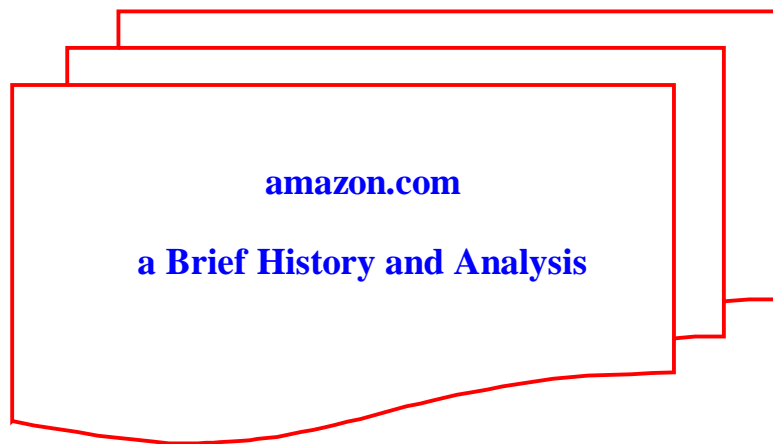


amazon.com.

The Amazon logo, a curved orange arrow pointing from the letter 'a' to the letter 'z', is positioned below the text 'amazon.com.'

amazon.com

a Brief History and Analysis

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May 2001

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Acknowledgement: I am grateful to David Salbstein and Colin Ong for their helpful comments on the first draft of this report. I have taken their comments into account and I believe this case is better because of that.

Summary of the case

The purpose of this analysis of amazon.com was to explore the nature and operation of any particular amazon business model that could be identified; and to assess the effect that such a model has on the business and its affairs.

Overall, the case demonstrates that amazon.com does appear to have developed its own business model; and that model comprises the following elements, taken from various amazon.com publications and references:

- It's All About the **Long Term**
- **Obsess Over Customers**
- When hiring employees, they ask:
 - Will you admire this person?
 - Will this person raise the average level of effectiveness of the group they're entering?
 - Along what dimensions might this person be a superstar?

- Our business is **cash favoured** and **capital efficient**
- Our vision is to build the Earth's most customer-centric company, a place where people can come to find and discovery **anything and everything** they might want to buy online.
- Online selling (relative to traditional retailing) is a scale business characterized by **high fixed costs** and relatively **low variable costs**.
- Ownership, **frugality**, bias for action, raising the bar, innovation and customer obsession. These are Amazon's cultural values
- Other parts of the corporate culture are the red, green and yellow days
- We **don't need to build physical stores** or stock those stores with inventory.

Whilst we believe that this is a fair representation of the amazon model, much of this case is dominated directly or indirectly by the accounting and financial aspects of the business: we demonstrate that amazon.com has a **negative** balance sheet, despite the form of presentation of the balance sheet found in the **2000 Annual Report**; and we see that whilst sales have grown at a phenomenal rate, costs have grown at an even more phenomenal rate. We also demonstrate that one effect of amazon.com's growth strategy is effectively to turn all of its costs into behaving as if they were variable.

Finally, whilst we tend to believe that 2001 will be a make or break year for amazon.com, the case concludes with a look to the future: we try to highlight a number of key issues that amazon.com is facing.

Introduction

My interest in amazon.com had been passive until I had an e-mail exchange with a colleague about the relative merits of economics and business studies, as taught in schools in the UK. In the course of that discussion, I asked what kind of view an economist had of a Dot Com business such as Amazon, thinking that I knew what a businessman would reply to such a question. Little did I know what I was going to come up against as I trawled the World Wide Web for answers to my own question.

What follows is a summary of some of the many views that I have been able to piece together on the startling and meteoric rise of amazon.com.

I hope I have fairly represented what I have found and whilst some of my opinions might appear strong or even negative, I have to take my hat off to all of the people who have done for Amazon what I think no one else has ever done anywhere, in any country, at any time and for so long!

Starting Point

Writing in his year 2000 letter to shareholders, CEO Jeffrey P Bezos proudly announced amazon.com the company is in a stronger position now than at any time in its past.

- Sales grew to \$2.76 billion in 2000 ...
- Gross profit grew to \$656 million in 2000 ...
- We served 20 million customers in 2000 ...

Considering that amazon.com only started operating in 1995, that really is a remarkable achievement: from zero sales to \$2.76 BILLION in such a short space of time has to be a record. At the time of writing, amazon.com has a market capitalization on the NASDAQ of \$5.287 billion, as at 1:43 am EST! 19 May 2001 (see figure 1 below).

So why did I say in the introduction that

“ ... some of my opinions might appear strong or even negative ... “

Well, take a look at their balance sheet as at 31 December 2000 and we find that its net assets are valued at MINUS \$967,251,000: in other words, if we had liquidated amazon.com at the end of business on 31 December 2000, they would not only have had nothing left, but they would still have been in debt to the tune of almost **\$1 billion**.

Paradox

So we have a paradox: how can a company have net assets that are negative to the tune of almost \$1 billion, yet be valued at around \$5.3 billion? The following chart shows us that the

Amazon.Com A Brief History and Analysis by Duncan Williamson May 2001

market capitalisation of amazon.com on the NASDAQ today is roughly the same as market capitalisation at the end of 2000:



Figure 1 Source: <http://finance.yahoo.com/>

On the basis of historical data, it's not possible to answer the question of why the people who populate the NASDAQ feel that they ought to value amazon.com so highly. NASDAQ wallahs, of course, tend not to respect history so much as the future, of course. We must take the view, therefore that anyone who has bought and retained their shares in amazon.com have done so because they are confident of a rosy future for it. There are also those investors who bought shares in Amazon a while ago, saw their values fall and are hanging on to them hoping to offset their current paper losses!

How Does Amazon Operate?

As we begin to unravel Amazon, let's take a look at what it is, what it does and how it does it.

Basically, Amazon is an online service provider in that it sells books, music, DVDs, and several other products and services solely from its websites on the Internet.

"Our US online retail stores currently consist of books, music, DVDs, videos, consumer electronics, toys, camera and photo items, software, computer and video games, tools and hardware, lawn and patio items, kitchen products and wireless products. We anticipate new online store additions in 2001 and beyond."

2000 Annual Report

There are also

“Amazon Auctions and zShops: Amazon Auctions allows buyers and sellers to conduct transactions with respect to a wide variety of products in an easy to use auction format. Amazon zShops allows individuals and businesses to offer popular as well as hard-to-find items to Amazon.com’s customers.

“Other Services: Services other than Amazon Auctions and zShops result from agreements with strategic partners to promote their products and services to our customers. In September of 2000, we launched a co-branded toy and video game store with Toysrus.com ... Other strategic partners include drugstore.com ... Audible ... Ashford.com ... NextCard ... Sotheby’s.com ... Ofoto.com ... CarsDirect.com.”

2000 Annual Report

Amazon also has an international aspect to it now, so in general, a potential customer logs on to an Amazon web site in the USA, the UK, Germany, France or Japan, searches their massive database of books, CDs and so on, decides to buy one or more products ... and the rest of the process falls into place: payment, processing and delivery to the customer.

Any user of the World Wide Web will testify to Amazon’s Web presence: without having carried out any survey to prove this point, let us assert that the average Web user will come across Amazon’s logo or site at least once in a session lasting at least an hour. Amazon really has done a first rate job of persuading users and businesses that it is a company to be linked to.

Other Businesses: discontinued in 2000

Writing in the 2000 Annual Report, CEO Bezos said:

“Many of you have heard me talk about the “bold bets” that we as a company have made and will continue to make—these bold bets have included everything from our investment in digital and wireless technologies, to our decision to invest in smaller e-commerce companies, including living.com and Pets.com, both of which shut down operations in 2000. We were significant shareholders in both and lost a significant amount of money on both ...

“In retrospect, we significantly underestimated how much time would be available to enter these categories and underestimated how difficult it would be for single-category e-commerce companies to achieve the scale necessary to succeed.”

2000 Annual Report

Associates Programme

One way that Amazon has managed to create such a presence is with its Associates programme. The 3 August 2000 edition of the Seattle Business Wire gave some useful insights into the Amazon Associates programme.

“ amazon.com today announced that enrollment in its Associates Program has reached 500,000 members ... started in July 1996. By simply linking to amazon.com, Associates can earn referral fees of up to 15 percent on certain items when visitors click through to amazon.com to make purchases.

Additionally, Associates will earn a bonus for referring 10 or more new customers per quarter to amazon.com ... Bonuses will be calculated according to the following

New Customers Referred	Bonus Payment
10 - 19	\$20
20 - 49	50
50 - 99	150
100 - 199	350
200 - 499	800
500 - 999	2,250
1000+	5,000 +\$5 for each new customer over 1,000

amazon.com's Associates network includes Web sites of all sizes and virtually every area of interest. The Associates Program's record-setting enrollment is evidence of its versatility and wide appeal across multiple product categories.”

(amazon.com Associates Program Celebrates 500,000 Member Milestone With New-Customer Referral Bonuses. http://www.findarticles.com/cf_0/m0EIN/2000_August_3/63834082/p1/article.jhtml?term=history+of+amazon.com)

The 2000 Annual Report tells us that the number of Associates at the end of 2000 was 530,000. We don't have any detailed information on the cost of the Associates programme but a couple of simple calculations reveal that it costs at least \$10.6 million per quarter: that's 530,000 members earning the minimum \$20 each. The maximum possible is astronomical: all members earning the maximum \$5,000 + \$5 per additional new customer; if they all had 2000 referrals each, that would cost Amazon more than \$5 billion per quarter, clearly this is absurd!

The Associates programme is clearly a significant cost whatever the total actual cost.

On top of this, Amazon offers discounts directly to its customers, over and above the normal selling price. Again, precise information on the value of this discount scheme aren't available; but a quick survey of 50 from amazon.com today (20 May 2001) titles revealed that many books are discounted by as much as 20%, others by 10% and yet others attract no discount at all. Given the 3 million ++ items in the total database, any survey carried out in ten minutes cannot be representative!

Writing for **Information Today, Inc** in March 1999, Steve Coffman said

“Amazon offers a selection of over 3 million titles, including all 1.5 million English language titles currently in print, as well as everything listed in Books Out of Print. That's more than 17

times the 175,000 to 200,000 titles available at your local Barnes and Noble or Borders and way more than the 20,000 to 40,000 titles you might expect at a typical neighborhood bookstore.”

Of course, Amazon doesn't actually stock all those titles. It maintains an inventory of about 300,000 of the most popular items in its warehouses ... These books list in their catalog as "Ships Within 24 Hours." Then they have arrangements with ...wholesalers ... to deliver another 420,000 titles that they don't have in stock within 24 to 48 hours. The rest ... they order directly from the publishers ..."

(Building Earth's LARGEST Library: Driving into the Future:
http://www.findarticles.com/m0DPC/3_7/54058625/p1/article.jhtml)

Writing in the same article, Coffman also points out

“ ... Barnes and Noble last year [had] more than 2,000 stores and 27,000 employees. Amazon has done it all with no store and only 614 employees.”

It is true that Amazon has no stores in the conventional sense, but throughout Bezos' letters to shareholders, we find that he talks about Amazon stores all of the time. Moreover, at the end of 2000:

“On an aggregate basis, these fulfillment centers comprise approximately 4.5 million square feet of warehouse space.”

(amazon.com 2000 Annual Report page 4)

By fulfillment centres, it means warehouses and the facilities it needs to service its customers.

I don't know the floor area of an average Barnes & Noble store, but if we assume it's of the order of 20,000 square feet, then Amazon has the equivalent of 225 stores represented by its fulfillment centres. Alternatively, Bezos used the analogy of football fields in his 1997 letter to shareholders (when their fulfillment centres represented 6 football fields), and 4.5 million square feet represents 100 football fields (assuming that an American football field is the same size as a soccer pitch!). Still a long way away from Barnes & Noble, but hardly entirely virtual. Nevertheless, we might conclude at first sight that operating fulfillment centres might be more cost advantageous than operating high street stores: is this the case, though?

Amazon has taken the view that its customer oriented approach (Obsess Over Customers is a paragraph heading from the 1997 letter to shareholders) and it has taken this approach right into its logistics operations:

Since Amazon works entirely online, let's look to author James Aaron Cooke writing for Cahners Publishing Company in January 2000 to give us some insights into Amazon's distribution operations:

“Uniform Materials Handling

With all of the new distribution centers [DCs], amazon.com wanted to maintain some consistency in the materials-handling equipment used.

One of the innovations the online retailer has embraced in all of the DCs is the use of radio-frequency technology to direct its warehouse associates' activities. Arnold [Chris Arnold, logistics director] reports that when it first installed RF technology, the company saw a 70-percent improvement in operational efficiency.

At the moment, the e-retailer's warehouse operations handle fulfillment for all orders placed on the company's Web site. "Amazon feels strongly about filling its own orders," says Paul Kreuser, director of supply chain development. "We can control the customer [satisfaction] when we fulfill the orders in-house."

For actual deliveries, the company still relies on parcel giant United Parcel Service (UPS) and the U.S. Postal Service. Nonetheless, Arnold recently told the audience at a Council of Logistics Management annual conference session that the company would like to try "zone-skipping," a practice in which a shipper linehauls a consolidated truckload of product to a breakbulk center for local distribution.

... amazon.com has chosen to do its distribution in-house. "We are not seeing the kinds of problems that e-merchants that relied on third parties had [during the 1999 holiday season]," says amazon.com spokesman Bill Curry. "Distribution does matter."

(Clicks and mortar:

http://www.findarticles.com/cf_0/m0GZB/1_39/58670261/p1/article.jhtml?term=history+of+amazon.com)

Amazon calls this aspect of its business *fulfillment*.

“Fulfillment costs represent costs incurred in operating and staffing fulfillment and customer service centers (including costs attributable to receiving, inspecting and warehousing inventories; picking, packaging and preparing customers’ orders for shipment; and responding to inquiries from customers), and credit card fees.

Fulfillment costs amounted to \$415 million, \$237 million, and \$65 million in 2000, 1999, and 1998, respectively.”

(amazon.com 2000 Annual Report page 43)

If we accept that Amazon has the equivalent of 225 retail stores, then for the financial year 2000, the fulfillment costs averaged around \$185,000 per store.

Total Amazon inventories are shown in the end of 2000 balance sheet at \$174,563,000: if we assume that each of Amazon’s *stores* held inventory for all of its segments, each *store* would hold an average of a total of \$776,000 worth of goods; and average sales per store for 2000 amounted to \$12,275,480.

The Amazon Business Model

Let's look at various pieces of information available and see what that reveals in terms of the kind of business model that Amazon represents. We will see that we might conclude that the management at Amazon is paternalistic, democratic and such like but whether this represents a brand new model, or paradigm, is doubtful.

- It's All About the **Long Term**: the stronger our market leadership, the more powerful our economic model (1997 letter to shareholders): our long standing objective of building the best, most profitable, highest return on capital, long term franchise (1999 letter to shareholders)
- **Obsess Over Customers** (1997 letter to shareholders)
- When hiring employees, they ask:
 - Will you admire this person?
 - Will this person raise the average level of effectiveness of the group they're entering?
 - Along what dimensions might this person be a superstar? (1998 letter to shareholders)
- Our business is **cash favoured** and **capital efficient**. And we do not need to build physical stores or stock those stores with inventory. (1998 letter to shareholders)
- Our vision is to build the Earth's most customer-centric company, a place where people can come to find and discovery **anything and everything** they might want to buy online. (1999 letter to shareholders)
- Online selling (relative to traditional retailing) is a scale business characterized by **high fixed costs** and relatively **low variable costs**. (2000 letter to shareholders)
- Ownership, **frugality**, bias for action, raising the bar, innovation and customer obsession. These are Amazon's cultural values according to [Steve] Frazier [managing director of Amazon.co.uk]. (Daily Telegraph 17 May 2001)
- Other parts of the corporate culture are the red, green and yellow days ... If it is red, everybody was doing either customer service or distribution centre. If it is yellow, it would be half your department. If it was green, it would be relaxed. (Daily Telegraph 17 May 2001)
- We **don't need to build physical stores** or stock those stores with inventory.

Perhaps the key elements of Amazon's business model are the words and phrases highlighted above:

Long term growth
Customer obsessive
Cash favoured
Capital efficiency
High fixed cost
Frugality
No physical stores

We need to bear these aspects of their business model as we review their operations: we won't necessarily refer to these aspects directly, but keep them in mind as you read what follows.

What About Profit in the Business Model?

Author Lesley Hazleton interviewed Jeff Bezos for a July 1998 article and asked about Amazon's then lack of profitability. Of course, Amazon has even now yet to make a profit. Here's what Bezos said in 1998

"We're focusing on introducing ourselves to customers. To do anything else right now would be a very poor management decision. It's not at all unusual for a four-year-old company to be in an investment cycle rather than a harvest cycle. What is unusual is for such companies to be publicly traded, but even that's not unique. Biotechnology companies have operated in this mode all along, and public markets have supported that strategy. And I think they've supported us because the Internet has created an opportunity for companies to build brand names far more quickly than has been historically possible, which means that everything else happens far more quickly, too."

(Jeff Bezos: how he built a billion-dollar net worth before his company even turned a profit
http://www.findarticles.com/cf_0/m3514/n7_v45/20985669/p3/article.jhtml?term=jeff+bezos)

Almost a year later, Bill Curry, amazon.com spokesman, said:

"We are busy trying to run a business which makes our customers happy. We do not get distracted by stock prices or by people who muse about the stock price."

(Daily Telegraph 3 June 1999

<http://www.telegraph.co.uk/et?ac=005026332245320&rtmo=pUhpbsBe&atmo=rrrrrrq&pg=/et/99/6/3/cnama03.html>)

Clearly, Amazon is taking a long term view as far as profitability is concerned. Can they afford to take such a long term view though. Surely, there isn't a business alive today that failed eventually to turn in a profit. What's Amazon's profit history? Let's see.

Amazon's Profit History

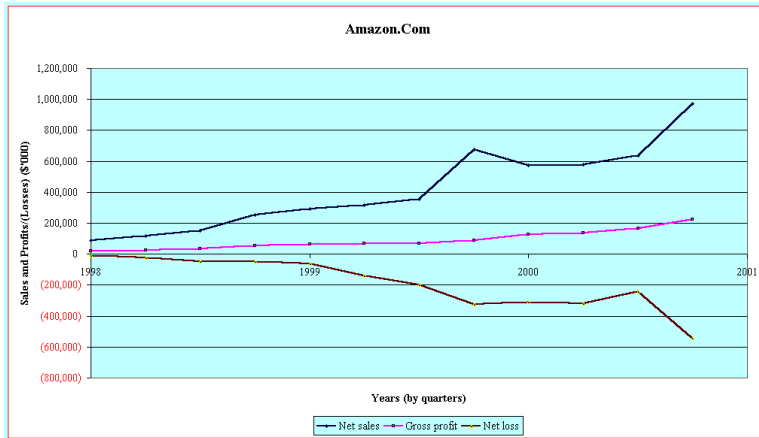


Figure 2 Sales and Profit

Figure 2: leaping frog or fighter aeroplane?! Whatever we call the graph, it's clear that sales and profitability are on diverging paths: they are negatively correlated. As sales increase, net profits decrease. There has never been a time when Amazon turned in a profit. There may be some blue sky on the horizon for Amazon, though, when we look at the segmental information for the business:

amazon.com	Books, Music and DVD/video	Early-Stage Businesses and Other	Total U.S.	International	Consolidated
Financial year 2000					
\$'000					
Net sales	1,698,266	682,642	2,380,908	381,075	2,761,983
Gross profit	417,452	160,889	578,341	77,436	655,777
Segment gain (loss)	71,441	(243,371)	(171,930)	(145,070)	(317,000)
Other non-cash operating expenses	0	0	0	0	(546,880)
Net interest expense and other	0	0	0	0	(242,797)
Equity in losses of equity method investees, net	0	0	0	0	(304,596)
Net loss	0	0	0	0	(1,411,273)

Table 1 Segmental Data: Financial Year 2000

For the first time in the company's history, one of its divisions turned in a profit, in the financial year 2000: the books, music and DVD division. A note of caution, however: the segment gain (operating profit?). There is always the doubt over how costs are allocated and apportioned to divisions of large companies, in the same way that we have doubts over such allocations and apportionments for departments within divisions. In other words, there may be simply a bookkeeping gain and not a real one.

How did Amazon assign its common costs such as buildings leases, to each division or segment? This process is often arbitrary therefore its segmental results may only be accurate to ±5% ... 10% ... 20%, who knows?

The allocation and apportionment concerns, though, dissipate when we realise that the overall position of the company is that the final net loss is \$1.4 billion on sales of \$2.8 billion.

Taking a somewhat unkind view of the current Amazon situation, we can conclude that for every \$1 worth of sales to a customer, Amazon effectively gives a rebate of \$1.51. That is total sales \$2.8 billion total costs/cash outlays \$4.2 billion.

Analysis of Costs: all of their costs are currently variable

Earlier, we saw that Bezos said that

- Online selling (relative to traditional retailing) is a scale business characterized by high fixed costs and relatively low variable costs. (2000 letter to shareholders)

Taking the data we have from Amazon's annual report and accounts and SEC filings, we can plot the last three year's sales on a graph. On the same graph, we can plot what we believe to be Amazon's costs. Figure 3 shows total costs and operating costs, defined as follows:

$$\begin{aligned} \text{operating cost} &= \text{sales} - \text{segment gain/loss} \\ \text{total costs} &= \text{sales} - \text{net loss} \end{aligned}$$

The graph in figure 3 is based on the income statement data taken from their annual report 2000; but does it bear out Bezos view that Amazon is a high fixed cost business? It doesn't appear to! The data on which the graph is based are contained in table 2, below it.

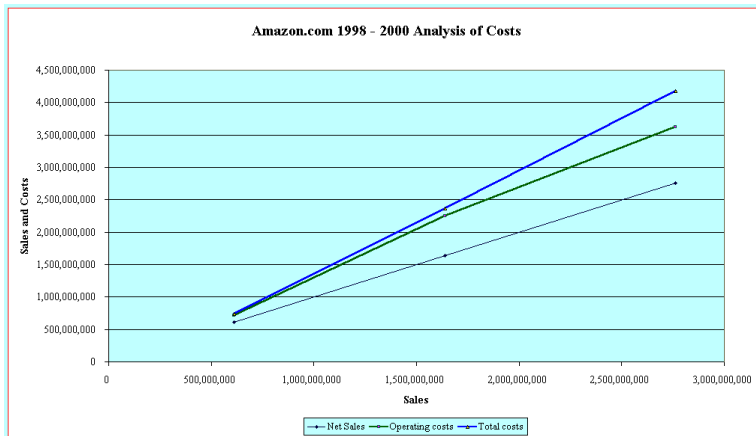


Figure 3 Analysis of Costs

Whilst there are problems in the approach taken here, it does at least beg the question of whether Bezos is right. From the evidence contained in Amazon's own data, it doesn't appear

to be a high fixed cost business: even if the estimates here are way off beam, they probably still don't support that contention!

	2000	1999	1998
Net Sales	2,761,983,000	1,639,839,000	609,819,000
Operating costs	3,625,863,000	2,245,594,000	718,874,000
Total costs	4,173,256,000	2,359,807,000	734,365,000

Table 2 Analysis of Costs

Using basic statistics, the cost functions derived from these data are:

$$\begin{aligned} \text{Total Costs} &= \text{TC} = -247,302 + 1.5981x \\ \text{Operating Costs} &= \text{OC} = -56,680 + 1.3489x \end{aligned}$$

The TC function shows that fixed costs are negative: meaning that if Amazon were to close down, someone would pay it \$247,302,000 to remain closed: clearly not sensible; and that as sales increase \$1, variable costs increase by \$1.60.

The OC function shows that fixed costs are again negative and amount to MINUS\$56.7 million and variable costs per unit are \$1.35.

More complete data would obviously help with our analysis; including much more detailed segmental data; **but what this tells us is that over the three year period under review Amazon's costs are tending to display almost perfect variability!** What price Bezos' view that Amazon is a high fixed cost business?

A More Traditional Analysis of the Accounts

Let's take a more traditional view of Amazon's accounting data now, and see what else we can conclude. The last three years' income statements and then some analysis.

Income Statement

amazon.com (\$'000)	Years Ended December 31,		
	2000	1999	1998
Net sales	2,761,983	1,639,839	609,819
Cost of sales	(2,106,206)	(1,349,194)	(476,155)
Gross profit	655,777	290,645	133,664
Operating expenses:			
Marketing and fulfillment	594,489	413,150	132,654
Technology and content	269,326	159,722	46,424
General and administrative	108,962	70,144	15,618
Stock-based compensation	24,797	30,618	1,889
Amortization of goodwill and other intangibles	321,772	214,694	42,599
Impairment-related and other	200,311	8,072	3,535
Total operating expenses	1,519,657	896,400	242,719
Loss from operations	(863,880)	(605,755)	(109,055)
Interest income	40,821	45,451	14,053
Interest expense	(130,921)	(84,566)	(26,639)
Other income (expense), net	(10,058)	1,671	0
Non-cash gains and losses, net	(142,639)	0	0
Net interest expense and other	(242,797)	(37,444)	(12,586)
Loss before equity in losses of equity-method investees, net	(1,106,677)	(643,199)	(121,641)
Equity in losses of equity-method investees, net	(304,596)	(76,769)	(2,905)
Net loss	(1,411,273)	(719,968)	(124,546)
Basic and diluted loss per share	(4.02)	(2.20)	(0.42)
Shares used in computation of basic and diluted loss per share	350,873	326,753	296,344

Table 3 Income Statements for 1998 – 2000

Source:

<http://quote.fool.com/sec/sectext.asp?CIK=1018724&Directory=1032210&Year=01&SECIndex=500087&nStartLoc=147754&nEndLoc=150695&symbols=AMZN&currticker=AMZN>

Well, this is not good reading is it. Beyond the gross profit level, this statement is almost entirely painted in red.

It is true that Amazon is a very expensive business to run. We can imagine that Bezos would tell us that marketing costs and so on are so high because they are still effectively a start up

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company that is casting its eye to the future: marketing and fulfillment costs virtually eat up gross profit on their own in 2000; and they more than did that in 1999 and they were equal to gross profit in 1998.

We might expect technology and content costs to be high for a web based business and they are, in all years. Administration costs are increasing at a significant rate too, and they stand at over \$100 million by the end of 2000.

In the longer term, can we expect these costs to stabilize? One would hope so. Moreover, it is clear from letters to shareholders, press releases and reports in the media that Amazon has been laying off staff over the last year and more. They know they cannot support such spiraling increases in costs.

To some extent much more worrying, though, is what is happening below operating profit in 2000.

Net interest payments were \$90 million in 2000; and in all three years, interest expense is significantly higher than interest income. The other adjustments in this section are bookkeeping entries in many ways but their underlying impact is significant and they illustrate that in financial terms there may be an element of panic setting in: **long term strategy in reality having an impact on the short term financials.**

Ratio Analysis of the Income Statement

The traditional ratios based on this income statement confirm what we have been saying:. They're not good reading.

amazon.com analysis	2000	1999	1998
Gross profit %	23.74%	17.72%	21.92%
Loss from operations %	-31.28%	-36.94%	-17.88%
Interest income as % of sales	1.48%	2.77%	2.30%
Interest expense as % of sales	-4.74%	-5.16%	-4.37%
Net loss %	-51.10%	-43.90%	-20.42%

Table 4 Income Statement Ratio Analysis

One wonders why the 1999 Gross Profit was so low and the loss from operations so bad. The net loss is getting worse and worse over the three year period, too.

Maybe they're trying too hard?

Balance Sheet

We have been presented with just two years' balance sheets but maybe that's enough. As we observed near the beginning of this history and analysis, the financial year 2000 balance sheet is a nightmare: it shows a negative net asset position.

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As presented here, in table 5, however, the balance sheet, taken from the annual report 2000, does not show the negative position that we have represented. This version of the balance sheet shows total assets set against total liabilities and stockholders' equity: a positive \$2,135,169,000 in 2000, so where does our negative value come from? Take a look at table 6, a redrafted but still correct, representation of the balance sheet of amazon.com as at 31 December.

amazon.com (\$'000)

ASSETS	Years Ended December 31,	
	2000	1999
Current assets:		
Cash and cash equivalents	822,435	133,309
Marketable securities	278,087	572,879
Inventories	174,563	220,646
Prepaid expenses and other current assets	86,044	79,643
Total current assets	1,361,129	1,006,477
Fixed assets, net	366,416	317,613
Goodwill, net	158,990	534,699
Other intangibles, net	96,335	195,445
Investments in equity-method investees	52,073	226,727
Other equity investments	40,177	144,735
Other assets	60,049	40,154
Total assets	2,135,169	2,465,850

LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIT)

Current liabilities:		
Accounts payable	485,383	463,026
Accrued expenses and other current liabilities	272,683	176,208
Unearned revenue	131,117	54,790
Interest payable	69,196	24,888
Current portion of long-term debt and other	16,577	14,322
Total current liabilities	974,956	733,234
Long-term debt	2,127,464	1,466,338

Commitments and contingencies

Stockholders' equity (deficit):

Preferred stock, \$001 par value:

Authorized shares -- 500,000

Issued and outstanding shares -- none 0 0

Common stock, \$001 par value:

Authorized shares -- 5,000,000

Issued and outstanding shares -- 357,140 and
345,155 shares at December 31, 2000 and 1999,
respectively

	3,571	3,452
Additional paid-in capital	1,338,303	1,194,369
Deferred stock-based compensation	(13,448)	(47,806)
Accumulated other comprehensive loss	(2,376)	(1,709)
Accumulated deficit	(2,293,301)	(882,028)
Total stockholders' equity (deficit)	(967,251)	266,278

**Total liabilities and stockholders' equity
(deficit)**

2,135,169	2,465,850
------------------	------------------

Table 5 Balance Sheets 1999 and 2000

Source:

<http://quote.fool.com/sec/sectext.asp?CIK=1018724&Directory=1032210&Year=01&SECIndex=500087&nStartLoc=143483&nEndLoc=147426&symbols=AMZN&currticker=AMZN>

Table 6 shows, perhaps, a more realistic view of Amazon's balance sheets. Here we have defined Net Assets as Total Assets - (Current Liabilities + Long Term Liabilities). Amazon would probably say that this is a cruel way to represent their balance sheet, but for a company in their position, it is a fairer way of showing the reality of what that position is. Dire!

Amazon.Com Redrafted Balance Sheet

(\$'000)	2000	1999
Total Assets	2,135,169	2,465,850
Total Liabilities	3,102,420	2,199,572
Net Assets	(967,251)	266,278
Stockholders' Equity	(967,251)	266,278

Table 6 Redrafted Balance Sheets: 1999 and 2000

Amazon has significant problems in terms of its goodwill and other intangibles. Goodwill is essentially the difference between what an investor will pay to own a business compared to the balance sheet value of that business. In many senses, we would expect the goodwill of amazon.com to be very high. After all, the market capitalization is \$5.3 billion yet the book value of the business is -\$1 billion: an estimated \$6.3 billion of goodwill! The depreciation of goodwill and other intangibles is known as amortisation.

However, goodwill tends to have to be real rather than theoretical. Nevertheless, the 2000 Annual Report tells us:

“Amortization of goodwill and other intangibles was \$322 million, \$215 million and \$43 million for 2000, 1999 and 1998, respectively. These costs increased in 2000 ... During the fourth quarter of 2000, we recorded an impairment loss on goodwill and other intangibles of \$184 million relating to certain of our 1999 acquisitions.

“Impairment-Related and Other Impairment-related and other was \$200 million, \$8 million and \$4 million for 2000, 1999 and 1998, respectively. We record impairment losses on goodwill and other intangible assets when events and circumstances indicate that such assets might be impaired ... include material adverse changes in operations, significant adverse differences in actual results in comparison with initial valuation forecasts prepared at the time of acquisition, a decision to abandon acquired products, services or technologies, or other significant adverse changes that would indicate the carrying amount of the recorded asset might not be recoverable ... the general slowdown in consumer spending, our decline in market capitalization as determined by the quoted market price for our common stock, the pervasive ... we identified certain levels of impairment corresponding with the business-unit goodwill and other intangibles initially recorded in connection with the following acquisitions: Alexa Internet, Back to Basics Toys, Inc., Acme Electric Motor Co. (Tool Crib) and LiveBid.com, Inc.”

Table 7 shows a selection of ratios that we can derive from Amazon’s balance sheet and income statements.

Ratio Analysis of the Balance Sheets

amazon.com analysis	2000	1999
working capital ratio	1.40	1.37
acid test ratio	1.22	1.07
stock turnover	30.25	59.69
debtors turnover	n/a	n/a
creditors turnover	131.37	172.93
total asset turnover	1.29	0.67
net asset turnover	-2.86	6.16
net assets (\$000)	(967,251)	266,278

Table 7 Balance Sheet Based Ratios

The working capital and acid test ratios *look* as if they come from a healthy company! The stock (inventory) turnover ratio has improved from 1999 to 2000 in line with inventory decisions and even the creditor ratio has changed for the better. In line with such a business, there are no credit sales, hence no debtors (accounts receivable).

Total asset turnover is low in 1999 and doubles by the end of 2000; but of course net asset turnover is negative: **what price capital efficiency here?**

How do we know if these ratios are good or not? What can we compare them with to help us to draw such conclusions? We need to compare the ratios with ratios of businesses as similar as possible to Amazon and see what results they have. Of course, most people reading this history and analysis would say that Amazon is unique, without equal ... nevertheless, consider table 8.

	Pearson Plc	Reed International Plc	Johnston Press Plc
net profit %	14.26%	15.18%	11.11%
operating profit %	9.45%	22.14%	17.09%
working capital ratio	1.99	1.44	1.96
acid test ratio	0.76	0.62	1.25
stock turnover	112.60	39.87	46.60
debtors turnover	133.88	126.33	67.01
creditors turnover	422.49	553.38	129.47
sales per employee	94.24	120.03	45.77
net profit per employee	13.44	18.22	5.09
op profit per employee	8.91	26.58	7.82
net asset turnover	2.14	1.75	3.01
non UK sales as % tot sales	53.79%	72.54%	1.94%

Table 8 Cmparators?

Purely to give us some idea of how well Amazon might be doing in terms of liquidity, profitability and turnover, here are the results of three British companies in the same, or similar, business: the book trade!

Clearly, these other businesses are profitable; but Amazon's working capital ratio and acid test ratios are comparable; and Amazon's stock turnover ratio is good. Amazon's creditor ratio is saintly compared to two of these three. Net asset turnover results, however, show Amazon the door!

Unfortunately, we don't have consistently available data from Amazon to calculate sales etc ratios per employee.

Cash Flow Statement

As with all cash flow statements, Amazon's cash flow statement is difficult to read in that it is filled with a huge amount of technical information. Look at table 9.

amazon.com Years Ended December 31	2000	1999	1998
CASH AND CASH EQUIVALENTS, BEGINNING OF PERIOD (\$' 000)	133,309	71,583	110,119
OPERATING ACTIVITIES:			
Net loss	(1,411,273)	(719,968)	(124,546)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities			
Depreciation of fixed assets and other amortization	84,460	36,806	9,421
Amortization of deferred stock-based compensation	24,797	30,618	2,386
Equity in losses of equity-method investees, net	304,596	76,769	2,905
Amortization of goodwill and other intangibles	321,772	214,694	42,599
Impairment-related and other	200,311	8,072	1,561
Amortization of previously unearned revenue	(108,211)	(5,837)	--
Loss (gain) on sale of marketable securities, net	(280)	8,688	271
Non-cash investment gains and losses, net	142,639	--	--
Non-cash interest expense and other	24,766	29,171	23,970
Changes in operating assets and liabilities:			
Inventories	46,083	(172,069)	(20,513)
Prepaid expenses and other current assets	(8,585)	(54,927)	(16,758)
Accounts payable	22,357	330,166	78,674
Accrued expenses and other current liabilities	93,967	95,839	31,232
Unearned revenue	97,818	6,225	--
Interest payable	34,341	24,878	(167)
Net cash provided by (used in) operating activities	(130,442)	(90,875)	31,035

INVESTING ACTIVITIES:

Sales and maturities of marketable securities	545,724	2,064,101	227,789
Purchases of marketable securities	(184,455)	(2,359,398)	(504,435)
Purchases of fixed assets	(134,758)	(287,055)	(28,333)
Investments in equity-method investees and other investments	(62,533)	(369,607)	(19,019)
Net cash provided by (used in) investing activities	163,978	(951,959)	(323,998)

FINANCING ACTIVITIES:

Proceeds from exercise of stock options	44,697	64,469	14,366
Proceeds from long-term debt	681,499	1,263,639	325,987
Repayment of long-term debt	(16,927)	(188,886)	(78,108)
Financing costs	(16,122)	(35,151)	(7,783)
Net cash provided by financing activities	693,147	1,104,071	254,462
Effect of exchange-rate changes on cash and cash equivalents	(37,557)	489	(35)
Net increase (decrease) in cash and cash equivalents	689,126	61,726	(38,536)
CASH AND CASH EQUIVALENTS, END OF PERIOD	822,435	133,309	71,583

Table 9 Cash Flow Statements 1998 – 2000

Source:

<http://quote.fool.com/sec/sectext.asp?CIK=1018724&Directory=1032210&Year=01&SECIndex=500087&nStartLoc=151018&nEndLoc=155893&symbols=AMZN&currticker=AMZN>

The upshot of this cash flow statement is that at the end of financial year 2000, Amazon had a cash mountain of \$822,435,000: it had \$133,309,000 and \$71,583,000 for 1999 and 1998 respectively. They are cash rich then ... doesn't that make a mockery of the earlier balance sheet adjustment to show that they are currently trading on a negative balance sheet?

Take a closer look at the Financing Activities section of the table 9; and especially at the line *Proceeds from long term debt*. Over the three years 1998 – 2000, Amazon has raised a total of \$2,271,125,000 in long term debt: \$2.2 BILLION in long term debt. Wow!

Take this long term debt out of the cash equation and the cash in the balance sheet would be **MINUS \$1,448,690,000 ... an overdraft of almost \$1.5 BILLION.**

The rest of the cash flow statement is not exactly awe inspiring but it does show signs of a lack of stability in that some items are changing wildly from year to year: such as inventories, accounts payable, purchases of fixed assets. Never a good sign if a company's changing its financials in such erratic ways.

Who Are We To Say All of This?

Our prognosis for Amazon is pessimistic: it needs Bezos forecast of a very healthy 2001 to turn into reality to prevent this company from sinking this year.

However, who are we to think and say this when the NASDAQ has amazon.com valued at more than \$15 billion? Well, we are not alone!

It seems quite clear from the data that Amazon is in financial trouble, even if it's not in marketing and logistics trouble! Nevertheless, we can only find one significant doubting Thomas in the Financial Press to stick his neck out and agree with the analysis here: Ravi Suria who works for Lehman Brothers in the USA. Apparently, Suria caused a storm when he came out of the Amazon closet and criticized them for their poor financial performance. Suria is not Bezos' best friend now!

Suria surfaced in June 2000 and his analysis caused Amazon's share price to plummet by 26%. Suria thinks Amazon is heading for Carey Street (or Chapter 11 as they say in the USA).

"Suria says: In 1999 Amazon was a growth story. In 2000 it became a credit story and in 2001 it's a distress story. The party is over."

(Daily Telegraph 25 February 2001

<http://www.telegraph.co.uk/et?ac=005026332245320&rtmo=0Kr02iKq&atmo=rrrrrrq&pg=/et/01/2/25/ccamaz25.html>)

Suria has forecast that Amazon is going to run out of working capital this year, as table 10 illustrates:

2001	Working Capital (\$m)
Mar 2000	704
Jun 2000	559
Sep 2000	504
Dec 2000	386
Mar 2001*	205
Jun 2001*	87
Sep 2001*	(21)
Dec 2001*	(38)

Table 10 Suria's Working Capital Analysis of Amazon

** these are Suria's forecasts.*

http://www.findarticles.com/cf_0/m0HWW/9_4/71561470/p3/article.jhtml?term=jeff+bezos

In fact we should be worried about Suria and his colleagues. From the same source as table 10 comes the following.

"If nothing else, Eric Von der Porten [who runs Leeward Investments] adds, Suria has forced stock analysts who are often "smitten by the opportunity" in a company to do some detailed analysis. That' s something that Merrill Lynch'Henry Blodget readily admits. "He has helped me think about several things in greater detail and in a different way than I would have thought about them," he says.

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But Blodget still disagrees with Suria's conclusion. "I think he's wrong," he says, "and I hope he is wrong."

http://www.findarticles.com/cf_0/m0HWW/9_4/71561470/p3/article.jhtml?term=jeff+bezos

Isn't that worrying? We wonder how on earth they could have missed something so obvious as Amazon's plight: a negative balance sheet and a worsening profit situation? What was Blodget looking at we wonder?

On the Inside: Who's Selling What?

Over the last year or so, officers of the company, together with a number of shareholders, have been classified as Insiders who have sold a total of 3,089,954 shares at a value of \$87,906,528. (Source: <http://biz.yahoo.com/t/a/amzn.html>)

One wonders at the morality of selling shares in organisations, if such sales are for personal gain, when that organisation is so heavily in debt. Equally worryingly, there is currently a Class Action under way in a District Court in Washington concerning allegedly misleading statements made by Officers of amazon.com relating to an offering of 690 million in 6.875% convertible subordinated notes due 2010. In this action, there is also the allegation that

"... Then, on 3/9/01, it was revealed amazon.com's CEO was being investigated for selling 800,000 shares of Amazon.com prior to a negative report by an analyst. Amazon.com's stock has now dropped to below \$12 per share ..."

(Press Release

Milberg Weiss Files Class Action Suit Against Amazon.com, Inc.

www.milberg.com/amazon)

Conclusions

A brief conclusion: amazon.com is a fascinating case study; but it is a strange story. Maybe it's the hype surrounding Dot Com companies that forces even serious investors and analysts to get things significantly wrong; but to date, it seems very strange that Amazon has been able to get itself to the position of having a negative balance sheet, never having got into profit ... and no real prospects of doing so for the foreseeable future.

We have looked at several aspects of Amazon's business and financial life; but cannot claim to have done that in an exhaustive way. Nevertheless, we have pointed out weaknesses in the Amazon Model: we have pointed out that there are serious questions hanging over their model: especially in the areas of

- Long term strategy as it impacts their financial position
- Their view on the behaviour of their cost structure: it's much more variable than they think
- They don't appear to be particularly frugal
- They have a lot of cash but it's at the expense of long term gearing
- They are not especially capital efficient

Our research has shown only one professional analyst, Ravi Suria, to get anywhere near our own viewpoint: this was a real surprise!

Finally, the overall attitude to such a situation maybe best summed up with this quotation from the Daily Telegraph of 10 April 2001:

“Amazon’s shares soared by as much as 42% to \$11.90 after the announcement ... that first quarter revenues and losses would be better than expected: \$695m and loss of \$480m respectively.”

<http://www.telegraph.co.uk/et?ac=005026332245320&rtmo=QemQ0x0R&atmo=rrrrrrrq&pg=/et/01/4/10/cnamaz10.html>

What can one say? If that is all it takes to make some people happy ...!

Finally, perhaps amazon.com epitomize the accountant’s saying that cash problems will always outweigh profitability problems:

“When planning the short or long term funding requirements of a business, it is more important to forecast the likely cash requirements than to project profitability etc. Whilst profit, the difference between sales and costs within a specified period, is a vital indicator of the performance of a business, the generation of a profit does not necessarily guarantee its development, or even the survival. **Bear in mind that more businesses fail for lack of cash than for want of profit.**”

(White Paper - Making Cash Flow Forecasts

www.planware.org)

The Future for Amazon?

Amazon.com’s future from an accounting and financial position looks grim; but what about other aspects of the business that might enable the company to ride out the potential disaster facing it? Let’s look at just a few aspects concerning amazon.com’s future, all taken from **2000 Annual Report**.

Firstly, amazon takes a look at the technological side of their business:

“Industry growth and new customer adoption will be driven over the coming years by relentless improvements in ... customer experience ... driven by innovations made possible by dramatic increases in available bandwidth, disk space, and processing power, all of which are getting cheap fast.”

They are optimistic about what they call their capital efficiency, as we saw earlier in this case:

“Price performance of processing power is doubling about every 18 months ...

Price performance of disk space is doubling about every 12 months ...

Price performance of bandwidth is doubling about every 9 months ...”

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“... price performance improvements ... will allow us to, for example, do ever more and better real-time personalization of our Web site.”

Amazon clearly feel that electronic retailing has a major advantage over traditional retailing, as the following comment stresses:

“In the physical world, retailers will continue to use technology to reduce costs, but not to transform the customer experience. We too will use technology to reduce costs, but the bigger effect will be using technology to drive adoption and revenue. We still believe that some 15% of retail commerce may ultimately move online.”

The 2000 Annual Report takes a very upbeat approach to its future, even saying that it has the benefit of “financial strength” among its features. Speaking of the immediate future for amazon.com, the report says:

“The year 2001 will be an important one in our development. Like 2000, this year will be a year of focus and execution. As a first step, we’ve set the goal of achieving a pro forma operating profit in the fourth quarter ... we have a plan to get there, it’s our top priority, and every person in this company is committed to helping with that goal. I look forward to reporting to you our progress in the coming year.”

In the section of the 2000 Annual Report dealing with the future, amazon.com has to acknowledge:

***“We Have an Accumulated Deficit and Anticipate Further Losses
We Have Significant Indebtedness”***

We have already spoken of these aspects of the future, speaking of their competitors, the 2000 Annual Report spells out the intensity of the competition as well as the advantage that other companies have in terms of a longer history and greater brand awareness than amazon. Moreover, they are alive to the possibility that as amazon moves into full profitability, other companies may move into their segments:

“We Face Intense Competition The e-commerce market segments in which we compete are relatively new, rapidly evolving and intensely competitive. In addition, the market segments in which we participate are intensely competitive and we have many competitors in different industries, including the Internet and retail industries. Many of our current and potential competitors have longer operating histories, larger customer bases, greater brand recognition and significantly greater financial, marketing and other resources than we have. ... As these e-commerce market segments continue to grow, other companies may enter into business combinations or alliances that strengthen their competitive positions. We also expect that competition in the e-commerce market segments will intensify.”

As might be expected, amazon foresee the possibility that advances in technology may create competitive forces that are unknown at the moment:

“In addition, new and expanded Web technologies may increase the competitive pressures on online retailers ... increased competition may reduce our operating profits, or diminish our market segment share.”

Amazon admits that whilst it has a business model to work by, and we have seen that it has a plan of survival, the model is not yet fully mature and reliable:

“We Have a Limited Operating History and Our Stock Price Is Highly Volatile We have a relatively short operating history and, as an e-commerce company, we have a rapidly evolving and unpredictable business model. The trading price of our common stock fluctuates significantly. For example, during the 52-week period ended December 31, 2000, the reported sale price of our common stock on the NASDAQ National Market was as high as \$91.50 and as low as \$14.88 per share.”

As any investor knows, the share price of a company may be highly significant or an irrelevance. We offer no further comment on this point.

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