e-Commerce Business Models

Business Models that have Succeeded and Business Models that have Failed - International Case Studies.

Chris Fox

Jean-Paul Satre once said history could be viewed as if one were looking out the back of a moving car: all the nearby scenery is a blur that starts to come into focus somewhere down the road. And so too it is with e-commerce business models - they are still blurring past us at an unprecedented speed, whilst there is not yet much further down the road on which we may focus.

The first problem with this topic is how to define success. In the volatile dot.com market, success is perhaps best defined as "a business that has not yet failed, and that appears, at least for now, to have some chance of remaining a going concern". Perhaps a tighter definition for now is "a business that survived the March / April 2000 NASDAQ crash"? (See graph in side-panel.) Even this definition remains problematic midst the ongoing problems with measuring the real profitability, and hence the valuation, of dot.coms (refer to the section on Making a Profit below). In general, however, the NASDAQ dot.com crash provided a useful watershed between a world where it appeared acceptable to simply give stuff away to attract eye-balls and a world where it was once again necessary to table a valid and profitable business model.

The second problem with this topic is how to define a business model. The following definition has been used:

Business Model:

"a unique configuration of elements comprising the organisation’s goals, strategies, processes, technologies and structure, conceived to create value for the customers and thus compete successfully in a particular market."

It is perhaps relevant at this juncture to point out that this paper will attempt to avoid the now hot debate between B2B and B2C business models, in the hope of transcending this issue and identifying success and failure criteria that are generally applicable in the e-commerce environment.

1 http://www.nasdaq.com/
2 http://www.time.com/time/magazine/articles/0,3266,48083,00.html
3 http://knowledge.wharton.upenn.edu/articles.cfm?catid=7&articleid=244&homepage=yes

For purposes of this discussion, I have devised a simple 3-Step Framework for analysing e-commerce business models:

1. Starting an e-business,
2. Getting some customers, and
3. Making a profit.

This framework has proven to be surprisingly (given its simplicity) useful in understanding the case studies.

The Case Studies

This paper proposes a simple framework for understanding the success and failure of e-commerce business models, and demonstrates this framework by applying it to several well-known examples. The principal example used is that of Amazon.com. Although Amazon.com has arguably been overused as a case study, it remains appropriate for the following reasons:

- Most people have heard about it, and many have actually used its services.
- It is big.
- It has been around for a relatively long time. (Jeff Bezos started Amazon in the (US) summer of 1994)
- It is international. (Amazon already operates in the USA, UK and Germany, and is about to launch in France.)
- As a pure-play e-commerce initiative, there are no complications around separating the e-commerce issues from those of the rest of the organisation.
- You can do business with Amazon from anywhere in the world. (Many other examples face regulatory or other restrictions on the people with whom they can do business. For example, egg:|, in the banking sector, requires you to have a UK residency.)
- Amazon.com's core book and CD retailing businesses fall neatly into the middle of the e-commerce / e-world continuum. (See diagram below.)

In the e-commerce phase, Amazon.com competes directly with incumbents such as Barnes and Noble (BarnesAndNoble.com), the incumbent business which

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4 Ramo, J.C., 1999, "Person of the year", Time, December 27, 1999
played e-commerce catch-up with relative success.

- Amazon.com itself has played directly into the e-business phase by completely restructuring the value chain with a $500 million investment in its fulfilment systems which allow for few points of online, value-added, ordering fulfilled from several central warehouses which deliver directly to the consumer.
- Amazon.com remains at risk over the longer term from the entrant of an e-world competitor. Two examples might make Amazon.com’s investment in warehousing a distribution redundant:
  - A commercialisation and legalisation of the Napster model might replace the pre-recorded CD as a product
  - E-books could similarly replace the pre-printed book.
- Amazon founder, Jeff Bezos, remains a cultural icon and, as Fortune’s 5th ranker in their ”America’s Forty Richest Under 40” for 2000\(^5\), remains an inspiration to dot.com entrepreneurs.

Several other cases will be used throughout this paper, either:

- to illustrate success or failure criteria not exhibited by Amazon.com itself, or
- to provide points of contrast or similarity to Amazon.com in order to further emphasise a point.

The information used in these case studies is all sourced from publicly available (and referenced) material, and I claim no inside or privileged knowledge of any of these companies.

### Starting an e-Business

Several important decisions need to be made when starting an e-commerce business, particularly in the case of an already established traditional business. Perhaps the two most important are:

- to create a whole new brand for the e-commerce offering, or to extend the brand of the existing product or service into the e-commerce offering, and
- to create a separate organisational structure to provide the e-commerce offering, or to integrate it with an existing organisational structure.

This decision is also frequently described in terms of treating the Internet as "just another channel" versus treating it as "a whole new way of doing business" or as a pure-play versus "bricks and clicks" strategy.

With both choices, there are several points in between the opposite ends of the spectrum.

The chart below illustrates the above choices by showing the choices made by a number of well-known e-commerce offerings.


Gulati, R. and Garino, J., (2000) provide a more comprehensive summary of the relative strengths of each of these approaches. An enhancement of their analysis is provided in the table below:

<table>
<thead>
<tr>
<th>Integration</th>
<th>Separation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Brand</strong></td>
<td></td>
</tr>
<tr>
<td>• Cross-Selling</td>
<td>• Can target different customer segments.</td>
</tr>
<tr>
<td>• Brand recognition</td>
<td>• Can target different, &quot;net-friendly&quot; products.</td>
</tr>
<tr>
<td>• Web influenced consumer commerce</td>
<td></td>
</tr>
<tr>
<td><strong>Management</strong></td>
<td></td>
</tr>
<tr>
<td>• Sharing of information</td>
<td>• Organisational focus!!!</td>
</tr>
<tr>
<td>• Alignment of strategic objectives</td>
<td>• Flexibility (to innovate)</td>
</tr>
<tr>
<td><strong>Operations</strong></td>
<td></td>
</tr>
<tr>
<td>• Purchasing leverage</td>
<td>• Avoid cross-contamination of business models.</td>
</tr>
<tr>
<td>• Exploits existing direct marketing infrastructures and distribution efficiencies</td>
<td>• dot.com organisational culture</td>
</tr>
<tr>
<td><strong>Equity</strong></td>
<td></td>
</tr>
<tr>
<td>• Parent captures entire value</td>
<td>• Opportunity to build separate, state-of-the-art customised systems to support the client experience.</td>
</tr>
<tr>
<td>• Less fear of &quot;cannibalisation&quot;</td>
<td>• Access to venture funding</td>
</tr>
<tr>
<td>• Attract and retain talented management</td>
<td></td>
</tr>
</tbody>
</table>

The balance appears to have shifted away from separately branded and managed companies towards more integrated offerings - that is, from the top-right corner of the chart to the bottom left corner. Research conducted by Andersen Consulting supports this view, claiming that "only 27% of global respondents said they feared competition from new start-ups, compared with 47% looking over their shoulders at established players turning to new areas." Rosemary O'Mahony of Andersen Consulting sums it up as follows: "established businesses have ceased to be intimidated by e-commerce or start-struck by its pioneers. Certainly the past year has proved the advantages of strong brands, deep pockets and managerial expertise."

Two potential reasons for this shift are suggested:

1. Firstly, the March / April 2000 NASDAQ crash must certainly have rocked confidence in the new start-up approach.
2. Secondly, several models, such as incubator subsidiaries or divisions have now been suggested as alternative "models for old economy companies wanting to fast-track their entry into the technology age without losing existing customers." The incubator approach "allows experimentation with innovative technology that can be abandoned or integrated into the main business depending on its success."

Regardless, the pressure on traditional companies to join the new economy is as high as ever:

*Companies operating in the "old economy" have a window of opportunity following the bursting of the dot.com bubble earlier in the year, and should use it to transform themselves into "dotcorps". ... The collapse of over-hyped internet start-ups did not mean a return to business-as-usual for traditional brick and mortar operations.*

## Get Some Customers

Customers are in short supply...

The key characteristics of the information age are best described in comparison to those of the agrarian and industrial ages.

<table>
<thead>
<tr>
<th>Age</th>
<th>In short supply</th>
<th>Determinant of value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agrarian</td>
<td>land</td>
<td>ownership of land</td>
<td>Powerful land barons typically accumulated vast tracts of land and coerced serfs into living on and working it.</td>
</tr>
</tbody>
</table>

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7 Julie Leib, 2000, "'Mobile Connectivity' is way forward", Business Day, 21 September 2000, pp16

In short supply | Determinant of value | Description
--- | --- | ---
Industrial | raw materials | physical assets | Powerful industrialists conspired to control the supply of raw materials. Access to commodities such as gold, diamonds, coal and steel assumed immense importance. It was generally true that the market could absorb as much product as the industrialists could produce. Gradually, as the means of production became more sophisticated, and more and more products became commoditised, the focus shifted towards the information age.

Information | customers | relationships and intellectual capital | The economic battles of today are fought over the mind-space of consumers. Products are largely commoditised, and companies compete increasingly on the basis of value added customer services.

Slywotzky\(^9\) sums this up: "What's abundant in most industries today is production capacity. What's scarce is the ownership of customer relationships... the companies that ... control customer relationships ... will be the ones that hold the power in an industry and reap the lion's share of the profits."

Zang Hailing\(^10\), extends this idea by suggesting that it is, in fact, customers' time that is in short supply, and therefore emphasises the importance of reducing the customers' time to adopt a new product as a key success factor.

Customers, however, are not passive participants in the information age power-play in the way that land and raw materials were in the agrarian and industrial ages. Consequently, the ongoing development of e-commerce will accelerate the shift of power to the consumers\(^11\). According to Slywotzky\(^9\), the Internet has made possible the transformation of the customer "from Product Taker to Product Maker". He elaborates, "The role of the customer ... shifts from passive recipient to ac-

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tive designer." Further more, the Internet has also made possible the transformation from "Price Taker to Price Maker ... armed with more options and more information, they looked further and bargained harder, and eventually found lower prices." Slywotzky provides further examples:

- Dell's online Configurator: design your own computer.
- Mattel's My Design Barbie: design your own Barbie Doll.
- Schwab's mutual fund evaluator: assemble your own investment portfolio.
- Chipshot.com's PerfectFit system: design your own golf clubs.

According to Gary Hamel, "the efficiency of the Internet in terms of customers’ ability to compare products and prices would place an even greater emphasis on quality since 'customer ignorance has been the biggest profit centre for many companies in the past'." The Internet reduces the seller's information advantage, putting information in the hand of the consumers and giving the relative price advantage to the consumers.

One consequence of this shift has been the increasing importance of Intellectual Assets. The most important of these are Intellectual Property, such as patents, trade secrets, trademarks and copyrights. As technology continues to lower the barriers to entry in many industries, the first players in a market find it increasingly difficult to defend their markets. Many have turned to Intellectual Property, as opposed to physical assets to do so. Amazon, for example, has patented its "one-click" system, and filed an infringement suit against Barnes and Noble in October 1999. (Barnes and Noble had no similar protection to fall back on when Amazon had initially entered the market). Similarly, Priceline.com patented its "name your own price" method, and has recently launched an infringement suit against Microsoft. The most successful companies create a "patent wall" or cluster of related patents surrounding a particular product. (On the other hand, Grulke argues that "copyrights and patents will no longer provide adequate business protection. Business advantage will only be gained by speed of action.")

However, the use of patents and other legal devices has proved no match for the importance of attracting and retaining the valuable customer resource.

...therefore, you need a lot of customers!

This recognition of the increasing importance of the consumer is a key proposition in this paper. It establishes the importance of the "Get some customers" stage of the 3 stage framework for analysis - the information age will belong to the companies who can attract and retain the most customers.

Wolfgang Grulke of FutureWorld refers back to the dictionary definition of commerce to conclude that commerce implies a large scale. The Merriam-Webster Online Dictionary defines "commerce" as "the act of trading or the business of commerce.

Lesson #2: Size Counts: you need a lot of customers - e-commerce is about economies of scale.

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12 http://www.time.com/time/digital/magazine/articles/0,4753,50877,00.html

ary\textsuperscript{15} defines commerce as the \"...the exchange or buying and selling of commodities \textbf{on a large scale} involving transportation from place to place\" (my emphasis). In the instance of e-commerce, the issue of scale would seem to apply foremostly to the number of customers. (Grulke further suggests the comparison of market capitalisation per customer as a measure of e-commerce success.)

Two primary factors would appear to drive this:

1. **Globalisation**: The potential ability to serve the entire world from a single site, changes the magnitude of requirement of economies of scale, and
2. **The virtual nature of software**: \"Because the marketplaces are made from software, not bricks and mortar - they can scale with minimal additional investment, promising even more attractive investments as markets grow.\"\textsuperscript{16}

According to Business Week Online\textsuperscript{17}, Amazon has attracted 20 million customers in 5 years (to June 2000), and expects to make $2.8 billion in sales in 2000. Furthermore about 70% of their business comes from repeat customers.\textsuperscript{14}

Dot.coms started by entrepreneurs with vision and drive may fail to scale up sufficiently to support the required customer numbers. According to Jerry Yang (of Yahoo)\textsuperscript{22}, \"Building an organisation that scales smoothly is the true test of an entrepreneur. Often what it comes down to is how well the entrepreneurs scale themselves.\" Ian MacMillan, the executive director of the entrepreneurship programme at the Wharton School suggests the following issues to look at before investing in fast-growing companies:

- \"Is growth diluting management's attention?\"
- Can the company handle the stress of doubling in size every year or two?
- Does the CEO delegate?
- Does the company meet its stated goals?
- Are the macro-economic trends in place to provide unlimited growth potential?\textsuperscript{23}

\begin{mdframed}
Lesson #3: He who has the most loyal customers wins.
\end{mdframed}

Napster, Fortune Magazine's \"hot idea of the year\" for 2000, attracted 10 million users in just under 10 months.\textsuperscript{18} Some sources quote a lower figure of 6.7 million by August 2000.\textsuperscript{19}

Yahoo! added 17 million customers in the last year.\textsuperscript{20}

(Both Napster and Yahoo! are free services.)

Egg: has 1.2 million customers\textsuperscript{21} and grew by 107,000 customers during Q3 2000. (But then again, you have to be a UK resident to be an egg customer.)

\begin{flushright}
\textsuperscript{15} http://www.m-w.com/netdict.htm
\textsuperscript{17} 26 June 2000
\textsuperscript{18} Kover, A., 2000, \"The Hot Idea of the Year\", Fortune, June 26, 2000, pp60-65
\textsuperscript{19} \"Twenty Four Hours\", Business Day, Friday October 6, 2000
\textsuperscript{20} Roth, D., 2000, \"Surprise! Yahoo Goes Broadband\", Fortune, May 29, 2000, pp50-55
\textsuperscript{21} KPMG Insider Alert on 16.10.2000
\textsuperscript{22} Schlenider, B., \"The Customer is the Decision-Maker\", Fortune, March 6, 2000, ppF-34-F-36
\textsuperscript{23} Rynecki, D., 2000, \"Ten Stocks: The Best of the Bunch\", Fortune, September 4, 2000, pp36-42
\end{flushright}
What does it take to attract and retain sufficient customers to your dot.com? The e-commerce needs hierarchy attempts to answer this question.

The e-commerce needs hierarchy

There can be little doubt that the Internet makes it easier to start a global e-business than it ever has been to start a business before. However, as a result, the question now becomes "should I start a business?", rather than "can I start a business?"

The e-commerce needs hierarchy attempts to define the requirements for attracting and retaining large volumes of clients. The bottom of the hierarchy is about attracting clients. The higher you go, the more you get towards building loyalty and retaining them.

You must do the lower steps on the hierarchy before the top ones will make any difference. Each level provides the foundation on which to build the next one.

(Note: The e-commerce needs hierarchy has Maslow's Hierarchy of Needs as its foundation.)

Serving a real need

A successful e-commerce business model, then, is one that can attract (volume) and retain (loyalty) customers. How then, do you attract customers? Answer: by satisfying a real need.

The first choice you have to make with regard to customers is who they are and what role do you wish to play with regard to them. One important and widely discussed aspect of this decision is choosing either to pursue either a B2C model (individual customers), or one of the more recently popular B2B models (corporate customers). Several models of aggregation (forward and reverse), integration (horizontal and vertical), etc. also require consideration. More important than any of these, in my estimation, is to simply identify and satisfy a need.

There needs to be a real customer driven demand for your product or service. Sup-
plier driven products or services (i.e. products or services offered because they can be) have no place. The Internet has made many new things possible - only some of them serve an actual need.25 (Note also that not all needs are "Internettable".26) 

Face it, if you can think up a company in your head, there are probably five other people who can do the same25

Most successful companies, products or services, arose from the combined personal experience and imagination of their founder, rather than from abstract imagining alone. "There was some certainty of demand before the formation of the start-up. Today, an increasing number of entrepreneurs start companies with little more that a gut feeling that someone will eventually need or want their product or service. This form of 'ivory tower' capitalism is quite dangerous. The start-up is left with the burden of establishing a market rather than participating in one. As they say on the beach, it's easier to surf a wave than to create one."25

Jeff Bezos built Amazon.com around the initial need of consumers to get any book, anywhere. In recognition of the burgeoning variety of information available and required, he built the "Earth's biggest bookstore" on the assumption that a virtual model would enable him to make a wider variety of books available to a more diverse audience than any physical bookstore ever could do.

Ideally, of course, you want to identify a need that no one else is satisfying yet. It is easier to write in the white space than to try and compete. Consider, for example, the number of people who know about, or have used Amazon.com, compared to the number of people who know about or have used their next competitor.

Getting Noticed

Of course, just being there is not enough. To succeed, you need to get noticed. In the fiercely competitive e-commerce environment, and particularly in the absence of physical bricks-and-mortar presence, this can be extremely expensive and risky.

Today, more than 1.6 million commercial sites operate on the Web, all in fierce competition for the attention of potential buyers... Many e-tailers, in fact, are averaging more than $100 to acquire a new customer, and some

Other examples:

- CDNow was created in August 1994, largely out of Jason Olim's frustration at poor service and availability when looking for Miles Davis CDs.27
- Jerry Yang and David Filo started "Jerry's Guide to the World Wide Web" in 1994 to help them keep track of all the URLs their friends sent them. They later renamed it Yahoo!28


are spending upwards of $500. If a merchant is selling high-ticket, high-margin items, or if it can be sure of a steady stream of repeat purchases, those costs may make economic sense. But for most, they're suicidal - their average customer acquisition cost is higher than the average lifetime value of their customers. Until recently, e-tailers have been able to convince investors that sky-high spending on marketing is necessary to stake out a position on the Internet space. But the day of reckoning is now approaching. 27

<table>
<thead>
<tr>
<th>Customer Acquisition Costs</th>
<th>McKinsey &amp; Co</th>
<th>Boston Consulting Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet-Only Retailers</td>
<td>$95</td>
<td>$82</td>
</tr>
<tr>
<td>All online retailers</td>
<td>-</td>
<td>$32</td>
</tr>
<tr>
<td>Stored based</td>
<td>-</td>
<td>$31</td>
</tr>
<tr>
<td>Catalog based</td>
<td>-</td>
<td>$11</td>
</tr>
<tr>
<td>Multi-Channel</td>
<td>$15-$30</td>
<td>-</td>
</tr>
</tbody>
</table>

Research by McKinsey & Co. suggests that online customer acquisition costs can be as much as 4 times as high as offline - the Internet provides a better vehicle for talking to existing customers than for attracting new ones 26 - whilst Bain & Co says it may be 20-40% higher for online retailers. 31 According to Shop.org customer acquisitions costs of $82 a customer for Internet retailers are much higher than the $31 for brick-and-mortar retailers.31 The gross income from a typical internet-only retailer's consumer is $24.50 in the first month and $52.50 in subsequent months if they remain a customer, but all acquisition and retention costs are highly variable between e-commerce market segments with customer acquisition costs varying from $200-$400 for e-brokerage customers to $30-$70 for books. 29

The importance and difficulty of getting noticed by customers in cyberspace means that "brands matter just as much in the new economy as in the old." 32 In the virtual world... brands are uncertainty reducers. People will pay a lot to reduce the uncertainty in their lives. And there is not part of society where brands can play a bigger role than on the Internet, because the Net has so many unknowns." 32 It is always hardest to build a brand on the Internet when you are second in a space - for

The American Marketing Association defines: "A brand is a name, term, sign, symbol or design, or a combination of them, intended to identify the goods or services of one seller or group of sellers and to differentiate them from those of competitors." 30

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32 Grose, T.K., 2000, "The Game of the Name", Time, June 12, 2000, pp78

example, who is the next after Amazon?\textsuperscript{33} Michael Moritz (general partner at Sequoia Capital) sums it up: "The large waterfront properties have not only been purchased, but developed."\textsuperscript{34} It is also becoming harder to build an Internet brand from scratch now that the existing well know bricks and mortar brands are starting to compete on the web.

Moreover, you have to build a \textit{global} brand. In traditional business, you build a business, and if it was really successful, you could contemplate spending a lot of money to go global. With e-commerce you are more or less global by default. The reason for this is simple. In cyberspace, it costs the consumer the same to access your site or e-mail you from anywhere in the world, whilst in the physical world the cost of visiting or phoning you differs significantly depending on where you are. (Here is also a potential advantage for South Africa. Countries like India and Ireland have successfully established themselves as technology centres, providing low cost services around the globe from relatively physically remote locations. With South Africa's relatively first world technology infrastructures, we have an opportunity to do the same.)

In the traditional economy it could take up to 30 years to successfully build a global brand.\textsuperscript{14} Amazon.com has proved that in the e-commerce world it is possible to do so within 3 years! The cost of building an Internet brand, however, was estimated in 1999 to be $60-80 million per annum and climbing.\textsuperscript{28}

It should also be noted that there are only approximately 1.8 million Internet users in South Africa.\textsuperscript{7} Although this number is expected to double to 3.6 million by the end of 2003, it seems unlikely that the South African market will be able to support a local company that is able to compete in terms of economies of scale with the likes of Amazon.com unless it pursues a global market.

Successful e-commerce companies appear to rely heavily on non-traditional means of marketing, rather than on traditional advertising. (In particular, the success of banner advertisements has been questioned for some time.) Viral marketing and community building are two of the most successful methods. Having a suitable URL (it doesn't take a genius to guess at www.Amazon.com) and getting good search engine rankings are also essential. (To be successful, you probably need an integrated programme, including banner advertisements, affiliate programmes, viral marketing programmes, and traditional medium marketing.)

Most people heard about Amazon.com from someone else. Amazon encourages this with the gift list programme and customer ratings and reviews. Using such programmes, Amazon has effectively turned each of its customers into a potential marketing agent. There can certainly be no more credible marketing than that of its customers, especially if you already know them or are able to contact them. Similarly "word of mouth accounts for the lion's share of CDNow's customers," and its basically free.\textsuperscript{27} eBay has done this to an even greater extent where it is the customers who are actually

\textsuperscript{33} http://www.time.com/time/europe/magazine/2000/0612/ibrands.html
\textsuperscript{34} http://www.time.com/time/magazine/articles/0,3266,42860,00.html

\textsuperscript{http://www.ChrisCFox.com/eCommerceBusinessModels.pdf}
selling the goods. With barely any national marketing or advertising, eBay had grown to 3.8 million users by the end of March 1999.35

"Amazon.com's Associates programme, launched in 1996, now has some 400,000 affiliates... Barnesandnoble.com is catching up with its rapidly growing program ... and, by mid-1999, it had well over 100,000 affiliates. ... Forrester Research estimates that ... by 2002, fully 25% of Internet retail sales will be acquired through sites using the affiliate-advertising model." Dell Computers also has a strong affiliate programme.27

Internet companies are prepared to go to almost any lengths to understand where customers' attention (or "eyeballs") goes. One of Amazon.com's strengths is that it is market centred, customer focussed and information rich. The reason for this is that they did not start off with a heap of organisational baggage.14 Amazon uses this information to not only understand their market better, but also to directly enhance their customers' experience of the service.

Unfortunately, some companies have spent all their money getting noticed, and then neglected the higher order levels on the e-commerce needs hierarchy. Conversion rates are then low. For example, it is estimated that it costs CDNow more than $70 to attract a new customer and that many customers spend less than half that amount before leaving the site forever.37 CDNow has 83% brand recognition, but only 17% loyalty - familiarity does not necessarily breed loyalty - you need the higher layers in the e-commerce needs hierarchy for that.

The companies most penalised by far have been e-tailers and content-oriented Websites. They spent millions advertising to create brand recognition and wrongly assumed that they could worry about actually making money later.38

One example of this was Boo.com. "The buzz on Boo.com turned out to be manufactured hype. The company squandered much of its $135 million on marketing, and investors finally pulled the plug in May [2000]."39 Big names like Goldman Sachs and Bernard Arnault poured about $125 million into the project, but the Boo bubble burst when investors refused to put up an additional $30 million, after being online for just 6 months, leaving more than 600 staff unemployed, and putting paid to the seemingly great idea of selling expensive designer sportswear online from a super-cool site that pushed the boundaries of technology.40 Reasons suggested for the failure of Boo.com include:

35 http://library.northernlight.com/SG19990714260000047.html?cb=13&sc=0#doc
36 "Spies Amoung Us", Time Magazine, July 31,2000, pp36-43
38 Schwartz, N.D., 2000, "Trial by Fire", Fortune, July 26, 2000, pp68-76

offering no regular bargains, in a tiny market in which most shoppers look for discounts; and
being cutting edge, but slow to download, limiting mass appeal.\textsuperscript{40}

Interestingly, the Boo.com brand was bought by U.S. portal FasionMail.com for an estimated £250,000 because, despite its debt estimated at £178 million, its site pulled 558,000 unique visitors in its month of liquidation. The new Boo will pursue a much less aggressive, but hopefully more sustainable strategy of long term growth.\textsuperscript{41}

\textbf{Working}

Although it might seem obvious, surprisingly many companies fail to make sure their web sites work. From my personal experience this is particularly true of South African companies.

\begin{itemize}
  \item \textbf{Cross-browser compatibility:} Never assume that just because it works in one browser it will work in all the others.
  \item \textbf{No broken links / missing images:} Although this is the easiest form of error to fix, it is still very common. A surprisingly large number of companies seem to think that an error message indicating "This sight is in the process of being re-organised" makes any difference to their customers, and it is certainly no excuse for sloppiness.
  \item \textbf{No backend errors:} These are the ugliest error messages as many companies simply allow their back-end systems to throw technical dumps of the cause of the error onto the screen. Besides the obvious irritation to customers, these error messages could tell potential hackers more than you would want them to know about your systems.
  \item \textbf{24*7*365 operation:} At best, companies whose back-end systems can't support 24*7*365 operation give you a polite indication of this fact together with a suggestion of how to proceed; at worst, they throw up another ugly technical back-end error message. In a high-tech world, failure to provide 24*7*365 operation on your website is a clear indication that your back-end systems are out-dated. Particularly in a global environment, where customers interact with you from different time zones, 24*7*365 is a minimum requirement. Equally important is the response time customers get when they e-mail you. It shouldn't be the customers' problem that all your support staff have gone home for the night.
  \item \textbf{Functional and user friendly:} On a carefully constructed web site, every page 'knows' why the customer is there and what information they expect to find or action they expect to be able to take. Too many web sites simply present inappropriate dumps of information and options. (In my personal opinion, this is one area where Amazon.com could pay more attention.) "Easy to use sites have high conversion rates."\textsuperscript{42} Unfortunately, many companies still leave the development of their web site at the mercy of their programmer.
\end{itemize}

\begin{footnotes}
\item\textsuperscript{41} Gurley, J.W., 2000, "The One Internet Metric that Really Matters", Fortune, March 6, 2000, pp135
\end{footnotes}
sites to the IT departments, and as a result get sites which are technically brilliant but inappropriate to the needs of the customers. Ideally, e-commerce business should get their real customers to test the systems, both before launching the site, and thereafter in the form of site usage monitoring and ongoing feedback.

- **Fast:** The speed of the Internet has been an issue for since its inception and will probably remain so indefinitely into the future as technology companies develop more bandwidth-hungry to attract customers faster than the infrastructure companies can put the required bandwidth in place. Perhaps more important than absolute speed is appropriate relative speed. This can be achieved along two dimensions:
  - Different areas within a single site may have different speed requirements. For example, in the central transacting area of an online banking site, low bandwidth, highly functional and fast pages may be required, whilst on the pages informing prospective customers about new products, more bandwidth intensive, content rich and consequently slower pages may be suitable.
  - The nature of the product or service should also determine the appropriate performance. For example, one of the reasons given for the failure of Boo.com was their use of high-tech but slow pages to sell discount clothing - customer failed to reconcile these incompatibilities.[40]

Speed of action is also important. Amazon's one-click ordering system makes it quick and convenient to purchase books, as the payment and shipping information does not have to be re-keyed.

- **Security and Privacy:** Customers need to feel sure that their credit card number and other personal information will be kept safe from prying eyes, not only during its transmission to the web site, but also while it is being stored in the back-end systems where it will be processed. Businesses such as online banks have an even more onerous requirement for security and privacy. "More than any other industry, the banking system exists on trust."[43] The reputations of online banks have recently been rocked after several reports concerning a breach of security at egg[:].

E-commerce business should be particularly aware of "Internet rage". Online users are not only less tolerant, but also more likely to do something about an unsatisfactory experience. For example, disgruntled consumers have gone as far as establishing their

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own web sites whose purpose is to provide a platform from which to vent their frustration at the company. www.sucks.com has gone a step further and provides consumers with an interactive web community and forum for complaints about companies and politicians. Even for those disgruntled consumers who are less retaliatory, competitors are "just a click away".

Not surprisingly, I have never found a single piece of evidence suggesting a technical error on Amazon.com's web sites. The Amazon site always works, the information it delivers is always accurate, and your books always get delivered.

Fulfilling

One problem with many e-commerce businesses is that they focus to heavily on flashy web-sites and marketing and that there is consequently too little focus on real-world logistics - not only must the goods and services be delivered reliably, but a product which breaks needs additional reverse logistics to enable it to be returned and fixed or replaced.\(^44\)

It is important to note that while Amazon is reported to have spent $50 million on its web-site and front-end systems, it has apparently spent $500 million on its warehousing and distribution systems. It is for this reason that you can be relatively sure that when you order a book from Amazon, it will arrive, even if you are on the far end of the Dark Continent...

In comparison, anecdotal evidence suggests that the chances of you getting the book you ordered from Kalahari.net over Christmas 1999 was approximately 50% and the chances that you would be billed twice or not at all was roughly the same. More reliable evidence comes from research conducted by Andersen Consulting in South Africa. In this survey, the 100 top sites were visited, and orders placed for 480 items. Only 350 orders were delivered, and of those 20% arrived late.\(^45\) That translates to 58% of orders arriving on time, and only 73% of orders arriving at all. (Fortunately, online shoppers are quite well protected as most transactions are done using a credit card - if the goods are never delivered, most credit card companies will reverse the charge.\(^46\))

It is once these issues of fulfillment are taken into account that the economies of scale inherent in e-commerce really make a difference. Enormous economies of scale are required in order to make such fulfillment systems profitable. It has been suggested that Amazon's infrastructure requires a customer base of 24-30 million people before the model becomes profitable. Again, it is hard to image a local South African player being able to compete on this basis without playing in the global market. (Clearly, the

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\(^44\) "New solutions to sort out the logistics of e-commerce", Business Day, Tuesday, October 17, 2000, pp

\(^45\) Staff Writer, 2000, "Tourists now seeing 'sites' through the Internet", Cape Times, Monday 28 August 2000, pp

original need identified must also be capable of supporting the require volumes.)

It is also in the area of fulfilment that the bricks and clicks debate plays out. E-commerce businesses require companies to be just as obsessive about the off-line aspects of their businesses as they are about the online aspects. Clearly, existing bricks and mortar organisations are likely to have an advantage in this regard, with, for example, more than 65% and possibly as many as 81% of bricks-and-clicks websites giving customers the opportunity to return items purchased online at a physical store.

Fulfilment does not only relate to filling orders, but also to responding to customer queries. According to research company Peppers and Rogers, the best 25% of companies answer e-mail queries within 2 hours, while 45% had unacceptable response rates and 21% did not respond at all.

A further advantage that Amazon has is that its initial focus was on products (books, CDs, etc.) that it was not essential to touch before purchasing. These products provided a perfect opportunity for an e-commerce business not tied to an existing physical distribution infrastructure. One might speculate that Boo.com's failure was, in part, attributable to its attempt to distribute clothing, which arguably requires greater tactile involvement, using the same model.

Adding Value

The opportunity to restructure the value chain that e-commerce offers is often seen as a direct opportunity to cut prices. Although it may be appropriate to reduce prices to compensate for "virtual value reduction", this should not be seen as the core value proposition offered by a dot.com business. As Nocera and Carvell point out, "giving stuff away is a great way to make friends and a lousy way to make money."

Rao, Bergen and Davis point out that in conventional price wars, every competitive move is based on price and every countermeasure is a retaliatory price-cut, with little emphasis placed on service, quality, brand-equity or other non-price factors. The Internet, they continue, has introduced a new form of price war, by fundamentally changing the cost of doing business. They further warn that, while lower costs may tempt a business to cut its prices, doing so may diminish consumers' perceptions of quality and may trigger an unprofitable price war.

The evidence to back up the premise that Internet shoppers are extremely price sensi-

\[
\text{Lesson #6: Having the lowest prices is not enough.}
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47 http://library.northernlight.com/SG19990714260000344.html?cb=13&sc=0#doc
48 Stones, L., 2000, "Websites that satisfy each customer's needs prove more successful", Business Day, October 26 2000, pp6
49 Gunderson, A., 2000, "Double, double, toil and trouble: online shopping is still a muddle", Fortune, September 4, 2000

tive is mixed. Whilst Internet shoppers are able to shop around for the best price more easily, they also shop around for quality attributes. Amazon's convenience attributes have made it able to charge higher prices than other online sites. As a result of two years of research by Bain, Frederich Reichheld and Phil Schefter have said, "Price does not rule the web; trust does. Without the glue of loyalty, even the best-designed e-business model will collapse." The issue of trust can be linked to that of brand, and that of bricks and clicks versus pure play.

Brick's and mortar business, such as Barnes and Noble, would be unwise to compete with Amazon on price because they have the additional cost overhead of their physical presence. They would therefore be wiser to compete on personalised face-to-face service, browsing, immediate delivery, low-hassle returns and the ability to touch the product. Barnes and Noble (and Tower Records) have developed parallel online presences, where customers can purchase goods online, but then collect them at the store. They also offer a search engine, similar to their online offerings, in the stores.

Companies that have competed predominantly based on price (either lower prices or actually giving things away for free) have invariably achieved initial success, but then struggled to sustain it. Egg:, for example, entered the market with much better rates its competitors, and initially attracted huge market share. However, the customers it attracted were predominantly rate sensitive (referred to as 'rate tarts' in the press) and quickly moved when other virtual banks entered the market with similarly aggressive pricing structures. This competition is considered a primary reason why egg:, share price closed at 126p on October 13, 2000, well below its160p float price.

Amazon.com may have effectively commoditised books - you can get almost any book anywhere - so all that remains to compete on is price. However, Amazon.com has simultaneously de-commoditised book selling by adding a range of value-adding features, such as customer peer reviews, recommendations and gift lists. These are the real services for which Amazon.com customers are paying. Amazon.com's key differentiator is not its ability to deliver books more cheaply than anyone else, but rather it is the information that they have on their customers. They use this information to recognise their customers, and to cross-sell to them across their various services.

Amazon has collected a huge amount of data on the buying habits of its customers. "That knowledge can be used to tailor, in real time, the design of the choiceboard itself, customising the options presented to the buyer and promoting up-selling and cross-selling. Once aggregated, moreover, the customer information can be used to guide the evolution of entire product lines and to spot new growth opportunities at their earliest stages. In such an environment, it becomes very difficult for a competitor, lacking the in-depth customer information, to displace the existing provider." Dell is another company that has successfully made use of its customer information.

51 Crainer, S., 2000, "Dot.coms battle to move clients from bricks to clicks", Business Report. 30 August 2000
52 Ramo, J.C., 2000, "It's one of those perfect Autumn nights that make Manhattan seem magical", Time, December 27, 1999

Amazon.com is the best source of information about books widely available to the general public. And that is just by-the-by and free! The owner of a bookstore in Cape Town once told me that many people come into his bookshop with print-outs from Amazon, and ask him if he can source the books on the print-out list. Whilst it may not result in a direct sale for Amazon, it does help to establish Amazon as the premier source of books in the mind of consumers.

In the pursuit of adding value, many e-commerce start-ups move quickly to expand on their original product and service offerings. For example:

<table>
<thead>
<tr>
<th>Company</th>
<th>Original Product / Service</th>
<th>Expanded Products / Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amazon</td>
<td>• books</td>
<td>• a wide range of additional products, including video games, DVD movies, toys, electronics, software, home improvement products and even patio furniture.$^{54}$ • different pricing techniques, for example, auctioning • distribution of on-line retail outlets through its zShops programme, whereby other retailers can list on the Amazon.com site. It has also begun to sign distribution deals with them.</td>
</tr>
<tr>
<td>Egg</td>
<td>• savings account</td>
<td>• personal loans</td>
</tr>
<tr>
<td></td>
<td>• mortgage</td>
<td>• credit cards (soon to include a joint venture with Boots)</td>
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<tr>
<td></td>
<td></td>
<td>• insurance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• a fund (unit trust) supermarket</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• online shopping</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• current account (planned for early in 2001).$^{55}$</td>
</tr>
<tr>
<td>Yahoo</td>
<td>• navigational site</td>
<td>• e-mail boxes</td>
</tr>
<tr>
<td></td>
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<td>• space to create your own home page</td>
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<td>• shopping and financial services</td>
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<tr>
<td></td>
<td></td>
<td>• chat rooms</td>
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<td></td>
<td></td>
<td>• online gaming$^{28}$</td>
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</table>

The value-added layer applies equally to B2B business models. Many B2B companies were formed on the premise that corporate buyers would want to receive large numbers of bids on each order from suppliers trying to undercut each other’s prices. In reality, the trend has been in the opposite direction, with corporate buyers establishing deep relationships with few suppliers who provide value-added services.$^{26}$

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$^{54}$ http://library.northernlight.com/PB20000420060000049.html?cb=13&sc=0#doc
$^{55}$ KPMG Insider Alert on 16.10.2000

Lesson #7: Value added information is the only thing you should give away for free, and then only if it is in support of a profitable product.
Advising

Whilst the value added services described above may be passive, giving advice personalises that value add and attempts to translate it into action. At the end of the day, despite the Internet’s promise of disintermediation and a DIY self-service economy, many consumers still want advice.\textsuperscript{56}

Amazon provides advice at 4 levels:

1. **Amazon eyes**: If you want to know when a new book is coming out on any subject, ask Amazon to tell you. Amazon will search through its list of new releases at a specified frequency and e-mail you the details of any new books that match your search criteria.

2. **Network recommendations**: Each time you log onto the Amazon site, Amazon checks its database to see what books you have purchased in the past, and then recommends additional books to you based on the selections of other customers who have also read the same books you have. In this way, Amazon is able to provide surprisingly accurate book recommendations based on consumer driven categorisations (rather than some artificially imposed system).

3. **Gift lists**: Amazon allows customers to select books that they would like to read, but then to add them to a gift list, without purchasing them. Friends are then able to read this list and purchase books of it as gifts. For example, if anyone reading this wants to buy me a book, all you need is my e-mail address (chris@chrisfoxinc.com) and you can order a book from Amazon for me from my book list - they already know where to ship it!

4. **Customer reviews**: Finally, customer can enter reviews on books they have read directly onto the site. Amazon staff check all the reviews entered, and if they are successful, they are posted against the book reviewed. Prospective buyers can then hear directly from other customers what they thought about the books. In this way, Amazon.com enlists their customers as sales agents.

Just as importantly, however, Amazon makes it easy for you to execute the advice they provide. For each of the above services, simply clicking on the relevant hyperlink will execute the sale. Amazon already know your billing and shipping details, which they will ask you to confirm.

**Building Community**

"Today, businesses are defined more by their relationships than by their products!"\textsuperscript{14} Beyond attracting a large number of customers, Amazon has built a community of customers who come together on the Amazon site to share information about the books they have read, and to use that information to inform their future books purchases.

Successful online communities exhibit **network growth**, a powerful and exponential growth in value. For example, the first person to make use of Amazon’s customer book re-
view facility would have derived little, if any benefit from this feature. The second person, however, would have benefited from the first person's contribution. Importantly, when the second person participates, the first person begins to derive benefit as well. If a third person joins, the value of the feature trebles for all participants. The fourth participant doubles it again. The more customers join Amazon, the more value the existing customers gain.

Communities build the social and value-orientated bonds that tie customers to the organisation. It is, therefore, more powerful to have a community of customers, than a lot of individual customers. This is particularly true in niches. (On a personal note, I sometimes wish I could spend more time at Amazon, reviewing books, reading reviews and communicating with people of similar interests - with whom Amazon will help to put me in touch. I am sure that this is exactly the effect that Amazon is trying to achieve.)

**Recognising me**

Recognition goes far beyond simply displaying the customers name at the top of the company’s home page - although this is important. It also goes beyond allowing the user to select which fonts the text should appear in, which stock prices should appear in the top right hand corner and which weather report should appear in the top left.

Each time you visit Amazon's home page as a recognisable repeat user, Amazon automatically generates a page based on your past shopping behaviour and purchases. This provides for proactive, rather than customer drive customisation.

Further, such personalisation goes way beyond mere recognition to providing a site that is most likely to directly satisfy the customers needs at any particular point in time. It also makes optimum use of the information about the customer that the company has been able to collect (rather than simply selling it on to the next direct mailing company willing to pay for it.)

**Involving me**

The final stage in the e-commerce hierarchy of needs is to involve the customer in the business. Amazon's facilities to write book reviews and to create gift lists are two ways in which Amazon involves its customers in the ongoing development of the business. More important, however, is Amazon's Associates programme, which already includes 400,000 members. Amazon Associates advertise selected books on their own websites, and then receive commission for any books sold from their sites. As customers become more deeply involved with the Amazon business model, so to will their own loyalty, and the role they play in attracting a building loyalty amongst others grow.

According to Prahalad and Ramaswamy, customers are no longer passive observers of corporate strategy. They continue: “Thanks largely to the Internet, consumers have been increasingly engaging themselves in an active and explicit dialogue with manufacturers of products and services”, allowing customers to become a “new source of com-

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petence for the organisation”. This has led to the concept of the extended enterprise.

Other companies have also involved customers more directly in their businesses:

- people have long complained that Microsoft uses its customers' businesses as their product testing laboratories.
- "Cisco ... give its customers open access to its information, resources, and systems through an online service that enables <its> customers to engage in a dialogue... <solving> the problems encountered by other customers ... <and> ... helping one another."57

### Making a Profit

A criticism that has been levelled at the founders of e-commerce business is that they don't think of themselves as CEOs of operating companies, but rather as investors, intending make a fast buck and then sell the business before moving on to the next hot idea.58 Dot.coms use several tricks (some now under investigation by the Financial Accounting Standards Board) to inflate their valuations. These include:

- Recording barter deals (typically in advertising space) as between 18% and 50% of revenue.58 (Practised by Starmedia Network, VerticalNet, SportsLine, and EDGAR online.)59
- "Investing in companies that turn around and buy advertising on their web-sites."58
- Booking the total purchase price rather than only the 'commission' for intermediated transactions. (Practised by Priceline.com.)59
- Recording the value of free give-aways and discounted goods as revenue and then recording the loss under "marketing expenses". (Practised by 1-800-flowers.com, CDNow and Bid.com.)59
- Recording fulfilment costs as marketing expenses. (Practised by Amazon.com, eToys, and 1-800.flowers.com.)59

For many e-commerce businesses, the business model appears to revolve around the IPO and stock price, and not the underlying product or service.50 However, this is no longer working.

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58 Useem, J., 2000, "New Ethics or No Ethics?", Fortune, March 20, 2000, pp60-64
59 Kahn, J., 200, "Presto Chango! Sales are Huge!", Fortune, March 20, 2000, pp66-70

Internet mania has finally, decisively, burned itself out. The future now belongs to companies that can deliver - of all things - real profits.  

The companies that have retained their market value have been already-profitable Internet infrastructure providers, not loss-leading e-tailers.  

"Everyone in San Francisco knows that the only people who made big money in the gold-rush of 1849 were the merchants who sold the picks, shovels, tents and workwear to the prospectors."  

"There will be a large separation between the companies that built stable, long-term business and companies that were created just to take advantage of the dot-com hype."  

In particular, companies whose business models are based primarily on online advertising revenues have experienced difficulties.  

A lot of advertising in Silicon Valley is aimed at investors rather than customers.

Amazon continues to make record losses, posting a 2nd quarter 2000 pro forma net loss of $115.7 million or 33c / share excluding special items, compared to a loss of $82.7 million or 26c / share for the same period last year, and with sales up only 1% over the prior quarter to $578 million.  

Amazon shares have taken a beating, losing 20% of their value ($8 1/8) on one day to close at $34 a share on June 23rd, 2000. This represented a total loss of more than 70% of its market value since its December, 1999, high of $113.  

At the end of the 3rd quarter of 2000, sales were up 79% from the previous year to $637.9 million, with a loss for the quarter of $240.5 million including amortisation of goodwill and acquisition costs, $89.4 million if these are excluded - Amazon shares closed down at $29.56 on the NASDAQ on this news.

Dot Coms that are already making profits:

- Yahoo! (Profitable since mid 1998, $143 million profit in 1999)
- eBay (1st profit in March 1996, $11.6 million last period)
- Real Networks ($7 mil in 1999 on $131 mil revenues. 85% of streaming content on the web comes in their format.)

There is a light at the end of the tunnel for Amazon, however. Its US books, music and DVD/Video segment posted at pro forma operating profit of $10 million for the 2nd quarter of 2000\(^71\), and it also made a profit in 1999 on shipping goods to customers\(^72\). However, Amazon continues to sacrifice profitability in favour of aggressive expansion outside of the USA and into broader product offerings.\(^71\) It should also be remembered that Amazon is a cash business, so as the business grows, so too does its working capital in the form of accounts payable. At the end of 1999, Amazon's accounts payable amounted to $463 million.\(^72\)

Similarly, egg:| reported a 7% increase in its loss before tax for the nine-month period ended September 2000 to £115.1 million. Its loss also reflects ongoing investment in its brand, marketing and new products and services. Third-quarter losses were £34.4 million. Egg:| still believes it is on track to break even in the 4th quarter of 2001, although some analysts have expressed doubt in this figure.\(^73\)

However, this high growth strategy will not work for all e-commerce businesses. Many companies appear to have simply assumed that at some scale, there must be a profit. However, analysis reveals that this is not true for many companies. Research by Mckinsey's suggests that for many companies, "fixed" costs remain variable as the companies expand, so economies of scale are never realised.\(^26\)

**Conclusion**

The e-commerce revolution is far from over. New companies and business models will continue to emerge and succeed, struggle or simply fail. However, some patterns have begun to emerge, and these show us that, in some respects the new economy is just like the old, whilst in others, it is almost unrecognisably different.

\(^{69}\) Schwartz, N.D., 2000, "Dr.Koop and the Greed Disease", Fortune, May 29, 2000, pp62-68

\(^{70}\) Schwartz, N.D., 2000, "Trial by Fire", Fortune, June 26, 2000, pp71

\(^{71}\) myneweconomy.com, accessed 28.07.2000

\(^{72}\) http://library.northernlight.com/PB20000420060000049.html?cb=13&sc=0#doc

\(^{73}\) KPMG Insider Alert, 16 October, 2000