Impact of Global Recession on Indian IT Industry and Effectiveness of E-Business in the Era of Recession

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Abstract

The current financial crisis has engulfed the world economy. The "Global Financial Crisis" of 2008, also called as global financial meltdown, resulted from the subprime mortgage crisis of 2007. For many people an economic depression has already arrived whereas for some it is just round the corner. In my opinion the depression has already arrived and it has started showing its effect on Indian Industries, Economy and IT sector and so on. The paper will highlight the cause and effect relation of global meltdown on Indian IT Industry, GDP growth rate and Employment. Moreover, it evaluates the effectiveness of E-Business in terms of investment and revenue generated by the organisation in era of recession and recommends the strategies to be taken to deal with the situation. The empirical data has been collected with the help of primary as well as secondary resources.

Keywords: Gross Domestic Product (GDP), International Monetary Fund (IMF), Credit Default Swaps (CDS), Fiscal Year 2009 Estimation (FY09E), E-business, E-commerce.

Introduction

The recession in the US market and the global meltdown termed as Global recession have engulfed complete world economy with a varying degree of recessional impact. World over the impact has diversified and its impact can be observed from the very fact of falling Stock market, recession in jobs availability and companies following downsizing in the existing available staff and cutting down of the perks and salary corrections. The global financial crisis has its origins in the U.S. subprime mortgage crisis of August 2007. It seemed initially that it would only affect developed countries, but the so-called “decoupling phenomenon,” which predicted that developing countries would remain unaffected, has not occurred. Instead the crisis has become a global phenomenon, as the following measures indicate. India is a developing country and we all can see after effects of recession.

E-Business is a revolution that is transforming companies round the world, and it is impacting all the industries. E business is much more than online purchase and implementation of computer applications by the IT departments or putting up a company
website. It affects the whole business and the value chains in which it operates and enables a much more integrated level of collaboration between the different components of a value chain than ever before. Adopting E-Business also allows companies to reduce costs and improve customer response time. Organisations that transform their business practices stand to benefit immensely from innumerable new possibilities brought about by technology. Before moving further the paper focuses on the definitions of basics concepts.

Global recession
A global recession is a period of global economic slowdown. The International Monetary Fund (IMF) takes many factors into account when defining a global recession, it states that global economic growth of 3% or less is "equivalent to a global recession".

Recession: Period of general economic decline, defined usually as a contraction in the GDP for six months (two consecutive quarters) or longer.

Subprime Mortgage: A class of mortgage used by borrowers with low credit ratings. Borrowers who use subprime loans generally do not qualify for loans with lower rates because they have damaged credit or no credit history, and are thus considered risky by lending agencies. Because the default risk for poor credit borrowers is greater than of other borrowers, lenders charge a higher interest rate on subprime loans.

Depression: according to the textbooks definitions, a bad, depressingly prolonged RECESSION in economic activity is depression. A slump is where output falls by at least 10%; a depression is an even deeper and more prolonged slump.

Electronic Business: It is commonly referred as "E business", it may be defined as the utilisation of information and communication technologies (ICT) in support of all the activities of business.

Electronic Commerce: Electronic commerce or E commerce (E com) is a subset of E business. E commerce is the purchasing, selling, and exchanging of goods and services over computer networks (such as the Internet) through which transactions or terms of sale are performed electronically.

Types of Ecommerce
Ecommerce can be broken into four main categories:

- **B2B (Business-to-Business)**: Companies doing business with each other such as manufacturers selling to distributors and wholesalers selling to retailers. Pricing is based on quantity of order and is often negotiable. Like alibaba.com is B2B website.
- **B2C (Business-to-Consumer)**: Businesses selling to the general public typically through catalogs utilising shopping cart software. Google is the good example of B2C website.
- **C2B (Consumer-to-Business)**: A consumer posts his project with a set budget online and within hours companies review the consumer's requirements and bid on the project. The consumer reviews the bids and selects the company that will complete the project. Ebay.com is C2B website.
• **C2C (Consumer-to-Consumer):** where individuals can buy and sell thanks to online payment systems like Paypal where people can send and receive money online with ease.

**Literature Review**

Over the period 1960-2007, a typical advanced country witnessed about six recessions — one every eight years. While some were mild, and hence a quicker recovery, others were severe and took longer to recoup. Recessions on an average lasted for about four quarters. An important observation was that a recession is prolonged and painful if it is accompanied by housing price busts or credit crunch or both. Such recession invariably causes far-reaching economic consequences.

The US economy has experienced seven recessions during 1960-2006. None had the element of severe bust in housing or credit crunch. Only two of these were severe — one during the oil price shock in 1973 and the other during the early 1980s. Both were outcomes of inflationary shocks, the latter was also combined with high interest rates. However, the economic losses in terms of consumption, investment, employment and income during these two recessions were no match to what happened during the Great Depression of 1929-1933. The crisis in 2001 would have been another severe recession, but the Federal Reserve effectively postponed it to what we are facing today.

The bust of the housing bubble in 2007 was the genesis of the current US crisis. The accommodating policy of the Fed and widespread wealth psychosis among US households and financial players were responsible for promoting the housing bubble during 2002-06. The excessive mortgage exposure took the sub-prime loans to unheard of levels and eventual collapse of the financial system in 2008. This has now morphed into a severe economic recession not only for the US, but for the world.

**Causes of Global Meltdown**

Every day the main headline of all newspapers is about our falling share markets, decreasing industrial growth and the overall negative mood of the economy. So what has caused this major economic upheaval in the world? What is the cause of falling share markets the world over and bankruptcy of major banks? The financial meltdown had its origin in the US mortgage market of the early and mid-2000s. At the time, the economy was booming, the US government was intent on making home ownership affordable to more people, financial institutions were awash with liquidity, and real estate values were rising endlessly. Competition among mortgage lenders led to innovation – teaser rate adjustable mortgages and other non traditional mortgage lenders led to innovation such as no and low documentations loans that opened up the real estate market to borrowers who previously would not have qualified for credit, i.e. subprime borrowers. All as well, provided those interest rates did not rise and housing prices continued to escalate. In 2004 however, the Federal Reserve began to raise interest rates, in 2006, housing prices started to taper off after rising nearly 50% between 2000 and 2006. As the market declined, borrowers who had expected to refinance their mortgages when their loans re-priced to higher interest rates coupled with higher monthly payments found they were not able to do so. Consequently, these borrowers were unable to meet payment requirements, leading to defaults that escalated as real estate values continued to decline. Concurrent with the growth in mortgage lending, significant financial innovation was occurring in the financial markets. Pools of mortgage loans, including those extended to subprime borrowers, were aggregated into portfolios of structured products based on the cash flows of the underlying assets- in other words these loans were securitised. These securities
were marketed to both institutional and retail investors. To enhance the marketability of these instruments, CDS were issued, and the growth in the CDS market paralleled the growth in the underlying mortgage market. While some of these financial instruments ended up in hedge fund portfolios, due to the significant volume of this market and the underlying assets as well as considerable investor appetite, these instruments became widely distributed throughout the global financial system to buyers ranging from government sponsored enterprises and financial institutions to mutual funds/pensions funds and retail investors.

Given the sponsorship of instruments and retention of key risk components by a number of the large financial firms, concerns over the safety, soundness and credit worthiness of a number of key market participants (including Lehman Brothers, AIG, Merrill Lynch) began to impact the market negatively as the crisis began to unfold. Since many of the instruments involved are complex and lack transparent market pricing, they not only are hard to price, but illiquid, further exacerbating the funding and capital issues of a number of financial organisations.

A similar picture than emerged in other developed countries as the combination of competition, innovation, readily accessible credit, and the ballooning of securitisation and resulting leverage created a massive systematic susceptibility to falls in global residential property values and mortgage defaults, in addition to huge losses incurred on exposures to the US subprime market. News of massive losses by institutions most exposed to such risks evolved and escalated, eventually creating a crisis of confidence among lending banks in the money markets and increasing difficulty among banks that were most affected to raise or refinance the short- and medium term borrowing they needed to fund their long-term assets. That lack of confidence quickly turned into a “credit crunch” in which some banks could not fund existing loans and most banks were unwilling to extend new credit either at all or at least on any terms resembling those on which they had previously extended credit.

Global Impact of Recession
So far the global impact is concern; Expectations of growth rates for 2008 have fallen in most countries. In October 2007, world growth was predicted to be 4.8%. The IMF now predicts that it will be 3.7% only. Expectations for 2008 growth for advanced economies now stand at 1.4%, down 0.8 points from predictions made in October 2007. Expectations for emerging and developing country growth in 2008 now stand at 6.6%, also down 0.8 points from a year ago. Expectations of 2009 growth fell everywhere between January & November. Projections of world growth for 2009 slumped from 4.4% to 2.2%. Every G7 country aside from Canada is expected to contract next year and the United States and United Kingdom are already in recession.

Every BRIC country (Brazil, Russia, India, and China) has seen growth expectations fall by between 1 and 3 percentage points.

Impact of Recession on India
Though no one likes or wants a recession But In the age of globalisation, no country can remains isolated from the fluctuations of world economy. Heavy losses suffered by major International Banks is going to affect all countries of the world as these financial institutes have their investment interest in almost all countries. So, what is the reality for countries like India? It would be naïve to imagine that a recession in the United States would have no impact on India. The United States accounts for one-fourth of the world GDP and any significant slowdown is bound to have reverberations elsewhere. On the other hand,
interdependencies between the US economy and emerging economies like India and China has reduced considerably over the last two decades. Much has happened between then and now. The Indian economy has shown a robust and consistent growth trajectory and the projection for 2008 is 9%. Indian exports to the United States account for just over 3% of GDP. India has a healthy trade surplus with the United States. Thus, the effect may not be as drastic as would have been the case in the 1980s.

**Structure of Global and Indian IT Industry**

**Growth of Global IT Economy**

The global IT industry has matured over the years and has emerged to be a chief contributor to the global economic growth. The global IT sector, constituted by the software and services, Information Technology Enabled Services (ITES) and the hardware segments, has been on a gradual growth trajectory with a steady rise in revenues as witnessed in the past few years. 2008 was a strong year as the number of contracts; the total value and the annualised contract values exceeded that of the preceding year. Among all users above average growth was witnessed in the government, healthcare and the manufacturing segments. The global software and services industry touched USD 967 billion, recording an above average growth of 6.3% over the past year. Worldwide ITES grew by 12%, the highest among all technology related segments. Hardware spend is estimated to have grown by 4% from USD 570 billion to nearly USD 594 billion in 2008.

Currently, the global IT industry is experiencing a slump with the recessions in the US and many industrial countries with the level of impact varying by country / market and industry. Forrester in its recent report has predicted that the US IT market will dip to 1.6% in 2009, down from 4.1% growth in 2008. The Asia Pacific region, using a weighted average of local currencies, will do a bit better in 2009, with 3.1% growth. The Western and Central Europe markets will have growth in local currency that is closer to 1%. By 2010, the US market will shift to 7.3% growth, not far behind the 9.5% growth in the other Americas, well ahead of the 5.5% growth in Asia Pacific and 5.3% growth in Western and Central Europe.

**Global scenario - IT purchases**

As it stands, the US market accounts for majority of the global purchases of IT goods and services. The US market which represented 37% of the global market for IT goods and services in 2005 had shrunk to 33% share in 2008. Western and Central Europe would see its share of global IT purchases fluctuate between 26% and 28% between 2008 to 2010; Eastern Europe, the Middle East, and Africa and Asia Pacific are expected to hold their share positions. The global IT purchases are expected to plummet as strong dollar would hurt dollar-denominated growth rates for IT purchases going ahead. The British pound was 23% lower in Q4 2008 from the year-ago level, the Indian rupee is down 20%, the Canadian dollar is 19% weaker, and the euro is down 9%. Only the Japanese yen and the Chinese Yuan renminbi have gained in value against the US dollar. While these currency swings are likely to reverse in 2009 as the financial crisis fades, the dollar is still likely to remain above 2008 levels for most of the year. That will dampen global IT market growth measured in dollars and hurt the reported revenues of US vendors like Accenture, Hewlett-Packard (HP), and IBM with large overseas operations. With global tech market in US dollars likely to shrink, global IT vendors’ revenues is expected to equal $1.66 trillion in 2009, declining by 3% after an 8% rise in 2008. The Asia Pacific region has been a major growth engine for the tech industry. Its total purchases of IT goods and services of $448 billion in 2008 were almost as
large as Western and Central Europe’s. Countries like Hong Kong, India, Malaysia, Singapore, South Korea, and Taiwan, have seen growth slow as exports to the US and Europe slowed. Asia / Pacific would experience a delayed impact of the global financial crisis. Gross Domestic Product (GDP) growth is expected to slow in most countries / markets in 2009, which will affect IT spending. Asia pacific is still growing more aggressively than other regions in GDP and in IT. As a result, vendors would be looking to this region for growth and stability.

Structure of Indian IT industry
The IT-ITES industry in India has today become a growth engine for the economy, contributing substantially to increases in the GDP, urban employment and exports, to achieve the vision of a powerful and resilient India. While the Indian economy has been impacted by the global slowdown, the IT-ITES industry has displayed resilience and tenacity in countering the unpredictable conditions and reiterating the viability of India’s fundamental value proposition.

Value proposition
The main reasons for the successful establishment of software companies in India and its strong performance can be attributed to the following:

• Cost advantage
Given the labour market conditions in India, there exists substantial scope of cost arbitrage for performing services from India. This, along with a large pool of talented and English people labour force, was the genesis of the IT sector’s dominance in the world IT services industry. Breadth of service offering and innovation Service offerings have evolved from low-end application development to high-end integrated IT solutions

• Quality / maturity of process
Having made its mark as a centre of low-cost and wide range of service offerings, the Indian IT / ITES sector has also proved its mettle in the quality of the service offerings, as
demonstrated by the fact that it hosts more than 55% of SEI CMM level five firms and the highest number of ISO certified companies

**Ease of scalability**
The vast and trained labour pool of technically competent, English speaking people has made it easy for the Indian companies to enter and exit this industry. Moreover, the ease with which a company can scale its operations (up or down) has been a great value driver for the success of the Indian IT / ITES service sectors growth story

**Performance of the Indian IT-ITES industry**
The information technology sector has been playing a key role in fuelling the Indian economic performance which has been stellar with robust GDP growth. India’s total IT industry’s (including hardware) share in the global market stands at 7%; in the IT segment the share is 4% while in the ITES space the share is 2%. The industry is dominated by large integrated players consisting of both Indian and international service providers. During the year, the share of Indian providers went up to 65-70% due to the emerging trend of monetisation of captives. MNCs however, continued to make deeper inroads into the industry and strengthened their Indian delivery centers during 2008. The continuing contribution of this sector to the Indian economy is evident from the fact that revenue generated from this sector has grown from 1.2% in FY 1998 to an estimated 5.8% in the FY 2009. The net value added by this sector to the economy is estimated at 3.5-4.1% for FY 2009. Some of the key highlights of the Indian IT / ITES industry for FY 2009 are as follows:

- The export revenues are estimated to gross USD 47.3 billion in FY 2009, accounting for 66% of the total IT-ITES industry revenues
- IT services exports grew substantially on account of increasing traction of the industry in emerging markets such as remote infrastructure management and traditional segments such as application management
- Domestic market continued to gain momentum, growing at 26% in INR terms on account of the overall positive economic climate, increased adoption of technology and outsourcing
- Engineering services and software product exports increased by 29% (USD)
- Direct employment reached nearly 2 million – with 1.5 million in the exports segment, increase of 26% in 2008. The indirect employment multiplier suggested that the industry created between 6-8 million additional jobs
- US and UK together constituted 79% of the global exports in FY 2008 thereby dominating the export markets
- BFSI remained the largest market followed by Hi-tech / Telecom which together accounted for more than 60% of exports

**Impact of the recession on Indian IT sector**
The current global economic slowdown has made it a roller coaster ride for the world economies. Asia Pacific is experiencing a deferred impact of the current crisis. With the expectations of a sluggish GDP growth and consequent reduction in IT spending, countries / markets which have a higher dependency on the export markets are expected to be affected more than other countries / markets with stronger domestic demand. India being one of the world’s fastest-growing tech markets, thriving mainly on exports is also experiencing the
tremors of the global economic crisis. IT spending as a percentage of revenue normally varies from 3.5% in manufacturing companies, 5-6% in global retail chains to about 9.5% in the banking industry. These could see marginal decline as companies will tend to hold spends on new IT deployments.

A recent study by Forrester reveals that
- 43% of Western companies are cutting back their IT spend and nearly 30% are scrutinising IT projects for better returns. Some of this can lead to offshoring, but the impact of overall reduction in discretionary IT spends, including offshore work, cannot be denied
- The slowing U.S. economy has seen 70% of firms negotiating lower rates with suppliers and nearly 60% cutting back on contractors. With budgets squeezed, just over 40% of companies plan to increase their use of offshore vendors
- The IT services and outsourcing market is currently undergoing a structural transformation that will have a profound effect on how IT service providers will have to conduct their business. Customers have started to reduce project scope and/or postpone new development. However, they are also trying to move more work to lower cost offsite locations, which could increase IT budgets towards tangible cost saving measures. The impact is likely to be higher for discretionary outsourcing expenditures rather than for critical, ongoing Application Development and Maintenance (ADM) services. Indian IT companies which are focused more on providing basic ADM services, and with long term outsourcing contracts, could exhibit more stable earnings in this environment. Furthermore, whilst discretionary expenditures are being reduced, ongoing projects will likely continue, at least in the near term, especially those which are in the more advanced stages of progress. Fitch expects IT services companies to report marginally positive revenue growth (in dollar terms) over 2009. With decisions on IT budgets being deferred and sales cycles having elongated from 3-6 months to 6-9 months, companies are seeing a significant drop in client additions. Moreover, the number of targeted large deals has more or less dried up. According to TPI4, mega deals have fallen to levels lower than those seen in 2001.

**Growth Assessment**
The global crisis seem to be hitting hard on IT companies in India also, but impact will of short-term, it offer opportunities for many. Particular Verticals of IT which slowdown will help are acquisition, shift from US and European market, HR strategy, infrastructure investment, etc.

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<td>- Domestic</td>
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<tr>
<td>- Exports</td>
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<td>7.2</td>
<td>9.5</td>
<td>12.5</td>
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<tr>
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<td>8.4</td>
<td>10.9</td>
<td>12.8</td>
</tr>
<tr>
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<td>3.8</td>
<td>5.3</td>
<td>6.5</td>
<td>8.6</td>
<td>9.5</td>
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Indian IT-BPO Industry - Sector-wise revenue break-up

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<th>Verticals</th>
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| The current US-led crisis parallels the 2001-2002 Dotcom Bubble burst especially for India’s IT (export) sector. Approximately 61% of the Indian IT export’s revenues are from US clients. If we consider the top five India players who account for 46% of the IT industry’s revenues, the revenue contribution from US clients is approximately 58%. This clearly indicates the adverse effect that the US recession is likely to have on the Indian IT sector. The industry has been constantly seeking to diversify its markets to offset its reliance on the US, which remains the largest outlet for India’s software sector. The impact has been more severe in the case of the Banking, Financial Services and Insurance (BFSI), which accounts for around 40% of the industry’s export revenues, and in retail and certain manufacturing sectors. Other verticals like telecom and automobile are also likely to have a delayed budget process and budget cuts. However, the industry focus is likely to shift to areas such as manufacturing, healthcare, retail and utilities. Healthcare industry is likely to witness increased IT investments due to increased focus on public health. Other industries that will see growth include telecom, retail and utilities. Some vendors who have a greater exposure to BFSI segment will be more impacted when compared to their counterparts with less significant exposure. The overall revenue impact on the IT and ITES industry, as a result of the BFSI meltdown, could be anywhere between $750 million and $1 billion.

- **Infosys** - The revenues from BFSI that were at 37% in June 2003 have stayed more or less unchanged as a percentage of total revenues. In the December 2007 quarter, Infosys got close to 37% of its revenues from BFSI. This slipped to 34% of revenues in the March 2008 quarter. In the quarter ending December 2008, BFSI showed a sequential growth of 4% in volume.

- **Wipro** - India’s third-biggest software exporter, and Cognizant, ranked sixth, have seen revenue from the key Banking, Financial Services and Insurance (BFSI), the revenue from BFSI in march 2008 quarter was 28%.

- **Cognizant** - Recorded the highest growth from financial services vertical among the offshore peers. This was mainly due to the type of financial services clients in the portfolio and the multiple operating levels, in April-June 2008. The revenue from BFSI in march 2008 quarter was 46%.

- **Tata Consultancy Services**, for example, earned 42% of its revenue in the second quarter of CY 2008 from the BFSI.
Impact of exchange rate on revenues
In IT sector, the margins are likely to be challenged on account of the slowing growth in the US. Rupee depreciation seems to be the only tailwind that the sector enjoys. This can be evident from the fact that the out of the increase in the IT export revenues for FY 2008 over FY 2007, almost half of the increase could be attributed to the rupee depreciation during the same period.

Pricing poised for decline in favour of volumes
Pricing has been difficult in this sector compared to other sectors: On an average, the US financial sector has driven bulk volumes through lower onsite pricing, higher off shoring and aggressive volume discounts. It is safe to infer that BFSI application business margins especially in the top companies are a few percentage points below the higher margin verticals like, say, energy. Hence, a replacement of financial services business with business from other verticals is likely to positively impact the bottom line. A speedy replacement is however, easier said than done. Volumes are expected to remain weak over the next three quarters for most players forcing further price cuts. The reduction in pricing is expected to be lower in magnitude compared to FY 02-FY 03. This is because the current pricing has not touched the FY 02-FY 03 bubble proportions. Infosys has already reported 1.8% decline in blended pricing (constant currency) in Q3 FY 09 while HCL Tech announced free transitioning for deals amounting to $1billion bagged during the quarter as a strategy to garner volumes. TCS and Wipro too have acknowledged pricing pressures and the impact would be more visible in the coming quarters. Fitch Rating expects the sector to face margin pressures over 2009 and 2010 due to the intensified competition for new contracts, thereby putting pressure on billing rates. Competition even for smaller contracts has increased, as companies try to maintain utilisation levels. Customer cost pressures could also result in renegotiations of maturing contracts at lower terms. There could also be an increased shift from traditional hourly billings towards a new return on capita based price contracts providing tangible savings, while variable time / material contracts could be renegotiated at lower levels. Vendor consolidation will be the order of the day in the current environment, as this would result in cost savings for customers. Fitch believes that the large Indian IT players will gain market share. However, these risks to operating margins are partly offset by the fact that Indian IT services retain some flexibility in terms of their cost model. As the impact of the slowdown becomes more severe, companies will increasingly look at cutting costs in the form of overheads and reduction in variable pay / annual increments. The industry has also been reducing its hiring, as well as changing the hiring profile to ensure that operating costs are in control.

New technological innovation: E-business
Year 1830-1900 was a time of rapid economic growth and technological innovation which has been well documented and analysed. Business historians Chandler (1977) and Porter and Livesay (1971) discuss changing patterns of production and distribution over this period.

In 1830, almost all goods were generic. Production processes used relatively simple technology and were low volume, with nearly all products distributed within a small locality. The historical trend identified is the increasingly concentrated nature of the market, and the reduced costs of exchange. Changes in technology and market conditions created an economic situation that favored manufacturer-controlled distribution systems. However, that
new technology (E-business) is an important contributing factor to the changing
organisational structure of firms. The four ways in which technological innovations can have
impact: by necessitating new organisational structures to handle complexities, by encouraging
administrative or other process changes that reduce costs or improve efficiency, by facilitating
the development of new distribution channels, and by changing the power relations amongst
organisations.

E-Business in the Era of Recession
The economic downturn is leading to the internet playing an increasingly bigger role. The net
effect of the recession is likely to make the web a bigger part of retailing because retail chains
and consumer goods manufacturers have seen during the recession how consumers use the
web to research, even if they buy offline. Actual purchase is not the only aspect of online
shopping for customers.

According to the report by Forrester Research and others on E-commerce indicates that e-
commerce is one of the very few markets with growth expectations in 2009 and beyond.
According to the report e-commerce revenue will grow from $204B to $335B by 2012. It has
been believed that online sales will continue to grow through the recession due to accelerating
shifts in consumer buyer patterns.

Drop in real U.S. GDP of 1.5% to 1.9% occurs for three to four quarters, It is believed
that online retail e-commerce would still increase by 18%. In US the E-commerce rose 14.3%
in 2008, but 26.5% overseas. That adds up to 21.5% combined, and even if economic growth
slows globally

![US Retail E-commerce sales, 2004-2009 in billion $](image)
Performance of various B2B and B2C Companies in the Era of Recession

Google.com

Google Inc. is an American public Corporation, earning revenue from advertising related to its Internet search, email, online mapping, offline productivity, social networking and video sharing services as well as selling advertising-free versions of the same technologies. The Google headquarters, the googleplex, is located in Mountain view, California. As of March 31, 2009, the company has 20,164 full-time employees. Google was founded by Larry Page and Sergey Brin while they were students at Stanford University and the company was first incorporated as a privately held company on September 4, 1998. The initial public offering took place on August 19, 2004, raising US$ 1.67 billion, implying a value for the entire corporation of US$23 billion. Google has continued its growth through a series of new product developments, acquisition, partnership, environmentalism; philanthropy and positive employee relation have been important tenets during the growth of Google. Google's mission is "to organise the world's information and make it universally accessible and useful".

The Investment made by the Google during the year 2006, 2007, 2008 and 2009Q1 is as follows

<table>
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<tr>
<th>COST</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009Q1</th>
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<td>Cost of revenues</td>
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<td>6,649,085</td>
<td>8,621,506</td>
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<td>Traffic Acquisition Cost</td>
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<td>4,933,878</td>
<td>5,938,951</td>
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<td>Other Cost of Revenues</td>
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<td>1,715,207</td>
<td>2,682,555</td>
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<td>Research &amp; Development</td>
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<td>2,119,985</td>
<td>2,793,192</td>
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<td>Sales &amp; Marketing</td>
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<td>1,461,266</td>
<td>1,946,244</td>
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<td>1,802,639</td>
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<td>11,509,586</td>
<td>15,163,581</td>
<td>3,625,399</td>
</tr>
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![Total Costs & Expenses](chart.png)
Even during the period of recession Google has invested more than the prior years.

**Revenues** earned by Google:

<table>
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<th>Revenues</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
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<td>10,604,917</td>
<td>16,593,986</td>
<td>21,795,550</td>
<td>5,508,990</td>
</tr>
<tr>
<td>Google web sites</td>
<td>6,332,797</td>
<td>10,624,705</td>
<td>14,413,826</td>
<td>3,692,823</td>
</tr>
<tr>
<td>Google Network web sites</td>
<td>4,159,831</td>
<td>5,787,938</td>
<td>6,714,688</td>
<td>1,638,042</td>
</tr>
<tr>
<td>Total Advertising Revenues</td>
<td>10,492,628</td>
<td>16,412,643</td>
<td>21,128,514</td>
<td>5,330,865</td>
</tr>
<tr>
<td>Licensing &amp; other revenues</td>
<td>112,289</td>
<td>181,343</td>
<td>667,036</td>
<td>178,125</td>
</tr>
</tbody>
</table>

Google has earned good revenues during the period of recession, as the chart indicates the revenue is increasing year by year; there is less effect of recession on B2C companies.

**Alibaba.com**

Alibaba Group is a Hangzhou-based family of Internet-based businesses that include business-to-business trade, online retail, a payment platform, and business management software and regionalised classified listings. It was founded in 1999 by Ma Yun (Jack Ma), and operates five e-commerce sub-companies which operate different aspects of trading. In 2008, alibaba.com attracted at least 23 million visitors of which 65 percent were from China. Japan’s Softbank was one of the earliest investors in Alibaba. Its founder, Masayoshi Son, invested $18 million in the company in 2000 and also participated in subsequent rounds of financing.

As of January 2007, the Alibaba Group is made up of 5 sub-companies:

**Alibaba.com**: English language global trade website serving small and medium-sized enterprises

- Taobao.com: Online auctions web site for customers
- Alipay: Online payments web site, processing mainly payments within China
• Alisoft: Provider of web services to the Chinese Small and Medium-sized Enterprise marketplace
• Alimama: Online advertising exchange, which allows web publishers and advertisers to trade online advertising inventory.

The Revenues earned and the investment made by the Alibaba during the year 2006, 2007, 2008 and 2009Q1 is as follows (in RMB’000)

<table>
<thead>
<tr>
<th>COST</th>
<th>2006</th>
<th>2007</th>
<th>2008 Q1</th>
<th>2008 Q4</th>
<th>2009Q1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of Revenue</td>
<td>237,625</td>
<td>280,113</td>
<td>78,926</td>
<td>118,252</td>
<td>108,824</td>
</tr>
<tr>
<td>Sales and Marketing Expenses</td>
<td>610,198</td>
<td>736,813</td>
<td>201,743</td>
<td>371,286</td>
<td>288,963</td>
</tr>
<tr>
<td>Product and development expenses</td>
<td>105,486</td>
<td>131,495</td>
<td>36,592</td>
<td>62,828</td>
<td>60,539</td>
</tr>
<tr>
<td>General and Administrative expenses</td>
<td>159,969</td>
<td>229,868</td>
<td>72,210</td>
<td>93,113</td>
<td>83,885</td>
</tr>
<tr>
<td>Business Taxes and Surcharge</td>
<td>69,394</td>
<td>110,545</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Bandwidth and depreciation expenses</td>
<td>30,983</td>
<td>38,771</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Staff cost and other expenses</td>
<td>237,625</td>
<td>280,113</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

![Total Cost](chart.png)
Impact of Global Recession on Indian IT Industry

<table>
<thead>
<tr>
<th>Revenues</th>
<th>2006</th>
<th>2007</th>
<th>2008 Q1</th>
<th>2008 Q4</th>
<th>2009 Q1</th>
</tr>
</thead>
<tbody>
<tr>
<td>International market place</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gold Supplier members</td>
<td>967,858</td>
<td>1,503,331</td>
<td>447,630</td>
<td>475,438</td>
<td>492,683</td>
</tr>
<tr>
<td>International Trust pass members</td>
<td>24,011</td>
<td>32,825</td>
<td>8,994</td>
<td>12,083</td>
<td>12,876</td>
</tr>
<tr>
<td>Other Revenues</td>
<td>-</td>
<td>11,539</td>
<td>7,540</td>
<td>1,583</td>
<td>-</td>
</tr>
<tr>
<td>Sub-total</td>
<td>991,869</td>
<td>1,547,695</td>
<td>46,164</td>
<td>489,104</td>
<td>505,559</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Revenues</th>
<th>2006</th>
<th>2007</th>
<th>2008 Q1</th>
<th>2008 Q4</th>
<th>2009 Q1</th>
</tr>
</thead>
<tbody>
<tr>
<td>China market place</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>China Trust pass members</td>
<td>369,653</td>
<td>594,098</td>
<td>206,127</td>
<td>294,070</td>
<td>288,468</td>
</tr>
<tr>
<td>Other Revenues</td>
<td>2,340</td>
<td>20,964</td>
<td>9,790</td>
<td>22,690</td>
<td>12,606</td>
</tr>
<tr>
<td>Sub-total</td>
<td>371,993</td>
<td>615,062</td>
<td>215,917</td>
<td>316,760</td>
<td>301,074</td>
</tr>
<tr>
<td>Revenues</td>
<td>2006</td>
<td>2007</td>
<td>2008 Q1</td>
<td>2008 Q4</td>
<td>2009 Q1</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>------------</td>
<td>------------</td>
<td>----------</td>
<td>----------</td>
<td>----------</td>
</tr>
<tr>
<td>Revenues</td>
<td>1,363,862</td>
<td>2,162,757</td>
<td>78,926</td>
<td>118,252</td>
<td>108,824</td>
</tr>
<tr>
<td>International market place</td>
<td>991,869</td>
<td>1,547,695</td>
<td>464,164</td>
<td>489,104</td>
<td>505,559</td>
</tr>
<tr>
<td>China Market place</td>
<td>371,993</td>
<td>615,062</td>
<td>215,917</td>
<td>316,760</td>
<td>301,074</td>
</tr>
</tbody>
</table>

**Conclusion**

India’s economy began 2008 in robust fashion but ended on a note of mixed sentiment with the global meltdown casting an inevitable shadow. New Delhi has lowered its economic growth target for the current fiscal year (April 2008-March 2009) to 6.8% from the previous 7.7%. Exports fell in October for the first time in seven years. Industrial production, which was among the main drivers of the economy, fell 0.4%. The rupee fell perilously close to 50 to a dollar in November, an all-time low. And, as per the government’s own admission, some 65,000 jobs were lost between August and October.

Two key sectors, agriculture and industry, were affected by the global economic slowdown. This will have a serious effect on India’s overall growth, says the National Council of Applied Economics Research, an economic think-tank. India has unveiled a 300-billion rupee (US$6 billion) package to bail out the corporate sector. It stepped up public expenditures and gave various tax concessions to industry to combat economic slowdown. The government expects the economy to remain relatively weak in the first quarter and to show strong recovery in the second half of the fiscal year.

Even in this period of recession the E-commerce especially E-tailing, B2C companies have shown the growth towards positive side. When companies are cutting down their budgets, these companies are investing in E-business during recession and reaping the profits because e-business is a global business and the impact of recession is not same every where.
References

[20] www.google.com
[21] www.thehindubusinessline.com
[22] www.harvardbusiness.org
[23] www.protiviti.com/economiccrisis