercial, "non-commercial" (we think that someone is running this service for nothing, however he can get a profit) and truly non-commercial sites. We focus on the first two types cause even if a Web site started as "no profit" project was planned to sell or sold than it had become a commercial one. Those types are strongly correlated with business models created by electronic economy such as brokerage model, advertising model, infomediary model, merchant model, manufacturing model, affiliate model, community model, subscription model or utility model [Afuah A., Tucci Ch., 2003]. The number of Internet sites types is constantly increasing but the main are:

- information website – performing a role of Internet business card presenting information about organi-

zation or company, its goals, mission, offer (services or products). Usually it contain huge content.

- advertising website – the purpose is to carry out advertising campaign of enterprise or organization,
- e-commerce site – supports selling products/services on-line and very often performs a role of e-CRM,
- electronic market places - a website form a electronic platform connecting buyers and sellers. The majority of these sites will are vertical exchanges, which focus on specific types of goods or the needs of particular industries (for example, www.ewood.com, www.metalsite.net). [Feldman S., 2000]
- Web portal - a site that provides a starting point or a gateway to other resources on the Internet or an intranet.
- vortal – vertical portal concerning some specific subject e.g. economy, finance, building industry.
- corporate website - used to provide background information about a business, organization, or service. Usually differs its content for registered and unregistered users.
- community site - a site where persons with similar interests communicate with each other, usually by chat or message boards.
- blog - sites generally used to post online diaries which may include discussion but some which are run by professionals can be considered as a form of auto presentation or blog owner company advertisement.

Future Internet technology development will extend that list. Nowadays more and more popular definition is WEB 2.0, WEB 3.0. In 2004. and 2005. it was treated only as typical commercial slogan but today it has become a new concept of Internet site construction. New websites built due to “WEB 2.0 philosophy” will give much more options for Internet users to be creative. The idea is that users should create the content and decide about the structure of information. Very good example is a website Del.icio.us (<http://Del.icio.us>) where users gather and classify Internet links on their sub-

sites according to their personal interests and all the link collections open to public access. [Domaszewicz Z., 2006] As we can see WEB 2.0 is not only technological change – it's a trend visible among Internet users, which nowadays see how hard is to find useful information in this global network. They are looking for alternative sources of information or even preparing documents by themselves. Most people, when they must decide about something e.g. buying a new car, are more convinced of opinion of other product users than any commercial analysis prepared by professionals.

All presented forms of Internet sites are created and maintained for specific purpose. The commercial aspect can vary in strength but all of them must create income. There are many ways how company can earn money using Internet from very simple like on-line advertising using banners to much more sophisticated like Internet auctions or market places.

The most commonly used way to generate income is Internet advertisement, which concerning the website content can be divided to:

- self-advertisement (different forms promoting company's products or services present on company website),
- outside ad. (different forms promoting other company's products or services ordered by individual agreement),
- network ad. (advertisement managed by commercial network e.g. Google AdSense).

Description of Internet advertisement types goes beyond this article frames (additional information can be easily found on <http://www.ittechnology.us/>) but the income aspect is an important issue. Research results concerning the value of on-line advertisement market show that number of US dollars spend on this form of company promotion in Western Europe in 2002 was on the level of 1.6 billion and from that moment an average annual increase was app. 2 billions reaching in 2007 9.3 billion dollars. [PricewaterhouseCoopers, 2007] The same trend was noticed in Poland. In 2002 expenditures for Internet

advert were 33 million of PLN reaching in 2009 a sum of 867 million of PLN (more than was spend on radio commercials). [Interactive Advertising Bureau (IAB) Polska, 2009] These numbers give very clear and optimistic prognosis for this form of Internet income source.

The second way of on-line revenue generation is e-commerce. Global network enables to trade in model 24x7 and the offer of Internet shops contains both electronic (e.g. music, reports, e-books) and traditional goods (e.g. books, CDs, household or computer equipment). The dynamic of e-commerce market development is comparable with previously presented advert on-line market. Almost 70% of European Internet commerce concentrates in 4 countries: Great Britain, Germany, France and Belgium. Polish e-commerce has reached the same level as Italian and is much more dynamic than in Spain and Portugal. In 2009 Polish electronic market reached almost 2% of total national retail trade (comparing to 1.6% in 2007). [Krasoń M., Stefaniak P. 2008] There are more than 7.3 thousand on-line shops operating in Poland and their turnover in 2009 was calculated on 9.6 billion of PLN. [Gacki G., 2008] The third way to use Internet as the source of income is model of brokerage. The website contains information or provides access to products or services of other companies ensuring income for website owner from commission. Typical examples are announcement sites (e.g. concerning estate market, cars or popular services), Internet auctions or more popular affiliate programs. The main good resource in this type of business is information which must be presented to Internet user in attractive and useful form. Practical examples of brokerage model are e-bay.com or Allegro.pl.

To summarize main types of Internet sites and the ways there generate income we must notice that future development of Internet services and technologies will create new, more personalized e-business forms (e.g. dynamic development of m-business). Additionally the increase of Internet user's "network consciousness" will require more sophisticated solutions to follow growing expectations in both direct and indirect (hidden) income generation.

3. METHODS OF PRICING INTERNET SITE

As with traditional business, web site business or even just a hobby site that brings in money, it's hard to determine a real market value. The first issue for the seller is to consider what he will be happy to walk away with. Other variables that will come in to play are the industry your site operates in (competition too), how much labour and technical skill is required to manage the site, the costs (hosting, marketing, staff, etc), whether the business is growing and how fast, the future potential and whether the industry is a buyers or sellers market (supply vs demand). Problem of calculating the market value of Web site can be concerned from many points of view depending on the its type or specific case. We use one measures or methods pricing Internet shop which except e-commerce website requires also a warehouse, cooperants etc. and others in case of typical announcement service or portal. Some experts would tell that on-line business should be sold for ten times it's gross profit, or 5 times average revenue or 2 times last years total revenue. EBizBrokers consulting company dealing exclusively with small to mid-market Internet-based companies, states that generally an e-business website is worth three to six times earnings before interest and tax. [iMerge Advisors, 2008] However in each case the web site, Internet domain is an intangible asset which is possible to calculate the value with some commonly used methods

and techniques. On the basis of their differences and similarities we can distinguish three main methods of analysis and pricing intangible asset: cost method, market method (sometimes called sale comparing method) and income method. The first one, cost method, is based on economic rule of substitution according to which the buyer is not paying more than the costs of similar investment realization characterized by the same benefits measured by e.g. usefulness or functionality. Market method is based on economic rule which claims that on free, unrestrictive market supply and demand factors will establish the balanced price. The third method (income method) uses economic anticipation principle (sometimes called expect principle), according to which the value of investment object is equal to present value of expected income, which will be gained after purchasing the object. As the name says, buyer must anticipate in generating the economic income. [Zarzecki D., 2000] Following this attitude an website can be treated as IT product and the most recommended method is the income method, than the market one and the least recommended is the cost method. [Smith G.V., R.L. Parr R.L., 1994]

Dynamic development of business activity in Internet exposed many defects of previously presented methods – its reasonable simplicity does not reflect specificity of electronic economy. The first commonly used method of calculating the value of website was based on netto income multiplier in form of: $10 * \text{annual netto income generated by the website}$. Of course the value of multiplier was strongly discussed reaching sometimes even the level of 15. However the method became very popular and was used to quickly calculate approximate value of website.

The second method, which became very popular in first years of XXI century, is based on the number of unique visitors of website and pricing one unique visit. The valuations were very different: from a few to even several dozen USD for one returning unique visitor or from a few to even several dozen US cents for one page view. For the current crop of Web 2.0 websites, the kind of multi-

ples being paid to buy companies is around \$30-40 per unique visitor. (Note that unique visitors should be counted over a period of one month, usually the most recent). The very often quoted article from November 2005 establishes an average of \$38 per unique visitor based on a range of different website sales. [Malik O., 2005] Those methods used by analytics from Wood&Co in 2000 for pricing Polish portals gave very optimistic results: Onet – 2 billion PLN, Wirtualna Polska – 1.5 billion PLN, Interia – 0.9 billion PLN, Gazeta.pl – 0.9 billion PLN. However the market has verified those calculations – just after accessing the stock market real price for shares were much below those expectations. There were even enormous differences in pricing made by portals managers e.g. in 2001 the Hoga portal were valued for 9 million PLN and almost the same in number of users portal Arena valued itself for 150 million. [Grochowski T., 2008] Present log data gathered by top Polish portals indicates 9.75 million users of Onet.pl, 8.22 million of Wirtualna Polska and 7.43 million of Interia.pl. The number of page view measured in period of month points Onet.pl as leader with 4059 millions, both Wirtualna Polska and Interia.pl reached app. 2050 millions. Among business portals there are two leaders: Money.pl and Bankier.pl with more than 2 millions of users and over 50 million of page views [Satalecki P., 2008]. Presented disadvantages encouraged researchers to adding other features to pricing process such as “brand” of website, number of users (unique, registered), website subject, wellness of target user, diversification of income sources, development potential or competitiveness to similar website. [Maravilla N., 2006, Speedtest.pl, 2010] This expending of list of crucial factors caused creation of many Internet site where you can price any site online e.g. <http://www.websitevaluecalculator.com/> or <http://www.speedtest.pl/wycena.html>. However the algorithms which are used during calculation process are not public which does not enables users to check what wages were used for specific factor, is there any algorithm diversification depending on website subject etc.

That is why these tools seems to be useless and should be treated as an curiosity. Exemplary pricing done by one of such a on-line calculator valued Google.com for 20 554 181 076,00 PLN, youtube.com for 9 295 753 701,00 PLN or Microsoft.com for 1 594 591 869,00 PLN.[13]

An interesting method of pricing big Internet websites or portals was presented by M. Prys. This technique is also based of the "user – concentrated" philosophy but an interesting issue is usage of original "penetration level" of target web users. As the author claims when the value of factor will reach 80-85% the website will not develop anymore – it has reached its optimal development level and in future it must add extra services for identified, new target group of users. Additionally

the maximum time period of income (value) prediction should not be longer than three years.[Prys M., 2008] Other attitude, which is sometimes used especially in case of highly branded Internet domains is called Value of Specific Intangible Assets. It can be considered as a part of traditional cost method however in some cases it is the only appropriate approach that will result with success in a determination of the website value. The approach is based upon the buyer's buying a wanted intangible asset versus creating it. Many times buying can be a cost efficient and time saving alternative. Considering highly recognized Internet domains the buyer is usually completely uninterested with the original website content, background software etc. – he focuses only on the name.

TABLE 1. APPLICATIONS OF PRICING METHODS

source: self study

PRICING METHOD	APPLICATION
Cost method	Pricing new Internet sites with low number of unique users., pricing community sites
Market method	Pricing Web sites which develop extremely dynamic, big e-commerce sites and portals
Income method	Pricing e-commerce sites, portals with small and middle number of unique users
Netto income multiplier method	Very subjective method (because of multiplier value) used to value any type of Internet site
Number of unique user based method	Pricing e-commerce sites, portals with middle and big number of unique users
Complex (hybrid) method	Pricing any type of Internet site varying the influence of different factors (wages) depending on specific case
On-line value calculators	Lack of access to calculation algorithm what causes very unclear justification of pricing result

Internet is an business environment which develops very dynamically – competition can appear anytime and take over significant number of website users. Technological evolution must be also considered. Those factors cause Internet business to be very severe and adventurous.

4. FACTORS DETERMINING WEBSITE VALUE

There are many ways to price an Internet based business. Some examples, which are used today, were presented above, however the list is not closed. Observation of rapid development of almost each type of e-business we must be aware of new factor, new methods, which will help us to make a good calculation on such a investment. The summarisation of factor which are used directly or indirectly in presented methods is presented in Table 2. As we can see there are groups of financial, technological, marketing, market and social data which must exist or be calculated if we want to use specific method.

TABLE 2. FACTORS APPLIED IN PRICING METHODS

FACTORS	METHODS					
	Cost method	Market method	Income method	Netto income multiplier method	Complex user based methods	On-line value calculators
Internet application costs	X					
Maintenance costs	X					
Marketing costs	X					
Purchase offers		X				
Stock/share value		X				
Patents value	X		X			
Market potential			X			
Present income value			X			
Future income value			X			
Unique visitors number				X	X	X
Unique visitor value				X	X	X
Web site "brand"						X
Number of registered users				X	X	
Target user wellness				X	X	
Number and structure of income sources				X		
Competitive Internet services					X	X
Page rank (Google based)						X
Target market penetration level					X	

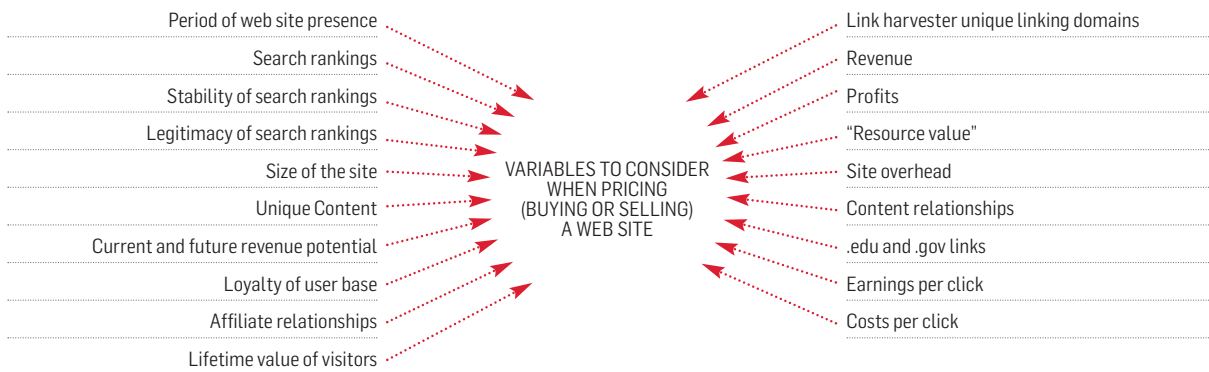
source: self study

Running a standard company there is no problem to call past financial data, which present cost structure (investment – past and present, variable and fixed charges etc.) for estimation substitute investment. Than we can convince potential buyer that it's cheaper to buy our company than start everything from scratches. The same situation is with income data – past and present information is available in seconds however for full calculation we need some forecasts. In that moment some uncertainty and risk appear, which in such unstable environment as Internet can be a big problem to calculate. Similar problem can appear with technological matter. The risk of growing old is extremely high and even just after purchase it can appear that whole Internet service needs complex rebuilding (re-programming) and huge investment. To be at least partly sure of data and calculation we need to base our opinion on expert analysis and reports. More optimistic situation we find in marketing and market data – those information can be found in open (free) reports (e.g. <http://royal.pingdom.com/>,

<http://www.internetstandard.pl/>), national statistic office or the research can be done by the buyer himself. Social factors are more complex – some data can be easily retrieved from e.g. database of registered user but nowadays the main problem is something which is crucial but extremely hard to predict – customer preferences. This factor decides whether our brilliant idea for Internet business will be huge success or total failure. But the customer behaviour is a “huge” unknown – we can try to analyse data, built model or sometimes even control customer actions but until the final result like on-line product purchase or website visit we can not be sure of anything. The meaning of that problem can be proved by Google latest investment – purchase a company named Recorded Future. Technology created by that company for future trends prediction connected with Google “user question” database can give some interesting results in connecting a chain of customer activities: search, get own opinion, action.[Idg.pl, 2009]

FIGURE 1. FACTORS DETERMINING A WEB SITE MARKET VALUE.

source: self study based on Malicoat T. Website Value 101 How to Appraise a Website <http://www.stuntdubl.com/> 2007



Another list of variables which determine a Web site value was presented by Toad Malicoat (Fig. 1). As we can see the factors are focused on the same areas as presented before but a difference from previously presented pricing methods is that they are all used in calculation (of course with proper wages depending on website type).

5. CONCLUSIONS

In case of just pricing or transaction of "sale-purchase" an Internet business both sides must be prepared very carefully. The selling side must prove maximum Web site value so all necessary data about internal finances, customers and strategy must be presented. On the other side the buyer must compare those information with present and future market analysis, taking different types of risk under consideration. Problem in both cases is that usually almost whole value of such a business is based on intangible assets which somehow must be presented in form of numbers. The most commonly considered components are: domain, pagerank, applied technology, number of visitors (new, returning) etc. Some examples of real market transaction like Microsoft has bought 1% of Facebook for 240 millions USD or wanted to buy Yahoo for 45 billion

USD shows that proper data exist and calculations are possible. The list of factors which were included was of course confidential. The advice for smaller companies is to gather all possible information about their business to be better prepared for potential pricing and sale. As we can observe the calculation methods of the Internet business value are developing – new ideas appear which sometimes are useful only for one specific type of e-business or even one pointed company. However there are trends that can be noticed. The first one is that methods are becoming more complex (different business areas are included to show the final value) and they need more, sometimes very special, input data. In specific cases even information about competitive companies can be useful, so it's worth collecting. The second trend goes with idea which on traditional market was finished by CRM attitude – the Web site visitor is a key to success, so we must know as much as possible about him/her. Storage of data is not a problem nowadays so good practice is to collect, analyze and finally see a company value in "n-dimensions" placing special emphasis on factors which create "on-line added value".

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