ATG Press Research Kit

Inside IT Firms I:
Outlook on IT Companies

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OVERVIEW

When we look to the IT industry from 1987 to 2001, what gets the looks among other things is the fast growth of the field itself. In human history, the fast growth of an industry is regularly accompanied with two things: buzzword, and frenzy. Most likely, these things cause to stun the industry insiders as of outsiders, if not mislead them completely! In this situation, a notable portion of the industry comes to failure in both of developing and marketing efforts. Losers are more among new players and less among old and long-established players. The mentioned failure urges the industry to reorganize itself and this is what we have been seeing in the IT industry since 2002 and expect to last by the end of 2006. Addressing the future tendency of the IT industry, we divide the industry into two main sections: companies and organizations. In this document, we focus on the first section, i.e. companies, and try to give an insight to the nature and trends of IT companies. To this end, we look to the IT companies from three different viewpoints: their functions, their behaviors, and their impacts. This document wants to be a brief, bright, and realistic one that provides helpful information for strategists at SMB (small and midsize business) class IT companies around the world.

1. COMPANY FUNCTION

In the business world, a company is recognized by its underlying activity. This activity may be referred to as the company function. Although this classical definition of company function is the dominating outlook on a company, it does not give enough insights to the analysis of a typical company. Instead, if we consider company function as the role that a company plays in the industry that it belongs to, we can achieve more interesting results. It should be mentioned that the role of a company in the society is the company impact and not the company function. We discuss about it in the third section later. Let's now compare the applicability of the two mentioned definitions of company function in the IT industry. Traditionally, the first step of analysis is categorization. If we use the first definition of company function (underlying activity) as a criterion for categorizing IT companies, we reach the following basic categories:

1. Hardware (component, system, or application) vendor (Apple, Intel)
2. Software (component, system, or application) vendor (Microsoft, Oracle)
3. Consultation & service provider (Accenture, Google)

Doing the same with the second definition of company function (role playing), we come to the following basic categories:

1. Partial (some of the required components) system builder (Dell, Intel)
2. Complete (all the required components) system builder (Microsoft, Sun Microsystems)
3. Single application builder (Autodesk, Cray)
4. Integrated application (suite) builder (BlackBerry, Oracle)
5. Outsourcing service (EDS, Infosys)
6. On-site (on-board) service (Accenture, Gartner)
7. Access providing service (AOL, Google)

Both of the above categories are basic, i.e., they do not include sub-categories. For example, the first category resulted from the first definition includes the sub-categories like chip vendor, storage devices vendor, network devices vendor and many more. In this document, these sub-categories are useless because we do not want to analyze the components of the IT industry, rather we want to have a better understanding of the functionality of IT companies. To this end, if we look at the first categorization, we see that it is more about the core of the IT industry itself. Rather, the second categorization has more to say about the essence of IT companies, and this is exactly what we want to address in this document. Therefore, the mentioned 7-category of company function is our first step to understanding the essence of IT companies. At the second step, we dig into the company behavior, which is about company goals and trends.

We finish this section with this important fact that *the success of a company has a meaningful difference with the success of its belonging industry. The success of a company is a resultant of its function, behavior, and impact but the success of an industry depends on the public demand for its components*. If we take these two as the same (which is often happened by strategists at SMB-class companies), then we are trapped in a hole without a loophole!

2. COMPANY BEHAVIOR

Intuitively, we all are familiar with the concept of human behavior. However, when it comes to the concept of company behavior, it is hard to reach a single viewpoint among different analysts. Fortunately, by leveraging the concept of company function that was described in the previous section, it is possible to reach a neat and complete definition for company behavior. Generally, the company behavior shows when, where, and how a company utilizes its function(s). This simple definition implies two important things: company goals and trends.

It is publicly believed that all of the companies have the same goal and it is nothing but making more money! This goal which we call it *market expansion* is the front goal of all of the for-profit companies. Many companies, especially the large ones, have another important goal, which they do not talk about it too much, although it is not hidden. The goal is to get the *industry leadership*, as much as possible. Some people believe that this goal is an outcome of the first goal, but it is not the case. In fact, this goal is the outcome of an inherent interest in human being, i.e., the power!

Although it is widely believed that the trends of a company are strongly depended on the mentality of its management team, we think it is a challengeable viewpoint. The trends show how a company moves toward its goals and there is a tight correspondence between a company trend(s) and its function(s). Therefore, it is not the trend that depends on the mentality of the management team, rather it is the goal that has such a dependency. If the goal(s) and the function(s) of a company are known, then it is possible to predict easily the trends of that company. Let's do this for the mentioned goals and functions.

Firstly, we suppose that the goal of a typical IT company is market expansion (front goal). Then the trends of that company for each of the mentioned seven functions (see the previous section) would be as the followings, respectively:

1. Increasing the performance and efficiency of the producing components without a rise in the price
2. Adding new and user-friendly features to the producing systems
3. Making new applications in the virgin or hard-challenging domains
4. Making more configurable and easily joinable applications
5. Expanding service portfolio using skilled and low-wage workforce
6. Increasing the skills and ingenuity of the workforce
7. Increasing the access performance along with decreasing the access price

In the previous section, for each of the mentioned functions, two well-known companies with the same function were introduced. Now, if you compare the above trends with the usual trends of their corresponding companies, you can have a better view of these trends. It is clear and needless to say that a company, especially a large one, could have more than one function and trend at the same time.

Secondly, we do the same thing for the second mentioned goal, i.e., industry leadership (rear goal). The trends of the typical company for each of the seven functions would be as the followings, respectively:

1. Integrating more features into the producing components
2. Making new systems based on the previously produced systems using a pyramid model
3. Using cutting-edge and research-based technologies in the applications
4. Covering and supporting more application domains
5. Expanding the geographical coverage of the services
6. Increasing the diversity of the services
7. Providing more geographically expanded and regionally localized access

We finish this section with this important fact that *although money and power can boost each other but each of them has a separate effect on human mind and desire. Therefore, they are never unified while they are working together.* This fact is a one that should never be forgotten by a corporate strategist.

3. COMPANY IMPACT

It is clear that the activities and behavior of any person have some effects on the society that the person is living in. For the companies as legal persons, these effects are generally wider and deeper than of real persons, so they can be supposed as impacts. Briefly speaking, the company impact is the effect(s) of a company function(s) and behavior(s) on its underlying society. The company impact is what that is usually surrounded with a chunk of junk estimations and buzzwords. This event could be seen around the IT companies between 1997 and 2001, clearly.

In the two previous sections, we tried to introduce simple but comprehensive criteria for the uncovering of IT companies functions and behaviors. In this section, we try to do the same thing for IT companies impacts. Generally, there are two methodologies for extracting the criteria for the impacts: top-down and bottom-up. In the bottom-up methodology, which is widely used by IT analysts around the world, the changes that are caused by IT in a society are measured and after the measurement, those changes are categorized. The drawback of this methodology is that it cannot find out the impacts of a specific company, rather it demonstrates the impacts of the whole industry on a society. Therefore, we try to use the top-down methodology in this document to reach some more exact criteria. To this end, we leverage the previously mentioned criteria for company function and behavior.

Traditionally, impacts are divided into two main groups: positive and negative. Adhering this tradition, we suppose that a company is following both of its front and rear goals (see the previous section) at the same time (as actually carried out by most companies) and then explain the positive and negative impacts for each of the seven categories of company function. The followings explain the positive impacts for the seven categories, respectively:

1. Moving toward the production of cheap, ubiquitous, and high-end devices
2. Having more functionality within a single system and having a more structured society
3. Getting new abilities and functionalities
4. Moving toward a consistent and cooperative workplace
5. Having cheap, high-quality, and expanded services
6. Moving toward a well-managed society
7. Wiping out the digital divide and providing more opportunities in the society

The above impacts show why IT is a favorite industry. In fact, IT is a favorite but fragile industry and the above impacts have nothing to say about its fragility. When we explain the negative impacts, you can find out easily the reasons of its fragility. Now, the negatives impacts for each of the seven categories are explained respectively:

1. Moving toward a monotone and uniform society especially in the business sector
2. Having a compulsory and virtually complex working style
3. Moving toward a fashion-driven economy instead of a demand-driven one
4. Having a pre-cast and ingenuity-free workplace
5. Separating the workforce in terms of its life style rather than its faith
6. Being limited to a few and vulnerable problem solving models
7. Increasing the flow of garbage stuffs in a rate higher than of useful stuffs

We finish this section with this important fact that *everything has its cons & pros. What makes a thing lucky or unlucky is not its cons & pros but it is the trust it has made for itself in the society.* This fact is another one that should never be forgotten by a corporate strategist.

4. CONCLUSION

The goal of this section is to inspire how one can use the introduced rules in the three previous sections for analyzing IT companies from a desired perspective. It would be more effective if it is shown through a few sample facts and recommendations as the followings:

1. If you are running an SMB-class company, do not reckon your company function as its asset. Your company real asset is the trust it has made for itself in the society.
2. The company function has nothing to do with making the trust, the impact has a little, and the behavior has the major role in doing that.
3. The trust does not guarantee a good market for a company, but it is not possible to have a good market without a good trust.
4. When the market is bullish, the third category of companies makes more than 90% percent of the news, although it has actually less than 10% of the impacts. When the market is bearish, it is shrunk sooner than any other category because the market is driven by impacts in long-term and buzzwords in short-term.
5. The long-term market of a company is proportional to its impacts.
6. If you want to form a startup, select your company function in compliance with your skills and confidence, not its potential impacts.
7. Companies belonging to the first and second categories are the valves of the industry and therefore need a lot of trust from other industries.

BIBLIOGRAPHY

Computer Science and Telecommunications Board (CSTB), National Research Council. 2000. *Making IT Better: Expanding Information Technology Research to Meet Society's Need.* National Academy Press, Washington, D.C.

Lohr, Steve. 2005. "Can This Man Reprogram Microsoft?" *New York Times,* December 11.

President's Information Technology Advisory Committee (PITAC). 1999. *Information Technology Research: Investing in Our Future*. National Coordination Office for Computing, Information, and Communications, Arlington, Va., USA.