# Staying Hungry, Staying Foolish: Academic Reflections on the Life and Career of Steve Jobs

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The 2011 death of Steve Jobs, Apple CEO and cofounder, generated a flood of articles in the popular press acknowledging his influence on the design and delivery of consumer products that changed the way multiple generations work and play. As one of the most visible, yet controversial CEOs in recent history, stories of his management style are likely to fuel a debate over his leadership effectiveness. It is expected that scholarly and academic articles will emerge in the next few years detailing the business lessons that can be learned from the way that Jobs ran Apple Computer, NeXT, Pixar, and his transformation of Apple in the 1990s.

Steve Jobs' personal story and business success reflect the American dream. The highs and lows of his career path embody the entrepreneurial spirit. From starting a business in his parents' garage to being the CEO of one of America's most highly valued companies, his story is the stuff of legends. His career included being fired and rehired by the company he founded, starting and selling several successful companies, and moving seamlessly between several industries and technologies. The purpose of this Special Issue is to offer academic reflections on the life and career of Steve Jobs and to initiate a scholarly discussion of research on entrepreneurial careers.

Few entrepreneurs have captured the world's attention as Steve Jobs did. His early career success, dramatic ouster from the company he built, and ultimate transformation of Apple into one of America's largest multibillion dollar companies encapsulates the American dream. The facts of his early life, including being given up at birth and being adopted by loving and supportive parents, provide us with a contemporary version of Horatio Alger's classic success stories. There is great interest in Jobs' life story with sales of Isaacson's biography reaching over 379,000 in its first week of publication.

Issacson's biography was Amazon's top selling book of 2011 despite being published in the 4th quarter of the year (Lovecraft, 2011).

There is also much interest in Jobs' career path because of his many accomplishments at a young age. His untimely death left questions unanswered about the products he might have invented, what he might have accomplished later in life, his influence on the companies he created and what the later stages of his entrepreneurial career might have looked like. The papers in this Special Issue provide academic reflections on the life and career of Steve Jobs. They are meant to initiate a scholarly discussion of entrepreneurial careers and to suggest new research directions that bridge the entrepreneurial and careers literatures. The papers in this Special Issue were presented in a symposium we organized at the 2012 Academy of Management annual meetings in Boston, MA. This symposium was selected by the Academy Program Chair to be designated a Showcase Symposium. Symposia are selected for this distinction if the topic is judged to cut across and appeal to several Academy divisions, and if the symposium has the potential to draw a large audience. Five papers are included in this Special Issue.

Hurley-Hanson, Giannantonio, and Sudek explore the career path of high-tech entrepreneurs exemplified by Steve Jobs. They explore the later stages of his career, starting with his return to Apple and his efforts to reconnect Apple to its core strength, innovation. Hurley-Hanson, Giannantonio, and Sudek argue that entrepreneurial careers do not fit traditional stage models of career development. They propose a model of entrepreneurial careers that describes career stages that are more appropriate to the career paths of high-tech entrepreneurs, introduce the concept of career phases, and discuss the role that age plays in entrepreneurial careers. Each of the papers included in this Special Issue examine one of the four career stages they propose.

Stephen Carroll explores *reconnection*, the first stage of the career model outlined by Hurley-Hanson, Giannantonio, and Sudek. Carroll argues that Steve Jobs was a persuasive leader who used numerous elements from the Arts to convince people of his vision to reconnect Apple to its primary purpose: making great products. Carroll details the techniques and tools of artists that Jobs incorporated into presentations to persuade and convince his followers of the obtainability of his vision. He likens Jobs' carefully crafted product launches (called Keynotes at Apple) to an actor performing on the stage.

Howard Yu explores *transformation*, the second stage in Hurley-Hanson, Giannantonio, and Sudek's model. Yu explores how Jobs transformed Apple by describing how his leadership style can be "decoded" into a series of replicable managerial practices that other organizations can emulate. More specifically, he explores what practices other companies can potentially adopt to achieve the same level of impact that Apple has created on the technological informal economy.

Julia Richardson and Mike Arthur examine the *reflection* stage of Steve Jobs' life and career. They focus on Steve Jobs' commencement address to the Stanford University graduating class of 2005. In this speech, Steve Jobs reflected on his experiences, his successes, and his failures in the hope of having an impact on the graduates' careers and lives. Richardson and Arthur explore the career lessons included in the speech. They connect each of his three stories, "connecting the dots," "love and loss," and "death" with a range of messages about effective career behavior. They use these career lessons to illustrate ideas about project-based careers, retrospective sense-making, and identity.

Jeff Sonnenfeld examines the *death* stage of Steve Jobs' life and career. He explores how Jobs' death affected Apple's customers, Apple's executive team, and Apple's profitability. He also describes the issues associated with having Jobs' identity be so intertwined with Apple and how this may be a factor in the decline of Apple shares. Sonnenfeld also describes Steve Jobs' role as a folk hero in our society. He shows the similarity of Jobs to other folk heroes and industrial leaders in the past. Sonnenfeld illustrates the issues that other firms have faced with their hero's farewell, and examines how companies have dealt with this loss both successfully and unsuccessfully. Finally, Sonnenfeld discusses the problems associated with trying to find an identical replacement for Steve Jobs, and the realization that these types of folk heroes and leaders cannot be cloned.

# ... And one more thing

We hope that this Special Issue on Steve Jobs' entrepreneurial career will initiate a scholarly discussion that will contribute to our understanding of high-tech entrepreneurial careers. As might be expected, Jobs had an opinion about this. In an April 20, 1995 Smithsonian Institution oral interview he stated, "I'm convinced that about half of what separates the successful entrepreneurs from the non-successful ones is pure perseverance." It's our job to find that other fifty percent.

Stay Hungry. Stay Foolish.

# High-Tech Entrepreneurial Careers: A Model of Stages, Phases, and Ages

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The meteoric rise, dramatic fall, and spectacular comeback associated with Steve Jobs' career path is an evocative example of the risks and rewards associated with following a high-tech entrepreneurial career. While research on entrepreneurs has primarily focused on their characteristics, there is limited research on the career paths of entrepreneurs in either the careers or the entrepreneurship literature. The purpose of this paper is to propose a new model of entrepreneurial careers that better reflects the realities of pursuing a career in the high-tech computer industry. The proposed model considers the role that stages, phases, and ages play in the careers of high-tech entrepreneurs.

The financial and business success of high-tech entrepreneurs Steve Jobs of Apple, Bill Gates of Microsoft, and Mark Zuckerberg of Facebook have captured the interest of academics, practitioners, and the general public. The products developed by their companies have changed the way businesses operate, how people spend their work and leisure time, and the ways they connect with each other. The companies these entrepreneurs have developed are some of the country's wealthiest, with Apple edging out Exxon for the highest valued company for much of 2012. While recent analytical doubts about the future of Apple have seen it drop out of the number one spot of financial top companies, Apple's long term viability is not in question (Myuhi, 2013).

These and other high profile computer and high-tech companies (e.g. Google) are viewed as highly desirable places to work by college graduates. Also capturing the public's interest is the unimaginable wealth these individuals have amassed, often at relatively young ages, compared to most successful entrepreneurs. While embodying the American dream, the success of these entrepreneurs has world wide appeal.

The high-tech industry is an important driver for innovation, jobs, and the U.S. economy. The Bay Area Council Economic Institute Report 2012 identified important job and economic factors. For instance, since 2004 high-tech jobs have outpaced the private sector by a ratio of three-to-one. It is estimated that the creation of one high-tech job creates 4.3 additional jobs in the local goods and services economy of the same region. However, this is not simply a temporary phenomenon. It is projected that employment growth will be at 13.3 percent from 2011 to 2020, while high-tech jobs are expected to increase 13.9 percent. High-tech companies are not only located in Silicon Valley, Los Angeles, and New York. There is at least one high-tech business in 98% of all counties in the United States. The average salary for high-tech jobs for 2011 was \$95,832. As seen by these statistics in the 2012 Report, the impact of high-tech industry jobs is significant in our economy.

There is limited research on the career paths of entrepreneurs in the high-tech industry. Traditional stage and linear models of careers do not appear to fit the career paths that Jobs, Gates, Zuckerberg and other high-tech entrepreneurs have followed. Thus, the purpose of this paper is to propose a new model of entrepreneurial careers that better reflects the realities of pursuing a career in the high-tech computer industry. Steve Jobs' career is examined through the components of the model presented in this paper.

# **Steve Jobs**

Steve Jobs' life story and career path offer management scholars a modern day case study in which to explore career theories and models. The interest in Steve Jobs' personal life and management style, along with the popularity of Apple's consumer electronic products, including the iMac, iPod, iPhone, and iPad, offers academics an engaging and relatable business case relevant to several disciplines. His successful return to Apple after a very public firing adds to the uniqueness of his story.

Steve Jobs' life and career combined to create a compelling story on many levels. There was the rags to riches story of an adopted child who achieved cult-like adoration from the customers who buy his products. There were spectacular failures along with undreamed successes. There were incredible self-disappointments including being ousted from a company he founded by a CEO and a board he chose. There were imaginative designs after multiple revisions. There were enemies created and friends alienated by a lack of social skills. There were huge risks and ultimatums given to corporate giants. There was brutal treatment of those he called friends. There was a hero who battled cancer and a genius whose work was cut short at the age of fifty-six. At the heart of the story, there was an entrepreneur.

Steve Jobs' career exemplifies the unique path that high-tech entrepreneurs may follow. This paper differentiates the high-tech entrepreneurial career path from other stage models of careers. His early career path can be followed from Apple, to NeXT, to

Pixar, and back to Apple. There are some aspects of entrepreneurial career theories that may apply to his early career decisions. However, it was after he was fired from Apple that his unique high-tech career path emerged and served as an illustration for the proposed model. Research on the mid-career paths of entrepreneurs may differ greatly from the early career paths of entrepreneurs just as it may for all careers. Research on entrepreneurs' long term career paths is lacking. In addition, research is lacking that differentiates the career path of entrepreneurs from standard career theories.

Although the career trajectory of Steve Jobs is utilized to illustrate the new model that is presented, Steve Jobs was not alone in exhibiting a unique high-tech entrepreneurial career path. Throughout the world there are examples of entrepreneurs who do not fit traditional academic careers models. Some include Richard Branson, Bill Gates, George Lucas, Mark Zuckerberg, and others. Silicon Valley offers numerous examples of high-tech entrepreneurs who have not followed traditional entrepreneurial paths. It is short sighted to not examine the career paths of these entrepreneurs. Their successes serve as inspiration for other would-be entrepreneurs, their stories offer business lessons for future generations of management practitioners, and their "unique" career paths are likely to become the norm for those who choose to work in high-tech companies. Careers researchers must begin to reformulate their assumptions about the careers of high-tech entrepreneurs.

#### Careers Research

Developmental theories of career development assume that "career development is a process that takes place over the life span" (Super, Savickas & Super, 1996, p. 28). Numerous psychologists and sociologists have suggested that individuals progress through distinct career stages, where each career stage is characterized by unique career concerns, psychological needs, and developmental tasks. Most of these developmental theories of career development also assign an expected age range to each stage in their career path model (Levinson, 1978; Hall, 1976). The key assumption underlying stage models of careers is that careers are linear, with individuals progressing in a step-by-step fashion through each career stage. These models do not explicitly recognize that individuals can cycle through the various stages several times in their careers. Entrepreneurial careers, which are often characterized by repeated failures and multiple start-ups, do not conform to traditional career stage models. Also problematic is the fact that some high-profile entrepreneurs are successfully running their own companies before the age of thirty. It is doubtful that these young millionaires and billionaires consider themselves to be in the early stages of their careers, given the success of their companies.

Donald Super in his model of careers (1980) emphasized the fact that careers develop over time. That is, while occupational decisions might otherwise be considered in relative isolation, Super's work suggested that such decisions must be considered in the context of the past and the future. In reviewing Jobs' career path, one can clearly trace the linkages between his occupational decisions. For example, the software developed at NeXT is utilized in Apple's current operating systems.

Although most models of career development have been based on the careers of white middle class males, some models have been developed for specific populations

including women (Fossen, 2012), entrepreneurs with and without dependents (DeMartino, Barbato & Jacques, 2006), MBA students (Nabi, Holden & Walmsley, 2010), minorities (DeCaro, DeCaro & Bowen-Thompson, 2010), transnationals (Portes, 2002), Cuban-Americans (Peterson, 2001), and for specific geographical regions such as Finland (Brannback & Carsrud, 2008). Few models exist which address the unique aspects of entrepreneurial careers. Plehn-Dujowich (2010) identified a model for serial entrepreneurs, entrepreneurs who repeatedly start new businesses across their careers, such as Richard Branson (Wright, Robbie & Ennew, 1997). There is no career model for what might be termed "one hit wonders," entrepreneurs who develop one successful company across their life span such as Sam Walton or Walt Disney, although some have investigated entrepreneurs with one hit item fad businesses (May, 2010).

# Entrepreneurship Research

The study of entrepreneurship is still relatively young. Yet in a short time, researchers have put forth and studied numerous theories of entrepreneurship. These theories seek to explain the process of entrepreneurship and attempt to predict who will become entrepreneurs or what conditions lead to entrepreneurship. Besides helping academics to understand the entrepreneurial process, these theories have the goal of assisting people who are or want to become entrepreneurs. However, there has been very little research on the career paths of entrepreneurs, nor the stages they may go through as their careers unfold.

One explanation for this is that there is still the problem of defining entrepreneurship. It has been defined as innovation (Schumpeter, 1958), initiating, maintaining, and developing a profit-oriented business (Cole, 1965), making significant decisions about changes which affect resources of a company (Sawyer, 1958), risk-bearing (Mill, 1848), ultimate formal authority within an organization (Weber, 2009), or making changes in strategy for an existing firm that alter the state or pattern of resources deployment (Ginsberg, 1988). Today there are many definitions of entrepreneurship accepted and each researcher is responsible for defining precisely what type of entrepreneur or entrepreneurial activity they are studying. There is still much discussion about whether entrepreneurship can take place in a corporate environment (Guth & Ginsberg, 1990) or whether street peddlers should be included as entrepreneurs. An inclusive definition which permits a broad exploration of entrepreneurship is "a process by which individuals - either on their own or inside organizations - pursue opportunities without regard to the resources they currently control" (Stevenson, Roberts & Grous-Beck, 1989, p. 23).

In the nineteenth century, an entrepreneur was any successful business man. Books were written about business tycoons such as Astor and Vanderbilt. These descriptions assumed entrepreneurs were owners. Early historians described the entrepreneur's motivations as material wealth, public recognition and esteem, and the welfare of society. His distinguishing qualifications were hard work and good luck (Livesay, 1982). The study of entrepreneurship entered the professional disciplines in the late 1920s. N.S.B. Gras and his colleagues at Harvard attempted to relate the business executive to the management of the firm and the socioeconomic environment

in which the firms operated. These Harvard academics produced a stream of case studies on business executives and firms (Livesay, 1982). Today, much of the study of entrepreneurs is still based on case studies. This has led to numerous criticisms of the history of entrepreneurial research. Historians may have been studying the careers of business tycoons instead of the formation of new companies (Vesey, 1982).

There is still much work to be done in the field of entrepreneurship. No one theory has been shown to explain the process completely. While research in the field is growing at a substantial rate, there are still some basic problems to be worked out in the grounding of entrepreneurial theory. There are two major streams of theory building in entrepreneurship: sociological and psychological. Sociological theories look at how the environment affects entrepreneurship. These studies began with McClelland's work on the need for achievement (1961). He felt that the high economic and social growth in some societies fostered entrepreneurship. In his view, this growth was owed to a large segment of these societies being high in need for achievement. Hagen's (1960) theory states that entrepreneurs are lower status groups trying to overcome their social inequality with economic venturing. He drew on historical cases from different countries. Recent historical research has found evidence that it was not the lower status groups in the country who were creating new businesses (Fleming, 1979; Kaser, 1978). Hagen's theory is now dismissed because of these inconsistent findings but perhaps his theory should not be dismissed so easily. Sociological theories have tried to come up with one theory of how environmental conditions affect all members of the population.

Psychological theories of entrepreneurs look at the distinguishing psychological characteristics entrepreneurs possess. These characteristics have been correlated with entrepreneurial performance in an attempt to predict who will become a successful entrepreneur. These psychological theories take a broad view of psychology. The three factors most often studied about entrepreneurs are the psychological influences on them, their personal characteristics, and the effects of previous experience on these individuals (Brockhaus, 1982).

While there is much research on the factors leading to an individual's decision to become an entrepreneur (Sing & DeNoble, 2003), there is less research on how they live out their entrepreneurial careers. Some research has focused on entrepreneurs' growth intentions (Cassar, 2007), but very little has examined the career stages of entrepreneurs as their careers evolve. Other research has explored how different variables at different stages of a person's life may influence them to become entrepreneurs (Singh & Verma, 2001). However, there is not much research on the influence of these variables on later career stages. Very few theories or models of mid-career stages exist and even fewer address the mid-careers of entrepreneurs.

Individuals may make the decision to become entrepreneurs at different stages of their lives, including retirement (Singh & DeNoble, 2003), right after school (Shaver & Scott, 1991), or after working for a while (Katz, 1994). The decision to become self-employed is affected by different factors at various stages of an individual's life course (Singh & Verma, 2001). Another important factor to consider is the co-evolution of the industry the individual works in (Jones, 2001). For example, Steve Jobs' career path cannot be examined without considering the evolution of the personal and home computer industry.

This brief review of current themes in entrepreneurship research reveals the need for theoretical and empirical work that examines the entrepreneurial careers of individuals working in the computer and other high-tech industries. The next section of the paper describes a proposed model of entrepreneurial careers. Relevant examples are drawn from Steve Jobs' career at Apple, NeXT, Pixar, and his return to Apple.

# A New Model of Entrepreneurial Careers

The purpose of this paper is to propose a new model of entrepreneurial careers that reflects the realities of pursuing a career in the high-tech computer industry. The career path of Steve Jobs is used to illustrate the entrepreneurial activities that comprise the stages, phases, and ages components of the proposed model. It is not the purpose of this paper to explore the reasons why Steve Jobs may have become an entrepreneur (Isaacson, 2011). As perhaps the world's most widely recognized CEO, Steve Jobs exemplifies entrepreneurs operating in high-tech industries. This paper describes a proposed model of entrepreneurial careers and illustrates the components of the model by examining Jobs' career path.

A model of high-tech entrepreneurial career development is relevant to and necessary for understanding today's fast paced technological environment. It is hoped that this model will serve to connect career theories and entrepreneurial theories. The model draws on historical career theory by utilizing developmental stages. However, these stages are conceptualized to reflect the stages that entrepreneurs experience. The model includes the concept of career phases to incorporate the fact that entrepreneurs may develop several products and companies across their careers. Finally, recognizing that entrepreneurs can start companies at many points in their lives, age is included as a component in the model.

As a high-tech entrepreneur, Steve Jobs' career trajectory illustrates the components of the model of entrepreneurial careers that is presented in this paper. Jobs' early career success, his ouster from the company he created, his work at NeXT and Pixar, and his ultimate return to Apple, offer management scholars a contemporary version of the Horatio Alger success stories. Studies on his successes and failures are likely to continue for years after his death. Steve Jobs was a very successful entrepreneur. His startups of Apple, NeXT, and Pixar created millions of dollars for him and his stockholders. His return to Apple in the 1990s ushered in a string of highly profitable consumer electronic products and dramatically increased Apple's market value.

There are three components in the proposed model of entrepreneurial careers. The components are career stages, career phases, and career ages. The first component of the model is career stages. Similar to other stage models of careers, entrepreneurial careers unfold across a series of stages. The model is similar to developmental models of career stages. However, unlike traditional career models which have linear progression, the proposed model recognizes that entrepreneurs may start up different businesses which results in them cycling through the stages multiple times. There are four stages in the proposed model. The first stage is reconnection. The second stage is transition. The third stage is reflection, and the fourth stage is death. As very little research has linked career theories to entrepreneurial careers (Katz, 1994), the proposed model attempts

to adapt classic career concepts such as career stages to better reflect the experiences of high-tech entrepreneurs.

The second component of the model is career phases. Since the primary focus of most entrepreneurs is on starting and building companies, the model needs to reflect the idea that entrepreneurial careers can be divided into identifiable career phases. Each career phase is usually associated with the specific company that the entrepreneur is focused on in that part of their life span. Entrepreneurs may operate in more than one phase at a time, but there is usually one primary company that is the focus of the entrepreneur's time, money, and effort in each phase.

The third component of the model is career ages. Many well-known career and developmental stage models such as Super (1980) and Levinson (1978) link the stages of their models to specific chronological ages. Some researchers have questioned whether specific ages should be linked to career stages (Leonard, Mathews & Bowes, 1987). Previous research on entrepreneurship illustrated that entrepreneurial careers can happen at many different ages (Katz, 1994; Shaver & Scott, 1991; Singh & DeNoble, 2003) but also found most entrepreneurs to be over the age of 40 (Kauffman, 2009; Wolverson, 2013). With the success of relatively young entrepreneurs such as Jobs and Zuckerberg, the model needed to recognize that entrepreneurial activity may occur before the entrepreneur formally enters the workforce and that entrepreneurial success may be achieved in what used to be considered the early career stages. It is recognized that age is an important component of entrepreneurial careers, however, it is argued that linearly assigning age ranges to career stages, as in previous stage models of careers, may not accurately capture the experiences of high-tech entrepreneurs. The next section of the paper utilizes the career path of Steve Jobs to illustrate each component of the model.

# Applying the Model

Applying the model to Steve Jobs' career path, the following career stages are illustrated. The first stage of his unique career path is Reconnection. In 1985 Jobs was forced out of the firm he created. He returned to Apple in 1997 when the company purchased NeXT, the computer firm he started after his ouster from Apple. However, the Apple he returned to was a dying enterprise. Fourteen years later, at the time of his death, it had become the most valuable company in the United States. Jobs reconnected with his old firm and reminded the company what was important about Apple. Jobs reconnected Apple to its true purpose – innovation – to transform its organizational image. Jobs used Apple's organizational identity to build the company into one of the top firms in the country and he created a new purpose for the organization.

The next stage in the model is the Transformation stage. Key to Jobs' success at Apple was his transformation of Apple from a computer company to a mobile device company. Jobs introduced the iPad in a January 2010 Keynote. During that Keynote, Jobs announced that Apple was a mobile devices company (Circle ID Reporter, 2010). This shift in strategy and redefinition of the company's mission was a dramatic transformation for a company that had launched the personal and home computer industry.

Jobs transformed additional companies, as well as entire industries. He transformed

Pixar from a computer division of Lucasfilm into an award-winning computer animation film studio. He transformed the way that music was purchased, stored, and listened to through the development of iTunes and the iPod. He transformed software development and distribution with the creation of the App Store, creating a cottage industry for thousands of app developers, and launching another generation of high-tech entrepreneurs.

As he grew older and was diagnosed with cancer, Jobs began the Reflection stage of his career. He began to speak to the media about his career and personal life. He chose to speak at graduations and other venues where he hoped to have an impact on people's lives and careers. He agreed to have a biography written about him (Issacon, 2011). He opened up about career failures as well as successes in the hope of imparting wisdom that would help people to learn from his successes and his failures.

In the reflection stage, Jobs appeared to consider his generativity needs (Erikson, 1963). In his personal life he spent private time with his wife and children, as well as his friends and colleagues. Jobs prepared Tim Cook for the day when he would not be able to run Apple because of his health. He worked very closely with Apple's board to prepare the company for life at Apple after he was gone. Steve Jobs busied himself with making sure the company would survive without him. He focused on choosing his successor and setting up the next products that Apple would introduce to the world. The three stories he told in his 2005 Stanford University commencement address were reflections on his life and legacy and lessons learned along the way.

Companies with strong entrepreneurial founders have to consider the impact that the eventual death of their company's founder will have on the long term viability of their firm. Therefore, the fourth stage of the model is Death. Steve Jobs faced this stage by resigning from his duties as CEO of Apple and preparing for his death. He died on October 6, 2011 at the age of 56. His death sparked very unique public reactions throughout the world. Thousands of people outside of his immediate circle followed his journey through this stage. In the days following Jobs' passing, reflections on his legacy were noted by the worldwide media (Moses, 2011; Hughes, 2011). Bloomberg Business Week devoted an entire issue to him, something they had never done in their publishing history (Bloomberg Business Week, 2011). Apple users around the world felt the need to note the passing of Steve Jobs and be involved with this phase. Apple stores allowed customers and visitors to place Post-it notes around the store sharing their feelings on the loss of Steve Jobs. People were able to use Apple technology to create visual images to send around the world to mourn with other Apple customers and fans of Steve Jobs.

The death phase is a rarely studied phase in career theories. However, Bell and Taylor (2012) studied this phase of Steve Job's career by doing a semiotic analysis of photographic images and emails sent to Apple and other corporate websites after the death of Steve Jobs. Visual data such as this may provide an important way for stories about the life of an organization and its founder to be remembered. Visual data is an additional way for individuals to communicate messages about their leader's death and the loss their employees may feel (Bell, 2012). Continuous visual images may also illustrate the importance of the dead in the ongoing life of the organization and show how the organization's members seek to maintain a continuing bond with the

dead (Bell & Taylor, 2011). Apple fans were in so much disbelief about his dying that they actually thought he would make a surprise appearance and launch Apple's latest product at a shareholder meeting two days before he died. On the one year anniversary of his death, visitors to the Apple website were presented with a single picture of Steve Jobs followed by a voice over video by Tim Cook. For several days it was not possible to access Apple's website without seeing this visual image of a company mourning the loss of their founder and paying respect to him.

Another issue to consider in the death stage of entrepreneurial careers is the reaction of the financial markets to the death of the founding entrepreneur. Because of his inextricable relationship with Apple, questions were rampant about whether the death of its founder would also result in the death of his company (Moses, 2011). Entrepreneurial careers are unique in that the impact of losing the company's founder may be keenly felt and result in questions about the long term viability of their firm. There have been product launches since the death of Steve Jobs. Although most have been highly anticipated and have generated huge sales numbers, Apple has dropped from its top spot as the world's biggest financial corporation (Popper, 2013). Investors are wary of Jobs' successor and whether he will be able to maintain the leadership of Steve Jobs. Steve Jobs' followers believed he was changing their lives with each new project. Cook has not yet enjoyed the cult-like following that Jobs engendered. Competitors have cut greatly into Apple's market share and profits (USA Today Money, 2013). Enormous law suits have bit into the cult-like status of Apple by revealing many details of the innovation of Apple products that Apple would rather not be made public. These lawsuits are also causing Tim Cook to focus on many other issues besides generating innovative new products for Apple (Cohan, 2013). For the first time, Apple profits and stock prices have fallen. Although in reality this may have nothing to do with the death of Steve Job's, many will attribute the financial decline to Jobs' death (Burrows, 2011). This aspect of the death stage of entrepreneurs is likely to be studied for many years.

A second component of the proposed model is career phases. It was important to include a variable that explicitly dealt with the reality that entrepreneurs may be involved with several products, businesses, and/or industries across their career spans. In examining Steve Jobs' career path, four distinct phases may be identified. Phase one occurred with the founding of Apple Computer. After building the first personal computer in his parents' garage, Jobs' focus was on building the Apple 1 and Apple 2 computers, building Apple Computer (the company), and taking the company public. Other key events in phase one include the development of the Macintosh, the hiring of John Sculley, and the eventual firing of Steve Jobs from Apple.

Phase two occurred at NeXT, the computer company that Jobs started after his ouster from Apple. Using technology developed for the Lisa computer, Jobs and his team developed a high-end, costly computer aimed at the scientific and academic community. While the computer was not a commercial success, its software found wide spread application. Steve Jobs ultimately sold NeXT to Apple. The third phase in Jobs' career path phase occurred at Pixar. Jobs transformed a computer division of Lucasfilms into an award winning computer animation film studio. Pixar's first release was Toy Story which was both a commercial and critical success. Several other successful films were produced by Pixar and Jobs eventually sold the studio to

Disney. During Jobs' Pixar phase he was able to fully integrate his love of artistry and technology (Isaacson, 2011).

The fourth phase of Jobs' career occurred at Apple. This phase encompassed his return to Apple in the mid-1990s until his death in 2011. During this phase Jobs transformed Apple from a computer company into a mobile devices company. There were numerous highly successful product launches including the iMac, the iPod, the iPhone, and the iPad. This phase also saw the creation of iTunes, the App Store, and Apple retail stores. In examining each of these phases, it can be seen that part of Jobs' genius was his ability to see the strategic linkages between each phase of his career. Technology developed for one computer became the platform for other high-tech products. It is also evident that while each of these phases of his career were distinct, there were strategic linkages between the businesses he focused on in each phase.

The final component of the model that Jobs' career path illustrates is age. Career age has interesting implications for both image norms (Giannantonio & Hurley-Hanson, 2006) and age norms (Lawrence, 1988). Entrepreneurship may intersect with age and image norms as people assess whether their occupation is age appropriate. Perceptions about the importance of physical attractiveness characteristics, including age, in certain occupations and organizations reflect both occupational and organizational stereotypes. These image stereotypes are exhibited in image norms (Giannantonio & Hurley-Hanson, 2006). An image norm is the belief that people must possess a certain degree of physical attractiveness in order to work in certain occupations, industries, and/or companies. Steve Jobs' image in his twenties did not fit the image norm individuals and organizations held at that time of people who started their own companies or who worked in the computer industry. He did not look like a serious business person who had started his own company and become a millionaire before the age of thirty. Jobs did eventually create his own unique image consisting of a plain black turtleneck and a pair of faded blue jeans (Issacson, 2011). Jobs was an excellent example of an image buster: a person who is so skilled and successful at their work that they are able to publicly and professionally present themselves with no concern for societal expectations regarding their appearance (Giannantonio & Hurley-Hanson, 2006).

Jobs was a millionaire in his twenties; he was fired from the company he founded at 30; and he passed away at the age of fifty six. In his thirty year career he started and sold numerous companies. Consistent with the model presented in this paper, Jobs' entrepreneurial activities occurred at several ages. Age norms are defined as "widely shared judgments of the standard or typical age of a person holding a role or status" (Lawrence, 1988, p 310). In organizations, age norms may accurately reflect how the organizations operate, but in many organizations they have been found to be inaccurate perceptions of the age distributions in their organizations (Lawrence, 1996). While research has found that most companies are founded by individuals older than Steve Jobs, he broke age norms by starting his first company in his twenties (Wolverson, 2013). Steve Jobs and many others that have followed in his footsteps, such as Mark Zuckerberg, suggest that age norms for entrepreneurs are shifting, if not radically changing.

### Conclusion

The purpose of this paper was to present a new model of entrepreneurial careers and to illustrate the components of the model using Steve Jobs' career path. Future research should examine the careers paths of other high-tech entrepreneurs to validate the stages, phases, and ages components of the model. Steve Jobs was a charismatic entrepreneur whose business successes held worldwide interest. His career path was highly visible. Future research on the career paths of other high-tech entrepreneurs will determine if his career path was highly unique. The rate of change and innovation in the high-tech industry demands an equally innovative approach to the study of entrepreneurial careers.

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# Steve Jobs as an Artist

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Throughout his significant career at Apple, NeXT, and Pixar, Steve Jobs demonstrated great persuasive skills in relating to a wide variety of audiences. In doing this, he demonstrated his use of principles common to the performing and visual arts. As such, he represents a significant role model for those advocating a greater use of the arts in managing organizations of all types. He demonstrated that managers and entrepreneurs like himself might greatly benefit from a study of the arts in the classroom as well as exposure to the work of significant artists.

#### The Persuasive Leader

It has been argued that innovative business strategies were the key to business success, but great strategies were of no value unless they were successfully implemented and that persuasive skills were an important element in the process of implementation (Carroll, 1998). This idea was presented in a chapter of a book entitled Managing Strategy Implementation (Flood et al., 1998). In a later book entitled The Persuasive Leader: Lessons from the Arts (Carroll & Flood, 2010), it was argued that persuasive skills must be learned from the arts, especially the performing arts. In this book, many examples of persuasive leaders from biographies, literature, and films were presented along with descriptions of their behaviors. It was argued here and in a later paper that all of these leaders were following principles of the performing arts to attract audiences to their messages. An analysis of persuasive leaders revealed that they used voice techniques, body movements, costumes, scenery, music, and other approaches common to theatre, film, opera, and even ballet to attract audiences to their visions for the future of their organizations. In teaching a course on Persuasive Leadership developed from this book, film clips of persuasive leaders from different fields were used to illustrate such artistic principles.

One film clip used in the Persuasive Leadership course was that of Steve Jobs discussing with employees his vision and strategic plans for NeXT, his second company. This meeting was originally shown in a 1986 PBS program on entrepreneurs. In this film clip, Steve Jobs used various dramatic voice and body language techniques in addition to powerful words and stories to excite his audience and persuade them to buy into his vision. His effectiveness at doing this was illustrated by the fact that

business leader Ross Perot called Steve Jobs and offered him an investment of some twenty million dollars after the airing of the program. Since then, many other film clips of Steve Jobs making presentations became available for viewing online. These included his 2005 commencement address at Stanford University, a 1998 presentation at a MacWorld conference in New York City, a presentation he made at the opening of a new Apple retail store, and even his first public presentation in 2005 when he introduced the Apple computer to the general public.

# Steve Jobs as a Performing Artist

In 1984, Steve Jobs made his first presentation introducing the Apple computer to the general public. Jobs slowly walked on stage with a cloth bag. He was wearing a suit and a bow tie unlike his later signature costume of jeans and a turtleneck shirt. He then dramatically opened the bag and placed the new Apple computer on a stand on the stage. He inserted a disc into the computer and the computer's capability to present beautiful images and its elaborate type face possibilities was revealed. He even presented an image of himself thinking on the screen. During this time, the theme music from Chariots of Fire was being played (other companies also have used this particular piece of music to create a certain emotional tone in an audience). He had the computer speak to the audience in a mock machine voice. The voice started with the statement, "I'm sure glad to get out of the bag." In his 2005 Stanford University commencement address, Jobs told three very dramatic stories of his own life and the lessons he learned from these stories that would also apply to the young people in the audience. The stories were told with dramatic flair and incorporated Aristotle's principles of persuasion through appeal to certain targeted emotions, the use of logic, and the creation of credibility for the speaker. In his other filmed presentations, Jobs appeared in his signature turtleneck and jeans, used dramatic images, and spoke very effectively with a specific choice of words, stories, good timing, dramatic emphasis, and poetic elements.

# Steve Jobs as a Choreographer

Choreographers create memorable dance performances with a particular goal in mind and by following a certain process to achieve that goal. The goal is to achieve an engaging aesthetic experience in an audience. To achieve this goal they must create harmony among various elements such as the music, the dance movements, the costumes, the scenery, and the lighting. In such matters, choreographers may also utilize various other artistic professionals such as lighting experts or costume designers. Choreographers usually observe hundreds of previous dance performances in order to see what was done previously and what might be possible to do given the right dancers. They carefully choose their dancers considering their vision of an actual future performance. They rehearse frequently before the actual performance making incremental changes depending on what works aesthetically and after determining what their dancers are actually capable of. Those choreographers who are truly excellent also have the ability to motivate their performers to constantly strive to do

their best and emphasize the concept of the company or team. In a similar manner, Steve Jobs' performances were carefully choreographed and staged. He planned his presentations in great detail. He considered the props, the steps, the words, and other elements of his performances.

Like any good choreographer, Jobs understood the importance of the dancers; he carefully selected his dancers. All of the key talent at Apple were selected personally by him. He allowed them to make mistakes and he worked to help them improve their performance. He communicated his vision of the future and constantly reminded them of the importance and relevance of what they were doing. He stressed the importance of teamwork and helping each other to perform better. He was a masterful choreographer.

# Steve Jobs as a Visual Artist

In addition to the performing arts, creative human visual artists have existed since the beginning of recorded time in the fine arts and crafts. Visual artists are distinctive in their ability to notice things in the world that are overlooked by most people and to communicate their insights effectively following aesthetic principles. There is a vast literature on aesthetics and the aesthetic response, as well as numerous biographies and autobiographies of artists across time periods. One famous book describing world famous artists was *Vasari's The Lives of Artists* written in the 1600s. This literature showed the truth of the statement that the most important skill of the artist lies in the eye rather than the hand. Jobs, on a visit to a Xerox research center in his younger years, saw future product possibilities in some early computer developments which most others failed to see, even those within Xerox itself. The computer mouse and other innovations came about in this way. He kept close track of the innovations occurring in the computer field, constantly meeting and discussing new ideas with knowledgeable individuals in this field just as all great artists do. He exhibited these skills repeatedly in his later years as well.

Very skilled artists also have great patience and a willingness and inclination to seek perfection by numerous re-analyses and incremental changes. Skilled artists are also willing to destroy their own creations for failing to live up to their standards or vision. Descriptions of the product design processes followed by Jobs often indicate that he was very much in this artistic tradition, continuing to seek perfection and possessing higher standards than his colleagues and contemporaries. Artists also tend to be individual thinkers quite resistant to attempts to make them conform to the expectations of others. Here again the descriptions of Jobs by those who have observed him support these characteristics. Jobs noticed this characteristic in the lives of historical artists described to him in lectures and his own reading and made this a part of his self-identity.

# Steve Jobs as an Experimenter

Well-known artists have also been known for their experimental approaches. Picasso moved through various periods of composition throughout his life on an experimental basis. Monet once did four paintings of a person with the wind blowing

on the figure from four different directions in order to identify the optimum aesthetic effect. Fine artists dissatisfied with a particular surface have experimented with adding sand to the paint or changing the surface of the canvas by bending it or folding it in different ways. Great artists are quite willing to abandon ideas that do not work out. Personal observation of the artists can provide support for this idea also. Steve Jobs was also an experimenter in the sense that he often tested different product configurations and production processes in his efforts to maximize both performance and aesthetic outcomes. He abandoned many design products that did not prove satisfactory in an aesthetic and a performance sense. Jobs' biographer (Issacson, 2011) provided many descriptions of him changing product design elements until they met his expectations.

# Steve Jobs as a Calligrapher

The favorite college course for Steve Jobs was a course in calligraphy. This course at Reed College was taught by a famous professor who was very well-known as a master of the subject and art form. Calligraphy is a term derived from the Greek words for "beautiful writing." It involves lettering with a brush or broad tip instrument most often created by the calligrapher. Calligraphy styles vary with geography. There are distinctive Western, Asian, and Islamic forms of calligraphy. In China, in the past, calligraphy was considered a higher form of artistic expression than was painting. There has been empirical research on the arousal power of certain computer generated calligraphy images. For example, in one study, a comparison of alternative forms showed that the one with the intermediate level of complexity resulted in the most stimulation (Smets, 1973).

Calligraphy combines visual aesthetics with the aesthetics of words and language represented. There can be a harmony of several of the arts in calligraphy, as Jobs discovered when he studied it. Also, the teacher in the course taken by Jobs frequently discussed the works of famous artists such as Picasso and Michelangelo, as well as philosophers such as Aristotle (Isaacson, 2011). Jobs was exposed to an overall view of the arts and humanities in this one course of study which certainly contributed to his artistic sensitivity and appreciation throughout his life. Beautiful calligraphy can be very arresting and aesthetically appealing at first glance. Its curves, shapes, and variations in texture and blackness and emphasis on stark simplicity and lack of clutter can be observed in the design and appearance of the various famous technological products associated with Jobs. Jobs himself said in his 2005 Stanford University commencement address that his exposure to the art of calligraphy significantly influenced the quality of the output of the Macintosh computer and all subsequent computers. His exposure to calligraphy and the lectures relating this to the other arts likely contributed to his creative design capabilities at later stages in his life. Also, just being exposed to Asian calligraphy which is less familiar to Westerners given its appearance and having to read it from right to left is likely to create cognitive effects in the brain which widen one's artistic perspectives and modes of evaluating new ideas, concepts, and developments. It can possibly create a higher openness to the perceiver as well.

# Steve Jobs as a Story Teller

Good persuaders use stories effectively since stories have been the way most human beings have learned and been persuaded since the beginning of time. Persuasive stories often account for what has previously transpired in the history of an individual, group, organization, or even a nation. It is a communication of experience which is of interest to an audience looking for guides to action to achieve certain goals or to avoid certain undesirable outcomes.

The experiences of Jobs at Pixar, a computer animation company which turned out to be a great success, are not as well known to the general public. Jobs learned about films as an artistic medium through this experience. He came to appreciate the importance of great stories rather than just technical innovations for economic success in this industry. Many films incorporated the arts that Jobs was familiar with such as photography, music, stories, and the various other visual arts.

Personal stories can be memorable or the opposite, depending on their characteristics and how they are told. Thousands of words have been written and spoken on how to make the delivery of words or stories more effective orally or in writing. The stories should not be too long, they should be relevant to the audience's concerns and interests, they should be presented with passion, they should describe some conflict, and they should explain how the conflict was or could be resolved. Stories presented as drama have their own rules for success. Oral presentations of all types tend to be far more effective when they follow principles of dramatic technique dating back to the writings of Aristotle. Certainly Jobs exhibited many of these principles in his many presentations both inside his company as well as when speaking to outside audiences.

The storytelling abilities of Steve Jobs were shown in many of his presentations which were filmed over the years and are now available online and were visible in his commencement speech at Stanford University. In the three short stories he told about himself and his life he followed the principles of effective story telling. He kept the stories short, told multiple stories, discussed issues of great interest to students at that stage in life, and he focused on his personal experiences and perceptions. In addition, he included dramatic examples in the stories.

Stories have important functions other than being entertaining. The success narratives as told by Jobs and countless others over the centuries have the function of learning what it is possible to do or achieve in life if certain principles or ways of thinking are utilized. They are also motivating in that they demonstrate what is possible for humans to achieve. Stories on organizational histories as Jobs frequently gave to others in his company gave the recipient a sense of organizational identity, pride, and a sense of life's meaning. Jobs and other such storytellers dealing with history and personal stories are accomplishing what most humans desire to do, which is to leave a favorable legacy.

### Steve Jobs as a Member of Creative Networks

Artists are very often active members of social networks. A social network has been defined as a little world composed of individuals who have something in common, such as interests, values, capabilities, etc. Individuals like to associate with others similar to themselves and who provide each other with benefits such as knowledge, psychological support, help, etc. Biographies of artists have described these activities and associations in some detail. Steve Jobs sought out the company of well known entrepreneurs like himself such as Gates and Perot and various engineers and artists. He wanted to bounce ideas off of people he respected and identified with. The same kinds of behaviors can be seen throughout the history of art. Artists seek out other artists like themselves for evaluation and suggestions. This can even be seen among quilt makers and knitters in neighborhood groups.

#### Artistic Influences and Role Models

It would seem that Steve Jobs was exposed to the arts as most people have been. He was exposed to music of all kinds. He liked Mozart and The Beatles even as a young man. At Reed College he completed a demanding course in calligraphy which is a rarified artistic field which has many aesthetic aspects highly relevant to modern electronic product design. Calligraphy had obvious influences on the fonts and typefaces of the products designed by Jobs in concert with his chief designer Jonathan "Jony" Ive. Ive subscribed to certain ancient design principles revolving around the idea that less was more and simplicity and harmony created engaging aesthetic properties. In the performing arts Jobs was familiar with important figures such as the opera singer Maria Callas. He even incorporated images of some of them in his products. Steve Jobs was also a serious student of photography. He collected photographic images and studied them carefully according to his biographer Isaacson (2011). He possessed many cameras over the years and was greatly skilled in their use. He was familiar with the work and achievements of many famous photographers. One of his heroes was Edwin Land who developed the Polaroid camera and created a very successful company to produce and market it. Land was a creator and an entrepreneur like Jobs. Jobs was apparently thrilled when he had a chance to meet Land in person. Photographs as compared to paintings present a realism that can have a strong emotional impact on the viewer. They can be especially powerful in creating a greater sense of humanity especially when the subjects depicted are suffering and especially when they are like ourselves. Jobs seemed to have some degree of this sensitivity to humanity and he seemed to have a deep understanding of human beings, along with their needs, strengths, and weaknesses.

# Steve Jobs and the Mindset of a Significant Artist

There are obviously different levels of artists in terms of creativity and significance. Paintings can vary in price from forty dollars to forty million dollars. Pedestrian artists might consist of those who do informal or formal marketing audience surveys to find out what ordinary people want and then are able to give it to them. Significant

artists are motivated by inner voices rather than outer voices and give the public what they don't even know they want. Jobs has voiced this idea many times. Great artists often have a great deal of self-discipline as various biographies of great artists indicate. They also have a great deal of self-confidence and can be high in narcissism which can enable them to stick to a vision in spite of criticism or doubts from others. An example may be seen in the career of the musician Bob Dylan who was greatly admired by Jobs and who became his friend later in life. Both Dylan and Jobs as well as many other historical artists could ignore the feedback of others while keeping tuned in to their inner voice and vision. Dylan could ignore the "boos" he heard at times during his concerts. Significant artists also are keen observers and can see things in a depth beyond the capabilities of most. They examine the work of others in their chosen fields very closely and are also highly observant of what is happening in the various environments and worlds around them.

A recent book by David McCullough documented how most major American artists, writers, and innovators made long visits to France in the 19th century to carefully study the innovations and new ideas of others in their chosen professions. Many significant innovations created by famous innovators were also of an incremental nature rather than that of some entirely new idea or perspective. Jobs quoted Picasso as saying that all artists are thieves of ideas to some degree and that they are also not mere imitators. Jobs declared that he and his company always built upon the ideas of others and he did not apologize for this. There are arguments for the value of incremental innovations versus radical new ones. Obviously there is also less risk and time and effort savings in building on existing ideas rather than creating entirely new ones.

# Importance of This Case Study of Steve Jobs for Management

It is highly likely that the artistic experiences of Steve Jobs accounted for much of his later success. The issue though was whether his experiences have relevance for the education of future managers. It seems that the answer must be a strong yes. There is an enormous amount of research literature on the effects of art education on students' cognitive abilities, creativity, innovativeness, and various types of student academic performances and later consequences which can be obtained in a web search and by reading arts oriented academic journals. Gazzaniga (2008) is one among many sources of this literature. In fact, numerous Ph.D dissertations have been completed on this issue. It is now increasingly recognized that exposure to the arts can be of benefit to participants in management development programs. Descriptions of two museum programs in Boston were developed for managers being trained at Harvard and MIT in Boston. Organizations such as AACORN are composed of management-oriented academics and art professionals from Europe, Canada, and the US. AACORN members have been active in arts oriented management development activities for a number of years, even though admittedly research on the effectiveness of such activities is deficient.

In summary, Steve Jobs was both a creative artist and a masterful artistic performer. He provided an ideal model of the type of leader necessary in many of the newer fields of endeavor being continuously created today. His life and experiences have also provided an example of the value of exposure to all of the arts to management success

for prospective managers and entrepreneurs. The arts are essential to both the processes of creation and communication. Jobs respected the arts and the process of change and growth embodied in the arts. He sought perfection like many artists and did not allow current tastes and wants to determine the nature of his creations. This is much like the actions of the great chef in the film "The Big Night" where this inherent conflict between conforming to present tastes or leading them is vividly displayed with the chef representing artists in the culinary arts. Jobs not only realized their importance but even preferred employees who were well-acquainted with the arts. Edward O. Wilson has called for a "consilience" or a greater unity of knowledge from the existing fields of knowledge including the humanities and arts, science, and technology (Wilson, 1998, 2012). Jobs believed in this concept and his success at Apple would appear to validate the benefits of that proposal.

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Howard H. Yu 33

# Decoding Leadership: How Steve Jobs Transformed Apple to Spearhead a Technological Informal Economy

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The number of obituaries and tributes that poured in following the death of Steve Jobs in 2011 is in stark contrast to the general public cynicism toward corporate America. Jobs was lauded as a technologist, designer, thinker, and even a visionary. This paper seeks to clarify the kind of innovation that Apple exemplifies - as a controlled platform that drastically reduces entry barriers for small hardware and software firms. The paper also investigates, from Apple's perspective, the change process by which the company transformed itself by identifying what Jobs did at different times and juxtaposing those actions with theories found in the literature in order to decode his leadership style.

As Jobs neared the end of his life, a grassroots protest movement with anarchist undertones mushroomed into mass demonstrations against Wall Street and capitalism. Ironically, right-wing critics were quick to point out that the protesters were using their iPhones and MacBooks – the epitome of capitalism – to create left-wing propaganda. Regardless of political inclination, however, people still lauded Jobs as a technologist, designer, thinker, and even a visionary, rather than seeing him as a captain of industry whose entire existence revolved around the relentless pursuit of profits. Jobs treated investors with something between ambivalence and contempt. Apple's investor relations team only shared information with Wall Street analysts and shareholders in dribs and drabs. Nor did Apple hold analyst days, routine events for most companies during which upper management presented the company's plans to several hundred investors. Yet Apple stocks continued to rise during Jobs' reign after he returned to Cupertino in 1997. On August 9, 2011, Apple overtook ExxonMobil as the most valuable company in the world, worth \$342 billion.

Through Apple, Jobs profoundly shaped how consumers interacted with technology and more importantly, created an ecosystem that allowed other entrepreneurs to thrive.

By seizing the intersection between art, technology and business, and channeling Apple to reflect that, Jobs reconceptualized how the consumer electronics industry should be organized and brought on board numerous start-ups to develop applications. In the process, he brought about an unprecedented rate of innovation – innovation that at times appeared to have exceeded his original vision.

The purpose of this paper is to clarify the kind of innovation that Apple exemplifies – as a controlled platform that drastically reduces entry barriers for small hardware and software firms. In doing so, Apple successfully cultivated a technological informal economy. Second, the paper investigates, from Apple's perspective, the change process by which the company transformed itself. The purpose here is not to provide a blow by blow account of different managerial actions undertaken by senior executives. For a historical description of Apple's corporate development, a handful of sources are available (e.g. Moritz, 2009; Price, 2008; Deutschman, 2000; Lashinsky, 2012; Isaacson, 2011). Rather, the main thrust is to identify what Jobs did at different times and to juxtapose those actions with theories found in the literature in order to decode his leadership style. This essay thus forms a blueprint for others to try to replicate Apple's success, bearing in mind that Jobs remains a rare example in contemporary business history. In other words, this paper seeks to provide a theory that describes the underlying strategy process that other firms can emulate.

# Transformation of the Industry

The term *informal* economy refers to "commercial activities that occur at least partially outside a governing body's observation, taxation, and regulation" (Ireland, 2011). Here this definition will focus on the activities of members of the technological community that lie outside the direct purview of the system designer. In context, Apple was the system designer. It provided infrastructure and rules that brought together groups of users and developers on a multi-sided platform. Related parties thriving within Apple's ecosystem included hardware manufacturers (e.g., Intel, Samsung, Toshiba, and Foxconn); application developers (e.g., Zynga – maker of FarmVille; Rovio – maker of Angry Birds; and the music streaming service provider Spotify); music labels (e.g., Sony, BMG, and EMI); and end users. Some application developers went on to build sizable businesses – based on Apple's platform – selling imaginary things, like tractors that plow farms in mobile games. These "virtual goods" mushroomed into a \$9 billion industry in 2011 alone, a global phenomenon that no system designer, including Apple, could have foreseen.

Even so, critics described Apple's ecosystem as akin to a carefully curated and gated community garden. Apple provided an open apps platform for outside developers that wanted to create software and content, but it was very controlled. Developers complained that the approval process for getting an app into Apple's App Store was opaque, but they continued submitting applications. By late 2011, the App Store offered half a million apps and Apple had paid developers \$3 billion in sales revenue over three years. In spite of its draconian approach, Apple managed to cultivate the first and biggest multi-sided platform in the mobile space. In doing so, it elevated smartphones to much more than ordinary communication devices. Consumers could

Howard H. Yu 35

now use them to access the internet and perform many other tasks previously only possible on PCs. At the time of writing, Windows Mobile, Nokia Symbian, and RIM BlackBerry operating systems were trailing far behind the Apple iOS mobile operating system. The only meaningful competitor was Google Android. But Apple's recognition of the important role of third-party developers in enriching user experience was a relatively recent phenomenon. It was only when Apple transformed from a niche computer maker focusing on advanced functionality, reliability, and ease of use for technical enthusiasts into a global electronic powerhouse bringing aesthetics and fashion in product design to mass consumers that the company became increasingly open in the design of its products. The magnitude of transformation inside Apple is as fundamental as that of the industry that Apple has been in and still is transforming.

# Transformation at Apple

In the early days, Apple typically designed its computers from scratch, using unique chips, disk drives, and monitors, proprietary operating systems, and many specially designed peripherals (Yoffie & Slind, 2008). This created the type of tight vertical integration between application software, operating system, and hardware devices that Jobs liked. Because of his desire for end-to-end control, Jobs also vehemently opposed proposals that Apple license the Macintosh operating system to other office equipment manufacturers and allow them to make Macintosh clones - something that happened after he was forced out of the company in 1985. Upon his return to Apple, he made eradicating the Macintosh clones a priority. When a new version of the Mac operating system shipped in July 1997, weeks after CEO Gil Amelio was ousted, Jobs did not allow the clone makers to upgrade to it and terminated their licenses altogether. "It was the dumbest thing in the world to let companies making crappier hardware use our operating system and cut into our sales," he later said (Lashinsky, 2012). Apple thus designed and built machines that were not compatible with others, unlike Microsoft, which profited from a world in which different companies made machines that were interchangeable, ran a standard operating system and could all use the same software applications (such as Microsoft's Word and Excel). Apple managers were trained to believe in the primacy of owning and controlling the main technologies behind the products that they built. Consistent with Apple's own "Think Different" marketing campaign and its iconic "1984" TV commercial, relying on outside vendors for undifferentiated, off-the-shelf solutions was simply not acceptable.

Yet the absolutely insulated approach came to an end once Apple started making music-playing devices. When Apple first introduced the iPod in October 2001, the project was set to meet an impossibly short schedule imposed top-down by Jobs. To meet the project deadline, Jon Rubinstein – then the head of hardware – had to swiftly assemble an engineering team that focused on integrating third-party, standardized components into a small package (Young & Simon, 2005). The time constraint set by Jobs forced the iPod project team to experiment with a new engineering approach that delivered the required product features not just on time, but also at a much lower cost and with virtually no upfront investment in product development. This was a critical condition in order to profit from an inexpensive music-playing device with a much shorter product life cycle

and considerably lower profit margins than Macintosh computers.

Besides controlling the project schedule, Jobs continued to stay close during project implementation. Colleagues reported that the CEO would be "horribly offended [if] he couldn't get to the song he wanted in less than three pushes of a button" (Kahney, 2004). More importantly, the prime differentiation of an iPod was not the physical design of the device but its complementary offering – iTunes. Jobs reportedly insisted that the iTunes user interface be modeled on Palm's HotSync software so that the iPod could transfer songs seamlessly from iTunes (Kahney, 2008; Levy, 2006). A year later, while the product team was busy releasing the Windows-compatible iPod, Jobs became the first person to persuade all major record labels to make their music available online. To achieve the 99-cents-per-song pricing scheme, he personally conducted early demonstrations of iTunes to top executives and leading artists in the industry. In doing so, Apple offered the record labels a solution to the problem of music piracy by creating an easy-to-use, legitimate online marketplace. Tellingly, Apple allowed record labels to capture most of the online revenue (close to 80%) from music sales. Rather than treating iTunes as a separate business with the requirement to generate lucrative profits, iTunes is positioned internally as a basic infrastructure in which Apple must invest in order to allow the company to become a platform architect.

The platform strategy – developing tools to allow third parties to distribute their products or services more effectively to end consumers – became increasingly apparent as Apple ventured into the mobile phone and tablet businesses. That explicit recognition of the positive contribution of outside developers, however, was in sharp contrast to some of Apple's long-held beliefs. Historically, Apple's well-regarded Macintosh operating system had always commanded a price premium from consumers. When it launched the Mac, Apple also tried to extract profits from developers, charging third-party developers \$10,000 for the software development kits (SDKs) required to create Macintosh applications. By contrast, Microsoft gave Windows SDKs away. Consequently, by the time of Microsoft's antitrust trial in 1998, Windows had six times as many applications as Macintosh. This made Windows far more attractive to consumers, despite its functional shortcomings.

What we observed, therefore, was the continuous adaption in Apple's fundamental beliefs as the firm transformed from a niche computer manufacturer which had targeted a narrow audience with a strong emphasis on engineering ingenuity, into a consumer electronics powerhouse that was thoroughly mainstream in its product offerings and attracted mass consumers. When Apple unveiled the first iPhone in January 2007, other manufacturers such as RIM, Nokia, and Palm had already perfected smartphone technologies that enabled end users to receive emails and go online using their mobile devices. Although iPhone's exclusive touchscreen design attracted much attention from the general public, the lack of a physical keypad also drew serious doubts from industry critics. The "radical design" was not even the first. HTC, a Taiwanese competitor, managed to launch a keyboard-less smartphone two weeks ahead of Apple. What sustained iPhone's differentiation against other competitors was the "App Store." By providing SDKs at a very low cost to independent software developers – a radical departure from Apple's former practices – the company became a platform architect, retreating from its former proprietary product strategy. Through its App Store and

Howard H. Yu 37

mobile devices, Apple fostered the development of something that soon became the largest mobile app marketplace.

Perhaps most interestingly, as the tablet business took off, independent developers created many applications that targeted large enterprises and established companies – a segment in which Apple showed little initial interest. For years, Apple had virtually ignored the enterprise sector and did not have a sales team to service businesses. Jobs had famously justified the approach by saying that Apple preferred to sell to end users, not IT managers. It was only recently that Jobs' successor – Tim Cook – formally recognized the importance of this "secondary" market and said that Apple would pay closer attention to the needs of large enterprises.

The example of Apple therefore demonstrates the advantage of cultivating a technological informal community around the company's core platform. The community members are not only indispensable in fulfilling the existing product-market strategy, they also play a critical role in the company's future evolution, enhancing the adaptability of the organization as a whole (Burgelman, 2002). Thanks to the independent developers that created business applications, office employees persuaded their employers to buy iPads and iPhones. Apple has claimed that 92% of Fortune 500 companies are currently testing or deploying iPads, as if Apple had invested major effort in selling its products to information systems professionals.

# **Strategy Process**

How can sense be made of Jobs' managerial actions in leading the transformation at Apple, which also transformed the industry? While Jobs was reported to have been the classic narcissistic CEO, what was the functional role in his top-down intervention? More importantly, how can this be reconciled with the literature, which emphasized a bottom-up, emergent process as the dominant mode for continuous change within a large established organization?

Numerous in-depth field studies revealed that most strategic initiatives are driven from the bottom up in the company's internal resource allocation process (e.g. Bower & Gilbert, 2005). Operating managers, in response to discrepancies between what they actually achieved and what they were asked to achieve or believed they could achieve (e.g., production capacity shortages, or potential market opportunities), defined detailed specifics of project proposals in order to resolve the perceived discrepancies. Out of the many proposals being championed, general managers in the middle (division or group executives) provided further impetus to those that they perceived to be the most promising, and in the process, commit their credibility and influence. Because they are the last executives with close knowledge of the businesses and their managers, their decisions as to which initiatives to select or ignore determine what gets funded. As a consequence, sponsorship and the pattern of execution dictated what actually happened, not strategy studies or top management pronouncements. Before an initiative received formal approval at the corporate level, the multi-level process of selection already occurred. The realized strategy was fundamentally determined by the definition and selection processes deep in the operating and integrating levels of the company.

The resultant effect of the bottom-up process was deemed to be so powerful

that some scholars adopt an intra-organizational, ecological perspective (Burgelman, 1991), viewing changes as the result of a continuous process of variation, selection, and retention of strategic initiatives that occurred within an organization (Miner, 1990; Galunic & Weeks, 2002). Lower-level managers were seen as champions of change, while top management only recognized (ex-post) the occurrence of fortuitous events that set the company on a successful course (Burgelman, 1991). Because formal structures and administrative systems defined the "rules of the game" among managers across levels and functions and exerted critical influences on day-to-day decision making, the main lever for top management was primarily in designing and maintaining elements within the formal structures of the company so that necessary changes could be brought forward by managers from the lower ranks (Burgelman, 1994, 2002), not in directly evaluating the technical details of every project proposal (Thompson, 1967; Mintzberg & Waters, 1985). The role of top management in strategic change was mostly to be "willing enough to recognize strategically bottom-up initiatives and capitalize on them rather than pass them by" (Noda & Bower, 1996, p. 188). The lever of influence available to top management remained indirect, such as manipulating the organizational perception of external threats (e.g., Gilbert, 2005) and/or establishing structural autonomy (e.g., Christensen, 1997).

This notion that top executives set a general vision and endorse strategic plans but do little to define the substantive content of individual initiatives contradicted what could be observed at Apple, as well as other accounts by business historians. Business historians have documented instances where top management "micro-managed" business development to ensure the correct implementation of its original vision (Rosenbloom, 2000; Jones, 2005; Tedlow, 2006). Top management was observed to interact directly with lower-level managers concerning the substance of specific operational details of strategic initiatives critical to an organization in a changing environment. Repeatedly, chief executives are shown to be much more involved in the day-to-day operations of their firms than previous research implied. A few exceptional studies also suggested that, in a turbulent environment, the active involvement of a strong CEO in driving strategic change is crucial (Bourgeois & Eisenhardt, 1988; Eisenmann & Bower, 2000). The critical question thus arises: How can one understand Steve Jobs' managerial behavior beyond simply egotistical meddling and view it as purposeful intervention that overcame organizational inertia and promoted Apple's long-term adaptation? Or, to put it more simply, what was the functional role of Jobs' micro-management?

While Jobs was the major force in spearheading changes at Apple, his involvement could be categorized into different classes of managerial actions. Importantly, each class of action could be further mapped to existing theories in the literature that predicted the different kinds of resultant development in an organization. Such mapping, in other words, effectively decoded Jobs' leadership into three discrete processes that other firms could have potentially replicated, albeit without an extraordinary figure like Jobs himself: strategic visioning, overcoming internal resistance, and sustaining change momentum.

Strategic visioning. While Jobs is widely recognized as having been a visionary technologist, breakthrough thinking in product design can also be achieved through rigorous methodologies. As design firm IDEO repeatedly demonstrated (Sutton &

Howard H. Yu 39

Hargadon, 1996; Hargadon & Sutton, 1997), when designers adhere to a cohesive set of simple rules, group members become capable of delivering radical innovation. IDEO's CEO Tom Kelley, author of *The Art of Innovation*, wrote that "the Anthropologist's role is the single biggest source of innovation at IDEO" (Kelley, 2005, p. 16). When companies find out what their customers hidden needs are by observing them – whether by chance, immersion or video – they can gain invaluable insights. Kelley reported that when Oral-B asked IDEO to design a new kids' toothbrush, they went into people's homes to watch kids brush their teeth. It observed that kids' toothbrushes were just smaller versions of adult toothbrushes and, because the kids lacked the dexterity of their parents, were difficult to hold and maneuver. This led to an innovative design: short, fat, softer toothbrushes that were easier for kids to manipulate (Dyer et al., 2011).

Christens et al. (2006) also described how segmenting markets along lines defined by the characteristics of products (category or price) or customers (age, gender, marital status, and income level) were poor indicators of customer behavior because that was not how markets are structured from the customers' perspective. During traditional market research and segmentation, the situational needs for which customers are looking to "hire" products or services go unnoticed. Christensen et al. (2006) advocated ethnographic product conceptualization, which moved away from traditional largescale market research in order to conceptualize "killer app" products. When P&G came to design firm Continuum hoping to revitalize its household cleaning division, the Continuum designers did not begin with chemical molecules. They did not spend time in the lab thinking about the chemistry of soap. Instead, they visited people at home and watched dozens of them engage in the tedious task of floor cleaning. The designers took detailed notes on the vacuuming of carpets and the sweeping of kitchens. They set up video cameras in living rooms. When the Continuum team analyzed the videotapes, they found that people spent more time cleaning their mops than they did cleaning the floors; the tool made the task more difficult. Out of this realization, the Continuum team worked to invent a cleaner that people could throw away. No more cleaning mop heads, no more buckets of dirty water. The idea of a "tissue on a stick" became the famous Swiffer launched in 1999. Today, Swiffer is generating more than half a billion dollars in sales in fifteen countries (Continuum, 2013).

Such an approach to new product development coincided with the genesis of most Apple products. Not reader surveys. Not competitive analyses. "When we first started Apple we really built the first computer because we wanted one," Jobs told Michael Moritz in the early 1980s for the book *The Little Kingdom*. Moritz (2009) further wrote, "He was unwilling to let product planning become burdened with analysis, focus groups, decision trees, the shift of the bell curve, or any of the painful drudgery he associated with large companies." It is astounding how little has changed philosophically at Apple from its earliest days to the present. The iPhone is a classic case in point. Before the device was introduced, Apple executives typically hated their smartphones. "That's why we decided to do our own," Jobs said in an explanation (Lashinsky, 2006).

Overcoming internal resistance. As described above, Jobs regularly carried out overbearing, top-down interventions. Most radical perhaps was when he convinced the iPod division to take away much of what had made an iPod great – the display, the large storage space, the wheel, and the menu-driven interface – to launch the iPod

Shuffle in 2005 (Levy, 2006). Later, in anticipation of the company's changing product mix when Apple expanded its direct presence in retail distribution, the CEO personally handpicked a former executive from Target and challenged the new team to model high-end boutiques – a brilliant move in hindsight, especially since the first Apple Store was opened in 2006 when Dell's online sales approach was still being hailed as the best practice for the computer industry (Thomke & Feinberg, 2012). By 2007, more than 100 million iPods had been sold, accounting for almost half of Apple's revenues.

This kind of top-down intervention differed from formulating strategy and shaping resource allocation. Rather, Jobs repeatedly ignored the company's current formal design and measurement systems to define specific objectives for new initiatives: personally champion these initiatives and maintain a strong presence throughout implementation. In doing so, existing routines embedded in the informal structure of the organization (Homans, 1950) were overturned. A new way of behaving across levels and functions was instilled. Jobs' involvement was heavy, and targeted with fine-grained and technical specifics, from the stage of project initiation well into final implementation of the selected initiatives.

Conceptually, Jobs overrode any obstacles imposed by particular aspects of the existing context of the organization that might delay or distort progress or learning. Since he expressed the performance aspiration in terms of concrete technical specifics, it avoided the perceptions, judgments, and biases of mid- and low-level managers, skipping the conflict-ridden processes of resource competition, and protecting the original vision of the strategic initiative – even when it contradicted the firm's tradition. The operating requirements imposed top-down forced lower-level managers to forgo existing problem solving routines, which made achieving the desired level of performance difficult. The discrepancy between the imposed level of aspiration and the current level of achievement, as a new performance gap, created enough dissatisfaction to induce the project team to engage in distant search activities. Along with additional resources that had been made available, the new performance gap freed the project team from the company's past performance history when it looked for technical solutions as well as other non-financial resources outside the organization (c.f., Cyert & March, 1963; Levinthal & March, 1981).

More importantly, the continuous impetus provided by the CEO in fulfilling the original project definition superseded the existing patterns of interaction among managers. Because the strategic initiative provided legitimacy for potential new arrangements, lower-level managers ceased to automatically re-enact the previous pattern of interaction. In effect, the organization engaged in ad hoc problem-solving across multiple levels all the way to implementation and stopped exercising existing repertories of performance programs that restricted or simplified information-processing. A forward-looking logic of consequence replaced the experience-based logic of appropriateness (March & Olsen, 1989; Gavetti & Levinthal, 2000). As individual actors experienced new ways of interacting, it created the opportunity to dislodge the existing communication pattern, power distribution, and social status among subunits. A new pattern of interaction among managers thus emerged. Evidently, status at Apple fluctuated with the prominence of the products on which one worked. As the success of the iPhone and iPad grew, the coolest faction of the

Howard H. Yu 41

company was software engineers working on Apple's iOS mobile operating system software. Hardware engineers and product marketers connected with the devices ranked high in the pecking order, followed by people in the iTunes, iCloud, and other online services organizations. Employees associated primarily with the Macintosh, once considered the ultimate product, were considered second-rate in the Apple hierarchy by this time (Lashinsky, 2012).

Projects that Steve Jobs personally managed did not necessarily require "bet-the-company"-sized resources, for which the CEO would absorb career risks that individual mid-level general managers would shun (Eisenmann & Bower, 2000). Rather, it was the substantive content of the strategic initiative that created a deliberate "stretch" that pushed the company to engage in experiential learning that it otherwise would not do.

Sustaining change momentum. One year after the successful introduction of the first iPod, Jobs eventually created a separate iPod division, appointing Jon Rubinstein, the former head of hardware, to take over the iPod and music operations (Young & Simon, 2005). Because the existing formal structures of the company had only been bypassed but not destroyed, when the strategic initiative was launched, Jobs could experiment with a new strategy before deciding to commit further to any irrevocable choices. Whether Jobs' actions were the result of careful deliberation or his personal intuition is a different question. Here, we are interested in the organizational consequences and those corresponding processes. In short, such top-down interventions made it possible to introduce changes in the informal organization of the company before reinforcing the desired behaviors through the elements of formal organization - the opposite of what underpins the majority of literature on organizational design. Generally speaking, top management can seize on early successes to remap the current elements of the formal structures to reflect new behaviors that are required to sustain the momentum. By institutionalizing these behavioral changes through formal administrative mechanisms, top managers are again released from the burden of continuous involvement in operational details.

#### Conclusions

As iconic as Steve Jobs was, a close examination of his managerial actions reveals the different processes that constituted his leadership. On the one hand, it is inspiring for other companies to know that they might be able to replicate Apple's success by following the different processes that Jobs embarked on in various circumstances. On the other hand, such a realization also suggests that Jobs was truly a rare corporate leader who was capable of integrating and driving these diverse processes from the apex of the organization.

More interesting, perhaps, is the question of how much technical knowledge a top manager must possess before he/she can successfully carry out the kind of top-down intervention Jobs achieved. Can a new CEO from outside the company ever engage in this level of intervention? What happens if top management provides the wrong content? Will this lead the company to prematurely abandon the strategic initiative, to irrationally escalate its organizational commitment, or to pragmatically redefine its content during the next rounds of review? These are some of the questions that go

beyond what a single paper can answer.

In the spirit of exploring new settings that allow further refinement of the emerging theories that have been presented, consider the following two high-profile examples, which help illustrate the high potential for future research in this area.

When IBM developed the revolutionary System/360 in the early 1960s, the goals of handling business and scientific applications as well as standardizing interfaces for peripheral equipment required IBM to spend more than ten times its annual budget on programming. To cope with the enormous challenge, CEO Thomas J. Watson, Jr. invited eight top executives to his ski lodge for a three-day session on programming. Going through considerable technical details, the team devised an operating system that would schedule the computers to work at their full capacity without any manual interruption. To speed up program development and make space in an excessively crowded agenda, Watson also abolished the corporate management committee – a group of top executives functioning as policy makers (Wise, 1966a, 1966b).

Sony's first version of the popular Walkman was a "special-order toy" made for internal use. But when CEO Akio Morita saw it, he declared that the company should bring it to the market at an affordable price and target young consumers. The project bypassed Sony's conventional processes with no market testing and was scheduled to be launched before the summer holiday. Given the project targets, engineers used low-end components and encased the player in a small, stylish package. Morita also added a twin output that allowed two people to listen at the same time. The CEO himself directed the marketing campaign, which did not involve a regular press release. Instead, Sony arranged bus tours with actors posing with the Walkman while reporters listened to a recorded tour. Young people were hired to walk through Tokyo, offering passersby the chance to try out the new product (Nathan, 1999).

In the field of organizational theories where carriers of change are often reduced to abstract ideas such as routines, capabilities, knowledge, and information flow, the development of a more manager-centered theory could prove to be an important contribution. This paper will ideally open new paths of inquiry into strategic change in complex organizations.

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# "Just Three Stories": The Career Lessons Behind Steve Jobs' Stanford University Commencement Address

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This paper examines the pedagogical value of Steve Job's Stanford University Commencement Address for understanding and teaching about careers in the 21st Century. The address is organized around "just three stories." This paper will show how the first story draws attention to different sources of learning and the need for authenticity. It will then show how the second story illustrates what it is like to experience and manage a career change, with a specific focus on involuntary job loss as an opportunity for growth and reinvention. The third story connects to the career as a 'calling' and circles back to authenticity as both a motor and anchor for careers. In addition to these themes, a note of caution should be added that the speech overlooks the contextual and individual barriers in contemporary careers. Finally, combining the three stories and introducing a further theoretical component, the paper shows how the speech provides an opportunity to illustrate the "intelligent career" framework.

Steve Jobs' 2005 commencement address at Stanford University provided important insights into his life experiences and his views on themes as diverse as innovation and creativity, love, family, and death. However, for management scholars its greatest strength may be its capacity to help understand and teach about people's career experiences and trajectories. This includes, for example, the need to make sense of and find authenticity in a career, the impact of other stakeholders on that career, changing career direction, learning from events in the past, and using them to fulfill aspirations for the future. The audience was a group of young graduates who were just starting

out in their own careers, their families, and university staff and faculty. The speech was written with graduates directly in mind and with a focus on what they might learn from Jobs' experiences, and how they might be able to incorporate that learning into their own future. In addition, a closer look shows that it speaks to the career concerns of a much wider audience.

At the beginning of the address, Jobs stated that he wanted to tell three stories from his life: "That's it. No big deal. Just three stories." Yet, as management scholars interested in how people experience and manage their careers, the stories each revealed something not only about the man, but also about careers in the 21st Century. They said something about how to navigate the opportunities and challenges that appear along the way, and how to create opportunities from them. They showed the environmental context in which careers evolve and the inevitability of change, the passage of time, and how people must be prepared to adapt to and still be drivers of change. They also revealed the importance of staying true to oneself, to personal aspirations and values and, above all else, how people might learn from their experience and the experience of others. Indeed, the need to work with, and oftentimes against others permeated all three stories.

The first story, which Jobs called "Connecting the Dots," focused on his early career experiences, including his childhood, education and decision to drop in and out of university classes. He talked especially about not knowing what he wanted to do with his life and his journey toward finding out. He also connected his early learning experiences to the development of the first MacIntosh computer and to discovering his love of calligraphy. In the second story, "Love and Loss," he began by saying how 'lucky' he was to have found what he loved to do early in life. He then spoke about the early years at Apple, its growth into a \$2 billion dollar company and his subsequent very public and personally devastating exit. He connected this experience to another learning phase in his career - learning to deal with loss, rejection and failure, starting up NeXT, and investing in Pixar. This story included references to changes in his personal life, meeting his wife, starting a family and, particularly, to keep looking for what or whom to love. The third story, "Death," addressed his cancer diagnosis and how such experiences were life-changing. He stated that in as much as they seemed to come out of the blue, these experiences also serve as a reminder of mortality, emphasizing again the importance of following one's heart, finding something to love and to never settle for second best.

While addressing several different themes, each of the stories and the entire speech were permeated by a single underlying message: that people need to listen to their hearts and heads, do what is important to them, pursue their ambitions, and take charge of and responsibility for their careers. His references to the head and the heart were significant because in Jobs' and popular usage, the heart represents feelings and intuition, while the head represents our rational and calculative leanings. A key concern here is to acknowledge the dynamic interplay between the head and the heart in career decisions and experiences. Finally, Jobs closed the speech with a simple piece of advice, "Stay Hungry, Stay Foolish" which served to further integrate the stories' separate messages and focus attention on the audience's future careers. Each of the stories will be discussed in order to consider how they can help management scholars to understand and teach about careers in the 21st Century.

## Connecting the Dots

At the beginning of his speech, Jobs triggered a chorus of cheers when he confessed that "this is the closest I've ever gotten to a college graduation." He seemed to celebrate that he had achieved so much without possessing a university degree and to contradict much contemporary management, education, and career theory. The more mainstream view reflected that of Becker (1999) for whom formal education was a key component of 'human capital' or "the stock of competences, knowledge and personality attributes that have a direct impact on our ability to work and thus to produce economic value" (p. 15). In particular, Becker suggested that formal education – the kind that Jobs appeared to reject - had a direct impact on not just *what* people do but also *how* it is done. More recently and adding to this argument, The Economist (2011) reported that "a university degree has never been more essential for securing good employment."

Yet, while at first glance Jobs seemed to reject the value of formal education, a closer look reveals a different message. Although he dropped out of formal classes, he did not give up on formal education altogether. Rather than discounting formal education and objective knowledge, Jobs took a more nuanced approach. He reflected, for example, on finding the calligraphy classes he took up as being 'priceless': "Reed College at that time offered perhaps the best calligraphy instruction in the country... If I had never dropped in on that single course in college, the Mac would have never had multiple typefaces or proportionally spaced fonts. And since Windows just copied the Mac, it's likely that no personal computer would have them." This showed that Jobs was, in fact, seeking out education and learning – even if it wasn't neatly packaged into a formal degree program.

Jobs also drew attention to *informal* opportunities for learning, or what Penrose (1959) once called knowledge gained through *personal experience* rather than formal learning. Jobs reported he "would walk the seven miles across town every Sunday night to get one good meal a week at the Hare Krishna temple. I loved it. And much of what I stumbled into by following my curiosity and intuition turned out to be priceless later on." In this part of the story, Jobs introduced two further themes. First, he echoed recent research (Schuller et al., 2004) that suggested that the benefits of learning are 'dynamic' where one experience of learning leads to more learning, but that what constitutes 'progression' in learning may differ among individuals depending on their respective contexts. Second, he alluded to the impact of luck or serendipity – of "what I stumbled into" - on learning opportunities and subsequent career experiences, a theme attracting growing interest from careers and management scholars alike (Bright, Pryor & Harpham, 2004; El-Sawad, Cohen & Arnold, 2005).

Though Jobs cautioned against viewing these experiences and achievements as part of some master plan: "Of course it was impossible to connect the dots looking forward when I was in college." This first story reflected the impact of 'planned happenstance' (Mitchell, Levin & Krumboltz, 1999) rather than 'luck' on career experiences. Jobs transformed an unplanned event (not seeing the value in the formal classes) into an opportunity for learning (dropping into the calligraphy classes). If Rojewski's (1999) definition of luck in careers as "unplanned, accidental or otherwise situational, unpredictable or unintentional events or encounters" (p. 296) is accepted,

the experience Jobs described was less a question of luck than of his own agency that enabled him to create and then profit from an unexpected, rather than 'lucky' learning opportunity. In fact, his 'stumbling' into the calligraphy classes was far from unintentional because it was his "curiosity and intuition" that led him to join those classes. Therefore, rather than meandering "through experiences initiated by others" and passively "awaiting a knock on the door" (Mitchell et al., 1999, p. 17), Jobs took control of the situation and found a form of learning that did interest him.

This first story had another message, one which permeated much of the speech as a whole: the importance of authenticity in people's careers. Jobs was unequivocal in stating that the regular classes he initially attended left him lacking a sense of authenticity and purpose (Maniero & Sullivan, 2006). Therefore, in order to counter this experience he engaged in the exploration stage of what Svejenova (2005) described as the four stages of authenticity development. This involved "stumbling" and following his "curiosity and intuition," even though nothing of what he did "had even a hope of any practical application" in his life. As the story continued, Jobs moved from the exploration stage toward a *focus* stage involving the development of the first Macintosh computer, and then – after the setback of having to leave Apple - toward greater *independence* by expanding on his individual autonomy and professional control. Finally, he worked towards *professionalism*, the fourth stage of authenticity involving mastery of his work and the way in which he engaged with his audiences.

Throughout this first story, Jobs also urged his audience to follow their intuition rather than a more "objective" or "rational" career plan that would have immediate value in the job market. This argument challenged much of the traditional vocational guidance literature with its focus on crafting careers that responded solely to the requirements of an employer (Sullivan & Baruch, 2009). Rather, it echoed Ibarra's (2002) advice for "crafting experiments" to discover one's own sense of identity and "trying out new activities and professional roles on a small scale before making a major commitment to a different path" (2002, p. 343). For example, Jobs 'dropped in' to the calligraphy classes, experimenting with what he might learn there even though "it was pretty scary" at the time. Indeed, though he had no expectation that calligraphy would have any "practical application," his seemingly urgent need for a sense of authenticity encouraged him to listen to his intuition. So, rather than sticking to a more traditional path of formal education, he went ahead to learn about "serif and san serif typefaces, about varying the amount of space between different letter combinations, about what makes great typography great." The passion in his reflections on those classes came through loud and clear. "It was beautiful," he said, "historical, artistically subtle in a way that science can't capture, and I found it fascinating."

## Love and Loss

In his next story, Jobs showed appreciation for the opportunities and experiences of a career change and what could be learned and gained from experiencing involuntary job loss. In his case it was a very public job loss at the hands of John Sculley whom Jobs had personally recruited to take over as Apple's CEO: "Well, as Apple grew we hired someone who I thought was very talented to run the company with me, and for the

first year or so things went well. But then our visions of the future began to diverge and eventually we had a falling out. When we did, our Board of Directors sided with him." This story highlighted the unpredictability of contemporary careers, and the impact of changing contextual circumstances on career opportunities and experiences. This is a theme that has garnered much interest among both careers and management scholars (e.g. Cummings & Estabrooks, 2003; King, Burke & Pemberton, 2005; Mayrhofer, Meyer & Steyrer, 2007) and is a central concern among national governments, especially in times of economic hardship. Jobs was also speaking to the connection between career and identity, an increasingly important theme in career research.

In reflecting on his involuntary job loss as a form of career transition, Jobs explained how losing his job at Apple impacted his sense of identity: "At 30 I was out, and very publicly out. What had been the focus of my entire adult life was gone, and it was devastating." He spoke to the implications of job loss not just for a sense of identity, but also for self-efficacy and self-worth (McKee-Ryan et al., 2005). In this respect he drew attention to job loss as a form of 'identity threat' or 'identity violation' (Petriglieri, 2011; Pratt, Rockmann & Kaufmann, 2006) requiring 'identity work' where people are challenged to reevaluate and reconstruct their sense of who they are. Jobs' description of being 'very publicly out' also reflected Ibarra and Barbulescu's (2010) argument that such work is especially likely in the context of career transitions that are 'visible' and with 'high stakes.'

Rather than focusing wholly on the negative impact of involuntary job loss, however, Jobs echoed the work of some scholars who suggested that it can present opportunities for growth, redirection and consideration of new career alternatives (e.g. Mallon & Duberly, 2000; Zikic & Klehe, 2006; Zikic & Richardson, 2007): "I didn't see it then, but it turned out that getting fired from Apple was the best thing that could have happened to me. The heaviness of being successful was replaced by the lightness of being a beginner again, less sure about everything. It freed me to enter one of the most creative periods of my life." This assertion turned the attention to identity change (Ibarra & Barbulescu, 2010), and told how the crisis of losing one's job may also give rise to the formation of a new identity. Jobs' described, for example, how his exit from Apple opened the door for reconsideration of his professional identity, what he wanted from life, and what opportunities were available to him. This led him to computer graphics, the world of animation and from there, to the studios of Lucasfilm and eventually to Walt Disney. For Jobs, as for many others who experience involuntary job loss, it was a positive 'trigger' to reconsider his career alternatives (Flum & Blustein, 2000).

Extending observations beyond the individual, this story also drew attention to the value of "career communities" (Arthur & Parker, 2002; Parker, Arthur & Inkson, 2004) and in particular, of "occupational communities" (Van Maanen & Barley, 1984) where both explicit and tacit knowledge are developed by working with occupational peers: "Woz and I started Apple in my parents' garage when I was 20. We worked hard, and in 10 years Apple had grown from just the two of us in a garage into a \$2 billion company with over 4000 employees." Even while he felt like "running away from the [Silicon] Valley" occupational community that he knew, he noted that he was 'still in love' with what he did, and ultimately with what that community enabled him to do. This theme spoke to the value of the psychosocial support (Chandler &

Kram, 2007; Cotton, Shen & Livne-Tarandach, 2011; Shen & Kram, 2011) people get from working with others and the impact of that support on our career experiences. It especially showed how working with others, and particularly in contexts where a sense of authenticity and belonging is felt, can be a source of inspiration and comfort during a career change (Shen & Kram, 2011).

In addition to highlighting the positive impact of career communities, Jobs alluded to what could happen when relationships - like his soured relationships with John Sculley and others at Apple - don't work out, and where rejection and loss of face challenge emergent identity (Ibarra, 2003). His sense of disappointment was palpable. Yet, he returned again to the centrality of "loving what you do" and the value of authenticity not just for when things are going well but also as a source of strength when things are going astray: "Sometimes life hits you in the head with a brick. Don't lose faith. I'm convinced that the only thing that kept me going was that I loved what I did." This assertion echoed other career scholars who suggested that a sense of authenticity and fulfilling one's 'calling' could be a strong driving force during difficult or challenging career events (e.g. Bunderson & Thompson, 2009).

Continuing with the theme of relationships, this second story also spoke to the impact of strong and weak ties (Granovetter, 1973) on career experiences and especially to their value during a career transition, such as job loss. After losing his position at Apple, Jobs talked about how he moved on to start NeXT and Pixar, a journey that was facilitated by connections he had maintained with Alan Kay during his time with Apple and those he made with Ed Catmull at Lucasfilms. Yet the ties he had maintained with his former colleagues at Apple were later reignited when Apple bought NeXT and he returned to Apple and took with him the technology that had been developed at NeXT. Finally, this story also revealed that making "mistakes," or what Jobs in his own inimitable way described as "screwing up so badly," may be an integral or even necessary part of even the most remarkable careers. "It was awful tasting medicine, but I guess the patient needed it." Rather than seeking to avoid career mistakes, he echoed the work of career scholars who argued that career mistakes may mark a new beginning rather than an end to a career journey (Blenkinsop & Zdunczyk, 2005).

## Death

In his final story, Jobs brought the audience back to the importance of authenticity, what Svejenova (2005) in her study of the creative industries described as "both a motor and anchor for careers" (p. 969). In Jobs' words: "Have the courage to follow your heart and intuition ... They somehow already know what you truly want to become. Everything else is secondary." Just as Svejenova (2005) spoke of the "path with a heart," so Jobs told the graduates "there is no reason not to follow your heart." The theme of movement, following a 'path to authenticity' rather than authenticity being an 'end point' is important and worth exploring further. In particular it drew attention to how authenticity is "a moving target.....that is continually evolving" (Peterson, 2005): "For the past 33 years, I have looked in the mirror every morning and asked myself: 'If today were the last day of my life, would I want to do what I am about to do today?'And whenever the answer has been 'No' for too many days in a row,

I know I need to change something." Here Jobs seemed to be suggesting that achieving authenticity can be a platform for both objective and subjective success and that "there is no reason not to follow your heart." This echoed Hall and Chandler's (2005) assertion that "an individual whose career is driven by a sense of calling benefits from enhanced metacompetencies, both of which aid the individual in navigating the career 'terrain' and a sense of psychological success" (2005, p. 89). It also resonated with more recent work about the value of having a career vision, understood as a clear sense of what one wants to achieve in one's career (Holtschlag & Masuda, 2011).

Extending the discussion of authenticity further, in his last story Jobs talked in depth about the importance of retaining a sense of authenticity in relationships with others. "Don't be trapped by dogma – which is living with the results of other people's thinking. Don't let the noise of others' opinions drown out your own inner voice," he said. This assertion echoed Ibarra's (2002) advice about seeing our "potential selves" and having the courage to "test fantasies – otherwise, they remain just that" (p. 45). Jobs' cautionary note that time is "limited" added further urgency to this topic. In this respect, he spoke to a theme that has dominated much contemporary career scholarship: the importance of taking charge of one's life and career rather than ceding responsibility to others (Briscoe & Hall, 2006; Inkson & Arthur, 2001; Sullivan & Baruch, 2009).

Jobs contention that "There is no reason not to follow your heart," introduced above, also alluded to the idea of his career as a journey. Whereas traditional use of journey metaphors has historically highlighted upward mobility (e.g. Savickas, 2000), as El-Sawad (2005) argued, a wider range of metaphors can provide important insights into individual career experiences. Thus, Jobs seemed to use the metaphor of the journey to reiterate the need for acceptance of, and encouragement towards, readiness for change and adaptation. Contemporary career scholars have taken a similar stance, indicating how the metaphor of career as a journey has a long tradition reflecting diverse work experiences such as "rowing down a river (no way back); climbing a mountain (upward, clear destination, many potential routes); navigating at sea (no path, not necessarily a destination, unknown obstacles); and wandering in space (no map, lost)" (Inkson, 2007, p. 129).

In the third story, Jobs introduced the concept of death to focus explicitly on change by saying, "and yet death is the destination we all share. No one has ever escaped it." In this respect, people should take responsibility for their achievements but also accept there are some things that cannot be changed, such as one's mortality. Yet, knowing what cannot be changed, he argued, invites people to take action: "Remembering that I'll be dead soon is the most important tool I've ever encountered to help me make the big choices in life..... Remembering that you are going to die is the best way I know to avoid the trap of thinking you have something to lose." This assertion connected again the importance of taking charge of one's life and adapting to change as a central theme in the contemporary career literature (e.g. Arthur, Khapova & Wilderom, 2005; O'Mahony & Bechky, 2006; Reitman & Schneer, 2003).

Continuing with the theme of change, Jobs also spoke to the necessity for change "and that is as it should be, because death is very likely the single best invention of life. It is life's change agent. It clears out the old to make way for the new." This assertion pointed to the value of change as an opportunity for "new beginnings" for

someone to redirect themself and their career (Wise & Millward, 2005) and thus, something which people should embrace and engage with rather than resist. It also reminded the graduates how their careers and lives were more directly impacted by external forces over which they had no control. Towards the end of this story, Jobs spoke more about the inevitability and impact of external forces of change, but this time about technological change where "typewriters, scissors, and Polaroid cameras" were replaced by personal computers, desktop publishing and Google.

With these observations, Jobs moved away from the focus on individual agency that dominated much of the speech. In doing so, he drew attention to the duality of agency and structure in careers: that in as much as people must take responsibility for their careers, they are also impacted by broader social forces. The allusion to these broader social forces worked towards answering recent calls for career scholars to pay more attention to institutional structures and their impact on career opportunities and experiences (e.g Inkson et al., 2012; Mayrhofer et al., 2007; Zeitz, Blau & Fertig, 2009). Yet, because it appeared rather late in the speech, it invited the audience to consider potential limitations in the speech's value for understanding contemporary careers.

## A Word of Caution

The interpretation of each of the stories and the speech as a whole signaled its value for encouraging students to take charge of their careers, not to be trapped by what Jobs' called "dogma," and to avoid letting "the noise of others' opinions" drown out one's own "inner voice." Taking this message to heart, and listening to one's own "inner voices," it is also incumbent to present a more cautious view.

First, while Jobs' message has much value for encouraging individual action, it underplays both contextual and individual barriers to career self-management. In this regard, it reinforces arguments in the contemporary career literature, suggesting that individuals should and indeed can be "masters of their own destinies" (El-Sawad, 2005, p. 36). While taking this stance offers a positive call to individual action, there has been growing concern for more explicit recognition that "in all careers there are constraints on which opportunities can be accessed" (King, et al., 2011, p. 998-999). Whereas Jobs was in a situation where he could drop in and out of classes and presumably had parental support to do so, others may not be quite as fortunate due to their social and economic circumstances. Indeed, according to El-Sawad, "images of free, autonomous and self-directing career actors" (2005, p. 36) bear little resemblance to some people's experiences of work. In this regard, Jobs seemed to be assuming what Pringle and Mallon (2003) describe as "an assured, skilled, probably well-qualified agent, with the human and social capital to leverage their skills, while traversing a terrain that holds no barriers for the adaptable and the well networked" (p. 847). Drawing further on the same authors, he also seemed to fall prey to what Pringle and Mallon (2003) described as erring "in the direction of privileging, individualism and individual choice" (p. 849).

Although Jobs was able to spend time searching for his calling, for some – if not most – people, responsibilities to others and social and economic circumstances do not allow them to search for their calling, let alone fulfill it (see Berg, Grant & Johnson, 2010). Similarly, as Jobs himself acknowledged, he found his calling early in life

whereas others may not (Berg et al., 2010). Moreover, although there is much to be said for finding and fulfilling one's calling, it can also be a 'double-edged sword' being both 'binding and ennobling' (Bunderson & Thompson, 2009, p. 32). On the one hand, it can provide for a feeling of authenticity and meaning in work, but on the other it can also create a sense of duty and obligation which may affect relationships with others, as was the case with Jobs (Isaacson, 2011).

Regarding the proclaimed positive side of involuntary job loss, it should be acknowledged that Jobs was in a very different situation than most people who lose their job. Indeed, recent research has suggested that most people are likely to experience lower self-esteem, depression, and health problems after losing their job (Zeitz et al., 2009). Therefore, whereas losing one's job can be an opportunity for identity change, "new beginnings," professional and personal growth, not everyone is in a position to benefit from such an opportunity. In this regard, it is beneficial to be mindful of Petriglieri's (2011, p. 657) cautionary note that the "number of people who contemplate a specific identity transition is always higher than the number who actually complete it." Moreover, whereas Jobs welcomed his new found freedom to explore and craft further career opportunities, for many people the change and uncertainty incurred during job loss is more likely to be a source of stress than liberation (Halbesleben & Buckley, 2004).

Finally, whereas the consistent message to pursue one's own sense of authenticity and not let others' opinions drown out one's inner voice is important, steadfastly pursuing one's own agendas regardless of the implications for others seems intuitively problematic. Regardless of his personal and professional success and for fulfilling his ambition to "put a ding in the universe" (Schofield, 2011), Jobs was an infamously difficult person to work with (Economist, 2011; Isaacson, 2011). Indeed, his behavior towards others, work colleagues, family and friends, has come under much scrutiny and criticism (Isaacson, 2011).

# Tying the Stories Together: Intelligent Careers

Tying the stories together adds an important theoretical dimension to the speech as a whole. In particular, Jobs made consistent references to the interdependence of *why, how* and with *whom* people work, a key plank in "intelligent career" theory (Arthur, Claman & Defillippi, 1995; Parker, Khapova & Arthur, 2009). A concern with *why* people work – that is, identification with and motivation to perform work - permeates each of the stories. The need to be authentic in understanding and then fulfilling the *why* was a key message. Jobs also acknowledged the fundamental importance of how people work - in making a difference to what gets done - and with *whom* people work – in both building effective relationships (such as his relationship with Steve Wozniak) and managing situations when relationships have gone wrong (such as his relationship with John Sculley and the Board at Apple).

More important than illustrating examples of why, how and with whom people work, however, are the links the speech suggested between them. Jobs clearly emphasized the influence of why he worked and how he worked – in believing in and contributing to the various groundbreaking products that are his legacy. In the early stages of his career, his search for a sense of authenticity, for example, led him

to the calligraphy classes which would later inspire the design and functionality of the Macintosh computer. Later, after his departure from Apple, that same need for authenticity and creativity led him to start up NeXT, and then Pixar, which became the most successful animation studio in the world. Why he worked also set a standard for with whom he worked, and in turn, which relationships worked, and when they worked. His relationships with Sculley and others shifted over time, as did his relationship with Wozniak. For example, even while his relationship with Sculley and Apple's Board had soured, his need for a sense of authenticity, creativity and innovation kept him in Silicon Valley to continue working with like-minded individuals in the creative industries. Reverse influences can also be inferred where, a) with whom he worked influenced why he worked (for example, how working with the leaders of Pixar fuelled his desire for creativity and innovation yet further), and b) where how he worked reinforced that desire further (for example, when the technology developed at NeXT became a central feature of Apple's expansion).

There are also suggested links between how and with whom Jobs worked. How he worked was clearly a magnet for some people and a turnoff for others. The clearest examples in the speech were his early successful collaboration with Wozniak which can be juxtaposed with his subsequent more problematic relationship with John Sculley. However, there are many later examples of his relationships with others more fully recounted in his biography, most notably concerning the influence of Jeffrey Katzenberg at Pixar and designer John Ive at Apple (Isaacson, 2011). The point in highlighting these links is not so much to explore which was most important, or when or why they were important. Rather, it is to suggest that there are dynamic relationships among why, how, and with whom people work that can keep a career vital over the course of one's working life.

In addition to the 'positive' connections between each of the dimensions, the speech highlighted potential sources of 'disconnection' where, for example, threats to how people work, such as job loss, can have a direct impact on why people work where the motivation to pursue a particular career direction is challenged. Such a turn of events may also lead to questioning relationships with others, perhaps resulting in the end of some relationships as a different career direction is taken. Likewise, problems with whom people work may, in turn, lead to problems with how they work where severed relationships create barriers to certain work opportunities which may, in turn, impact the motivation to work.

Jobs closed his speech by borrowing a message from the back cover of the last edition of *The Whole Earth Catalog* from the mid-1970s: "Stay Hungry. Stay Foolish." The words were simple, but with the three stories behind them, new depth can be seen. Staying hungry relates to why people work, to what everyone wants their life and career to stand for, and the difference people want to make in society. It also encourages people to never be satisfied, to be ready to innovate and improvise, and above all else, to make the most of the many learning opportunities that are encountered along the way. Staying foolish relates to openness to both new ideas (in how we work) and new people (with whom we work). It encourages people to challenge established norms about how to think and behave and invites everyone to keep going even if "common sense" might suggest otherwise. Staying hungry and foolish can be good for everyone

- and for the world to which people contribute.

At the start of this paper, it was suggested that the speech could serve as an aid to teaching about career experience and trajectories. However, not all students will agree with such an interpretation. On the contrary, Jobs' first wish would be for students to join the conversation rather than defer to another's "wisdom." This is how it should be. The real power of the speech for management learning and education therefore, is that it offers a beginning, a commencement, for further conversation.

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# Steve Jobs' Immortal Quest and the Heroic Persona

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October 2011 was a month of historic milestones for Apple. At the end of the prior month, on Tuesday, September 27, Apple sent media invitations for a press event to be held October 4, 2011 at 10:00 am at the Cupertino Headquarters for a major announcement. Several prominent industry analysts proclaimed with hopeful optimism that the firm would announce the return of Apple founder Steve Jobs.

Sadly, Steve Jobs did not appear for what turned out to be a product announcement of the iPhone 4S. In fact, Jobs had stepped down as CEO on January 17, 2011, a year and a half after returning from medical leave. He stated that Tim Cook, Apple's Chief Operating Officer, would run day-to-day operations as he had previously done during Jobs' 2009 medical leave.

The analysts' wishful thinking had some basis in more than cult like denial of Steve Jobs' mortality. In fact, despite that medical leave, Jobs had returned for the iPad 2 launch on March 2 and the iCloud introduction on June 6. The analysts were among many constituents around the world who were to be tragically disappointed. Jobs actually had resigned as CEO on August 22, 2011 saying, "I have always said if there ever came a day when I could no longer meet my duties and expectations as Apple's CEO, I would be the first to let you know. Unfortunately, that day has come" (Isaacson, 2011). Six weeks later, a day after the new iPhone press conference, he died (Isaacson, 2011).

The grief within Apple's ranks across the globe was profound, but enthusiasm for his product legacy soared. In the first 24 hours after its October release, 1 million 4S models were sold. A key Jobs goal was reached posthumously as Apple became the largest mobile handset vendor in the world by revenue in 2011, surpassing Nokia, then the long-time leader. That quarter, Apple reported historic high earnings with 53 percent of its revenue derived from sales of 37 million iPhones.

In the life stage of monarchies, the palace crier proclaimed, "Long Live the King" followed by, "The King is dead," and then "Long Live the King." As Apple rallied

around the leadership team which survived the death of founder Steve Jobs, customers, media, and investors wondered how Tim Cook, the new CEO, especially after an underwhelming product launch the day before Jobs' passing, could possibly be "the new Steve Jobs" (Sonnenfeld, 2011b). Disappointed, Apple watchers reexamined the long term Senior Vice President of iOS Software, Scott Forstall, Apple global marketing executive Phil Shiller, and iPad developer Jonathan Ives for traces of the Jobs mystique.

Such leadership searches would not be satisfying. There is no known clone of Steve Jobs even though new reports suggest a reborn Apple University is about to ambitiously launch a curriculum to institutionalize the charisma of Jobs (Sonnenfeld, 2011). Such endeavors must be mindful that Jobs, a college dropout and maverick, was not himself the product of management seminars and leadership simulations. He learned from reflecting on the wild ups and downs of experience and confided in trusted mentors such as David Packard and Robert Noyce – good potential role models for a board of directors.

## Cloning Jobs in Seminars

It was as much his experience that defined him as his intellectual genes – or given his deliberate casual look, some would say his jeans. To find the next Steve Jobs means first defining Steve Jobs. He is a global household name known across all segments of society and all life stages. He was not merely a successful or even merely an inspiring business leader. Steve Jobs was a classic folk hero and folk heroes are not simply the product of carefully designed organization charts, diligent inventory management by HR department replacement tables, conventional MBA courses, messianic external searches by board committees and recruiters, or other neatly planned succession conveyer belts.

Instead, they are the product of restive souls struggling through the rocky road of uncommon risk, grandiose dreams, disappointment, failure, and fear of mortality. Not always pleasant people to be around, they produce change through this never satisfied quest. Sigmund Freud's (1929, p. 29) masterpiece *Civilization and its Discontents* argued that "One feels inclined to say that the intention that man should be 'happy' is not included in the plan of 'Creation.'" Similarly, painter Robert Motherwell once explained why artists sneak in at night to touch up their "completed works" already hanging on gallery walls. "One wonderful thing about creativity is that you're never wholly satisfied with what you're trying to do. There's always the anguish, the pleasurable challenge" (Sonnenfeld, 1988).

# Society's Choice of Folk Heroes

At times, various occupations from explorers and frontiersmen, to warriors and statesmen, to inventors and business leaders speak to this societal need – depending on where society's greatest uncertainty and disruptions appear. When American society no longer needed images of George Washington and Thomas Jefferson, heroic images of legendary frontiersmen like Daniel Boone, Kit Carson, Davy Crockett, and others arose. Then inventors such as Samuel F. B. Morse, Alexander Graham Bell, Thomas Edison, Luther Burbank, the Wright Brothers, and Henry Ford captured the

public imagination. They, in turn were followed by FDR, George C. Marshall, Douglas McArthur, Omar Bradley, and Dwight D. Eisenhower. At a later period, leaders such as Gordon Moore and Robert Noyce of Intel, Ken Olsen of Digital Equipment, An Wang and David Packard of HP, Bill Gates of Microsoft, and Steve Jobs of Apple emerged.

Folk heroes provide people with a path to navigate through highly uncertain times by simplifying frameworks for a complex world and the personification of transformation in calming human dimensions. They are characterized by five key criteria: 1) common origins; 2) resilience from crushing adversity; 3) transformative technologies; 4) mythic making mystique and unique self-promotion; and 5) wider societal visions (Sonnenfeld, 1988).

First is the idea of the common touch – often through humble origins. Thomas Edison, who founded General Electric and invented the electric light, the phonograph, and motion pictures, was the son of a rural lumber mill operator. Car maker Henry Ford was a farmer. Steel magnate Andrew Carnegie was the immigrant son of a poor Scottish weaver. Steve Jobs, was born out of wedlock, an orphan abandoned by his natural parents, a Syrian Muslim political scientist, and a USC graduate student.

Secondly, business folk heroes triumphed over life's adversity from career setbacks to personal health crises. Both of Henry Ford's first two automobile firms failed. Walt Disney's first two companies failed as well and he lost control of his first cartoon characters. Thomas Edison was cruelly outmaneuvered by tycoon Jay Gould and lost the rights to many of his own early significant inventions such as the simultaneous transmission of several messages on the same wire.

Steve Jobs, of course, showed incredible personal stamina and resilience in his five year struggle with pancreatic cancer. Jobs was forced out of the firm he created in 1985 and he did not return to Apple until 1997 when the company purchased his new company NeXT. As he recounted in his 2005 Stanford Commencement speech:

So at 30 I was out. And very publicly out. What had been the focus of my entire adult life was gone, and it was devastating. I felt that I had let the previous generation of entrepreneurs down - that I had dropped the baton as it was being passed to me. I met with David Packard and Bob Noyce and tried to apologize for screwing up so badly. I was a very public failure, and I even thought about running away from the Valley. But something slowly began to dawn on me - I still loved what I did. The turn of events at Apple had not changed that one bit. I had been rejected, but I was still in love. And so I decided to start over. I didn't see it then, but it turned out that getting fired from Apple was the best thing that could have ever happened to me. The heaviness of being successful was replaced by the lightness of being a beginner again (Stanford Report, 2005).

His business comeback was unrivaled in industrial history. The Apple he returned to was a dying enterprise but by the time he died 14 years later, it had become the world's most valuable company. The second chance was essential. His greatest legacy may have been his creations after his comeback in his 40s – similar to other folk heroes ranging from JFK and Martin Luther King to Elvis Presley and Michael Jackson.

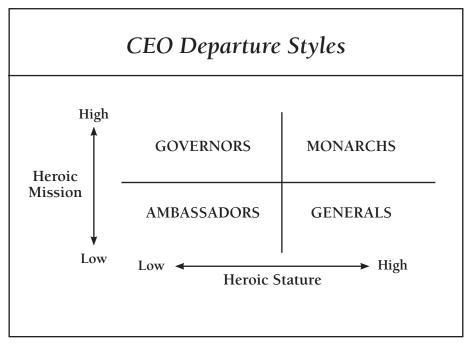
Thirdly, business folk heroes championed revolutionary technologies, discovering new markets and setting new standards of business performance. Edison, with 1,093 patents opened doors to vast new industrial frontiers in the fields of electricity, appliances, entertainment, and communications. Carnegie's transformation of steelmaking facilitated sweeping changes in transportation and construction – while introducing popular new concepts of cost control in the production process. Ford's vision of bringing the automobile into the hands of the average American through his process of mass production was adopted worldwide much the way Jobs' dream of bringing new technology into the average household with his notion of an inexpensive user-friendly personal computer was. Through Jobs' series of blockbuster products from the Mac, the iMac, the iPod, iTunes, the iPhone, and 230 patents, not to mention his pioneering animation studio Pixar, Jobs reshaped telecommunications, entertainment, education, and commercial transactions.

Fourth, business folk heroes created their own mythic imagery as great promoters. They were not obscure inventors tinkering in their lab; they seized the stage. This tendency for self-promotion has a long history. Alexander III of Macedonia labeled himself "Alexander the Great," fabricating a lineage to Odysseus and Achilles. Thanks to the publicity he generated, historians considered Ford to be better known in the early 1920s than any other American. Edison was also a skilled booster of his own accomplishments, notoriously ignoring the parallel or prior creations of Alexander Graham Bell. A compulsive overachiever, Edison hired platoons of publicity agents charged with elevating his fame. Jobs was such a master of staging, secrecy, and mythmaking, many technology bloggers seriously expected that the flat iPhone 4S product launch by successor Tim Cook two days before Jobs' death was a set-up for a cameo visit from Jobs himself – back on stage.

Fifth, business folk heroes generally displayed a strong sense of civic concern and philanthropy. This is the unknown part of the Jobs' legacy. They have used their voices and resources to address societal distress. The remarkable generosity of Bill Gates and Warren Buffet was not emulated by Steve Jobs despite his estimated wealth in excess of 8 billion dollars. Gates and Buffet pledged the bulk of their wealth to communities and individuals in need, similar to the later career philanthropy of Ford and Carnegie who funded educational institutions, libraries, and foundations. Some wonder if Jobs resisted the public displays of philanthropy, curtailing corporate gifts and shutting down his own foundation and preferred to give anonymously or posthumously.

This speaks to the complex nature of Jobs' persona. In 1984, Polaroid founder Edwin Land prematurely dismissed Jobs as destined to fail because he didn't master his technology. By many accounts, Jobs was not a gracious person having defrauded his friend and cofounder Steve Wozniak of an even split in an early project at Atari and then denying for years the paternity of his own out-of-wedlock first child whose mother had to resort to public welfare. He was no fan of contemporary standards of transparency in governance. Former SEC chairman and Apple fan Arthur Leavitt said that once he had met with Jobs when he was being wooed to join the Apple board but after asking too many questions, Jobs withdrew the offer. Notorious for exacting high standards, he was also known for his temper and quickness to not tolerate those who disappointed him (Isaacson, 2011).

**Table 1:** CEO Departure Styles



Jeffery A. Sonnenfeld, The Hero's Farewell, 1988

## Danger of the Boss as the Brand

The post-genius failures are sobering in number and severity. Years ago, the world's second-largest computer company was one most people had never heard of: Digital Equipment Corporation. Its founder, Ken Olsen, ran things for more than three decades, but the company became a casualty of the personal computer revolution. He wasn't an isolated example: An Wang of Wang Labs and William Norris of Control Data were both brilliant engineers and casualties too.

With so much evidence showing the benefits of good planning and the traps that lie in wait for companies too tied to their founders' vision, one would think modern CEOs would know better. Yet many seem loath to acknowledge a future without them in it. At a 2007 panel of CEOs, Warren Buffett asked Amazon.com founder Jeff Bezos and News Corp CEO Rupert Murdoch to address their succession plans – and was met with virtual silence. Murdoch, now 79, was questioned about this at an annual shareholders' meeting in Adelaide, Australia eight years ago and replied that his retirement plans had been "put on hold forever" and that he would have to be "carried out," citing the recent birth of his second daughter to his third wife and boasting of his low cholesterol. Buffett chuckled: "Well that is truly leading beyond the box!" (Sonnenfeld, 2011a).

Why would a Jobs, a Murdoch, or an Olsen think he had anything more to prove? They all transformed their industries and had sweeping commercial impact across

countries and continents. But in the modern age, they became heroes of a sort – which is embedded in their self-concepts – and they can be susceptible to the foibles of heroes. These sorts of business folk heroes have complex character challenges which raise concerns over when the boss becomes the brand. The challenges include grandiosity, self-righteous omniscience that combine to forge an imperial identity that defines their heroic stature. The other challenge is a heroic mission which is based on a quest for immortality and indispensability.

The *heroic identity* drive can be manifest as grandiosity and narcissistic self-worship – such as with Occidental Petroleum's long running autocratic leader, Armand Hammer who led the firm until he died at age 92 and had a life sized bust of himself in the headquarters lobby, as well as a four foot oil picture of himself in the boardroom – although he only owned one percent of the company he led. James Dutt, as CEO of Beatrice required that every employee have a portrait of him hanging in their offices and cubicles.

When the CEO's name is fused with their firm, their health and conduct become corporate concerns stripping away claim to rights of privacy entitled to the rest of us. As Jobs' health declined, he initially put out false statements on his well-being, misleading investors, employees, and customers. Jobs cultivated a strong, loyal, and balanced top management team which had virtually no visibility, as they routinely were forbidden from talking with the media and all product launches featured only Steve Jobs as master showman. On the other hand, his soaring standards for excellence improved the quality of the average person's life. Great enhancements in healthcare and advances in education were enabled through his creations and also provided employment to thousands and created wealth for many.

What Jobs accomplished at Apple was, of course, monumental. Having unleashed a tidal wave of brilliant, trend-setting, consumer friendly products: the iPod, the iPhone, and the iPad, Jobs improbably turned Apple into the world's most valuable technology company. He also lured firms, industries, and cultures into a new future. When iTunes and the iPod arrived, people switched to buying their music online and the dire fears of the Napster days faded. Later Jobs' iPad forced publishers of books, magazines, and newspapers to rethink their own businesses.

Jobs succeeded through his unyielding vision and his obsessive oversight of Apple's quality standards. He was a master at bringing simplicity to the macho complexity that tech culture embraced, and he would not compromise. Charging into a smart phone market dominated by the button-festooned BlackBerry, Jobs demanded the iPhone's front face sport a single physical button. Now stores are filled with sleek phones that look like iPhone clones.

Jobs can also be thanked for exacting standards for transforming the telecommunications industry in the past few years. When developing the iPhone, Jobs decided he didn't like traditional voice mail, which forced owners to listen to their messages in sequential order. He said he wanted "visual voice mail," letting users choose and hear messages in any order. The feature meant overhauling huge phone systems – but AT&T agreed, got the iPhone, and signed up millions of customers.

Jobs was a folk hero but not necessarily a benevolent deity. Many of these business folk heroes dispense with the niceties and courtesies common at work because they are driven on a mission – a quest for immortality through their work.

In the 2005 Stanford speech, Jobs said:

When I was 17, I read a quote that went something like: 'If you live each day as if it was your last, someday you'll most certainly be right.' It made an impression on me, and since then, for the past 33 years, I have looked in the mirror every morning and asked myself: 'If today were the last day of my life, would I want to do what I am about to do today?' (Stanford Report, 2005).

The renowned psychoanalysts Otto Rank, Ernest Becker, and Robert Jay Lifton had described the unusual need of folk heroes to justify themselves as primary value in the universe as a quest for immortality. In the *Denial of Death*, Becker (1973, p. 66) wrote that many leaders "must stand out, be a hero, make the biggest contributions to world life, show that he counts more than anyone or anything else."

Haunted by their fear of mortality, folk heroes are in a hurry but it is through their unique identity and profound contribution that they can create an immortal legacy. As Jobs confided again at Stanford:

No one wants to die. Even people who want to go to heaven don't want to die to get there. And yet death is the destination we all share. No one has ever escaped it. And that is as it should be, because death is very likely the single best invention of life. It is life's change agent. It clears out the old to make way for the new. Right now the new is you, but someday not too long from now, you will gradually become the old and be cleared away. Sorry to be so dramatic, but it is quite true. Your time is limited, so don't waste it living someone else's life. Don't be trapped by dogma—which is living with the results of other people's thinking. Don't let the noise of others' opinions drown out your own inner voice. And most important, have the courage to follow your heart and intuition (Stanford Report, 2005).

# Assisting the Hero's Farewell

When these challenges of heroic mission and heroic stature drives are combined to form a four cell diagram (Sonnenfeld, 2011b), folk heroes are often classified as *monarchs* – people who live for their job, have no other interests, and consider engagement in their position as the source of their health and vitality. Hence, they crowd the spotlight of others and will not groom equally strong personalities as potential successors. Clearly Warren Buffett is in no hurry to leave at eighty years old with a half century of running his public enterprise. Fred Smith has ruled FedEx for an astounding forty year reign with a long series of talented executives who parted ways when it was clear there was nowhere for them to go internally. By contrast, *ambassadors* who are at peace with their legacy, often groom strong successors such as the generations at UPS, DuPont, Microsoft, and Intel with the exiting encumbants remaining constructively on the board.

A life time Xerox generalist, Anne Mulcahy saved the company from near demise in a close partnership with her successor Ursula Burns. Intel can proudly point to a long lineage of strong leaders succeeding each other from Gordon Moore, Robert Noyce, and Andy Grove, to Craig Barrett and Paul Otellini. Similarly at Verizon, Ray Smith was succeeded by Charles Lee, Ivan Seidenberg, and Lowell McAdam – all strong visionary leaders who stayed engaged to help in continuity after they left office. *Generals* feel strong identification with their role as leader and a responsibility after leaving office and can often feel the need to return to battle and reassert their power– as has happened to Jerry Yang at Yahoo, Larry Page at Google, Howard Schultz at Starbucks, Phil Knight at NIKE, Martha Stewart at Martha Stewart Omnimedia, and Michael Dell of Dell. They removed their successors and stepped back to perform tough tasks, challenging accumulated doctrine which only they had the authority to dissolve. *Governors* serve a bounded term of duty and then turn to a series of other life challenges, leaving their old role completely behind. Examples of this include Jack Welch of GE, Bill Donaldson of DLJ, The NYSE, Aetna, and the SEC, Jim Clarke of Silicon Graphics, Healtheon, WebMD, My CFO and Netscape, as well as Meg Whitman of Ebay and HP.

With *monarchs*, there can be an unhealthy overdependence on the folk hero. Juan Trippe, who launched Pan American Airways, was essentially the Steve Jobs of aviation. Trippe built his vision of a worldwide air-travel network by meticulously crafting relationships with key diplomats and politicians in countries around the world to ensure Pan Am would get favorable treatment on routes and gates. That gave Pan Am a hugely profitable dominance in international air travel. Trippe was also a Jobsian showman when it came to selling his product to consumers, using nautical terminology to evoke the luxury of cruise ships. But Trippe got so obsessed with company infighting that he didn't notice the world was changing around him. Pan Am's board found him to be arrogant and secretive but felt powerless to make changes. Many key company records seemed to exist only in Trippe's head. When deregulation arrived, Pan Am was ill prepared to transfer power to a new generation.

Many people do not understand how *ambassadors* lingering around the shop and on the board can be a constructive force. Things work well when the founders establish a line of successors. Computer chip giant Intel was founded by Gordon Moore and Robert Noyce – legendary engineers who left Fairchild Semiconductor to pursue their vision for microprocessors. They handpicked their senior executives, sculpting a clear succession process and cultivating a successor who was, if anything, even more creative: Andy Grove. Moore and Noyce were confident in their legacy, never threatened by Grove's ascension. They took the title of chairmen, with Grove acting as CEO. Yet it was Noyce who originally shaped Intel's carefree "follow your bliss" management style – shunning executive perks like private jets and dedicated parking spaces – that thrives there today and around Silicon Valley. He was the model for later Intel CEOs, and Intel's headquarters is named for him. Intel's leaders kept the revolution young by redefining themselves technologically, but not culturally. They've evolved from their early focus on chips to other key components such as graphics chips and flash memory. Now Intel is working on such new technologies as electrical transmission and generation.

Many boards and governance activists do not understand the value and way to guide a *general*. Preserving key DNA is also about implanting crucial values throughout the company. Howard Schultz, whose vision turned Starbucks into a global brand, stepped away from management for years. He returned when growth began to slow under his successors – and amid a sense that Starbucks had become too generic, losing

some of the identity that originally attracted customers. To help employees better understand and feel the core values, Schultz advocated face-to-face conversations with as many people as possible and in those conversations, advocated balancing the need to innovate with values that must be preserved.

But admiration of the founder must not become a stifling cult. Michael Dell cautioned about the importance of the founder not creating a religion around himself or herself and takes practical steps to avoid that. Dell said he works to make other stars visible with an institutionalized review process that exposes up-and-comers to the board of directors.

Walt Disney, like Steve Jobs, should be classified as a *monarch*. He imposed his image on the company as the brand. He hosted major TV shows personally, introduced new technologies and business plans alone with great visibility. Disney, like Jobs, had a loyal management team of technical experts but no restive soul to stir the water at Disney. After he passed away, the once creative tight-knit teams in animation studios and theatrical divisions' crew became stale, and under the leadership of Disney's son-inlaw, they declined new risk taking. They would hide behind the mantra that a new risk wasn't the way Walt would do things. Instead of being a bold, creative entertainment company, Disney became more like a cult or a religion that worshipped the past. *Disney University*, with the pizzazz of its "imagineers," actually created a cult of conformity until the visionary Michael Eisner and Frank Well stormed the Magic Kingdom and took control in a vicious proxy battle, ultimately saving the enterprise.

In an effort to reassure key constituencies, Jobs' successor announced that Apple still had Jobs' visions, adding that Apple was not going to change, and he reiterated that thought right after Job's death proclaiming to "honor his memory by dedicating ourselves to continuing the work he loved so much" (Isaacson, 2011, p. 600).

This fear of change and worship of a company's past triumphs can be dangerous and even the antithesis of Jobs' actual approach. The board and management must fight the deification of Jobs when it starts to lead to rigid principles manifest in strategic decisions or in clunky doctrines preached at a prospective *Apple University* reportedly designed to teach people to think like Steve Jobs. Steve Jobs' leadership style was not just a product of a freely chosen cognitive style, but largely the emotional product of unique life experiences. In seeking more Steve Jobs-like leaders, they can't be manufactured; they have to be found.

Steve Jobs-like folk heroes are the key to American strength, but management systems often drown the spirit of such creative geniuses because of their challenging, complex and even difficult characters. Thus the next Steve Jobs, whether it is the complex characters of Facebook's Mark Zuckerberg, Amazon's Jeff Bezos, or Google's Sergy Brin may not be easygoing congenial personalities, but the world is different because they are in it.

Interestingly, the profiles of these complex characters even parallel those of such heroic international business figures like India's Sunil and Rajan Mittal, creators of Bharti/Airtel, Jack Ma of China's Alibaba, Robin Li of Baidu, or Chinese internet titan, Ma Huateng of Ten Cent. However, such geniuses cannot be indulged without limit. Bureaucratic executive clones should not be cultivated, but unconstrained imperial titans should not be running public businesses without oversight, as was seen in so many governance defaults of the last decade. Yet in balancing those, it needs to be

acknowledged that founders are not like other people.

In this age of self-directed work teams, empowered management and activist boards, Jobs reminds people that bold individuals are still needed as leaders. Apple's board took plenty of flack from governance critics for the risks they knowingly took to not suppress the rare genius of Steve Jobs. It is one of the hardest positions to serve as a director of a company. Governance mantras are often not supported by research. They can be suffocating and classroom routines can come off as superficial and cultivating conformity through jargon and routines rather than actual risk taking, promoting failure, and encouraging genuine and edgy creativity. Mere auditing, oversight, and compliance with rules is not the way to govern with such folk heroes. Boards have to learn how to earn the personal trust of such CEOs and reach them through reason and dialogue rather than threat.

All over the globe, whether in distant seaports, capitals, mega cites, villages, town squares or central parks, prominent monuments to various individuals from history are featured. Rarely are these tributes to a board audit committee or a management task force. Rather, they are a celebration of courageous, quirky and sometimes even difficult individuals who rose above the crowd to lead.

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