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"Don't be Irrelevant"
Google Inc.'s Pervasive Strategy to Success



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“Don’t be Irrelevant”
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by

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Submitted to The Department of Economics

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I hereby recognize and pledge to fulfill my responsibilities as defined in the Honor Code and to maintain the integrity of both myself and the College as a whole.

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Abstract:

The evolution of the Internet, and its derived technologies has lead to the development of products, firms, and industries; all which utilize its unique and expansive power. As a direct result, search engines and their respective industry have experienced tremendous growth and now command a multi-billion dollar market. Emerging as the dominant player, Google Inc. has managed its way to a 60% market share and generates profits of nearly $10 billion annually. As foundation for measurement renowned business theorist, Michael Porter, has developed ides on competition and strategy that have been an integral part of the management discussion for over 20 years. With the understanding and application of these theories a pervasive analysis is performed on the search engine operator Google Inc. The comprehension of its strategic position within the search engine industry and the relevant business activities it undertakes to attain extensive profitability, provide the tools discern: the succinct and powerful strategy Google applies firm-wide and the significance of its ability to do so with such success.

Chapter 1: Introduction

Over the past fifty years almost every aspect of life has evolved dramatically due to technological innovation. This unprecedented period of change in the lifestyle and circumstances of society has not only been magnified, but also multiplied by the creation and development of the Internet. Originating from its meager beginnings as a system designed to transfer electronic data between separate networks, the Internet is now a dominant inescapable presence within the developed world. Through its convenience and ever-evolving functionality, the Internet has become an integral aspect of existing within society. On the most basic levels it has permanently changed how people communicate, interact, and build relationships; while with a more complex systemic view one can discern the countless ways it has shaped and molded the building blocks of modern civilization. The Internet's status as a vehicle of change has been cemented through evidence of re-evaluation and adaptation of major societal processes such as the economics and politics. Considering the widespread influence it exudes, the necessity of research and discourse become essential in understanding and utilization of this technology. The enormity of the issue, change attributed to the Internet, is easier calculated and measured when a more specific example is undertaken. Consumption, within an economic framework, becomes the driving force of how people survive, and like everything else has evolved immensely with the Internet. This evolution has had direct effects on not only consumers but also on firms.

The introduction of the Internet into commerce has forced many new considerations and responsibilities on the firm. With regards to a firm, the communication prowess embodied by the Internet has provided new opportunities, eliminated the middle man, and streamlined services, while conversely creating a scenario where staying relevant becomes a very complex issue. Firms can now utilize online functions and service to eliminate costs and generate better

production efficiency. The ability to remove once tedious and cost-intensive tasks instantly transforms the Internet into a moneymaking tool with high potential for growth. In addition to aiding efficiency, exposure to the market and individuals has become as simple as a click of the mouse. New opportunities to advertise and promote brands have allowed for a more competitive marketplace where information transfers at an ever-increasing rate. While there are many ways it has become beneficial to firms, in the same way that it helps it can also be detrimental to success and thus profits. As the spread of information has become harder to control and more expedient it becomes difficult to sustain advantages over competitors and dissembles some barriers to entry. Overall it is apparent to even novice observers that the Internet has influenced and changed how a firm operates and executes its strategic management, and will continue to in the future.

In order to properly and effectively examine the successful navigation of these changing conditions it essential to first analyze the theoretical framework for corporate strategies and governance. With the rise of large corporations over the past decades, there has been much work undertaken on the proper way to manage a firm to position them in the best situation to be profitable. Ideas have been generated that outline how firms should focus their structure and operations that have been widely accepted as fundamental pieces to strong firm. Successful firm navigation as considered by renowned management theorist Michael Porter, focuses on two fundamental aspects: competition and strategy. These major ideas are essential to the discussion of the qualities necessary to be successful and long-term profitability related to firm management.

As a staple of a free market economy, competitors and competition is unavoidable, where firms can get ahead is when they utilize an advantage held over competitors and manipulate it to

put them in the best position for success. Michael Porter developed this strategy of competitive advantage to describe the manner by which firms should approach competition. Competitive advantage requires that firms identify the areas in which they can generate more value for the firm and shareholders in a specific activity compared to that of a competitor (Ankli, 1992). The realization and focus upon operations, which revolve around this advantage and value created, can propel the firm to a larger market share or greater profitability. A central aspect of competition is the industry the firm resides in. Understanding the relative industry forces considerations of competitors, how profits are made, and where specific value is created. Using results from industry analysis, firms can place themselves in the best position to succeed and create advantages in relation to their respective rivals. Porter insists that for long term success firms must identify and utilize these advantages to earn the competitive edge.

As important as the individual qualities that set firms apart and allow them to compete in their own fashion, the strategy, which firms operate under, can be seen as the framework for their goals. Porter generated a strategy for industry and market analysis, which he feels should be implemented by firms to effectively calculate competitive factors. Proper analysis and consideration of these principles can allow firms to better observe their ability to serve its consumers and generate profit within the industry. In Porter's eyes firm strategy revolves around the value created and the business activities undertaken. This focus becomes beneficial for any firm as they are able to differentiate from competitors and adhere to consumer desire. Undertaking business activities, which serve to reinforce the goal of value creation is a core aspect of the strategy creation process, and can lead to greater stability and profitability in the long term. By tailoring the inner workings of a firm to its specifically developed strategy creates

barriers to replication and thus protects profits from competitors. Overall Porter's theories on strategy become an expansive and multifaceted approach instrumental in long-term success.

Corporate management and strategy are an essential part of the success equation for a major firm in today's economy. To effectively investigate the application of these ideas empirically an examination of actual firm strategies and according success, or lack of, must be undertaken. As discussed earlier the influence of the Internet has become so prevalent that industries have been generated based off of it. As a part of the technology industries rise to prominence, Internet companies have evolved and become quite popular in the past few decades. This Internet sector, specifically search engines have created their own set of characteristics, which differ from most traditional industries. Foremost a defining quality of this segment is its reliance on information. With applications such as organization and transfer, there are a multitude of ways in which information is utilized as a vehicle of profit by firms within the industry. While the products or services are information related, revenue is largely drawn from supplementary advertising. Dependence on advertising for profit can lead to externalities as firms can become increasingly concerned with ad exposure losing sight of value objectives. This misalignment of priorities can be very detrimental to the producer consumer relationship, creating the possibility for long-term stability problems. Also to be recognized as a trait of these internet-based firms is how a majority of the products are a manipulation of an already established technology. Firms use innovation to tailor the power of the Internet to meet specific consumer demand needs. These defining characteristics lead to a unique set of circumstances leading one to question if the aforementioned management theory still applicable for success.

As an expansion of this dialogue, the subject of significance within this examination directly relates to the discussed management theories. Specifically examining a firm within this

internet-based realm, to discern if these strategies hold true against the associated volatile conditions and enable financial success. To test these theories empirically, a rigorous and complete breakdown of Google Inc. and surrounding industry will be undertaken. Google and its current prominence and success make it a relevant and excellent example within this field. and instigates the question whether these decade old management theories are applicable under modern Internet conditions.

Founded in 1998, by two Stanford University students, Larry Page and Sergey Brin, Google arose from meager beginnings as a webpage link indexer. As their idea and service developed, Page and Brin were able to manage the company to become a serious presence within its relevant market. By 2004 after their initial public offering, Google's search engine offered access to over 4 billion web pages and a slew of other Internet powered services including e-mail (G-mail), Google Earth, and Google Desktop (Scott, 2008). As Google's arsenal of services grew, immediate returns were seen, with the first publicized quarterly results boasting earnings over $800 million. Through diversification of services and brand promotion in less than 10 years Google had almost 400 million users and over $1 billion in profits (Scott, 2008). This nearly unprecedented growth and expansion landed Google as one of the most highly regarded firms today. Today, generating $37 billion in revenue and over $10 billion in profits Google has cemented its status among the Internet elite (Google Inc., 2010). With this in mind, the question arises: How and why has Google Inc. been able to grow and achieve such impressive numbers in today's competitive economy?

Methodology

To provide a revealing and pertinent answer, a systematic approach will be implemented to effectively research and conclude empirically on the effects and relevance of Google's

strategy with regards to success. Michael Porter's appropriate theoretical framework will serve as the foundations to properly build and strengthen a case analysis. In order to impose the ideas empirically it is essential to achieve a strong understanding of Porter's reasoning. Using this knowledge, an application and resulting analysis of Google's strategic implications on success can be made. With these considerations in mind, evidence will presented to describe whether Google's strategy support, conflict, or negotiate Porter's framework. The completed analysis stands to dictate ideas for modification or amendment to the theories for greater significance within the modern Internet economy. Through further case analyses the ideas could be strengthened and expanded to update management theories. Additionally the success-strategy relations discovered could be considered and referenced in a specific management environment. Regardless of the results the information found in research and analysis will provide a interesting examination of a top Internet firm's management through strategy.

Chapter 2: Management Theory

Over the past century there has been a dramatic developments and changes in the ideas surrounding firm management. While all businesses need some form of management, as size and scale grow it becomes an increasingly important factor of organization and efficiency, and thus typically success. Firms have always utilized management or a faction of control, but not until the 20th century was strategy applied to the organizational concept (Horwath, 2006). Historically, strategy gained prominence within confines of the battlefield, only relatively recently did it transition to the business environment (Horwath, 2006). Throughout the past decades many have postulated on the subject but as times changes so did the theoretical framework. Strategic theory, concerning firm management, has evolved and developed expansively, but has never reached an all-encompassing consensus. Originating in the 1950's and 60's management practice focused on budgetary planning with popular literature coming from Peter Drucker and *Concept of the Corporation* (1946) (Horwath, 2006). It continued to progress through the next several decades through examination and resulting analysis of the best and most prominent corporations by a multitude of scholars. In the late 1970's and early 80's firm related strategic thought focused upon on the corporation within its competitive industry environments. At the forefront of this movement, Michael Porter, was instrumental in shaping ideas through the works *How Competitive Forces Shape Strategy* (1979), *Competition Strategy* (1980), and *Competitive Advantage* (1985) (Teece, Pisano & Shuen, 1997). Although major headway was made under Porter's contributions, by no means did the discourse become stagnant (Horwath, 2006). Entering into the 1990's focus shifted to a strategic approach coined resource-based theory (RBT), first described by B. Wernerfelt in his 1984 publication *A Resource Based View of the Firm* (Haugstad, 1999). RBT suggested that for superior performance, management

must be concerned with inputs, cost and proper resource allocation (Haugstad, 1999). In modern works on strategic management, those after the turn of the millennium, centralize on the simplification of processes and the proactive use of strategic thinking, which typically embodies a aggregate view of the firm and its environment (Horcraft, 2006). The economy and firm alike have continuously grown and evolved, producing new ideas while reaffirming and refuting old ones, but no definitive approach has been agreed upon. As such, an empirical investigation into the application of prominent strategic theories upon current firms allows for insight concerning relevance in the modern economic environment.

Michael E. Porter

Michael Porter of Harvard Business School is one today's of the foremost authorities on firm management in strategy. Authoring a diverse array of academic literature, Porter has amassed an expansive knowledge on the thinking and actions required to navigate a firm to success. Referenced in thousands of publications his theories and ideas have been discussed both in academia and the boardroom, contributing to relevance not only theoretically, but also empirically. Porter's most widely considered and utilized works revolve around competition and strategy, and will serve as framework to examine Google's management and success. Classic Porter works such as *What is Strategy* (1996) and *Five Competitive Forces that Shape Strategy* (2008), having been revised by him and subsequently reissued will serve as the foundations for this case study. These works contain theories specifically centered upon a firm's strategy approach, but cannot fully be understood without proper competitive analysis. As dictated by Porter, the keystone of strategy is competition and thus where this discourse will begin.

A. Competition

Porter's strategy framework, "explains how an organization, faced with competition, will achieve superior performance." (Magretta, 2012, p. 264). Upon further examination this is much more expansive than beating out competitors; it is a complex statement concerning the navigation of a specific competitive environment to meet and exceed organizational objectives. Permeating throughout the business world, is a competitive idea which Porter describes as "competing to be the best," (Magretta, 2012). This winner-take-all mentality is a fundamental misconception of management teams across the economic spectrum. Porter claims that competition is more appropriately described as "competing to be unique," which encompasses value creation behind a specific firm's actions (Magretta, 2012). Firm's competing through the "best" mindset falsely assume that only one firm can exist successfully within a market space. If firm management uses this idea as basis for competitive analysis in building strategy, the flawed logic can have negative repercussions on the firm and industry as a whole (Magretta, 2012).

This type of zero-sum competition, or to win someone must lose, has deleterious consequences involving all competing firms. It perpetuates the belief that all competitors must converge on the same supposed "best" practices and approaches thereby detracting from differentiation and leading to price-competition (Magretta, 2012). Porter insist there is no single best practice within a particular industry, but practices best at uniquely achieving a firm specific goal (Magretta, 2012). Described more accurately than common war or sport analogies, requiring victory and loss, inter-industry competition can be better related to the realm of performing arts. Many diverse artists of the same medium can succeed, yet each with their own unique characteristics (Magretta, 2012). "The more good performers [firms] there are, the more audiences [customer segments] grow and the arts [industry] flourish. This kind of value creation

is the essence of positive-sum competition." (Magretta, 2012, p. 426). The inverse of zero-sum, positive-sum competition is a mutually beneficial scenario where uniquely valued competing firms can coexist. The essential aspect of Porter's theory on management's approach to competition is a focus on the value a firm creates to foster uniqueness, and the means by which it accomplishes that (Magretta, 2012).

Five Competitive Forces

In its most basic form, management is responsible for the accounting for and understanding competition (Porter, 2008). Porter views many modern managers as naïve in their perception of competition, commonly misunderstanding it as only that between direct industry competitors. True competition for profits embodies more than simply opposing firms but all relevant business entities. The full breadth of competition spreads across a firm's industry to associated suppliers, buyers, possible entrants, and substitute goods (Porter, 2008). Porter discerns that these core influences are the essential components of industry competition and are held true throughout any industry no matter how abstract. He concludes that a firm's negotiation of competition is managed through these five forces: bargaining power of suppliers, bargaining power of buyers, threat of new entrants, threat of substitutes, and rivalry among existing competitors (Porter, 2008).



Fig, 1: Five Competitive Forces (Porter, 2008)

"While a myriad of factors can affect industry profitability in the short run—including the weather and the business cycle—industry structure, manifested in the competitive forces, sets industry profitability in the medium and long run." (Porter, 2008). These key elements of structure shed great light upon the industry, as specific weak forces highlight possible value creations sites. Porter describes how these are the essential factors in understanding industry structure and thus the opportunities to generate profits.

I. Power of Suppliers

In some form or fashion all firms must undertake transactions with suppliers to provide the product or service they set forth. Any activity or transaction involved in the obtainment of a production component is a supplier relationship, and as all firms engage in some form of production suppliers become an inescapable entity economy wide. The significance of this force is established through the understanding of the (negotiating) power these suppliers hold (Porter,

2008). The duration of the production process and all activities involved is where a good gains value in any industry. Porter elaborates "Powerful suppliers capture more of the value for themselves by charging higher prices, limiting quality or services, or shifting costs to industry participants." (Porter, 2008, p.9). If a supplier exhibits power within an industry, firms cannot accommodate supply cost increases, thus the supplier shrinks margins and drives profitability from the respective industry (Porter, 2008). There are a multitude of ways a supplier can exert strength over its clients, and they can arise in a variety of areas. If a large portion of a supplier's business comes from industries different from that of the client, it can adopt prices, which incur the highest marginal revenue possible from each transaction. Serving a diverse variety of industries gives strength to suppliers, as they are not dependent upon the activities of one (Porter, 2008). Supplier's can gain power over its clients if there a switching costs for changing providers, it can be more detrimental to a firm's bottom line to change, especially in the case of specialization (Porter, 2008). A source of strength that can be particularly harmful to profits is lack of supplier substitutes. If a firm has very limited options to obtain a necessary good or services they, suppliers gain and hold robust negotiating power, absent vertical integration (Porter, 2008). These supplier relationship scenarios, while not all-inclusive, are typical in deciding the balance of power, and provide insight on appropriately judging an industry's supplier power.

II. Power of Buyers (Consumers)

On the other side of the transaction spectrum is buyers, but similarly can also harness influence and power over a firm. These essential entities can "can capture more value by forcing down prices, demanding better quality or more service (thereby driving up costs), and generally playing industry participants off against one another," as Porter states all these actions can be

attributed to decreased industry profitability (Porter, 2008). A variety of situations emerge that facilitate the ability of buyers to exert leverage over a firm, all which serve to draw more of the value for themselves. A strong trend in many industries today is a standard good or service, one that offers no real difference from another (Porter, 2008). If a firm is selling to only a select few purchasers, they gain power as they in turn are responsible for a large portion of business and negotiate accordingly (Porter, 2008). In addition a buyer's relative price sensitivity can play a strong roll in dictating where the value ends. Many times there are intermediate customers, "or customers who purchase the product but are not the end user," they also can be analyzed in nearly the same fashion (Porter, 2008, p.10). In supplement they also can affect the choices of end users or those down the transaction flow (Porter, 2008). Buyers play an integral part in this dynamic competitive relationship and their specific power must be considered.

III. Threat of Substitutes

Any firm offering a good or service to its clients must be aware and account for the possible substitutes. "A substitute performs the same or a similar function as an industry's product by a different means," this occurrence can detract from customer base and thus profits (Porter, 2008, p.13). Substitutes are unavoidable with any industry as consumers and other firms can innovate to find alternative ways to meet the same need. If within an industry there is high possibility and probability of substitutes it equates to diminished profitability (Porter, 2008). Threat of substitutes can be prevalent for a variety reasons, most significantly if another good is available where the consumer receives a comparatively larger proportion of value created (Porter, 2008). In addition if there are low costs to switch goods that serve the same purpose, the threat is high; brand name to generic drugs for example (Porter, 2008). The threat of substitutes can rise drastically as a direct result of innovation and technological development, as so

management must be constantly aware of changes in both related and seemingly unrelated industries (Porter, 2008). Overall substitutes can have extremely detrimental effects to a specific industries financial success and expansion, as they diminish consumer base and thus possible profits.

IV. Threat of New Entrants

Any industry that has existed and allowed for firms to display positive financial statements becomes attractive to possible competitors. The fourth force, which holds competitive implications, described by Porter is the threat of new entrants. "New entrants to an industry bring new capacity and a desire to gain market share that puts pressure on prices, costs, and the rate of investment necessary to compete." (Porter, 2008, p.4). This becomes especially pertinent when the firm enters the industry through diversification, such as Microsoft's development of Internet searching technology (Porter, 2008). An instrumental factor is realizing this particular threat is focused on the industry specific barriers to entry and established firms response to entrance. Porter notes that generally, executed entry is insignificant; the importance lies in the actions surrounding the threat. Barriers to entry can expand across a diverse selection of business activities but must be acknowledged in totality by management in order to understand where the threat lies (Porter, 2008). This ever-present threat is a serious and powerful force, that must be considered in identifying industry structure, to overlook it can be detrimental not only market share but overall profitability.

V. Rivalry Among Existing Competitors

The final force involved in Porter's five force analysis focuses upon the intensity of rivalry among firms already established as competitors. "Rivalry among existing competitors takes many familiar forms, including price discounting, new product introductions, advertising

campaigns, and service improvements." Similar to the others, strength in this facet of industry structure can diminish industry wide-profits (Porter, 2008, p.15). This intensity can grow based on numerous aspects of the existing industry competition. When an industry grows and expands at a slow rate, nearing stagnation, it creates a tooth and nail battle for market share (Porter, 2008). Not only do barriers to entry play a role in competitive analysis but as do those to exit. If barriers to exit are high it can force firms to attempt at all costs to maintain existence within the industry and thus create strong rivalry among competitors to gain profits (Porter, 2008). Rivalry is generally strongest when the industry has been driven to price-competition, as there is no product differentiation and firms are competing for the same customers and same dollars (Porter, 2008). There is the possibility that rivalry can focus competition on characteristics outside of price, such as brand or features, it can be positive for not only the industry but also its consumers. This often cut-throat rivalry is then a culmination of the four previous forces and while no more significant must be considered appropriately.

Competitive Force Implications on Strategy

These five forces serve as the starting block for any management group wishing to develop a succinct competitive strategy. Understanding the structure of an industry and the specific forces that exhibit strength allows for perception of why industry profitability is located where it is (Porter, 2008). The proper considerations of said forces can uncover many truths concerning the best firm specific course of actions. This depiction can lead management to "positioning the company to better cope with the current competitive forces; anticipating and exploiting shifts in the forces; and shaping the balance of forces to create a new industry structure that is more favorable to the company,' (Porter, 2008, p.25). An efficient and knowledgeable management team is able to use this analysis to apply not one but multiple

actions highlighted through understanding. This ability to predict industry shifts and alter industry structure should not be underestimated by organizational management. Proper understanding of competitive structure allows for a more complete industry picture, which can provide valuable insight into the proper course of actions in hopes of superior performance.

Competitive Advantage

In Porter's theoretical framework, a major contributor to superior performance within in industry is attributed to competitive advantage. "If a company has a competitive advantage, it can sustain higher relative prices and/or relative costs than its rivals in an industry." (Magretta, 2012, p.902). Relative price is concerned with a consumer's willingness to pay for a specific product, this willingness can be altered by the value viewed when comparing similar. If a firm is able to create enough value associated with its good or service to command a comparatively superior price, then they are able demand a higher relative price (Ankli, 1992). Conversely relative cost is on the other end of the spectrum defined as "…producing at lower costs than rivals," (Magretta, 2012, p.934). Proper management of these two aspects can lead a firm to superior performance, or competitive advantage. Porter states several economic fundamentals of competitive advantage. First, commonly used measuring statistics such as market share and stock price are misleading and strategy should be focused on return on invested capital (ROIC) (Magretta, 2012). Competitive advantage is not about winning but the specific value creation and the cost-value production relationship. A firm's comparative status of relative price and cost can be directly attributed to specific business activities undertaken. These activities compiled form a firm's value chain, and this value chain is thereby a source to aid in defining competitive advantage (Ankli, 1992).

Value Chain

As previously stated compiling all the value creating and cost-inducing activities a firm undertakes form its specific value chain. This particular type of analysis becomes relevant for management applications, as it is fundamentally what they can directly control. A management team is able to choose what to do and what not to do in order to create and sustain the greatest competitive advantage (Magretta, 2012). Placing these essential and supplementary activities into a value chain allows for a more succinct organized method of advantage understanding**.**

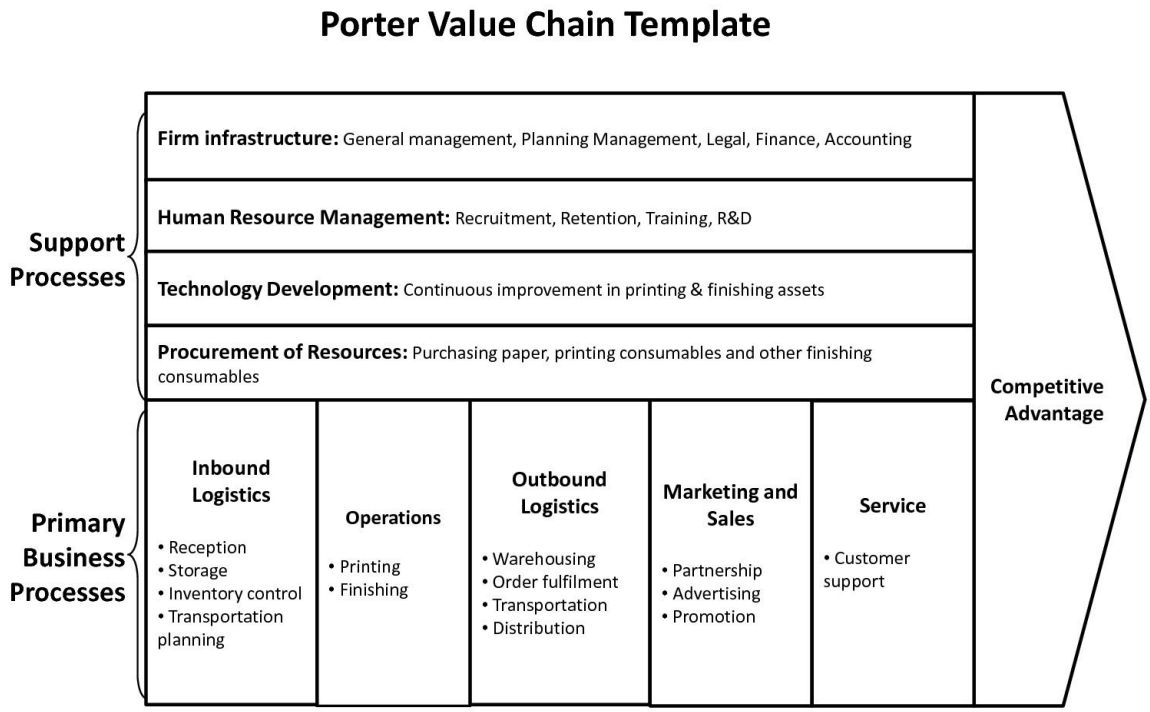


Fig. 2: Value Chain Template (.docstoc, 2011)

The proper creation and study of a specific firm value chain can allow a manager to more fully understand each individual activity and the relation they have amongst each other. Each firm's value chain is part of a much larger value system, which encompasses the chains of all means of

production and distribution (Magretta, 2012). Once a firm has completely developed and understands its value chain, they then can utilize the management benefits. After creating their firm-specific chain it is necessary to create a value chain for the industry as a whole. Using this for comparison a manger can discern where his firm demonstrates operational effectiveness, or the areas they perform activities better and more effectively (Magretta, 2012). The continued value chain analysis moves to the discovery of which activities act as price and cost drivers. Business activities "…can now be seen not as a cost, but as a value adder," (Magretta, 2012, p.1129). Porter describes this as essential to proper management, viewing all activities, even cost driven activities as contributors to value creation enables the complete understanding of competitive analysis.

B. Strategy

A firm's competitive standpoint is an important and integral component to successful negotiation of its industry, but only serves as the foundation for true strategy development. Any approach or tactic can be called or considering a strategy, but for superior performance it must be much more discursive (Magretta, 2012). For Porter a firm's strategy is deeper and more complex than a description of how they do things, but a complete behavioral plan. "The focus is on where you want to be, not the decision-making process by which you got there,"(Magretta, 2012, p.1210). A necessary aspect of strategy is obtaining operational effectiveness, but it is not an all-encompassing idea. As operational effectiveness is "performing similar activities *better* than rivals perform them," it is also a necessary consideration of strategic position (Porter, 1996, p.62). Position encompasses a firm's ability to perform different activities than rivals or undertaking the same activities differently than rivals. This position becomes instrumental in promoting differentiation and sustainability of competitive advantage within the industry. The

focus solely on operational effectiveness leads to rapid diffusion of best practices and competition convergence (Porter, 1996). Thus a complete and succinct strategy requires the acknowledgement and adherence to five distinct ideas. These are five essentials qualifications of a good strategy: distinctive value proposition, tailored value chain, trade-offs, fit, and continuity (Magretta, 2012). These components all comprise tests and applications that a strategy must adhere to in order to be robust and instrumental in success.

I. Distinct Value Proposition

Any firm looking to look to enter into a strong strategic position must form a distinct and often unique value proposition. A firm's value proposition allows firm management to make decisions about the specific value they will offer (Magretta, 2012). The value proposition includes three fundamental characteristics: customers served, needs to be met, and relative price producing acceptable consumer value and firm profit (Magretta, 2012). Using any of the aforementioned aspects to be the instigator or keystone for construction can allow for a valid proposition to be built. A firm's ability to generate a distinct value proposition permits them to identify the unique value they will be attempting to create and the market segmentation of concern (Magretta, 2012). Performing demand side analysis is instrumental step in developing a solid strategy.

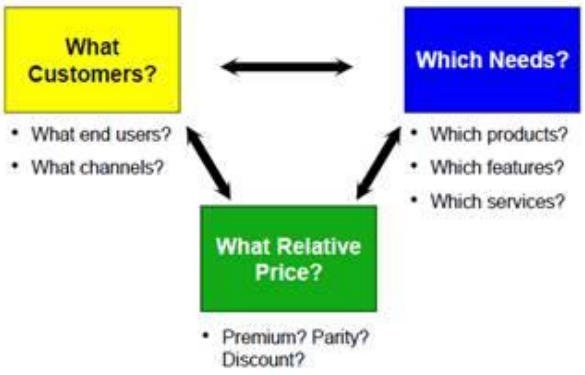


Fig. 3: Value Proposition (Monografias, 2011)

II. Tailored Value Chain

As discussed earlier in the discussion of competition of strategy, a firm must develop a value chain that includes their essential business activities. As a value proposition can be adopted by competing rivals within a sector, is does not translate into a strategy without the regarding best practice business activities differing from rivals (Magretta, 2012). In that idea, a firm's value chain must be unique and tailored to the value they are attempting to create (Magretta, 2012). "Choices in the value proposition that limit what a company will do are essential to strategy because they create the opportunity to tailor activities in a way that best delivers that kind of value." (Magretta, 2012, p.1541). It becomes absolutely necessary for a firm's management to focus on the specific activities comprising their business. As Porter has stated "the essence of strategy and competitive advantage lies in the activities," whether it may be performing those differently or different activities all together (Porter, 1996, p.62). Embodying a customized value chain different from that of rivals helps increase differentiation and prevent imitation. This inward perspective and adjustment concerning the process of how a firm achieves set goals is the second step and opposite of value proposition. Harnessing a tailored value chain can be considered supply side analysis, it must be combined with the demand side or value proposition for an integrated approach. Utilizing this supply and demand combination is an invaluable facet of strategy creation and positioning within in industry in order to generate superior performance.

III. Trade-Offs

A fundamental mistake perpetrated by many management groups in the modern business economy is notion that more is always better. Porter insists that this misconception leads to the avoidance of trade-offs, or activities not enacted in order to reaffirm value creation and value chain tailoring (Porter, 1996). A trade-off can aptly be described as a fork in a firm's strategic road, undertaking a specific action leaves another to be foregone (Magretta, 2012). These either-or decisions can be made for a variety of reasons but most importantly if a certain action would support values inconsistent with a firm's specific strategic position. By advocating which activities to take or not, management is able to set forth clear concise organizational priorities for its employee population (Porter, 1996). Within his discourse Porter asserts that trades-offs are the linchpin of strategy, it holds everything together. Without trade-offs there would be no need to make choices or decisions, and thus no strategy. In their absence any value-creating idea instituted by a firm would quickly be imitated and superior performance would result in the deleterious systematic consequence of operational effectiveness competition throughout the industry (Porter, 1996). In culmination, trade-offs are integral to strategy, it could not exist without, and their understanding importance provides meaningful management indicators of what not to do.

IV. Fit

Strategic positioning encompasses not only what actions a firm undertakes, but also the relationships between the activities, or fit. Under strategic fit business and value creating activities must not only be related but reinforce each other (Porter, 1996). A prevalent management misconception is break down a firm into the few things they do best, or a firm's core competencies. This sectioning of activities is a fundamental problem as managers must be

diligent in view the aggregate of the system as whole, to prevent loss of the big picture (Porter, 1996). There are three types of fit as referenced by Porter, which comprise the fashion in which this idea can be applied to activities. First is consistency of all activities with the overall strategy. A firm must assure that competitive advantages sustained from specific practices accumulate rather than detract from each other (Porter, 1996). The second type is where activities undertaken reinforce others, this concerns the activities contributing to specific value created. The third and final foundation of fit is when activities work together toward the optimization of effort, or a drive to efficiency (Porter, 1996). All three force management to move focus from individual assets, to the entire activity system which is much more pervasive. This overall consideration enables a firm to negotiate their entire value chain of activities into a competitive advantage rather than independent ones (Porter, 1996). Fit gains significance after comprehension of industry wide effects, it enforces long-term sustainability of competitive advantage. With each fitted activity it becomes exponentially harder for rivals to imitate a firm's business model (Porter, 1996). Using strategic fit to develop an interdependent system of activities is an unavoidable necessity in competition for superior profit performance.

V. Continuity

Porter does not deny the need for an innovative and adaptable strategy, as there are shifts in industries regularly. These shifts, which can be due to technological innovation, market trends, or change in preference, will generally happen regardless of firm desire or action. Under this assumption its commonplace for managers to formulate decisions based on flexibility. Porter adamantly discourages this practice. "When you substitute flexibility for strategy, your organization never stands for anything or becomes good at anything." (Magretta, 2012, p.2291). He insists it is neither flexibility or rigidity are the appropriate strategic course but continuity

throughout the business. Firm continuity allows for the passing of time and business cycles in they can deepen their understanding of the strategy enacted (Magretta, 2012). A firmly developed strategy must have stable core ideals and a strong consensus on their method of value creation. This continuity over time provides a greater understanding of the value a firm produces and the opportunity to excel at its creation (Magretta, 2012). Porter argues that as a paradox to the idea flexibility is needed to survive turmoil and changing conditions, in reality continuity is the best tool for successful navigation. As changes happen in a diverse variety of forms and functions, holding a stable strategy enables a firm to figure out what is truly significant in their strategic position. They can use this discursive tactic to better address opportunities and pitfalls throughout their industry, as change flows more fluidly when there is a proper realization of what one is and is not (Magretta, 2012). Many times overlooked and ignored, continuity is vital in strengthening strategic comprehension and adapting through change.

Competition & Strategy

Executing an effective and prosperous strategy requires an expansive and in-depth analysis into the entirety of a firm and its surrounding industry environment. No proper strategic approach can be generated without careful consideration of all required facets as depicted by Porter. Utilizing invasive competitive analysis as foundation firms can assume an industry position and relevant business activities to institute a strategic plan. With appropriate competitive knowledge attained, the core principle behind Porter's theories on strategy is choice. That may seem to be an oversimplification of a complex process, but choice is the driving force and primary definer of firm strategy (Porter, 2012). In a market environment motivated by competition to be the best, or zero-sum, imitation and replication replace this choice and destroy differentiation. For a superior performing strategy Porter determines managers must be diligent

in choices on strategic position and value creation. This is inclusive of not only final position and value choices, but how a firm operates within its applicable sphere to these determined stances. Placing emphasis on fostering uniqueness Porter proposes a strategic model in which a variety competitively aware firms with market opportunities can succeed. Applicable to all industries Porter's theoretical framework on strategy and competition creates a model for superior performance in the modern economy.

Chapter 3: Google Inc. Strategic Analysis

The search engine industry has been in action many years before the likes of Larry Page and Sergey Brin created the corporate goliath that is known today as Google. These existing search engines were a way for Internet users to search the content of the web by the use of keywords to discover content that related to inputted term. While the incumbent firms had gained success, there was an issue of quality and relevance of results presented (Scott, 2008). Many web content creators understood how these engines selected results and thus would manipulate their own sites to be at the forefront (Scott, 2008). This was beneficial for the creators but many times did no service to the users of the engine, as the sites were not particularly relevant to the queried phrase. The construction of Google forever altered this landscape, with an steadfast drive to offer quality and relevant results to its users. During their time at Stanford University, Page and Brin were developing a web crawling program, basically software that indexed website connections (Battelle, 2005). Unbeknownst to them this would be the building block for the Google Search process used world wide today. Upon the realization that this technology and data retrieved could be used to format an Internet search program that instituted formally forgotten aspects, quality and relevance, they began to form Google. Over the past decade and a half, once a college computer science project has evolved greatly, rising to a multi billion dollar international corporation (Battelle, 2005). The following examination of Google Inc. will go to discern whether its management nurtured a promising business idea to fruition through the careful execution of competitive strategy as described by Porter; or if its actions conflict with framework set forth, and regarding success is a product of circumstance and opportunity.

Five Competitive Forces

I/II. Buyer/Supplier Power

In the traditional breakdown of Porter's five competitive forces these two are individual entities, but in the case of Google they are better described in combination as due to unique nature of their make-up. Similar to social networking giant Facebook, Google has millions of users who utilize its products and services under no direct cost; they are free (ignoring the costs of necessary complement goods involved in internet access). Yet, while giving a plethora of services away for free Google generated over 6.5 billion dollars in 2009, strong evidence of its industry and market comprehension (Google Inc., 2010). Google is able to generate billions of dollars in revenue through their expansive online advertising services. Under that notion is why in this particular case analysis, buyer and supplier power has been linked together and are essentially the same. Users visit Google's website for access to information and content, the profit creators are the advertisement placed within their activity. The firms, whom engage in advertising within the Google Network, thereby supply the product or content of profit generation and buy the right to put it there. In this manner the user becomes the indirect profit creator, as their interaction is required for revenue to be made. This aspect places great power in Google's hands over the firms utilizing their advertising services. Google Internet services are what draw their millions of users giving them strong negotiation tools when interacting with these firms.

Within its specific market segment Google's suppliers and buyers are typically the same entities, with a single exception, infrastructure. The vast majority of inputs utilized apart from advertisements, are concerned with the construction and processes involving data servers to run the Google search engine. While many large Internet service firms purchase servers and data

storage devices from suppliers such as Dell and Hewlett-Packard, Google has opted to design and develop its own (Shankland, 2009). Purchases are then designated not to pre-fabricated servers, which invoke a premium price associated with the value in finished production, but components for Google to erect in its own fashion (Shankland, 2009). The immense volume in the hundreds of thousands allows Google to generate strong negotiating power of those supplying the components for its data servers. Although without power a data server cannot be run or maintained, and thus the second supplied aspect of Google's infrastructure formation is its energy requirements. In a study concerning data server power usage it was identified that Google consumes around 0.01% of the world's electricity to run its server fields (*Data Centers,* 2012). While a tenth of a percent seems relatively small, for one firm to be directly responsible it becomes a very astonishing statistic. To combat the large prices associated with such a demand, Google enters long-term power purchasing agreements with several energy providers (*Data Centers*, 2012). The massive quantities and longevity of the contracts agreed upon allow for an abundance of capital for the providing firms to reinvest in more efficient and renewable energy (*Data Centers,* 2012). This relationship allows Google to be quite powerful in relation to the supplier as they provide means for capital research and investment, which can lead to stronger future profit margins (*Data Centers,* 2012). Google's immense infrastructure requirements could place it at a disadvantage to scale and thus could lose some relative power, but through unique management of the issue Google has been able to mitigate this power shift and retain it on its own behalf.

As Google employs advertisements in an extremely diverse variety of industries and sectors, no one firm is responsible for a large portion of revenue, with 5% being the largest (Google 10-Q, 2011). Vertical integration is nearly impossible for most all employed firms as to

develop a search engine is an incredibly capital intensive process, requiring large infrastructure and technical support. In addition Google dominates the search engine market share with over 60% within the United States (Eijk, 2009). Thus if a firm wishes to reach the most potential customers through its advertising, Google provides the greatest opportunity for that. Google has displayed management prowess by the navigation of this particular force, and maneuvered possible detractors into its favor and aligned them with firm goals. In addition Google is in strong competitive position within its industry concerning the power of buyers and suppliers.

III. Threat of Substitutes

There are two separate entities to consider when evaluating the power of this force, users and advertising firms. First analyzing user substitutes, a search engine embodies a very unique ability to harness an ever-expansive amount of information in one place for easier access. There are not many applications in the modern world that can perform this function without the use of the Internet. Possible substitutes that involve a much lesser degree of technology could be library access, telephone operator, or simply asking another person. While these all offer their own specific set of benefits, they are severely limited in their capabilities and expanse. As long as users have access to the Internet, using Google or a search engine is the best and most efficient way to accomplish their goals, leaving threat of substitutes low. Concerning the firms using Google to advertise there is a larger possibility of substitutes. Firms can utilize traditional advertising techniques such as print or television but these can easily get lost in the static and real affects are hard to judge. In addition these traditional mediums generally charge a premium price and are most more costly to a firms bottom line (Girard, 2009). As many firms transacting with Google are smaller Internet based entities paying premium advertising cost is not typically an option and can fail to reach their targeted market. Google's expansive and vast resources of

information technology and the possibilities to utilize by both users and firms go to weakening the threat of substitutes within their respective market.

IV. Threat of New Entrants

The search engine industry today is what most economists would consider an oligopoly, dominated by a few large firms. This structure has developed as such for a number of reasons, concerning barriers to entry and incumbent advantages. Barriers to entry within the search engine industry are immense. To create a successful engine millions of dollars in capital investment are required to build the technical infrastructure necessary to support such an expansive platform. In addition the research and development to develop a proper algorithm would be extremely costly and a lengthy process (Eijk, 2009). There are also strong network effects associated with the established and incumbent firms. The larger the regarding network grows the more content is contributed creating more benefits for users which attracts greater numbers. In that sense the more users involved create even greater opportunities for profit, thus a firm looking to advertise would want to reach the most potential customers. The one particular characteristic that may make this industry very attractive to possible entrants is the intense expenditures made in Internet advertising; in 2007 over 20 billion dollars were allotted to this cause (Eijk, 2009). This vast supply of potential earnable profits could be enough reason for a firm to undertake entry into the industry, but it would still be a daunting undertaking. These specific aspects of the industry other than the possible profits lead this particular force to be relatively weak with relation to Google and its industry.

V. Intensity of Rivalry

Within the established firms in the search engine industry there is the definite existence of rivalry among them. As described previously there is a substantial amount of money to be

made in online advertising, these potential revenues drive firms engage in substantial competition for sales. The driving force of this competition could be seen as the amount of users utilizing each individual search engine. As it is an advertising-based industry with profits arising from user interaction, the ambition to gain users plays a strong role in profits. Not all users will create revenue for the search engine as they do not always look into the advertisements related to their search. In that the established firms are striving to create the largest possible user base, logically the most potential profit creators place a firm in the best position to generate sales and thus a high concentration of revenues. Using a common indicator the Herfindahl index, which is derived from the sum of squares of each competitors market share, provides evidence of market power ("Horizontal merger guidelines," 2010). When applying the index to the current search engine industry standings, a value of 4,987 is equated. As 0 is a scenario of perfect competition and 10,000 a monopolistic environment, this displays qualities of both ("Horizontal merger guidelines," 2010). It displays that the major firms of this oligopoly hold substantial market power throughout the industry, but also that there is strong competition within it ("Horizontal merger guidelines," 2010). The industry is drawn away from price competition, as search engine content of the major competitors is free, thus shifting the focus in instituting to brand and value creation surrounding their products. This focus on differentiation instigates the rivalry among competitors, it forces them to develop their services with features and quality in mind. In analysis of Porter's five competitive forces within the search engine industry rivalry intensity shows the greatest strength and must be fully evaluated upon for superior performance, but not at the expense of the others.

Industry Structure

The Internet search engine industry is relatively new one, developing and growing substantially through technological development and user increase within the past decade. When Google officially entered the market in 2004 there were multiple competitors, none harnessing an overly dominant market share. As Google grew to fruition, two firms emerged as its direct profit competitors, Microsoft and Yahoo!, each whom displayed unique advantages and faults. Microsoft, whose market share was relatively small had the backing and resources of the tech giant, and Yahoo!, leading in search engine market share but lacking in quality results and usefulness (Scott 2008). The competition among the three firms have continued throughout the developing years and have instituted themselves as the major current entities comprising over 94% of all search use today (comScore, 2010). This three firm dominance has led the search engine industry to become an oligopoly by current economic standards. While the services provided are similar there is a variety of differentiation between the ending results (Pass & Lowes, 1994). The differentiation arises in several areas including advertising strategies and brand image, but becomes apparent in results provided by the competitors respective search algorithms. According to expansive study through Dogpile.com and Penn State University it was shown that 76% of the time first page search results were unique to each engine (dogpile, 2007). In addition, only 8.9% of results were shared between any two of the major competitors (dogpile, 2007). These statistics illustrate the vast differences in relevance and quality techniques used, essential to the industry structure. Another industry characteristic contributing to the oligopolistic formation, is the immense difficulty of entering the market (Pass & Lowes, 1994). The data infrastructure and technological development necessary of an efficient search algorithm is enough to discourage all but the most dedicated and resourceful entrants. This

oligopoly that is the search engine industry leads its competitors to avoid simple price competition, as due to the scale of involved firms price is easily matched and replicated. Firms instead compete and factors and functions surrounding their product, in this case the quality of results provided to the user and success of advertising to its respective provider (Pass & Lowes, 1994). This structure allows for relatively intense competition among the dominant players, but also long term profitability.

Upon examination and analysis of the search engine industry, it displays unique qualities and characteristics that comprise its structure. Users are essentially the profit drivers and must be a fundamental aspect of consideration. The true product involved is the advertising space and opportunities, but is only made possible through its users magnitude of users. Technological requirements, R&D, and employment drive cost within the industry, it becomes necessary to invest great capital in these aspects to create the features and functionality desired by users (Eijk, 2009). These characteristics of the services offered are what dictate prices, as favor and number of users grow prices charged can be dictated as such. Looking at the five forces that comprise this industry structure, established firms such as Google and Yahoo! are in strong positions to profit as they control much of the power. This control allows them to keep much of the value created through services, and in turn generate profits and performance. In its current construction the search engine industry allows for firms to successfully exist, and without drastic change will remain this way for the foreseeable future.

As previously stated Google's current primary two competitors within the search engine industry are Microsoft and Yahoo!. Until recently Google was forced to compete against each and their respective individual services provided. In 2010 Yahoo! sold the rights to its embedded search engine and accompanying advertising to Microsoft and its expanding service Bing (Frye,

2010). This merging of services changed the game; it laid the groundwork for a new competitive circumstance to be experienced by Google. It has to now not only compete with the two established brands, but one unified service. This collaboration had serious implications upon the industry structure, Bing and Yahoo!'s market share was essentially combined by providing advertisers and profit drivers access to both market segments boosting their combined share to 30% of the entire market (Frye, 2010). While this was slightly beneficial as Google only had to compete with one search service, considerations still had to be made concerning each individual brands and the now combined market force. Microsoft and its service Bing have begun to develop and diversify its array of services similar to that of Google, expanding to a wide variety of web-based programs (Microsoft, 10-Q, 2011). In addition to this Bing has a plethora of resources to utilize stemming from the established and deep-pocketed Microsoft. The other competing brand Yahoo! has a relatively different approach to its website and service. Yahoo! was established as a web portal through which a user could access news, entertainment, but also had an embedded search engine (Yahoo!, 2010). This formation attracted its own unique set of users and created a brand much different than the typical search engine operator. While the brands and companies remain different, the search engine and advertising provided are now the same. This collaboration of competitors has forced Google to battle against a competitor holding much larger market share, but with respect to the Herfindahl index, competition has decreased on an aggregate industry level (Pass & Lowes, 1994).

Competitive Advantage

Using the proper understanding of the search engine industry, it becomes possible to determine where Google has gained competitive advantage over its rivals. While not all competitive advantages can be sustained long term, Google has built several which are quite

difficult to replicate by competitive firms within the industry. First and foremost as a determining aspect of the search engine industry, Google's dominant market share creates a strong competitive advantage over its rivals. Their immense user volume of over 14 billion queries a month provides the best opportunity for advertisers to connect with the relevant consumer demand (comScore, 2010). This opportunity drives advertisers toward Google and allows a premium relative price to be charged for access to its user base. As Google holds dominant market share of over 60% this index gives backing to its ability to concentrate such high profits in return for its service (Google 10-Q, 2011). Although this market dominance is integral in their current success it should be noted that is typically not a sustainable competitive advantage. As the industry continues to grow and evolve new firms may enter or market share may equal out. This would in turn destroy this specific competitive advantage Google currently enjoys and force them to find a way to raise relative price elsewhere.

When considering their actual profit driving service their relative cost is quite insignificant for each action. Google has developed automated services, which examine and place the advertisements within their engine almost instantaneously, driving the cost of each transaction to a very low cost (Advertising Policies, 2012). The most powerful area of competitive advantage Google exerts throughout the industry is the quality of the services it presents. The programs they have developed in order to present quality results not only for their users but also customers have been a driving factor behind their market share. Users have flocked to Google for many reasons but a major contributor being the usefulness of their engine, and thus the usefulness to advertisers. This competitive advantage complied with the search engine industry structure has allowed them to strategically position themselves in the drive for superior performance.

Value Chain

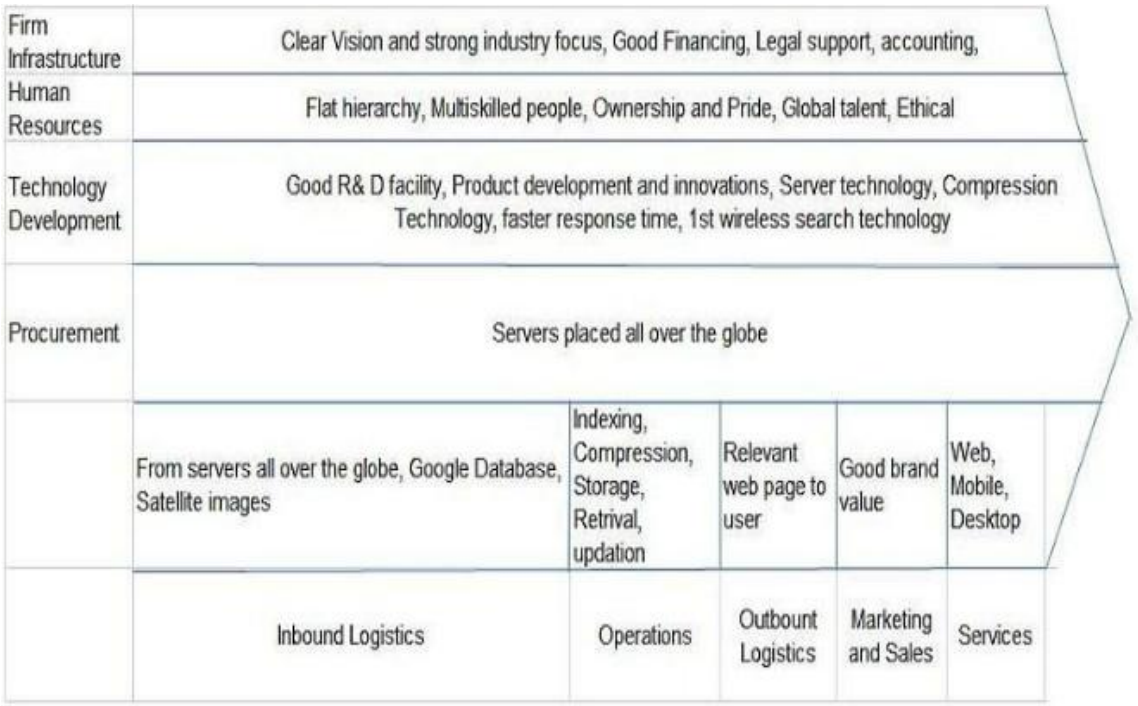


Fig 3: Google Value Chain (Scott, 2008) (Girard, 2009) (Battelle, 2005) (Google Inc. 2010)

All firms wishing to develop a proper and successful strategy for superior performance should strive to create an effective value chain. This presented value chain has been created to provide insight into Google's specific value chain. Using this technique of breaking down overall firm operations into individual segments allows for insight into the specific role each section of activities plays. In addition it provides a broad overview of what sectors of the firm are driving cost and which are driving price or value creation. Looking at Google's value chain it becomes apparent where these factors are being derived from. As Google's price scenario is created through a more intrinsic idea of the quality embodied in its service, it is more pertinent to use this specific chain to examine relevant cost generators. Utilizing this construction in combination with Google Inc. financial reports it becomes clear that its most significant cost driver is that of operations, which comprise over 57% of total costs (Google Inc. 2010). The

continual maintenance and development of its engine and associated services is a significant source of expense for Google as a firm. When looking at Google's support processes through an examination of financials, the greatest contributor is technological development, which is appropriate and aligned with its desire to further increase quality and value (Google Inc. 2010). This focus on operations and technological development by the firm displays not only the cost but also the price drivers. The implementation of specific activities becomes essential to the value created by Google for users and customers. The development and upkeep of these activities directly related to the services provided and the value embodied in such services. The focus on these activities displays Google drive for quality among its services, the source of its greatest competitive advantage.

Strategic Tests

I. Value Proposition

Residing within the search engine industry, Google has a very unique two-part value proposition serving as the foundation for its strategic approach. Originated with the goal to serve info-seeking users, with its expansion Google now serves two distinct groups, users and firms with advertising needs. Due to the expansive nature of the Internet and the plethora of content it encompasses, Google does not serve to a particular demographic or segment as there are opportunities to appease users and firms of all types. Google is not only attempting to connect users with information on subjects they seek but the most relevant and quality information (Google Inc. 2010). On the other side Google is attempting to provide advertising opportunities and connect firms with customers whose demand their goods or services meets in the most efficient and effective way (AdWords Help, 2012). Since Google's user services are free, users face no relative price concerning their use. Using a unique bidding strategy Google allows the

firms competing for space to propose how much they would pay for a single user-ad interaction (Advertising Policies, 2012). Google's unique value proposition sheds light on one of its core ideas, quality.

II. Tailored Value Chain

Having examined Google's overall value chain it becomes important to focus on specific activities and how Google performs them differently from rivals in order to sustain competitive advantage. These activities must also reinforce its overall goals of providing quality and relevant access to information and advertising opportunities (Google Inc. 2009). Under the comparison of corporate cultures within Google and competitors, the "intellectual playground," the Googleplex which headquarters the firm, is very distinguishable from that of Yahoo! (Olsen, 2005) Google differs by its laid back recreational approach in comparisons to Yahoo!'s flashy by the numbers establishment (Olsen, 2005). Until recently Google was on the forefront of internet service innovation, attacking all areas rather than focus on a few successful establishments. This focus on technological innovation derived into a slightly altered approach form competitors. Through financial examination it displays the different areas and business activities when each firm places significance. (Google Inc., 2010) (Yahoo!, 2010) The complex indexing behind Google's advertising services AdWords and AdSense Google is differentiated from competitors by the standards and qualifications used in selecting results (AdSense Help, 2012). Google has also chosen to adopt a management scheme much different from the bureaucracy most common through the corporate world, dispersing power more equally throughout the organization (Girard, 2009). In addition to all this Google also provides customized indexing and analytic data of a specific firms ad success or lack there of, offering a much more expansive service than competitors in order to examine empirical results (AdWords Help, 2012). All these activities

performed by Google are attempting to tailor their process to be what they see as the best and most importantly unique to ensure superior performance.

III. Trade-Offs

An integral aspect of strategy as Porter states, that a firm must make trade-offs it the essence of strategy, choice. Google is no exception to create and foster the uniqueness associated with their brand and value decisions are made on activities not to do. While Google is attempting to index and consolidate as many websites as possible into their engine, there are many times when pages are rejected from their queries (Webmaster). Using indexing and analytic techniques Google prevents and removes a wide variety of sites, including but not limited to those that are deceptive in nature, sites that are doorways to advertisements but disguised in another way, and also sites that attempt to manipulate the search algorithm to promote non-quality irrelevant subject matter (Webmaster Tools, 2012). When deciding upon the advertisements used, Google opted for minimalist ads with few words, rather than flashy intricate displays. This not only forces advertisers to be direct, but it dramatically reduce costs of sales. As the cost to place and maintain high resolution images and extravagant ads is much more expensive (Girard, 2009). Advertisements can also be removed from the Google sphere of influence as within their policies there is a set of guidelines that must be followed to allow inclusion in the engine (Advertising Policies, 2012). This could be viewed as a means of avoiding spam but it becomes a true trade-off when examined intuitively. Google could very well allow these sites and ads as they tend to be deceptive or in false nature, but could lead to strong revenues from clients. This is not the case, in order to provide quality content for users and cost effective advertising for customers Google chose to exclude these types on entities (Adword Help, 2012).

Trade-offs within Google's firm strategy extend in not only service activities but also aspects of structure. Google receives thousands of applications annually, some of the best and brightest minds in the technology fields, but in 2007 cut backs were necessitated on the hiring of these valuable firm assets (Carr, 2007). As growth continued, Google was hiring highly qualified personnel at an astonishing rate, but as financial statements were received, it became apparent profits were suffering accordingly. As a management decision Google was forced to slow hiring and thus lose potential company assets, which could aid in quality creation (Carr, 2007). Through uninformed examination an observer might claim that Google continually diversifies and offers a new different product than that of its search engine all the time, in essence making no choices on what not to do. Although that seems correct, in reality all these services provided support in its goal of connection users with information. Google adamantly abides to Porter's insistence on a firm must make trade-offs in order to reach superior performance.

IV. Fit

Porter insists for a succinct and sustainable strategy firms must focus upon not only their undertaken business activities, but in how they relate amongst one another. Reiterating Google's themes of putting users first, with a focus on quality and relevance many of their processes support this cause (Our Philosophy, 2012). Noted in the discussion of tailored value chain all of the activities used to promote quality among its services. This value of quality affects not only its services but also extends to employees and corporate culture. The confines of Google offices it is a very different place than the typical corporate environment, with a variety of recreational activities, wide open layout, and laid back environment, all serve to create what Google feels is a quality workplace for its employees (Scott, 2008). A time management rule which requires

developers and engineers to spend 20% of their time working on projects of their on creation, becomes another method of driving for quality work environment (Girard, 2009). Google does not stop at the work place; in 2009 it initiated a statistical data study, Project Oxygen, to define characteristics of a quality manager (Bryant, 2011). Utilizing its data analytics proficiency to assess Google managers and employees, in hopes to foster quality workers; exemplifies its unrelenting pursuit of quality across all organizational aspects (Bryant, 2011). Google has also developed their own in office intranet, MOMA, a high speed information sharing system, which directly mimics the business objectives of connecting users with pertinent information (Girard, 2009). Infrastructure is not forgotten in Google's use of quality among all facets, designing and constructing the data servers required promote quality through maximum efficiency (*Data Centers*, 2012) Google enacts these efforts in order to streamline the sharing process to facilitate efficiency and enable quality production (Girard, 2009).

All the policies and activities Google pursues drive towards quality, such at its search algorithm developed and proprietary advertising indexing and analytics. The ad model embodied by Google revolves around a significance rating and relevance success, which forces the ad providers to work with efforts toward quality (Girard, 2009). The price and bidding technique used allows the advertiser only to pay for perceived significance and the direct effects from service utilization. This is done to mitigate risk and uncertainty surrounding typical advertising and allow the price charged to contribute to significance and quality desired (Girard, 2009). Google's expansive use of analytic programs to build the relationship among its users customers employees and business activities in order to create a greater overall high quality service (AdSense Help, 2012). It becomes readily apparent on investigation that Google has operating

within the confines of Porter's theories on fit, not just in their consumer service but through their organization as a whole.

V. Continuity

Any industry or sector is affected by demand changes and cycles, and Google's industry is no different. According to Porter, this gains importance when a firm shows continuity through time in order to combat that. Since initial public offering Google's services have always been free to users, throughout the years many analyst' and economist' have criticized Google for that practice. Despite this backlash, Google has never wavered in its practices and refuses to charge its users for the access it provides, even through times of economic downturn (Girard, 2009). As Google has expanded and diversified rapidly as a company, but they have never moved away from the firm model they have described as "organizational chaos" (Girard, 2009, p.197). While many suggest that as Google grows to thousands of employees it is necessary to move to more rigid and top-down management method, Google continues to march to its own beat. Using a flat styled hierarchy that focuses more on collaboration and community, rather than managers dictating the work to be done, Google has continued to exhibit great success through this fashion (Girard, 2009). As for continuity of business activities and objectives Google continues to work towards producing higher quality more relevant results. In a recent announcement they alluded to a new factor in website quality analysis, dubbed the Semantic System (Efrati, 2012). This program will attempt to provide more data then the words within a site, but the context and true meaning of these words (Efrati, 2012). This embodies ideas of continuity in that the same problem they were looking to solve upon origination they are still working towards a better solution. Google as a firm has displayed great continuity through downturns and upswings to cement the ideals and values they hold so true.

Chapter 4: Discussion

Thus far this case study concerning Google Inc. and the application of Michael Porter's theories on competition and strategy has provided insight into the reality of its success. The analysis of Google's strategic position within the search engine industry and the activities it utilizes to reach its distinct value proposition provide the tools discern: whether they employ a distinct strategy, their strategy is integral to their success, and if Porter's theoretical framework is applicable in this technology-based, advertising-driven industry. Using the framework regarding industry structure, Porter's Five Competitive forces, it is clear that Google has adopted a unique strategic position to succeed. Stemming from the search engine industries unique composition, Google's position allows it to hold power over the five forces, which in turn allow it to create such substantial profits. Although Google is positioned to succeed the significant analysis arises when examining how they have accomplished that.

Once analysis moved in the strategic portion of Porter's framework it becomes immediately evident there are strong underlying themes behind Google directives and activities. Through accrued acknowledge and the executions of business activities, the emphasis on quality and users becomes readily apparent. Google has developed a clear and succinct strategy, which has been applied across all facets of their business. This strategy developed through actions and all services provided is one focused on the core principal of quality. While any firm can institute a strategy through its corporate process, it is only significant when that strategy has a direct relation to profits and superior performance. Under this consideration and with understanding of the analysis performed, it is undeniable that Google's strategy of user focus and quality are directly attributed to its financial success and performance. Utilizing an unrelenting pursuit of quality and motivation to meet and exceed user needs has fostered the dominant market share

held today. This ability to grow market share through strategic approach has resulted in unfounded success. The market domination held, creates the immense desire for advertisers, wishing to reach maximum exposure, to utilize high quality cost effective services to promote their firm and goods. This forges an indisputable link between Google's strategy and financial success, or profits. With this connection in mind, the relevance of Porter's theoretical framework can be called into question. As it is highly doubtful Page and Brin built their strategy through his work, the analysis performed makes it highly evident that they have strategically executed the business to success. Google's approach adheres to all Porter's qualifications of a good strategy that will lead to superior performance.

While Google's strategy abides by Porters foundations it could be seen as irrelevant if all competitors within the industry held the same plan. Examining the service and approaches of Bing and Yahoo! it becomes apparent this is not the case. Focusing upon the literature provided for advertisers considering the utilization of joint Microsoft/Yahoo! search service, the differences come to the forefront. There are claims of quality and effectiveness displayed throughout but they appear as more of an advertisement to attract advertisers rather than an informative discourse to facilitate success as done with Google's literature (*Advertising Solutions,* 2012). Google offers an expansive how-to concerning creating quality and profitable ads, accomplished through a multitude of FAQs and descriptions on the inner workings of the service. This is not to say Google's competitors do not provide insight, they do but the expansiveness is just not there, only an abundance of statistics that with proper understanding of the industry appear to be very misleading (*Search Advertising,* 2012) The information provided by Google genuinely attempts to create the highest quality and most relevant scenario for both all parties involved. As Google only profits in the event advertiser content is exposed to and

clicked-through by the user, it is essential that the ads are quality and invoke response from user. In addition when looking on how Google, Microsoft and Yahoo! generate profits there is a vast difference.

Microsoft has a plethora of services and products that have been creating billions in profits for many years; diversification in search engine technology has been relatively recent and only accounts for portion of expansive profits. Microsoft's revenue created from its Online Service Division (Bing's firm sector) is only 3.5% of total revenues earned (Microsoft, 2010). The diverse portfolio offered by Microsoft creates a much different strategy when compared to Google. Microsoft attempts to spread its grasp into all computer related functions and better connect them through the development of Bing, rather than be the focus of its work. Quality of results does not necessarily fall to the wayside, as it is necessary to attract advertisers but the user first mentality is not a core principle of strategy (Microsoft, 2010). Microsoft had an established reputation of success and brand loyalty in computer industries to build its search engine following off of. Compared to Google this is a very diverse approach; market entrance Google forced to build a service that had users in mind and meeting their needs first and foremost to gain ground within the market. While Microsoft continues to grow and develop Bing's capabilities it has been unable to make a real dent in the market dominance Google displays. As it is now Microsoft fails to provide a service or brand strong enough to draw Google's constituent of users away from the service they already utilize.

Yahoo! also operates under a different strategy and framework than that of industry leader Google Inc. While Yahoo! does generate a large portion of revenues from the advertising within its search engine, 50%, its pales in comparison to the 98% of revenues Google draws from advertising (Yahoo!, 2010). Yahoo! offers a variety of profit generators ranging from business

and product listings to transactions fee accrued through displays upon its websites (Yahoo! 2010). Due to troubling financial growth and success Yahoo! was forced to sell its search engine and related activity rights to Microsoft. This cemented its status as a web portal rather than search engine operator creating a strategy that differs greatly from Google's. Yahoo! has thus tailored its business activities to facilitating this function rather than the continued growth and development of its own search process (Yahoo!, 2010). This does not go to say Yahoo! has failed where Google succeeded but have chosen a different path and strategy, an idea which Porter is adamant can lead to success for more than one firm within an industry.

All aspects considered it becomes extremely difficult to refute that Google has utilized and implemented a strategy to navigate its competitive environment to incredible success. When debuting Google was forced to create a reason for users to be drawn to its services. This was done with an intense focus on quality that was not before seen in the search engine industry. Using this developing reputation of delivering quality results Google was able to expand its user-base by continually honing in this ability. In addition Google, instituted a user first mentality, which fell right in line with its reputation of quality and relevance. As continued expansion occurred it was and is in relentless in pursuit of quality for its following and users. Not only was Google's drive focused at the components of its market, but throughout the entirety of its operations. This profound work by its management can be as a direct proponent of its financial success and growth over the last decade. Despite competitors attempt to implement service development and collaboration in order gain ground and market share upon Google, the strategy implemented has made this a very difficult and daunting task. Simple replication of approach is just not feasible for its competitors as it has uniquely positioned and structured it self in a fashion which extends its strategy into all aspects of the business. Google's strategy of quality for its

users and customers has undoubtedly been developed and maintained through management actions and decisions, has lead to its current success and will continue to for the foreseeable future.

As such, it displays, at least within the context of this case analysis, that Porter's long established theories have been held true. Critics of the framework used for analysis might question the validity of this evidence, saying it is more so about the good idea Google had not the strategy they used to implement it. This can be easily disputed through the evidence provided, this was not an original idea and did not hold first mover advantage, Google as a firm was just the first to do it right. The findings of this study can be implemented to drive success in web and information based firms in the future. While the direct replication of a study is not an appropriate approach by Porter's standards, the core values they used to grow and succeed are what matters. Google is evidently aware of the competitive environment they reside in, but have not allowed this threat on profits to alter its implemented strategy. Yahoo! and Bing have generated small increases in the market share held, detracting slightly from Google's but strategy is unwavering. While the threat of profit loss due to competitor growth is a real issue and acknowledged by Google, it has not moved focus on beating these competitors out. The focus of Google's strategy has remained steadfast in its pursuit of quality, and thus creating unique value associated with its brand and services. Operating directly within Porter's broad overview of competition and the theory of "competing to be unique," Google is an excellent example of the theoretical frameworks provided. In seemingly contradictory fashion Google has competed in one industry aspect to be the best, it has made the choice to fight to be the best for its service users. This further spotlights and reiterates the fundamental ideals held of quality and users as the foundations for Google's management strategy. Considering all theory and empirical

evidence provided it becomes undeniable that Google has instituted a well-developed strategy and it is the essential factor of continued success.

Conclusion

The expanse of this case analysis has allowed for, and produced a detailed description of Google's strategy and regarding success in direct correlation with Porter's competitive and strategic framework. Although this evaluation provides interesting and relevant insight into Google and its highly profitable strategy, a realization much more meaningful and applicable is derived. All theories and facts considered, Google provides an excellent example of how a firm has executing a tailored strategy to financial success. While vastly informative and useful, the most significant realizations are made surrounding the ideas and reasoning behind the related management decisions. Google's proficiency in utilizing a Porter defined strategy, of quality and users, is a pertinent conclusion, but how management is able to apply a strategy throughout its complete organizational scope and create direct links to profitability, is the invaluable knowledge to be gained from analysis. The systemic thinking approach behind the management decisions required to successfully invoke a strategy across all business activities is the essential development achieved through the duration of this discourse. Recognizing the strategic implications attained through the Google analysis, future firms and managers can hopefully bolster success and foster superior performance. In conclusion, Google Inc.'s robust strategy of quality and user focus across all business operations and its regarding pervasive significance, as derived through Michael Porter's ideas, can provide future firms of all industries with the framework to understand the means of strategic navigation to success.

References

AdSense Help. *Google Help*. Retrieved March 11, 2012, from http://support.google.com/adsense/?hl=en

Advertising Policies Help - Overview . *Google Help*. Retrieved March 10, 2012, http://support.google.com/adwordspolicy/bin/static.py?hl=en&guide=1316546&page=guide.cs

AdWords Help. *Google Help*. Retrieved March 10, 2012, from http://support.google.com/adwords/?hl=en

Ankli, R. (1992). Michael Porter's Competitive Advantage and Business History. *Business and Economic History*, *21*. Retrieved March 6, 2012, from http://www.thebhc.org/publications/BEHprint/v021/p0228-p0236.pdf

Battelle, J. (2005). *The search: how Google and its rivals rewrote the rules of business and transformed our culture*. New York: Portfolio.

Bryant, A. (2011, March 12). Google's quest to build a better boss. *New York Times*. Retrieved from http://www.nytimes.com/2011/03/13/business/13hire.html?_r=4&pagewanted=1

Carr, N. (2007). The Google Enigma. *Strategy+Business*, *1*(49). Retrieved March 7, 2012, from http://www.strategy-business.com/media/file/sb49_07404.pdf

comScore. (2010, July 13). *June 2010 u.s. search engine rankings*. Retrieved from http://www.comscore.com/Press_Events/Press_Releases/2010/7/comScore_Releases_June_2010_U.S._Search_Engine_Ranking

dogpile. (2007). *Different engines, different results* . Informally published manuscript, Penn State University, State College, PA. , Available from InfoSpace. Retrieved from http://www.infospaceinc.com/files/Overlap-

DifferentEnginesDifferentResults.pdf

Efrati, A. (2012, March 15). Google gives search a refresh. *Wall Street Journal*. Retrieved March 15, 2012, from http://online.wsj.com/article/SB10001424052702304459804577281842851136290.html?mod=WSJ_hp_mostpop_read

Eijk, N. (2009) Search Engines: The new bottle neck for content access. *Institute for Informational Law*. Retrieved March 11, 2012, from www.ivir.nl/publications/vaneijk/telecommunication_markets.pdf

Frye, E. (2010, August 23). *Bing & yahoo alliance: Key facts*. Retrieved from http://www.walkupright.com/blog/bing-yahoo-alliance-key-facts/

Girard, B. (2009). *The Google way: how one company is revolutionizing management as we know it*. San Francisco: No Starch Press.

Google. (2012). *Data centers*. Retrieved from http://www.google.com/about/datacenters

Google Inc. (2010) *Annual Report.* Retrieved from investor.google.com

Google Inc. (30 September 2011). *Form 10-Q.* Available from investor.google.com

Haugstad, B. SINTEF Industrial Management, Technologies. (1999). *Strategy theory* (1502-4555). Retrieved from website: http://www.kunne.no/upload/Gamle publikasjoner/Nedtegnelser/Strategy Theory_N0299_Haugstad.pdf

Horwath, R. (2006). Evolution of business strategy. *Strategic Thinking Institute*. Retrieved March 4, 2012, from www.strategyskills.com/Articles/Documents/evolution.pdf

Magretta, J. (2012). *Understanding Michael Porter: the essential guide to competition and strategy*. Boston, Mass.: Harvard Business Review Press.

Microsoft. (2010). *Annual report.* Retrieved from

http://www.microsoft.com/msft/reports/ar10/index.html

Microsoft. (30 September 2011). *Form 10-Q.* Available from http://www.microsoft.com/investor/reports/fQ10/10Q_fr_dis.html

Monografias. (Photographer). (2011). *Value proposition*. [Web Graphic]. Retrieved from http://www.monografias.com/trabajos89/strategy-michael-porter/strategy-michael-porter.shtml

Olsen, S. (2005, June 20). *Google vs. yahoo:clash of culture*. Retrieved from http://www.cnet.com

Our Philosophy. *Google*. Retrieved March 11, 2012, from http://www.google.com/intl/en/about/company/tenthings.html

Porter, M. (1996). What is Strategy?. *Harvard Business Review*, *Nov-Dec*. Retrieved March 1, 2012, from http://www.ipocongress.ru/download/guide/article/what_is_strategy.pdf

Porter, M. (2008). Five Competitive Forces that Shape Strategy. *Havard Business Review*, *1*. Retrieved March 1, 2012, from http://hbr.org/2008/01/the-five-competitive-forces-that-shape-strategy/ar/1

Scott, V. A. (2008). *Google*. Westport, Conn.: Greenwood Press.

Shankland, S. (2009, April 1). *Google uncloaks once-secret server*. Retrieved from http://news.cnet.com/8301-1001_3-10209580-92.html

Monografias. (Photographer). (2011). *Value proposition*. [Web Graphic]. Retrieved from http://www.monografias.com/trabajos89/strategy-michael-porter/strategy-michael-porter.shtml

Pass, C., & Lowes, B. (1994). *Business and microeconomics*. New York: Routledge

Teece, D., Pisano, G., & Shuen, A. (1997). Dynamic Capabilities and Strategic Management. *Strategic Management Journal*, *18*(7), 509-533.

U.S. Department of Justice & Federal Trade Comission. (2010). *Horizontal merger guidelines*. Retrieved from website: http://www.justice.gov/atr/public/guidelines/hmg-2010.html

Webmaster Tools Help. *Google Help*. Retrieved March 10, 2012, from http://support.google.com/webmasters/?hl=en(

Yahoo!. (2012). *Advertising solutions*. Retrieved from http://marketinginfo.yahoo.com/contactForm/contact2011/.ashx?n=11&cc=USWBYASP&msc=2761

Yahoo!. (2010). *Annual report.* Retrieved from http://www.shareholder.com/visitors/dynamicdoc/document.cfm?documentid=2967&companyid=YHOO&page=1&pin=&language=EN&resizethree=yes&scale=100&zid=b85dd6ea

Yahoo!. (2012). *Search advertising*. Retrieved from http://advertising.yahoo.com/article/search-advertising.html

.docstoc. (Host). (2011). *Porter value chain template*. [Web Graphic]. Retrieved from http://www.docstoc.com/docs/9354561/Porter-Value-Chain-Template