Analysis of Google’s Organizational Design

Based on ‘How Google Works’ by Eric Schmidt & Jonathan Rosenberg (1/2014)

Silicon Valley has produced some of the best technology companies that have created enormous value, both financially and socially. Many books have been published highlighting the legacy of its leaders, commonly in form of biographies. They highlight the founder’s/CEO’s leadership styles, decision-making skills and ability to restructure the organization & processes. However, replicating a leadership centric success is unreliable since few characteristics in a given situation could yield exceptional results. A complementary approach is to formulate an organizational structure & culture that is scalable and not tightly bound to its charismatic leaders. ‘How Google Works’ provides an insight into the design of Google’s organizational structure and this article is an attempt to map it to standard OD methodologies.

Organizational life-cycle is inevitable

Although there is no direct comment on the life-cycle concept in the book, it does highlight the problems of any organization that goes through rapid expansion and in the process, how the culture tends to become bureaucratic, less innovative & more de-motivational for employees. Every technology or its product has a life-cycle and continuous innovation is key to long term growth & sustainability of a company. The following graph shows the size (no. of employees’) vs revenue growth of Google, except for Motorola acquisition, the graph is linear, with revenue per employee averaging > $1.1M over period of 10 years. While Facebook & Apple have reached similar revenue/employee, the sample size is only few years.

![Revenue/Income/Employee Growth](image)

The graph also shows that as an organization, Google has been able to maintain its core fundamentals during its enormous growth in past 10 yrs. It is obvious that many of the Google’s products would have made the journey of launch/growth/stagnation & decline, but the collective value has grown consistently. Such performance is not possible just on strength of margins and without the strength of organizational structure & culture.

Technology Attributes

The trends in information technology are continuously making it cheaper and more accessible. The Moore’s law is making the semiconductor/hardware cheaper while providing tremendous computing power in mobile devices with even longer battery life. Affordable hardware creates more online users, allowing even more developers to contribute to the software that runs on these devices.
Thus the software development can experiment & iterate multiple solutions at low cost and rapid cycles, the cost of both experimentation & failure is low and determined by compensation of developers rather than cost of infrastructure. Based on above technology trends, Google seem to have identified the following technological attributes:-

- **Speed** – The time to deliver a working feature from an idea is essential for user acquisition, if a problem is obvious to few, it would naturally drive many to compete for the solution.
- **Technical insight** – It is the *implicit value* creation of a product or value addition of a feature. Quite often, the new product fit into ‘me too’ approach without an insight into why the users would adopt it. A product based on technical insight would go beyond competition, not just because it is cheaper or better to use, but solves the problem that users would have faced next.
- **Plan for scalability**: The path from prototype to large user base should be natural and part of the design process, thus ensuring that product doesn't fail on its large scale deployment.

A traditional top-down organizational structure that is hierarchical, middle management heavy & dependent on visionary leaders fails to fulfill these attributes, thus requiring a more horizontal organizational design.

**Horizontal or Hierarchical Organization**

It is quite evident that founders were aware of the fact that as the size of the company grows, the entrepreneurial culture fades, flow of ideas is constrained by bureaucratic processes. However, is Google ‘flat’ or ‘hierarchical’? The book carefully avoids answering this question and is quite justified in doing so; the reason is that organizational design is not as straightforward as in theory. The ‘structure’ of an organization is very much dependent upon its size (By 2015, google has ~54K employees) and number of products. The structure becomes naturally hierarchical once a product requires increased number of employees. It seems that Google preferred to be more functional and resisted organizing around products, this indicates to a ‘Matrix Structure’ structure which is also quite common in industry.

The recent restructuring & formation of ‘Alphabet’ also indicates that the core ‘Google’ is still organized around functionally similar cluster of products, thus maintain the matrix while products under ‘Alphabet’ do not share common ‘core’ technology and are perhaps loosely coupled except for functionalities like HR, IT, finance etc.

If one differentiates the two prominent factors of an organizational design – (1) Structure & (2) Culture, Google has apparently experimented with these in non-traditional manner when compared to other large and established Silicon Valley companies.

**Span of Control**

(*It refers to number of direct reports per manager.*)

As explained in [Organizational lifecycle and decline](#), the relationship complexity to be managed increases exponentially as more reports are added to a manager’s portfolio. A typical max limit has been traditionally limited to the magic number ‘7’, i.e no more than 7 direct reports per manager.

Google has increased the span-of-control to ‘10’, thus making the structure comparatively ‘flatter’, but not physically flat (although it did experiment with latter). A broader span-of-control helps in improving the overall efficiency by reducing the overhead costs of middle management. However, it also requires transferring more authority to employees and designing independent job descriptions. The concept of ‘Smart Creative’ is designed to motivate employees to be more independent and responsible, thus reducing the management role in routine activities.
Smart Creatives

A smart creative is knowledgeable in multiple domains: is technical, good analytical abilities, understands business, can anticipate the market changes, is not risk averse, understands the customer, is self-directed and immensely creative. It sounds like an unrealistic ‘all-in-one’ approach and challenges the ‘availability’ of such resources in market, especially when demand is for several thousands of such individuals.

However, it is possible only if a ‘Smart Creative’ is an outcome of a ‘learning organization,’ when a potentially good employee joins the organization. In short, the employee is assisted to grow in the organization using the Situational Leadership model. The manager begins with ‘directing’ the employee with daily decisions on ‘how’ to complete the tasks. Then slowly coaches the employee in ‘decision making’ and finally the employee is independent enough to take most of the decisions related to his job responsibilities.

The model is very similar to the admission and learning process in universities, where the student gains the ‘value,’ as he/she passes through the stages of education system.

Culture

(It is the unwritten norms, rules and values shared between all employees.)

One important distinction that Google had was to realize that the ‘culture stems from founders’. Usually the culture is an afterthought, when the company is already financially successful and has perhaps gone through its growth in size, and culture is concocted by Human Resources. What most companies do not realize is that while the founders facilitate the initial product success, the culture helps in scaling the organization and its products. Google’s culture can be attributed as follows:-

- **Artifacts (visible components of culture)**
  - **Rituals:** The company wide TGIF meeting held by senior management, where employees are welcomed to raise their concerns with the company decisions. The employees would pre-submit their questions, which would be voted by other employees, and then the most voted concern would be addressed by management.
  - **Slogan:** “Don't be Evil”, “serving end users”, “long term focus” and “making the world a better place” are some the slogans that Google uses.
  - **Stories:** There are several references to how an idea by an employee lead to development of a product, e.g. Jonathan’s 20 percent project that lead to Google cultural institute.

- **Values (conscious and affective desires of organization)**
  - **Limit Bureaucratic framework**, since it kills ideas. The environment should enable meritocracy, by giving voice to conflicting opinions.
  - **Collaborative culture:** An important aspect is to build a self-sustained campus similar to university style, close proximity of co-workers is encouraged by providing world-class food on-site. It naturally encourages the employees to mix-up and share ideas. Google also encourages culture of collaboration with less control through process and bureaucracy.
  - **Transparency:**
    - Establish culture where managers share information rather than withholding information as means of maintaining their control & positional authority.
    - Share the quarterly reports at all levels, letter to board, individual products objectives & key results.
    - Even individual contributors publish his/her current work assignments.

- **Empowerment (amount of ownership felt by employees)**
  - **Responsibility:** Work life balance through responsibility & freedom (again fits into smart creative)
Assumptions (How employees determines expected behavior)

- **Failures:** To curb the practice of Defensive Reasoning, the leadership encourage openness to bad news without any backlash. Since hiding, bad news will only defer the consequences of dealing with an imminent failure. A general cultural slogan: ‘users first, thinking big, and not being afraid to fail’.

- **Divas Vs Knaves:** Divas are exceptional employees with difficult egos but they bring high value to the team. Knaves on the other hand are self-serving employees who are rather pessimistic. Such employees’ falls into the two end of the normal curve, while Divas should be managed, Knaves should be eliminated.

Topics not covered in the book

- **Mergers and acquisitions:** How does Google ensure that employees added because of merger integrate successfully into its values and culture?

- **Scaling the company through different geographic locations:** With multiple campuses in different locations, how does it still try to maintain a transparent & open communication and collaborative culture similar to university setting.

- **Challenges the company faces as it ages:** The median age of Google employee is early 30s, almost a decade less (and a generation younger) than other large companies of similar size. Although Google is large, it is still young as an industry (~15 yr), a company's culture deteriorates as its products and employees age, and market value of both decline. It is unclear how it plans to manage its aging, both in leadership & policies.

- **Developing & retaining Smart Creatives:** The book describes the recruitment process and its definition of smart creative, but it does not provide any hint of specific process (e.g. internal job swaps, performance management etc) that could help in continuous development of its employees. A general problem in all aging Hi-Tech companies is that the employees lose their competitive value in employment market due to obsolete skills. In short term, it gives an illusion of a stable workforce, but takes away the culture of innovation.

Conclusion

The 'industrial revolution' facilitated deeper ‘division of labor’, which was followed by ‘assembly line’ manufacturing process. Subsequently, the white collared service industry preceded the blue-collar workers and later the Hi-tech workers, but basic culture did not change much except for some of its artifacts. These artifacts are reflected in office/cubicle design, multitude of benefits (food, transportation) etc, but most organizations remain bureaucratic with high degree of functional specialization that is skewed to maximize employee productivity and thereby profits. Even Adam Smith, the father of capitalism, had warned that extreme specialization in work division would deprive employees with any chance of pride in the work. In long term, highly specialized functional task provides only existential benefit (salary, affiliation) but fails to provide a meaningful career (self actualization, esteem) for most of the employees. (refer to Employee Motivation)

The steps taken by Google, as mentioned in the book, are certainly a step in the right direction. And should serve as a model for newer companies. As Google ages, perhaps in next decade, these concepts would be further tested for their effectiveness. Similar to Robert Noyce, who inspired entrepreneurial culture in Silicon Valley, Google’s experiment with organization design should have long term impact on valley's employee culture, this is brighter outlook for Millennials!