CRITERIA LEADING TO THE RISE AND FALL OF THE DOT-COM

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Abstract

The last several years saw the emergence of the dot-com company as well as the demise of hundreds. The question then becomes, what does it take to become a dot-com survivor? What factors have contributed to a dot-com success? And what factors have contributed to its failure? This article sets out to answer these questions based on articles that have been written on this dot-com phenomenon, as well as the personal experience of one who has had a first-hand look and experience at a dot-com firm. The aim is to ultimately compare current dot-coms and predict their possibilities of success and then track their progress over time.

Keywords: Dot-com, Internet

1. INTRODUCTION

The past few years has seen an evolution take place in technology. The Internet has spawned hundreds of dot-coms. What is a dot-com company? As stated in the American Heritage Dictionary, a dot-com company is one, "whose products or services deal with or are sold on the Internet", a simple definition but one that encompasses various layers of complexity. In recent years, the 'net' has provided hundreds, if not thousands of people, the opportunity to become businessmen and women and put their businesses on the Internet.

The concept of running a business via this channel was embraced and, over time, became a business trend. This has been seen in cases such as, Amazon.com, eBay.com and Yahoo! These companies were set to make millions of dollars and change the way people did business. They were going to use the Internet as their vehicle to help them achieve their financial dreams. Unfortunately, the dreams of many were shattered when the dot-com phenomenon came to a screeching halt and a reality check was done.

According to www.webmergers.com, a total of 788 dot-coms have failed since January 2000 through to January 2002. Many of the failures occurred in May 2001, when 64 dot-coms shutdown. The dot-com shakeout first affected e-tailors and content destinations in the business-to-consumer (B2C) sectors such as infrastructure, consulting firms, entertainment sites, online news providers, and providers of dial-up and broadband Internet access.
The following sections describe major factors which have contributed to the failures and successes of dot-coms. These factors provide the basis for suggestions of the technologies and strategies that can be leveraged for their ongoing success.

2. FACTORS FOR FAILURE

Unoriginal business model/business plan
One of the key factors surrounds the lack of an original business model/business plan. According to **http://www.dotcomfailures.com**, the number one reason (47%) dot-com owners stated for failing is a faulty business model. Many of them began with ideas that already existed and put it on a web site, while others implemented the free business model. As a result, there are a substantial number of dot-com failures that fall into this category (e.g. freeinternet.com, freetaxprep.com, and freewebstuff.com). The model is neither realistic nor profitable. Other business models require that dot-coms build a critical mass of buyers and sellers at the same time. Many B2B marketplaces fall into this category, as do collaborative purchasing models. These models require huge amounts of money to create either half of the equation in a many-to-many model.

Along with a sound business model, a firm must also have a sound business plan. It should entail the strategy for the business – business, marketing and customer strategy. Many dot-coms were consumed with expensive, splashy web sites and lacked customer and product focus, mainly because they did not have a good business plan. Many times, dot-coms were focused on the initial public offering (IPO), while overlooking a vision, a viable business plan, business model and a mission that would lead them into justifying an IPO.

Extensive planning and thinking needs to be put into a business model and into a business plan. Aspects of a model that should apply to a dot-com include a business strategy, customer strategy, and potential partnerships and alliances. As briefly discussed, having a solidified business strategy allows you to set both long and short term objectives for your business, which usually entails a business vision, values and a mission statement. A customer strategy allows you to set up your customer base, your target audience, how to retain customers, and how to market to returning and new customers. Creating partnerships and alliances with other established 'brick and mortar' firms helps a dot-com establish themselves as reputable firms.

Too much money, too soon

Many dot-coms had more money than they knew what do with. And many had visions of making millions once they went public with their dot-com. Dot-coms were attracting top-notch talents from everywhere in the hopes of putting out something faster than the next person. Many were lured to the potential riches of a dot-com as well as to a laid-back corporate culture. But as venture capitalists were giving money to dot-coms, it was being spent unwisely without any consideration for accountability as to where it was being invested.

Management of many dot-coms was young and inexperienced. Due to their business naiveté, many handled their venture capital (VC) money poorly (Walters 2001). Shelley Lebowitz, CIO of Morgan Stanley has worked with two VC firms. And many venture capitalists will not invest in a firm if the business does not have an extremely seasoned management team. That is one thing that is absolutely critical. She says that, "a firm is not built on a great idea and on 10 minutes of business experience. The dot-com phenomena glamorized it. It really doesn't look that way".

There was a need to be the first to market, having the competitive advantage over your competitors (if they knew who they were). With that mindset, dot-coms were looking for investors willing to invest their time and money in their business. In addition, because of the speed with which dot-coms were going to be first on the 'Net', there were over-investments made which ultimately led to the bubble burst of the dot-com. As a result, many dot-comes inflated their business plans to meet the size criteria of the venture capitalist. But soon enough, VC realized that many dot-coms were not producing what they had promised, dot-coms ran out of money shortly after going public. Moreover, VC should have been more vigilant over the dot-coms' cash flow. But many VC were tempted by the potential of a new technology or new product to earn a company excessive profits. Many investors invested in dot-coms that they knew very little about but relied on the speculation that the stock would provide a high return in a short period of time. Investors failed to realize that many of the dot-coms had very weak financials. But at the height of the dot-com phenomenon, financial backing from an investor was quite easy to get.

Poor customer strategy

A business cannot exist without its customers especially when the goal is to sell its products and services to its customers. Recently, many more organizations are taking their focus away from their products and placing it on their customers and their relationship with them. Where were the customers when the dot-com business was being developed? It is easy to lose sight of your customers, when the focus is trying to make as much money as one can in the shortest amount of time. They were preoccupied in trying to persuade VC and public investors in their business and not for their customers and potential revenue. Often times, one of the success or failure factors depends on how well the customer relationships are managed as well as the retention and loyalty of customers.

In a survey conducted by PriceWaterhouseCoopers Management Consulting Services, they found that dot-coms are ignoring their customers, and focusing more on leadership and strategic partnerships. As a result, dot-coms don't have a complete understanding of what the customer needs and therefore don't respond with appropriate services while not leveraging the full potential of technology. They are not using technology to their competitive advantage, which could have helped them cater the necessary products and services to customers.

Reliance on advertisements for profits

On any given web site today, one can find several banner advertisements. Ads have become so tailored that if you go to a search engine and query for a certain topic, the result set will render the desired results, as well as ads that are related to the topic. But do banner ads on web sites render the desired profits that ebusinesses are looking for? No, they often do not.

Advertisers have estimated that the percentage of people who click on web banners has fallen from about 5 percent to as miniscule as about .5 percent. Banner ads have become a nuisance to surfers and many just ignore them now. According to George Rodrigues, president and co-founder of Graphic Vision, a Brooklyn based web design company," It all comes down to traffic. If a site doesn't receive enough hits, advertisers are not going to advertise on it". Rodrigues goes on to say "companies, especially the smaller ones, should try to get sponsors because sponsorship is more effective than web banners. This way they can charge a flat rate and the money is guaranteed unlike the click-throughs" (Hinds 2001).

For example, Yahoo! Inc is moving away from over-reliance on ad revenue by introducing such new services as hosting online stores and streaming audio Web casts. In addition, they have other initiatives underway, such as free Internet service, a new corporate Yahoo! Platform, and a business-to-business marketing strategy by persuading companies to integrate Yahoo's portal into their internal web networks. Too many of the dot coms based their business plans on web advertising. Advertising alone will never support a successful web site.

Profits are essential

Revenue is critical to keeping a business afloat. Implementing ideas, which allows a business to generate cash flow in order to invest in new ideas, is crucial in keeping a competitive advantage. But the goal of generating revenue goes hand in hand with having a realistic business plan. Many dot-coms suffered from weak revenues and earnings base. "Early in 2000, many companies with less than $1 million in sales had market caps in the billions. This should have been an immediate signal to investors that a company is overvalued. Even if sales are growing exponentially, sales will have to grow for years, before a billion dollar market cap can be justified" (www.amateurinvestor.org). The ability to generate revenue relies upon having products and services that customers want. In turn, they will buy the products and hopefully tell others about it. As a result, you have customer retention and profit from that customer. But many dot-coms failed to realize that just because an e-business can be set up, does not mean that it's a good idea. In addition, the cost of attracting and sustaining each customer must be less than the net revenue generated per customer. Most dot-coms have yet to determine a way to become profitable. Many dot-coms even have losses that exceed sales (www.amateurinvestor.org).

3. FACTORS FOR SUCCESS

Find a niche

What has made surviving dot coms so successful? According to Shelley Lebowitz, CIO of Morgan Stanley, there three key elements that can attribute to a dot-com success: 1) A management team needs to be in place that has the knowledge to execute, 2) a product that makes sense, one that is unique and 3) a large enough market place in order to make it work. Shelley feels that "without all three, your business will fail". In addition, she thinks that timing is key as it can determine whether or not the market is ready for a product. The lack of all three lead to the brief existence of a biometrics company she along with other colleagues were trying to form.

This is what has helped eBay and Yahoo! become successful. They have managed to find an untapped niche that has enabled them to withstand the dot-com crash. The past few years have shown us that not everyone manages to find the niche that can make him or her millions. One of the biggest mistakes dot-coms made was investing in an area that already had too many competitors (e.g. pets.com, petstore.com, and petsupplies.com). According to an article on www.powerhomebiz.com, "niche marketing entails offering unique products or services to a few concentrated markets." This can be said of online or offline businesses, but more so on the Web since many have used this channel as their sole means of revenue. It is the ability to select online target markets that are not filled or under filled niches. Instead in jumping into an already established area, finding a customer need that had not been well met on the Internet and then filling the narrow niche properly can put a dot-com in the right direction. In addition, a dot-com can then concentrate on dominating this untapped market without spending huge amounts of money.

A company that has found its own niche is eBay.com. Founded in September 1995, eBay is the leading online marketplace for the sale of goods and services by a diverse community of individuals and businesses. According to their web site, www.ebay.com, their market enables "trade on a local, national and international basis. It features a variety of international sites, specialty sites, categories and services that aim to provide users with the necessary tools for efficient online trading in the **auction-style** and fixed price formats." The key word in the aforementioned statement is auction-style; this is where eBay has been able to be so successful. They have been able to employ business to business (B2B), business to consumer (B2C) and consumer to consumer (C2C) models. They have managed to introduce a virtual venue that allows anyone to buy and sell goods. Never before has a business model existed that directly connects buyers and sellers in such a way.

Customers, customers, customers

The lack of a customer strategy can be any businesses' downfall, but if set up correctly, having the right customer strategy can be of great advantage.

According to www.powerhomebiz.com, "good online businesses rely on customer relationships built upon mutual advantage and trust, the way businesses always have." The goal isn't always to attract everyone that is out there onto a site, but to maintain your current customers' loyalty. "The key to excellent customer relationship management is to target the right customer (the profitable customer, the potentially profitable customer) via the right channel with the right product or service at the right time with the right technology" (Prof. Lawler, Pace University). Loyalty is elusive on the web. The web is the hardest medium to ensure loyalty.

Companies that place a priority on their customers will come out on top. Those that have exceptionally done a great job at this are those that have been dependent over the years on catalog sales and now are on the Web. Companies that exemplify this are www.landsend.com and www.llbean.com. They have been able to enhance the customer experience on their web site, enabling customers to easily purchase clothing on the web. They have implemented features such as personalization and customization, to make customers feel comfortable when buying, immediate customer assistance and if you need to speak to a representative you can give them your phone number and within minutes someone calls you to address any question that you may have. Moreover, they also have virtual models that try on the clothes so you can see how the clothes would fit on you.

Another company that has placed a priority on their customers is Amazon.com. Amazon.com has been a pioneer and often tends to keep a competitive advantage for a while before the others jump on the bandwagon. Amazon.com introduced the concept of collaborative filtering. Offering other book titles or product suggestions based on the preferences of other customers that have purchased the same item that you are about to buy. More often than not, customers will buy something else that has been suggested to them. In addition, they have enhanced the customer experience on their web site, by offering an easy, convenient medium to buy books.

But providing great customer service or meeting customer needs is a constant process. Many dot-coms have on a consistent basis, touched base with their repeating customers and tried to find out how they can better their products and services as well as the user friendliness of their web site.

Ability to diversify and keep revenues streaming in from different avenues

One strategy that has become crucial to success on the Web is the ability to diversify a company's offering – the ability to earn money from various sources. Yahoo! for instance now earns from a variety of means – banner advertising, directory listing, Yahoo store, auctions, even web site hosting. In November 2000, Yahoo's business plan focused on advertising, partnerships and commission fees to generate income. Those who have a clear understanding as to their markets have begun to expand their offering to several niche products that have great market potential. The same can be said of eBay.com. In addition, eBay has expanded globally where users from all over the world can buy items and auction items.

Diversification for revenues is becoming common among dot-com survivors. Many are realizing that they need to extend their focus beyond just relying on one or two means of generating revenues, which traditionally have been customers and banner advertising. Many have started to partner with more established brick and mortar companies to help them solidify themselves on the web.

Branding

One of the problems that many dot-coms faced was lack of recognition. With the influx of web sites on the web, there was no easy way to get your name out there to the masses. Many companies spent a lot of money trying to market their name as well as gain brand recognition. But as many realized, it is a very difficult thing to do.

Many company names were just too similar to distinguish from each other – Pets.com, PetStore.com, Petopia.com, and PetsSmart.com. During Super Bowl 2000, a majority of ads, costing $2.5 million or more were from dot-coms desperate to build national recognition. But part of developing a strong brand is building up a series of good experiences with a company or product. The purpose of branding ads is to familiarize your target market with your company's name and offerings. The goal is not necessarily click-throughs but name identity. Banner ads, site sponsorships and ads are all good for building brand identity. The narrower your niche, the more you can concentrate your brand-building ads on your target audience.

Yahoo! tends to exemplify this branding strategy pretty well. We have all seen the commercial with the final tag line is, "Do you Yahoo!?" It has become a very popular question, which had propelled Yahoo! to become the primer search engine on the Internet, with more than 55 million subscribers on their site. It takes time to have your company be recognizable. Dot-coms especially have had a difficult time in doing this and in turn have spent millions of millions of dollars in marketing campaigns trying to get their name out there

4. TECHNOLOGIES/STRATEGIES THAT CAN BE LEVERAGED BY DOT-COMS

A number of technologies and strategies can be leveraged by dot-coms to ensure their successes. Several of these are suggested in this section.

Customer relationship management

Customer Relationship Management (CRM) suggests that with the move away from the product-centric company, many more are focusing on their customers and their relationships with them. This new technology approach is something that not only established organizations could benefit from but also dot-coms – as they are constantly looking for new methodologies and technologies to invest in.

CRM is an enterprise approach to understanding and influencing the behavior of the customer through meaningful marketing and selling in order to improve customer acquisition, retention, loyalty and profitability. The key in the definition is acquisition, retention, loyalty and profitability. Having all these factors combined can make a company successful with its customers. It has become so important because customers have become the center of many companies. They are ones who are reshaping business. A customer strategy helps a company develop a sound CRM strategy. A customer strategy entails 1) understanding who your customers are; 2) what are their needs; 3) what are the demographics; 4) who are the profitable customers? And 5) what are their preferences? Putting a customer strategy in place will allow companies to sell their products and services more effectively as well as offer personalization and customization options.

Although many companies are starting to focus on the 'customer', the question is whether or not they are doing it correctly and efficiently. As a customer you want to know that if you purchase an item via any of the many touch points (e.g. catalog, phone, web) available, that on the receiving end, the sales/service person knows the details of who you are, whether or not you have purchased before, your order history and given that history, what other products you would be interested in. Many dot-coms are very good at this, as they often times rely solely on their web site for customer revenue and their loyalty.

There is the concept of 'emotional intelligence' – "understanding what motivates and drives people, and leveraging this knowledge to get the best out of them" (Patel 2001). Using emotional intelligence will allow companies to connect all three units (sales, service and marketing) that are often separate entities. If a company can clearly understand their customers, they are in a better position to deliver better products and services and meet their customers' goals but build a specific CRM strategy. In addition, they can rely on customer loyalty. Since many companies fail to re-organize and unify these units they often find themselves addressing these units separately. Moreover, failing to take into account the emotional intelligence of the customer, companies build inadequate CRM strategies as well and set themselves up for failure and a costly project.

A company needs to address their business, relationship marketing and operational process strategy. Moreover, it needs to understand who their customers are, what they need and what they are currently are experiencing when interested in purchasing a product. Once you have a CRM strategy, you need to know what leading edge technology will get you there. You need technology in place that will enable your reps to: 1) have one view of the customer, 2) have a better understanding of the customer and 3) improve customer satisfaction through self-customer services. The challenge is that CRM requires that all touch points be integrated seamlessly, when a customer representative or sales representative is interacting with a customer.

A CRM model that encapsulates a business strategy, a relationship marketing strategy (the passion and care a business exhibits towards their customers and the focus placed on the interaction with the customer) and an operational process strategy (measurements of retention, long-term profitability, customer retention and the customer experience), will allow companies to select a CRM product to meet their strategic goals.

Data mining

Data mining is the process of modeling large amounts of information from diverse sources to uncover (analyze) patterns in the information for competitive business advantage. Data mining provides organizations with the ability to gain a better understanding of their customers, their buying needs and their future buying needs. It's a matter of analyzing the data thoroughly to achieve that understanding.

To get the correct data in place, modelers who are often either mathematicians or statisticians spend a lot of their time, analyzing and modeling the data. They need to be smart enough to know what needs to be mined, being able to differentiate what data should be looked at versus what shouldn't be looked at. In addition, when it comes to launching new products and services, having the right information as to what new products and services a customer wants, makes this process much easier and potentially more profitable for companies. "Without dependable information for targeting prospects, you can waste a significant amount of promotional money on reaching the wrong customers" (Battaglia 2001). Having all the information in the world does not assure you that you have the correct tools in deploying it out your service, sales or marketing representatives.

There are basic data mining questions dot coms should ask themselves before they invest in a data-mining tool. A company needs to know who are their most profitable customers, as well as their potentially profitable customers. In addition, a company needs to know what their buying patterns are; what are they buying or not buying. And if they are not buying, what are the patterns of the customers that are not being sold or serviced to. Moreover what are the opportunities to cross sell and up sell. And finally, when is the customer more likely to be disloyal? The web is the hardest medium to ensure loyalty. And if an on-line retailer does not meet their need on demand they are quick to click to another site. In addition, it is also looking at customers, who were once loyal but are so no longer.

The end goal of data mining is the ability to tailor products and services to customers effectively. Companies that employ data mining are those likely to have a competitive advantage over others in their industry. They are able to utilize the data that is easily available to them (i.e. data they gather from online or snail mail surveys, account information from customers, usual buying patterns from their loyal customers), and to use them to shape their products and services.

Wireless

A need has come about for convenience and ease of use. Customers do not want to be burdened with arduous tasks when trying to place an order via the web or having to navigate through various pages to get to what you want in order to make a purchase. Many dot-coms, as stated before are looking to ways of leveraging technology to their advantage. Many are looking to make use of wireless technology to get ahead of the competition. But what is it all about? And who has benefited from wireless technology? Wireless is a term used to describe telecommunications in which electromagnetic waves (rather than some form of wire) carry the signal over the communication path.

Wireless technology provides another medium in which customers/users can easily and conveniently access information. Many dot-coms are starting to experiment with this new technology. There are several factors driving mobile usage. There is 1) an opportunity to further attract wealthy customers, 2) many customers/users are demanding this type of service, 3) efficiency is involved, where customers can perform functions and tasks easier, 4) a perception that this technology is a differentiator for competitive edge. Although it is a technology in its infancy where there are some fundamental obstacles, such as bandwidth and security, many are venturing into this area.

In a New York Post article this past June, eBay was "launching a new wireless bidding service for its customers through InPhonic, a Washington D.C. based wireless company, backed by former Apple CEO John Sculley". Bidders can get notified if they've been overbid on an auction and respond immediately with a new bid over their cell phones, PDA or any device that is connected to a wireless service that accept short message service (SMS). This provides users an easier and convenient way to make use of devices that they may already own and for a low-monthly fee ($2.99), get notified of auction bids (Barack 2002).

The financial online trading firms are also making use of this technology as well. Firms like E*Trade, TD Waterhouse and Charles Schwab are allowing their customers to get instant quotes, updates on financial news, and even put in trades through multiple wireless devices. Many of these companies have seen the real need to make services easier and convenient. For example, Charles Schwab introduced in 2000, wireless online trading via the PocketBroker. This service will allow brokerage customers to make trades and receive news through hand-held digital organizers made by Palm, Inc. The brokerage company which developed this new service with eBay was Aether Systems Inc., a wireless data products and services company.

Other dot-coms that offer wireless services to the 'average' consumer are companies such as Avantgo.com and Vindigo.com. Both offer applications that are easy to download to a PDA. Vindigo.com offers wireless guides to movies, restaurants, bars and nightlife to major cities. It was a free service, up to 2 months ago, where they were no longer offered their services for free but for an annual fee of $29.99. (This goes back to an earlier mention in this article, regarding failure factors in the dot-com industry where many dot-coms relied on the 'free' model). Avantgo, Inc. offers up-to-date news, entertainment, weather, etc via various channels. One can download various channels to be notified about when you sync your PDA with the web. It continues to be a free service. The advantage that Avantgo, Inc has is the reliance on other products and services for revenue, which probably helps them to continually provide this service for free.

5. CONCLUSION

The dot-com phenomenon has taught many people valuable lessons in business and in management. This article provides some insight into some common pitfalls that many dot-coms fell into as well as some factors that have led to the successes of many other dot-coms. The Internet will continue to be a powerful force in business and will eventually become a tool that everyone can benefit from. The greatest challenge many dot-coms face now is trying to find new ways to cater to their customers.

In an ideal world, if a dot-com can take advantage of those aforementioned technologies then at the end of the day, those dot-coms that can leverage new technology and have the infrastructure in place for it, will be survivors in the global information highway.

6. FUTURE WORK

The factors explored here can be used to form the basis for in-depth research in analyzing specific dot-coms and the comparison of the aforementioned factors and their level of success in their industry and the potential of failure for others. In addition, further analysis can be conducted to see if any current dot-coms have implemented successfully any of the technologies and strategies mentioned in this article and the impact they may have had on their business.

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8. REFERENCES

http://www.ebay.com, Retrieved February 26, 2002 http://www.powehousebiz.com, Retrieved February 9, 2002

Dot.com Crash (n.d.) Retrieved February 26, 2000 from http://www.amateurinvestor.org/dotcom1.htm

Internet Shutdowns and Bankruptcies Hit 17-Month Low in January. (n.d.) Retrieved February 9, 2002 from http://www.webmergers.com/editorial/article.php?id=51

Year End Shutdowns Report: Shutdowns More Than Doubled in 2001. (n.d.) Retrieved February 9, 2002 from http://www.webmergers.com/editorial/article.php?id=49

Battaglia, M. (2001, June). Taking Data Mining to the Next Level.Retrieved on April 18, 2002 from http://dmreview.com/editorial/dmreview/print_action.cfm/EdID=3530

Barack, L. (2002, June 6). Bidding on the Go. *New York Post.*

Hatter, A. (2000, August 31). Dot.Coms risk failure by ignoring both customers and traditional business rules. Retrieved February 9, 2002 from http://www.pwcglobal.com/extweb/ncpressrelease.nsf/DocID/0F753CC8B801A8668525694C00672734

Hinds, V. (2001, April). The Survival of Dot.Coms. *The Network Journal.*Retrieved February 9, 2002 from http://www.tnj.com/articles/Features/features_april01_dotcom.html

Miller, T. (n.d.) Top Ten Lessons from the Internet Shakeout. Retrieved February 9, 2002 from http://www.webmergers.com/editorial/article.php?id=48

Patel, J. (2001, May 14). With CRM, Don't Forget the Customer [Electronic version]. Retrieved February 9, 2002 from http://www.informationweek.com/837/uwjp.htm

Walters, J. (2001, September 24). Why Dot-Coms Failed (And What You Can Learn from Them). *Ivy Sea, Inc.* Retrieved February 26, 2002 from http://www.inc.com/search/23447-print.html

James Lawler (Customer Relationship/Data Mining Course), Pace University, Spring 2002

Shelley Lebowitz (personal communications, April 8, 2002)