# The Online Obstacle:

A Study of African-American Enterprise on the Internet

by

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B.S. Mechanical Engineering, Cornell University, 2000 M.Eng. Computer Science, Cornell University, 2001

Submitted to the MIT Sloan School of Management in Partial Fulfillment of the Requirements for the Degree of

### MASTER OF BUSINESS ADMINISTRATION

at the

#### MASSACHUSETTS INSTITUTE OF TECHNOLOGY

**JUNE 2010** 

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#### ABSTRACT

Iconic Web companies based in the US, along the likes of Google, Facebook, and Twitter, have exhibited some racial/ethnic diversity among their founders, yet there appears to be a dearth of African-Americans in the group. In this thesis I conduct an empirical investigation into the potential existence of a set of impediments to blockbuster success for African-American founded consumer Internet companies -- or an "online obstacle," as I have chosen to term the condition.

In utilizing a short-form survey and telephone interviews to collect the thoughts and opinions of 16 black entrepreneurs who have made at least one attempt at launching a consumer Internet start-up, I document three recurrent themes. First, there do not appear to be enough African-American graduates of engineering and computer science disciplines to facilitate creation of promising Internet ventures that could achieve blockbuster status. Second, black Web entrepreneurs by-and-large have not achieved the heights of capital infusion that seems to be necessary to transition a concept from "successful" to "blockbuster." Lastly, African-American founders of consumer Internet companies do not in any significant numbers appear to live and play in the start-up ecosystem that is Silicon Valley, inhibiting development of relationships and access to resources needed to ascend to blockbuster status online.

Overall, my findings suggest that the online obstacle I seek to identify is very much a collection of barriers that has a direct correlation to issues black entrepreneurs have spoken about for decades, suggesting that any revealed online obstacle very much lacks an online origin.

Thesis Supervisor: Denise Lewin Loyd

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For my bride and best friend, Angela,

I thank you for your endless belief in me as your husband, as a professional, and, most essentially, as my own man.

We well know my pursuing an MBA was not even in the best of our plans, yet the experience has supercharged me in ways I do not know how I could have done without.

While walking with a classmate one day, he asked about how you and I continue to make "it" work, and my response came without delay: "We simply dream alike."

Here is to never backing down from *what* we dream to be while relentlessly discerning *who* we dream to be.

With love and dedication,

-- Allen May 7, 2010

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#### ACKNOWLEDGEMENTS

Foremost, I would like to express gratitude to my thesis advisor, Dr. Denise Lewin Loyd, for enthusiastically accepting the challenge of sponsoring the relative stranger of a first-year MBA student who reached out to her about an ambitious thesis project. You extended to me in one two-hour introduction meeting what would likely have taken others months to grant -- trust. It is your earnest participation that has helped this composition become a significant milestone in my lifetime academic career. Thank you so much for owning your role.

Next, I would like to thank the men and women -- many of whom are close friends and acquaintances, others of whom are completely unknown to me -- who made time to think on my requests to identify African-American consumer Web entrepreneurs. In all likelihood, I would not have come across three-quarters of the entrepreneurs who participated in my thesis surveys and interviews without your e-mail forwards, phone calls, and word-of-mouth to your personal networks. This thesis goes to show how an action that may seem to be small in the scheme of someone's day-to-day life can build to something that is hugely meaningful in the life of another.

Also, to the 16 entrepreneurs who granted me access to their individual stories, opinions, and real-time thoughts, I thank you for your invaluable contribution to this body of work. Speaking with each of you exposed me to information and perspectives that will only enhance how I go about the world, and I am appreciative of the privilege of that experience. Without your active participation and generosity with your time, completion of this endeavor of mine would not have been possible. Hopefully this paper authentically captures some aspect of each of your voices.

And lastly, I would like to recognize the support of my wife, Angela, and newborn son, Mitchell. To Angela, thank you for your constant encouragement as I worked my way for many months through this very unfamiliar undertaking. You always seem to have assurance in what I am capable of achieving well before I am convinced of the same. To Mitchell, I appreciate your gifting with a smile what would have been undivided playtime with your daddy to his pursuit of knowledge and excellence. I can only hope you discover this thesis out of curiosity at some point in the future and share in the sense of pride I have today in completing it. I love you both.

"I can do all things through Christ who strengthens me." Philippians 4:13

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This opening section is as much for me, in setting my expectations, as it is for anyone who ever lays eyes on the exposition that follows. After pitching this topic to my MBA thesis advisor, Denise Lewin Loyd, during the spring semester of my first year and engaging in subsequent discussions with her about my plan of attack, I am fairly certain she had a clear view of the mountainous terrain that lay ahead, whereas I saw nothing but wide-open plains. In hindsight, it was probably for the best that I had such naïve mental imagery.

Perhaps I was no different than the myriad thesis writers before me, having a million different ideas to explore and sights of grandeur for contributing to an institution's body of knowledge. Unlike me, however, most of those authors were not using sheer anecdotal observation as a starting point, and likely had some modicum of academic research writing experience beforehand. In any case, despite an embarrassingly huge opportunity to completely "school me" given her impressive and accomplished background in research writing, Dr. Loyd simply mentioned to be sure I am being fair to myself in measures of success. Luckily, I am well practiced in the art of listening, and heard her caution for my perfectionist ways loud and clear.

I am the first to acknowledge that I am no expert on any of the political, social, or economic topics touched upon in this thesis. There are many academicians and practitioners who have written or spoken at length over the years on the effects of gaps in technology access and usage among African-Americans. Considering these experts' significant investment of time and thought in their areas of focus, I have fully discounted my ability to provide even a worthy nod to the great many of those contributions. Additionally, recognizing that public discourse surrounding sociological ills related to a race-related digital divide has traversed much ground

since the mid-1990s, my allotted time and resources do not allow me to step all that far into the many nuanced points of accumulated information.

However, I do have a great deal of hope for what it is this thesis could possibly represent, and that is the start to (or a heightening of, as the case may be) an informed conversation about what appears to be an absence of blockbuster Web-based consumer concepts founded by black entrepreneurs. Two groups are of principal interest here: academicians who may have the time, resources, and training to further (and fully) explore some of the issues spoken to in this thesis, and perhaps most importantly, the community of black Web entrepreneurs who are trying to "make it happen" day in and day out. As the participant interviews for my thesis progressed, it was surprising how many of these black entrepreneurs felt they could easily identify impediments to wide-spread consumer acceptance of their online upstarts. Even more surprising was that many felt they faced an unlevel playing field that would not likely be eradicated, or even diminished, until the next generation of black Web founders.

I must admit that some satisfaction has already been harvested in the process of composing this ambitious thesis. This realized hope is in the achievement of getting nearly all of the 16 black Web entrepreneur participants on the same concerted line of thought about this topic for what was at least 30 minutes, stretching on occasion to over an hour. A few even remarked they had not really paused to think about the observations that drive this analysis, but were glad that they now had. Dr. Loyd will hopefully be proud in that I have chosen to accept success in the process of my efforts, and consider any public consideration of this thesis as icing on the cake.

# 1.1 The Entrepreneurial Process and My Kitchen Table

In having the privilege of working full-time for a year as an entrepreneur<sup>[1]</sup> before matriculating into the MIT Sloan School of Management, I can concretely say that composing an MBA thesis is a rather entrepreneurial process. Think about it: you spend marathon blocks of time developing your topic (business concept generation), assessing the odds of successfully researching and espousing upon your ideas (landscape evaluation and market positioning), securing advisors and empirical study participants by pitching your vision (3<sup>rd</sup> party fundraising through angels, VCs, and strategic investors), and then compiling all you have strived to gather into a package your consumers will hopefully consider to be more parts value than waste (releasing the product to market). All considered, engaging in any entrepreneurial process is bound to present opportunity for inspiration, transformation, and discovery, and having already experienced "building something from nothing," I can say this project thoroughly delivered.

Most entrepreneurial endeavors are cultivated within some familiar exploration-friendly environment -- garages and dorm rooms among the most popular in today's Web dominated world. My thesis topic had a similar formation through many impromptu snippets of "kitchentable-style" discussion I would primarily have with my wife. We frequently find ourselves involved in discussion about various aspects of the African-American experience, and the topic of African-American enterprise on the Internet has certainly appeared on our menu of discussion more than once.

\_

My concept was called URdrobe (tagline of "Your Clothes. Your Style. URdrobe.") and was an online wardrobe application that allowed users to visually mix and match tops, bottoms, and shoes for the sake of testing outfits. The idea was to algorithmically tell a user that, for instance, "800 other users own this blue shirt and tend to wear it with \*this\* set of bottoms and \*this\* set of shoes." or "To achieve \*this\* look you will need to purchase \*this\* and \*this\*." After spending the equivalent of a year between 2007 and 2008 building a proof-of-concept and (unsuccessfully) courting investors, I ran out of cash and closed up shop. ...Fantastic experience nonetheless.

# 1.2 Obstacle: "That Which Impedes Progress or Achievement"

When it came to refining what it is, specifically, I strove to research in this thesis, I determined I wanted to seek answers to a question that sometimes lingers in my mind as I remain up-to-date with online consumer<sup>[2]</sup> concepts moving toward Internet stardom: Why does its appear to be the case that none of the founders of these shooting-star companies are African-American?

In sifting through the news of on-the-move Web upstarts, I often find that I can account for (albeit, through inexact observation) the presence of white and Asian founders, the largest and smallest of the four major race/ethnic groups in the US<sup>[3]</sup>, respectively. However, I have yet to identify an African-American founder among the companies that have reached, or are well on their way to reaching, blockbuster status.<sup>[4]</sup> It would appear to me that something is impeding the extreme-progress or super-success of African-American founded consumer Internet companies -- beyond what has become commonly known as the "digital divide," historically referring to a lack of fundamental access to technology such as the Internet. Thus, I will use what is known of the digital divide as a foundation upon which to empirically examine the potential existence of an identifiable "online obstacle," as I have chosen to term the condition.

This paper presents the cumulative results of a series of surveys and interviews among black<sup>[5]</sup>
Web entrepreneurs who have made one attempt or more at launching consumer Internet concepts. I presented these participants with questions about their familial and academic

<sup>&</sup>lt;sup>2</sup> I chose to target consumer web-based concepts because they have the largest available usage audience and tend to become popular virally, meaning there is often an assortment of entry windows and a shorter runway to becoming a blockbuster hit.

According to the 2000 Census, it was estimated that whites comprised 75.1% of the US population; Hispanics, 12.5%; blacks or African Americans, 12.3%; Asians and Pacific Islanders, 3.7%.

<sup>&</sup>lt;sup>4</sup> For the sake of this argument, I am defining "blockbuster" status as having at least 50 million unique users and at least \$25 million in 3<sup>rd</sup> party funding; elements that I found to be common among iconic Web companies.

I will use "African-American" and "black" interchangeably throughout this study. In either case, I am referring to those individuals who are of ethnic African descent and claim America as their home-base.

backgrounds, start-up experiences, and opinions as they relate to potential impediments to the super-achievement of African-Americans in the online consumer space. It is appropriate to note here that this thesis does not intend to imply, even in the slightest degree, that black founded online concepts have not encountered success and above-average results. In fact, there are several examples within the wide sampling of participants for this analysis alone who have achieved admirable levels of start-up funding, enviable consumer bases, and / or lucrative exits, among various other measures of success. Rather, it is the overwhelming lack of these types of concepts transitioning to the category of "blockbuster" that I seek to elucidate.

### 1.3 Summary of Key Insights

What does the digital divide have to do with African-American enterprise on the Internet?

- 1. The term "digital divide" in the US most simply refers to a technology access gap among certain social groups. This paper attempts to establish whether the level of success of African-American enterprise on the Internet has been impeded by this gap and other ills.
- 2. The digital divide has been reported by the US popular press to be all but closed as it relates to African-Americans due to a notable increase in access to the Internet via mobile devices. I contest this takeaway on the basis of distinguishing the access modes of consumers versus producers -- a key distinction in any conversation on online enterprise.

What are the most prevalent impediments to blockbuster success with black Web entrepreneurs?

3. The black Web entrepreneurs I interviewed about a potential online obstacle collectively identified the most prevalent impediments as (a) limited numbers of African-American technology graduates, (b) unequal access to start-up capital, and (c) a lack of involvement in advantageous eco-systems like Silicon Valley.

4. Interestingly, all three of the major barriers attributed to a potential online obstacle in this paper have a direct correlation to issues black entrepreneurs have spoken about for decades, suggesting that any revealed online obstacle very much lacks an online origin.

What solutions might assist in transitioning black founded Web concepts to blockbuster status?

- 5. Many of the identified barriers would seemingly benefit from a shift in mind frame and increased fundamental exposure -- more African-American youth becoming interested in pursuing technical fields, more technically capable black professionals viewing Web entrepreneurship as a career option, and more African-American Web entrepreneurs becoming involved in the ecosystems proven to be critical to Internet concept stardom.
- 6. Two ideas that I present are: (a) Internet company incubators housed at several of the Historically Black Colleges and Universities (HBCUs) and (b) funded competitions for Web application development targeting pre-college African-American students.

# 1.4 Chapter Overview

Chapter 2, The Digital Divide, describes the ethnic gap in access to technology to contextualize its role in exacerbating the underrepresentation of African-American Web entrepreneurs online. Chapter 3, The Online Obstacle, introduces my hypothesis regarding what appears to be a dearth of black representation among the Internet blockbuster elite. Chapter 4, Discussion of Empirical Results, provides an outline of the results of my interviews about a potential online obstacle with African-American entrepreneurs who have made an attempt at launching a consumer Internet concept. The chapter also provides supporting discussion materials to substantiate the thesis participants' anecdotal observations. Chapter 5, Leaping the Obstacle, discusses potential solutions to some of the previously identified components of an online obstacle, and Chapter 6 concludes.

## 2.1 Where Gaps and Obstacles Are Not the Same

At first glance, a lack of representation of African-Americans within the ranks of blockbuster consumer Internet company founders might simply appear to be the result of an insufficient means to gain the skill sets and exposure typical of such success stories. Or put differently, that the online obstacle I seek to identify in this paper stems directly from what is referred to in the US as the digital divide as it relates to African-Americans. However, upon examining this line of thinking a bit closer it becomes more apparent that the existence of an online obstacle is independent of the digital divide -- one condition neither speaks to the causes nor the effects of the other. Additionally, it follows that many of the impediments that potentially account for an online obstacle have in all likelihood been exacerbated by the existence of the digital divide. Thus, although the condition I seek to define is independent of the digital divide, I do not believe it is exclusive, and therefore it is beneficial to understand what the digital divide is before proceeding to a discussion of a potential online obstacle.

### 2.2 What is the Digital Divide?

Within US academic, business, and political circles, the "digital divide" generally refers to a lack of access by some members of society to information and communication technology, as well as the resulting deficiency in associated skills. Larry Irving, a former member of the Clinton Administration's technology team, is widely credited with coining the term in a series of US Department of Commerce NTIA<sup>[6]</sup> reports entitled "Falling through the Net.<sup>[7][8][9][10]</sup>" These

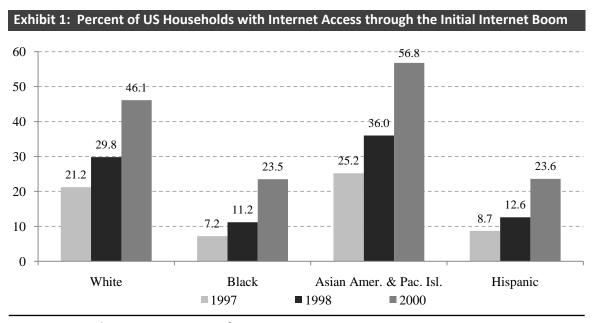
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The National Telecommunications and Information Administration (NTIA) is an agency in the US Department of Commerce principally responsible for advising the President on telecommunications and information policies.

 $<sup>^7</sup>$  NTIA, "Falling Through the Net: A Survey of the "Have Nots" in Rural and Urban America," 1995.

<sup>&</sup>lt;sup>8</sup> NTIA, "Falling Through the Net II; New Data on the Digital Divide", 1998.

reports, published between 1995 and 2000, sparked significant public interest in their revelation of serious gaps in the levels of technology adoption by certain ethnic groups in the US. Black citizens had among the lowest levels -- an observation especially relevant to my thesis.



Source: NTIA and ESA, US Department of Commerce

Part of the huge concern with the NTIA-identified imbalance in digital access among certain ethnic groups was the notion that the gaps exacerbate an existing lack of access to resources, and perhaps even serve as impediments to improving one's social or financial status. This thought is not terribly hard to visualize considering our world today -- a full decade later. Consider the unemployed individual who cannot easily apply to positions via online conduits, enroll in online courses to further his education, or, perhaps most relatable to day-to-day life in 2010, participate in the four billion<sup>[11]</sup> online search engine inquiries made each day around the world. In all of these cases, limited participation seems to directly imply limited progression.

<sup>&</sup>lt;sup>9</sup> NTIA, "Falling Through the Net: Defining the Digital Divide", 1999.

<sup>&</sup>lt;sup>10</sup> NTIA. "Falling Through the Net: Toward Digital Inclusion", 2000.

<sup>&</sup>lt;sup>11</sup> comScore, Inc., "comScore Reports Global Search Market Growth of 46 Percent in 2009," January 22, 2010.

### 2.3 Minding the Digital Gap -- A National Concern

## 2.3.1 Response within Politics

Notable discourse about the digital divide developed within the highest political arenas after the NTIA's initial report in 1995. Some reactions reflected a call-to-action, while others were interpreted as dismissive. President Clinton was among the most supportive of addressing the imbalance, proposing a plan in 1996 to bridge the digital divide through creation of a \$2.0 billion, five year, Technology Literacy Challenge fund. Additionally, in 1999 he signed an executive memorandum to ensure that closing the digital divide will be a vital goal...throughout the federal government and in 2000, his last year in office, presented \$2.3 billion in budget initiatives toward the cause. However, the notion of a digital divide certainly drew its skeptics, as well, including Federal Communications Commission (FCC) chief Michael Powell. When asked in 2001 about his agency's stance on the alleged digital divide, Powell responded:

I think the term (digital divide) sometimes is dangerous in the sense that it suggests that the minute a new and innovative technology is introduced in the market, there is a divide unless it is equitably distributed among every part of society, and that is just an unreal understanding of an American capitalist system...I think there's a Mercedes divide, I'd like one, but I can't afford it...I'm not meaning to be completely flip about this -- I think it is an important social issue -- but it shouldn't be used to justify the notion of, essentially, the socialization of deployment of the infrastructure.<sup>[14]</sup>

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<sup>&</sup>lt;sup>12</sup> The White House, "America's Technology Literacy Challenge," February 15, 1996.

<sup>&</sup>lt;sup>13</sup> The White House, "Remarks By The President On Bridging The Digital Divide," December 9, 1999.

<sup>&</sup>lt;sup>14</sup> Schwab, Klaus, "Perspective: The digital divide: Ignore it at our own risk," CnetNews.com, July 17, 2001.

### 2.3.2 Response within Industry

Despite an active ongoing discussion on the digital divide in political forums, thought surrounding the topic appears to have had considerably less traction among some groups of influential practitioners. Adam Banks, in his 2006 book *Race, Rhetoric, and Technology:*Searching for Higher Ground, notes the following about the racial technological gap in America:

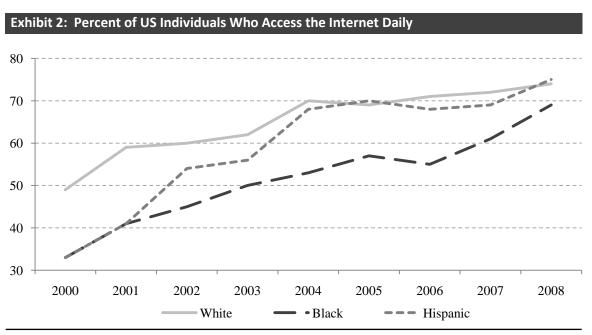
During the last ten years since the Digital Divide and broader technology access issues emerged in the national conversation, not a single article in the three major technical communication journals, *Technical Communication*, *Technical Communication*, *Technical Communication Quarterly*, and the *Journal of Technical Writing and Communication* addresses the Divide or any technology access issue, although all of these journals frequently take up question on the promises and perils of computers and the Internet. No article in Technical Communication addresses any issue related to race & technology -- in fact, no article in the journal takes up the question of race at all -- in spite of a significant presence of African-American and Latino/a engineers in the workplace. [15]

As Exhibit 2 reveals, there seems to have been enough cause throughout the decade to address an ethnic disparity in access to the Internet for any professional journal or industry organization purporting to have in-depth reporting on industry trends to its constituency, be the trends favorable or not. The data shows that while the black and Hispanic populations begin the decade in the very same situation -- well below the Internet access levels of the white population -- Hispanics quickly close the gap while blacks continue to lag significantly. In fact, the Hispanic population accessed the Internet daily in greater proportion than the white population (75 percent

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<sup>&</sup>lt;sup>15</sup> Banks, Adam, "Race, Rhetoric, and Technology: Searching for Higher Ground," Ch. 2, par. 9, 2006.

vs. 74 percent, respectively) as of 2008. The black population, although much better off than it was at the start of the decade, is shown to still need what is not an insignificant increase in participation in 2008 at 69 percent.



Source: Pew Internet & American Life Project, 2000 – 2008 Surveys

Contrasting the lackluster attention to the topic of the digital divide by industry publications, there were some industry executives who made waves by pressing the topic in very public ways. Steve Case, former Chairman and CEO of America Online (or AOL, which at the turn of the century was the largest Internet company in the world), was one of these practitioners who consistently acknowledged existence of the digital divide, and even went a step further to support bridging it first-hand.

Outside of supporting President Clinton when called upon to speak publicly on the issue, Case took additional self-driven measures to improve the technology access imbalance among minority groups. One example is his inclusion of the concept in his remarks to the FCC in 2000

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as he defended the pending combination of AOL and Time Warner -- the largest merger in American business history. Case stated to the board of FCC Commissioners:

... I don't think there's a more urgent task before us than closing the Digital Divide.

One of the things Jerry [Levin] and I are most looking forward to is joining our resources and sharing our ideas to expand digital opportunity to all communities.<sup>[16]</sup>

Notably, AOL-Time Warner went on to erect a number of initiatives geared toward bridging the digital divide, including establishment of Places of Color, an Internet service provider (ISP) targeting urban minority communities via a partnership with (and financial investment in) DME Interactive, the first publicly traded African-American-owned Internet company.

### 2.3.3 Response within Popular Press

The popular press also intermittently chimed in on the public discourse during the years following the NTIA's digital divide series of reports. Just as in the case of the political and business conversations, there were competing allusions to a race-driven digital divide in major US-based publications. One of the more in-depth articles was published by BusinessWeek in 2003 as a special report on 'solving social problems.' A section of that article which was tellingly entitled *The Digital Divide That Wasn't* follows:

Roughly seven years ago, when the term [digital divide] was coined, it described a presumed problem of uncertain dimensions. Policymakers speculated that despite its promise, the Web -- which was then dominated by wealthy, white males -- might exacerbate societal divisions of race, income, gender, and education. There's still a gap, of course... [b]ut research shows that it's narrowing -- and that no problem

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Time Warner, Inc., "Opening Statement of Steve Case Remarks Prepared for Delivery Chairman and CEO America Online, Inc," July 27, 2000.

serious enough to earn the scary label digital divide really exists ... the percentage of African Americans and Hispanics who are going online should soon match their representation in the broader population.<sup>[17]</sup>

Conversely, three years later in 2006, Wired magazine, a major US periodical focused on how technology affects culture, the economy, and politics, published an article entitled *Digital Divide? It's Still There*, contrasting the interpretations of pundits in years prior. Noting released federal data (67% of white students used the Internet versus 44% of Hispanics and 47% of blacks) that dispelled notions that going online was a way of life for everyone, the article reads:

This creates incredible barriers for minorities," said Mark Lloyd, a senior fellow at the Center for American Progress and an analyst on how communications influence civil rights. Not using the internet "narrows their ability to even think about the kind of work they can be doing," Lloyd said. "It doesn't prepare them for a world in which they're going to be expected to know how to do these things." The racial divide in computer usage is tied to broader problems, including poverty in black and Latino communities and even a cultural reluctance to use the internet, Lloyd said. [18]

### 2.3.4 Section Summary

The tone of public discussion on the digital divide appeared to land on the extremes of either side -- one of acknowledgment and one of refute -- during the decade that followed the series of NTIA reports. A catalyst for the polarization could have been the transitioning of political administrations (the Clinton administration was replaced by the Bush administration in 2000), when stances on such topics tend to be intensified, while another could have been the

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<sup>&</sup>lt;sup>17</sup> Stone, Amey, "The Digital Divide That Wasn't," BusinessWeek, August 19, 2003.

Associated Press, "Digital Divide? It's Still There," September 6, 2006.

proliferation of independent and government research linking race (among other drivers) to an apparent technology gap in the US. Whatever the national sentiments over the last 10 to 15 years on the state of the digital divide, particularly as it relates to disparities along racial lines, my goal in briefly presenting examples of contrasting public responses to the matter is to simply assert that the concept took on a nationwide identity that continues to exist today.

# 2.4 The Digital Divide Today

By 2006, mass media had all but declared defeat of the "so-called" digital divide in the US, at least as it related to race. The New York Times published an article in March 2006 entitled *Digital Divide Closing as Blacks Turn to Internet*, stating:

African-Americans are steadily gaining access to and ease with the Internet, signaling a remarkable closing of the "digital divide" that many experts had worried would be a crippling disadvantage in achieving success ... Studies and mounting anecdotal evidence now suggest that blacks, even some of those at the lower end of the economic scale, are making significant gains.<sup>[19]</sup>

The same article goes on to present a supporting quote by Magic Johnson, the retired basketball icon turned accomplished businessman:

"What digital divide?" [Magic] asked rhetorically in an interview about his new Internet campaign deal with the Ford Motor Company's Lincoln Mercury division to use the Internet to promote cars to black prospective buyers.<sup>[19]</sup>

It appears the author's intent is for readers to accept Magic's suggestion that the digital divide is over as it relates to race, citing African-Americans' reception to automobile advertising over the Internet, as sufficient supporting evidence for his claim. I am skeptical of the article's

<sup>&</sup>lt;sup>19</sup> Marriott, Michel, "Digital Divide Closing as Blacks Turn to Internet," New York Times, March 31, 2006.

conclusions, but find it to be exemplary of what has seemingly been a movement by mass media to patch over whatever race-related technology gap that may continue to exist in the public's eye.

More recently, eMarketer (a digital marketing and media research firm) estimated in a March 2009 article entitled *The Dwindling Digital Divide* that "nearly one-half of the African-American population -- over 19 million people -- uses the Internet at least once a month, and in four years, 56% will be online."<sup>[20]</sup>

Exhibit 3: US Internet	Users, by Rac	e/Ethnicity,	2008-2013 (	% of popula	tion of each	group)
	2008	2009	2010	2011	2012	2013
Asian	70.8%	73.5%	76.0%	77.1%	78.0%	78.9%
White	66.0%	67.0%	67.8%	68.7%	69.4%	70.1%
Hispanic	49.1%	50.8%	52.4%	53.9%	55.2%	56.5%
African-American	46.4%	48.7%	51.0%	53.2%	54.8%	56.4%
Other	49.1%	50.4%	51.6%	52.7%	53.4%	54.0%

Source: eMarketer, February 2009

Supporting this claim, a July 2009 report from the Pew Internet Project (a research group) stated,

The notion of a digital divide for African-Americans has some resonance when thinking about the wireline internet, but when you introduce the mobile internet, the picture changes and African Americans are the pace setters....African Americans are the most active users of the mobile internet -- and their use of it is also growing the fastest. This means the digital divide between African Americans and white Americans diminishes when mobile use is taken into account... The high level of activity among African Americans on mobile devices helps offset lower levels of access tools that have been traditional onramps to the internet...<sup>[21]</sup>

<sup>&</sup>lt;sup>20</sup> eMarketer, "The Dwindling Digital Divide," eMarketer.com, March 12, 2009.

Horrigan, John, "Wireless Internet Use Survey", Pew Internet & American Life Project, July 22, 2009.

I believe there are credible conclusions that can be drawn about the state of America's digital divide based on African-Americans' higher adoption of Internet by mobile device, but I do not see how the conclusions in the aforementioned studies are substantiated. Perhaps these studies will at minimum provoke thought on distinguishing workstation and mobile device access to the Internet. For instance, I would think there to be significant difference between access via a workstation (such as a desktop or laptop computer) which offers a full display and keyboard, among other accoutrements, and access via a mobile device (such as a cell phone) which is primarily driven by specialized content delivery applications. One method is nearly the exclusive mode of access for production of tools and content, while the other is almost singularly reserved for consumption of content. A scientific study of this producer-consumer dynamic might attempt to compare the number of Internet applications programmed and amount of online content published using a mobile device to the same measure of applications and content created on a workstation. If the results indicated that the overwhelming majority of Internet applications and online content are created on a workstation, perhaps the reported leveling effects of mobile Internet access on technological equality in the US warrants reexamination.

# 2.5 Chapter Conclusion

I have presented a brief history and flash view of the current status of the conversation on a racerelated digital divide in the US to establish a foundation from which to examine this paper's focus. That is to question whether there are impediments to the extreme-progress or supersuccess of African-American founded consumer Internet companies. That discussion begins in Chapter 3 with some background on my anecdotal observations regarding Web entrepreneurship among African-Americans and continues in Chapter 4 with a presentation of empirical results.

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# 3.1 The Great Equalizer

In June 2000 at the SUPERCOMM<sup>[22]</sup> National Dinner, FCC Chair William Kinnard presented remarks about the Internet under the title of "The Great Equalizer," and stated:

We are at the cusp of the third greatest revolution in mankind's history. There was the Agricultural Revolution, and the Industrial Revolution, and now we are at the very beginning of the Information Revolution. This third revolution rewards those who control and process information. It gives them a competitive advantage and a road to national affluence. It is defined principally by its power to unlock the potential of markets, to transform retailing, to make businesses more profitable and to create unimaginable wealth for a privileged few.

Kinnard's comments embody why detection of a potential online obstacle, or impediment to super-success, among African-American consumer Internet companies should be part of a larger discussion. Proliferation of the Internet has proven there are huge financial rewards to be reaped for pioneers in this nascent territory. For example, consider the top-15 US founded Internet fortunes (Exhibit 4). Among them, all are billionaires and the notable net worth for each (with the exception of one -- Mark Zuckerberg) was generated in the five-year period immediately preceding Kinnard's prescient commentary about the Internet and its ability to create "unimaginable" wealth. It is additional testament to note that the #1 and #2 individuals are within the top-15 of the Forbes 400 (Forbes magazine's annual list of the "richest people in America"), and are by a considerable amount the youngest at the age of 37, whereas the top-15 richest people in America had an average age of 61 in 2010.

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<sup>&</sup>lt;sup>22</sup> SUPERCOMM is a trade show for the telecommunications industry that is jointly owned by the Telecommunications Industry Association (TIA), a trade organization, and USTelecom.

Exhib	it 4: Top-15 US Founded	Internet	t Fortun	es (as of M	larch 2010)	
	Name	Age	1,00	Worth llions)	Internet Fortune Source	Year Website Launched
1	Larry Page	37	\$	17.50	Google	1998
2	Sergey Brin	37		17.50	Google	1998
3	Jeff Bezos	46		12.30	Amazon	1994
4	Eric Schmidt	54		6.40	Google	1998
5	Pierre Omidyar	42		5.20	eBay	1995
6	Mark Zuckerberg	25		4.00	Facebook	2004
7	Mark Cuban	51		2.40	Broadcast.com	1995
8	Jeffrey Skoll	45		2.40	eBay	1995
9	Kavitark Ram Shriram	53		1.50	Google	1998
10	Omid Kordestani	45		1.40	Google	1998
11	David Filo	43		1.40	Yahoo	1995
12	Peter Thiel	42		1.30	PayPal	1998
13	Jerry Yang	41		1.30	Yahoo	1995
14	Meg Whitman	53		1.30	eBay	1995
15	Todd Wagner	49		1.20	Broadcast.com	1995

Source: Forbes magazine (adapted from The Forbes 400 and The World's Billionaires lists)

This list of Internet fortunes<sup>[23]</sup> is abbreviated for the purposes of this paper, but there is a sizeable number of Internet elite who have amassed tens- and hundreds-of-millions of dollars from their involvement with Internet related ventures. Additionally, it is interesting to observe that among the fifteen listed, a third generated wealth from their work with Google -- the tenth largest public company by market capitalization in the US and nineteenth largest in the world within six years of "going public" and little more than a decade after its inception. It is in light of these statistics and Kinnard's commentary that I wonder why I have yet to identify an African-American who has generated "unimaginable" wealth from founding a consumer Internet start-up.

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I would like to point out that every single website listed in the top-15 Internet fortunes is consumer-facing. This highlights why I chose to conservatively focus on consumer Internet concepts when studying the absence of African-Americans among blockbuster ventures.

An argument to perhaps consider with such an observation is that these Internet elite are well beyond *most* people on earth when it comes to net-worth, regardless of race or ethnicity, and therefore any categorical lack of belonging to their "club" is merely coincidental. This is why I chose to delve a bit further into my observation by researching up-and-coming Web entrepreneurs who are deemed by start-up pundits to have the likeliest opportunities to become the next awe-inspired household names. I gathered relevant information on Web concepts that have presented over the past two years at the TechCrunch50 conference -- an invite-only gathering that purports to find the best 50 (or so) of the year's Web 2.0 start-ups and launch them in front of the industry's most influential venture capitalists, companies, and press. Almost half (forty-five) of the nearly one-hundred TechCrunch50 participants in 2008 and 2009 met my criteria of being US founded and consumer-focused. They are listed in the Exhibit 5:

Exhibit 5: TechCruno	ch50 Consumer Web Offerings 2008	and 2009	
Website	Description	Entrepreneur	Photo*
AnyClip	Movie clip sharing	Aaron Cohen	1
Birdpost	Vertical social networking	Jason Peery	a
Clicker	Internet TV programming guide	Jim Lanzone	2
Clixtr	Social camera application	Fergus Hurley	3
Closet Couture	Online fashion community	Christina Elia	b
Cocodot	Online Invitations	Shawn Gold	4
DotSpots	Content annotation	Farhad Mohit	c
Dropbox	File sharing	Drew Houston	d
Emerginvest	Finance and investments portal	Andrew Waterman	e
ExchangeP	Fantasy stock market	Charles Katz	f
FitBit	Exercise information tracking	James Park	g
Footnote	Online document archives	Russell Wilding	h
Fotopedia	Wikipedia for photos	Jean-Marie Hullot	i
GoodGuide	Rating and review website	Dana O'Rourke	j

Source: TechCrunch50 (2008 and 2009), CrunchBase.

<sup>\*</sup> References the entrepreneur photos in Exhibit 5. Letters represent 2008. Numbers represent 2009.

Website	Description	Entrepreneur	Photo*
Goodrec	Recommendation service	Mihir Shah	k
GoPlanit	Travel planner	Steve Chen	1
Grockit	Online learning game	Farbood Nivi	m
Hangout.net	Online social hangout activities	Pano Anthos	n
Hark!	Browsing platform	Fouad ElNaggar	5
iCharts	Interactive charting	Seymour Duncker	0
Imindi	Thought engine	Adam Lindermann	p
Insttant	Real-time people-generated news	Joe Langevin	6
LiveHit	Discovery / real-time data analytics	Jeanine LeFlore	q
LearnVest	Personal finance education	Alexa von Tobel	7
Lissn	Real-time social media threads	Myke Armstrong	8
Localbacon	Job board	Joe Essenfeld	9
Me-trics	Personal data aggregation	James Vreeland	r
MIXTT	Group social network	Eve Peters	S
MOTA Motors	Used car online platform	Reza Bundy	10
Mytopia	Social gaming community	Guy Ben-Artzi	t
OtherInbox	Email services	Joshua Baer	u
Perpetually	Private web archiving	Darrell Silver	11
Playce	Synchronous social games	Carmel Gerber	v
Postbox	Email productivity	Scott Macgregor	w
Redbeacon	Find and schedule local services	Ethan Anderson	12
SeatGeek	Forecasts price of event tickets	Jack Groetzinger	13
Storysomething	Story platform for children	Jim Rose	14
Threadsy	messaging service	Rob Goldman	15
ToonsTunes	Create and share music online	Paul Bohan	16
ToyBots Woozees	Internet-enabled toy platform	Shervin Pishevar	17
TrueCar	New car pricing information	Scott Painter	X
VideoSurf	Computer vision search engine	Lior Delgo	у
Udorse	Endorsements via photo tagging	Geoffrey Lewis	18
Yext	The next yellow pages	Howard Lerman	19
YourVersion	Personalized discovery engine	Dan Olsen	20

Source: TechCrunch50 2009, CrunchBase.

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<sup>\*</sup> References the entrepreneur photos in Exhibit 5. Letters represent 2008. Numbers represent 2009.

Simply noting the wide ranging diversity of start-ups selected to participate across two years of the conference, I now supplement this table with photos -- matching founders' names to faces:



Source: TechCrunch50 (2008 and 2009), CrunchBase.

Although an imprecise measure, looking at the photos and names of the consumer Web concept founders in the TechCrunch50 over the last two years suggests there is some ethnic diversity in the group. There also appears to be some (albeit small) female representation. However, none of the individuals appear to be black. This observation holds even when I relax my standard and include enterprise focused and non-US-based companies that participated in the conference.

Recalling the opening text of this chapter, FCC Chair Kinnard's address to the 2000 SUPERCOMM National Dinner, the Internet is supposed to represent the dawn of the Information Revolution -- and it is generally accepted that it does. It is my impression that revolutions (whatever the type) are supposed to effectuate a fresh start; where only the most productive of old rules and standards remain, and success, as a term, is broadened to be more representative of the times. The absence of African-American Web entrepreneurs on each of the lists I have presented (Exhibits 4 & 5) leads me to deduce that although society is indeed witnessing an Internet-driven metamorphosis of commerce and economics, vestiges of unfavorable circumstances make this revolution less of the baking of a new pie than it is a hyperexpansion of the pie that for all intents and purposes already existed. If the Internet is truly a democratizing agent -- or "The Great Equalizer" -- I do not believe it is a stretch to expect to identify at least one African-American founder among a relatively diverse group of promising start-ups. Yet without even one black founder to point to, by my imprecise assessment, the count remains at none, and draws forward the fundamental observations that drive this thesis.

#### 3.2 Where One Would Not Be None

Famed entrepreneur Howard Aiken (1900-1973), inventor of the world's first programcontrolled calculator, is noted as espousing: "Don't worry about people stealing your ideas. If your ideas are any good, you'll have to ram them down people's throats."<sup>[24]</sup> Most entrepreneurs would admit that losing their "bet-the-farm" idea to the world before having an opportunity to execute upon it is a small fear that is permanently camped in the back of their minds. Good ideas are the lifeblood of Web entrepreneurship, and in the fast-paced, highly visible economy that is the Internet, an entrepreneur will find out very quickly just how good his idea really is.

What exactly constitutes a good idea and where do they come from, though? And more significantly, what constitutes a "blockbuster" idea and why has there not been one African-American (again, via my cursory observation) who has been able to both generate and carry one of these ideas across the threshold of "Club Internet Elite?" Perhaps a brief step into the storyline of a few consumer Web concepts that exemplify ultra-successful ideas might generate insight. The following sections highlight two such blockbuster concepts: Twitter and Facebook.

# 3.2.1 "Twitter: Share and Discover What's Happening Right Now..."

Overview: Twitter is a free social networking and micro-blogging service that enables its users to send and read messages (known as tweets) via the Twitter website, Short Message Service (SMS)<sup>[25]</sup>, or external applications. Tweets are text-based posts of up to 140 characters displayed on the author's profile page and delivered to the author's subscribers who are known as followers. Jack Dorsey launched Twitter in March 2006. The name "Twitter" was chosen to be descriptive of the product: "a short burst of inconsequential information."

<u>Idea Cultivation</u>: By the age of 14, Dorsey was obsessed with dispatch routing and wrote open source software for dispatching which continues to be used by various taxi cab companies. In

25 SMS is more commonly known as "text messaging" via mobile phone.

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Weiss, Eric A. "A Computer Science Reader: Selections from Abacus," New York, NY: Springer, 1988, p. 404.

Exhibit 7: Twitter Homepage Near Launch in 2006



Source: Internet Archive WayBackMachine

2000, at the age of 24, he started a company in Oakland, CA to dispatch couriers, taxies and emergency services from the Web. That company eventually morphed into Twitter nearly five years later after Dorsey began to take notice of status messages in instant messaging. He wondered how to build a service on that very premise -- status updates to friends without the need to write a whole blog entry. A prototype for what became Twitter was completed in just two weeks. [26]

Glaser, Mark. "Twitter Founders Thrive on Micro-Blogging Constraints," PBS.org, May 17, 2007.

Momentum Shift<sup>[27]</sup>: Four or five months into Twitter's existence, Om Malik, a venerated Silicon Valley technology blogger, "got a whiff of it, and linked to it," effectively launching the service publicly (Dorsey had not even bought Twitter.com yet, as the service was using the moniker "Twttr"). The South by Southwest (SXSW) gathering -- a set of interactive, film, and music festivals and conferences that take place every spring in Austin, Texas -- in early-2007 provided the next large influx of steam to the Twitter engine. During the event, usage of the service went from 20,000 tweets per day to 60,000<sup>[27]</sup>.

<u>Current Status</u>: Twitter has fundraised over \$57 million from venture capitalists after several rounds of financing, including a July 2007 first round of funding that is rumored to have been between \$1 million and \$5 million.<sup>[28]</sup> Users were tweeting 5,000 times a day in 2007, 300,000 times per day in 2008, 2.5 million times per day in 2009, and as of February 2010, the statistic rose to 50 million tweets per day, or an average of 600 tweets per second.<sup>[29]</sup> In March 2010, the service surpassed 10 billion total lifetime tweets.<sup>[30]</sup>

### 3.2.2 Facebook: "Helps You Connect and Share..."

Overview: Facebook is a social networking website that allows users to add friends and send them messages, and update their personal profiles to notify friends about themselves. Additionally, users can join networks organized by city, workplace, and school or college. Mark Zuckerberg launched Facebook in February 2004. The name "Facebook" stems from the colloquial name of books given at the start of the academic year by many university administrations with the intention of helping students to get to know one another better.

Douglas, Nick. "Twitter blows up at SXSW Conference," Gawker, March 12, 2007.

Arrington, Michael. "More Information On That Secretive Twitter Financing," TechCrunch, July 29, 2007.

Weil, Kevin. "Measuring Tweets," Twitter blog, February 22, 2010.

Parr, Ben. "Twitter Hits 10 Billion Tweets," Mashable, March 5, 2010.



Source: Internet Archive WayBackMachine

<u>Idea Cultivation</u>: The original concept for Facebook was inspired by a product produced by Zuckerberg's preparatory school, Phillips Exeter Academy, which for decades published and distributed a printed manual of all students and faculty, unofficially called the "face book." Before Exeter, however, Zuckerberg, who began programming in 6th grade<sup>[31]</sup>, enjoyed developing computer programs, especially communication tools and games. He built a program to help the workers in his father's dentist office communicate and a music player named Synapse that used artificial intelligence to learn the user's listening habits. Microsoft and AOL tried to purchase Synapse and recruit Zuckerberg, but he chose to attend Harvard University instead.<sup>[32]</sup> As a sophomore at Harvard, Zuckerberg initially programmed a concept called Facemash -- a

Grynbaum, Michael. "Mark E. Zuckerberg '06: The whiz behind thefacebook.com." The Harvard Crimson, June 10, 2004

McGirt, Ellen. "Hacker. Dropout. CEO.," FastCompany, May 1, 2007.

website that compared sets of two photos of fellow undergraduate students and asked users to choose the 'hotter' person. Facebook emerged after Zuckerberg realized the value in Facemash's content, as the university did not have a student directory with photos and basic information.

Momentum Shift: Membership to the Facebook website was initially restricted to students of Harvard College, and within the first month, more than half the undergraduate population at Harvard was registered on the service. The network was expanded to Stanford University, Columbia University, and Yale University in March 2004, and quickly continued on to include all Ivy League and Boston area schools. By this time the service had an 85% penetration rate -- 3.85 million members -- in the colleges it supported, with 60% logging in daily. In September 2006, Facebook expanded beyond schools to include anyone with an email address.

<u>Current Status</u>: Facebook has fundraised \$716 million from Angels, Venture Capitalists, and Institutions -- including an initial investment in the amount of \$500,000 in June 2004 from PayPal co-founder Peter Thiel (introduced to Zuckerberg by the former cofounder of Napster, Sean Parker. Zuckerberg bumped into Parker shortly after moving to Palo Alto to pursue Facebook full-time.) Facebook currently has more than 400 million active users worldwide. [35]

### 3.2.3 Section Summary

The preceding stories of Twitter and Facebook may seem somewhat different at first glance, but a more deliberate comparison reveals that they are very much alike in a few rather significant ways. For instance, both blockbuster companies were grown to Internet stardom in Silicon Valley, as has been the case for nearly every US-based blockbuster Web concept to-date. In fact,

<sup>&</sup>lt;sup>33</sup> Phillips, Sarah. "A brief history of Facebook," Guardian News and Media Limited, July 25, 2007.

Arrington, Michael. "85% of College Students use Facebook," TechCrunch, September 7, 2005.

Facebook, "Facebook Statistics." <a href="http://www.facebook.com/press/info.php?statistics">http://www.facebook.com/press/info.php?statistics</a>

their Silicon Valley home bases appear to have served as the thin line of separation between super-success and relegation to simply being yet another "good idea" (although there are certainly other ingredients that allowed these concepts to succeed in the ways they have). For Facebook, the concept's initial, very sizable cash infusion was a product of proximity, with Zuckerberg meeting Thiel by way of Parker whom Zuckerberg "bumped into" shortly after moving to Silicon Valley. For Twitter, Dorsey had "luck" in befriending and then co-founding the company with two ex-Google employees who were successful serial online entrepreneurs. Additionally, both Dorsey and Zuckerberg are founders who did their own software programming and both share a storyline of having had early exposure to the very underlying inspirations for their Web products -- Dorsey, a successful teenage dispatch software programmer; Zuckerberg, a successful teenage communications software programmer.

Twitter and Facebook's stories of ascension provide many avenues to pursue in identifying the existence of a potential online obstacle for African-Americans, and one of the most salient points for thought is summarized within Malcolm Gladwell's book *Outliers: A Story of Success*:

It is those who are successful...who are most likely to be given the kinds of special opportunities that lead to further success. It's the rich who get the biggest tax breaks. It's the best students who get the best teaching and most attention...Success is the result of what sociologists like to call "accumulative advantage." [36]

The black Web entrepreneurs who participated in this thesis collectively offer a different perspective on what seems to be Dorsey and Zuckerberg's accumulative advantage in achieving beyond-average success. The results of my interviews with these individuals follow in Chapter 4.

<sup>&</sup>lt;sup>36</sup> Gladwell, Malcolm. "Outliers: The Story of Success," New York, NY: Little, Brown and Company, 2008, p.30.

# 4.1 Methodology

I chose to examine the backgrounds, attitudes, and experiences of individuals who have a critically important perspective on potential impediments to blockbuster success by a black entrepreneur founded Web concept -- black Web entrepreneurs themselves. Participants for this analysis were sourced as randomly as possible, as to attempt to diminish bias due to communal opinion, largely by reaching out to relevant networks of colleagues, friends, and acquaintances. Some contacts passed along a name or two from pools of past colleagues, schoolmates, or business partners, while others brought to my attention that they themselves were good candidates to become a thesis participant due to a prior consumer Internet effort that had come and gone at some point in their past. Additionally, a few of the participants came by way of referral from other participants, but by-and-large the process was as random as it likely could have been given my word of mouth and cold-calling approach to the effort.<sup>[37]</sup>

# 4.2 Collecting the Data

The source of data for this thesis was two-fold: (1) an online survey that included 31 short-form factual questions and (2) phone interviews that lasted between 30 and 60 minutes consisting of longer form opinion-based questions and clarifying some of the participants' survey responses.

I constructed a website for my thesis at www.onlineobstacle.com and used it to provide constant access to the online survey, information about my thesis, some samplings of data and resources I planned to use within my thesis, and brief biographical information on myself. Beyond initial

As a side note, I found it to be surprisingly difficult to track down black Web entrepreneurs, and then those who were willing to participate. Much like networking for any other reason, I was quickly reminded that a warm introduction goes a long way.

questions gathering the participant's name and e-mail address, there were three main sections for the online survey that collected information on the participants' basic background (e.g. childhood and current residences, gender, birth year, and schooling), family background (e.g. schooling levels and professions of parents, number of siblings, and birth order), and experience with Internet ventures (e.g. name, launch year, and description of last online venture, third-party capital sought and obtained, and co-founder demographics). The online survey concluded with an inquiry into anything of importance to the participant I may have missed in my questioning, as well as a request to interview the candidates by phone, to which 100% of the survey participants accepted.

Each of the participant interviews I conducted was different from the one prior or the one following. Some of the entrepreneurs wanted to know more about my background and impetus behind setting out to author a thesis involving African-American enterprise on the Internet, others were very direct in answering the questions I posed without indicating a desire to segue into anything further, while another set was rather expressive in wanting to transition into an "off the record" conversation. There were two questions I was prepared to ask each of the participants outside of the specific questions I may have had in response to his / her survey submission or posing a follow-up question on a prior answer. Those two questions were:

1. Do you believe there to exist impediments to blockbuster success for African-American founded consumer Internet companies? If yes, please describe them. If no, please give your opinion on what appears to be a non-existent African-American representation among blockbuster consumer Internet companies.<sup>[38]</sup>

<sup>&</sup>lt;sup>38</sup> It is significant to note that 100% of the participant responses to question 1 were 'yes,' meaning that I never asked the 'no' cases in both question 1 and question 2.

2. If yes to question 1, what are some solutions you would recommend to assist in diminishing these impediments you have identified? If no, what do you believe to be the ingredients for reaching blockbuster status as a consumer Internet company?

The participants spoke at length (with assurance of anonymity) in answering my questions, and I listened while audio-recording their responses for future reference and writing extensive notes. After completing the lot of interviews I went back and forth between the data I had gathered and the recorded interviews seeking common themes that might have emerged among the participants' responses. There were three themes that were recurrent: (1) limited numbers of African-American technology graduates, (2) unequal access to start-up capital, and (3) a lack of involvement in advantageous eco-systems like Silicon Valley.

### 4.3 Presentation of the Results

Potentially relevant summary statistics based on demographic information of the 16 black Web entrepreneur participants are presented in the following bullet points to maintain anonymity:

- Gender: 15 participants (94%) were male and 1 (6%) was female;
- Age: 2 participants (12%) were below the age of 30, 7 (44%) were between 30 and 35, 4 (25%) were between 36 and 40, and 3 (19%) participants were above 40;
- <u>Hometown</u>: 11 participants (69%) were raised on the East Coast, 4 (25%) in the Midwest, none on the West Coast, and 1 (6%) was raised mostly internationally;
- Residence: 12 participants (75%) currently reside on the East Coast, 1 (6%) in the Midwest, 1 (6%) on the West Coast, and 2 (13%) live internationally;
- <u>Formal Education Level</u>: 6 participants (38%) completed college (no advanced degree), 8 (50%) obtained a Master's degree, 1 (6%) completed some college, 1 (6%) is still an undergraduate student, and none have a doctorate level degree;

- <u>HBCU Educated</u>: 3 participants (19%) attended undergraduate school at an HBCU;
- <u>Ivy League Educated</u>: 2 participants (13%) attended undergraduate school at an Ivy League institution;
- <u>Undergraduate Concentration</u>: 4 participants (25%) studied an engineering or technical discipline in undergraduate school and the remaining (75%) studied business or a closely related subject;
- <u>Father's Formal Education Level</u>: 4 of the participants fathers (25%) completed high school or some college courses, 3 (19%) completed college (no advanced degree), 6 (38%) completed at least one advanced degree, and 2 chose no response;
- Mother's Formal Education Level: 7 of the participants mothers (44%) completed high school or some college courses, 2 (13%) completed college (no advanced degree), 5 (31%) completed at least one advanced degree, and 2 chose no response;
- <u>Birth Order</u>: 1 participant (6%) was an only child, 6 (38%) were first-born children, 6 (38%) were middle children, and 3 (19%) were the youngest child.<sup>[39]</sup>

Full discussions of the three recurrent themes I identified from the participant responses about a potential online obstacle are included in the subsections that follow. Brief introductions to each may be found immediately below:

<u>A Game of Numbers</u>: The African-American community does not appear to have enough undergraduate students studying engineering and computer science disciplines to facilitate creation of promising Internet ventures that could achieve blockbuster status. Following are some suggestive participant quotes that capture the spirit of this theme:

<sup>&</sup>lt;sup>39</sup> The median number of total children per family amongst the participants was three and the maximum was seven.

"Our kids go to school and they're not coming out to be programmers. By-and-large that is not what they are doing. We're thinking on the business level and the conceptual level, but that is not paired with technology. They say I have a marketable skill and I want to cash in. They would much rather a sure thing that pays the bills."

"I think it is a supply-side issue and not a demand-side issue. The ability for our people to get online and consume various content and services is there, whether traditional Internet via computer or by mobile. Where the real issue is when it comes to black founded concepts is that the amount of people that funnel in through the academic lines that end up yielding those kinds of entrepreneurs...you just don't have enough people going into the process. If you look at the African-American population and the people going into fields like engineering and computer science, I think you find the smallest set. And then you have a cultural bias between the folks who do go into those careers leaning towards a conservative career path. No one will knock you if you take a job at [any one of several large technology focused companies], but the environment within the community is not nurturing when it comes to hanging out in a garage to launch the next blockbuster concept."

<u>A Lower Case of Capital</u>: African-American Web entrepreneurs by-and-large have not achieved the heights of capital infusion that seems to be necessary to transition a concept from "successful" to "blockbuster." Following are some suggestive participant quotes that capture the spirit of this theme:

"The black entrepreneurs in the Web space are constantly trying to figure out how to move to the next level and the greatest barrier is funding."

"In the technology space there's a perception that the white guys do it better. And that is because they have had access to capital, and have been able to launch products that work. ...You have a bunch of guys who haven't necessarily figured out the revenue piece of it, but they've been able to figure out something that's successful in terms of engagement. We always end up having to cobble up 'dough.' When we go to 3<sup>rd</sup> party funders who aren't black owned, we often get beaten to the punch, and a lot of that has to do with relationships that got established in undergrad and grad school. So a lot of them know each other. When we put our teams together who have been to those schools, we generally get there second because the conversations don't happen on the business level, they happen on the social level."

"Putting all of the pieces together is the challenge for black entrepreneurs. They don't have access to the seed funding to say this is all we're going to focus on."

The Silicon Valley Vacuum: African-American Web entrepreneurs do not in any significant numbers live and play in the start-up ecosystem that is Silicon Valley, inhibiting development of relationships and access to resources needed to ascend to blockbuster status online. Following are some suggestive participant quotes that capture the spirit of this theme:

"A lot of us aren't sitting in Silicon Valley. It's a bedroom community. Why is that not a welcome community for black folk?"

"Blockbusters are very incestuous when you get to that level. Angels from FourSquare [a location-based social networking website] are Twitter guys. It's a 'good new boys' network -- either you are on the inside or the outside. The same VC who invested in 'this' invests in 'that.' Same lawyers are used, etc. It's a small

network of people making a lot of money, and just like any other network like that, you don't want to let 'others' in."

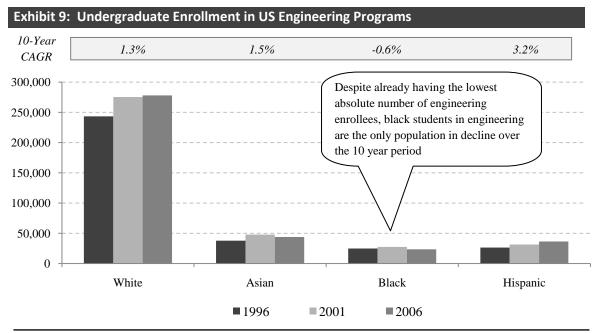
"Lots of things have to mix well. Silicon Valley is a very unique ecosystem. An idea is worth nothing; execution is everything -- and execution becomes infinitely harder if you're not in the right ecosystem that will enable you to execute. And a big part of execution is raising capital. [For example], it's the reason Evan Williams was able to support and finance Twitter. One, he had a great background with Blogger. Two, he had good relationships with investors -- he had investors who had just put money into Odeo. Odeo was going south and he paid them their money back because he knew he had Twitter under the hood -- one of his developers [Jack Dorsey] had started working on it and that was where he was going to spend his time going forward. Once he got that to a certain point where he showed some growth, he could go back to those investors and raise capital easily. He's in that ecosystem. And he's dealing with investors who understood what Twitter's metrics would be all about; that it's about the growth and usage and versus the revenue, and those investors don't exist everywhere.

"Companies in Silicon Valley tend to blow each others' horn. So for example, there are a lot more influential bloggers based out of Silicon Valley, so it's almost like a neighborhood type thing. They tend to talk about the start-ups that are in their neighborhood way more than they talk about other startups, because they're bumping into people all day long from these various companies. And so, it sort of self

perpetuates. For a consumer Internet play, you should really be in Silicon Valley. If not you aren't there, you are handicapping yourself, probably, by a factor of five."

#### 4.3.1 A Game of Numbers

This point was the most common response to the interview question inquiring if each participant thought there were any impediments to African-American Web entrepreneurs achieving blockbuster status with their concepts. I gathered background data from the website of the National Science Foundation (NSF) to attempt to validate my participants' "feel" for the environment, and it turns out that the basis of their assertion is correct (Exhibit 9).



Source: National Science Foundation: Women, Minorities, and Persons with Disabilities in Science and Engineering 2009.

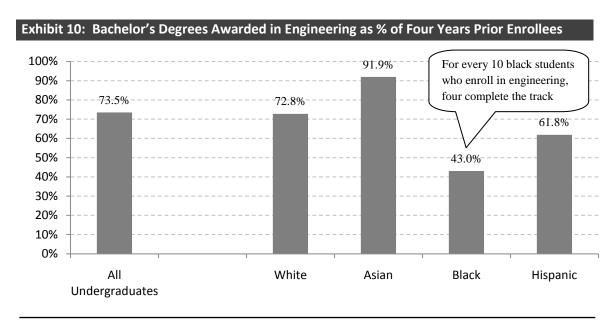
The data confirms that not only do blacks account for the lowest population among US engineering students, but their numbers fall well below their national proportion (5% of engineering students vs. ~13% of the US population). Additionally, the population of black engineering students is in decline (a compound annual growth rate of -0.6% between 1996 and 2006 -- the most recent decade of data offered by the NSF). However, I do acknowledge this is

merely a proxy for the fuller extent of the entrepreneurial implications from my participant responses. For instance, the data says little about how many of these engineering students will eventually become entrepreneurs. Nor does the data account for the founders of Web companies who are self-taught programmers, perhaps not having ever stepped foot inside of an engineering school. Even so, I believe it is a fair argument to make that if the US government was to make a budget allocation to catalyze Internet entrepreneurship, engineering programs would likely be top of the list and thus data on them serve this paper's purposes as well.

After reviewing the NSF's 2009 report on *Women, Minorities, and Persons with Disabilities in Science and Engineering* and working with some of the downloaded data, I made another observation that further supports my participants' assertion. Among the four major race/ethnic groups in the US, African-Americans have by far the highest attrition rate in engineering programs (Exhibit 10). Only 43% of black students who enroll in an engineering program are awarded a Bachelor's degree in engineering, while the average among all undergraduate engineering students is 74%. (The assumption is that these students are switching into other majors at their various institutions, rather than dropping out of school altogether).

The lack of African-American students entering into engineering programs and then graduating with degrees in engineering would appear to serve as an obstacle to super-success in online enterprise, as indeed part of the story is about base rates or "a game of numbers." One of the takeaways from the review of the stories of Twitter and Facebook in Chapter 3 of this thesis was that the founders of these concepts knew how to program computers, and mastered the skill at an early age. Although both Dorsey (Twitter) and Zuckerberg (Facebook) claim they were self-taught as programmers, I would wager there are fewer numbers of self-taught programmers than

those mastering that skill in the halls of higher education -- especially within the black community in light of our earlier review of the digital divide.



Source: National Science Foundation: Women, Minorities, and Persons with Disabilities in Science and

Engineering 2009.

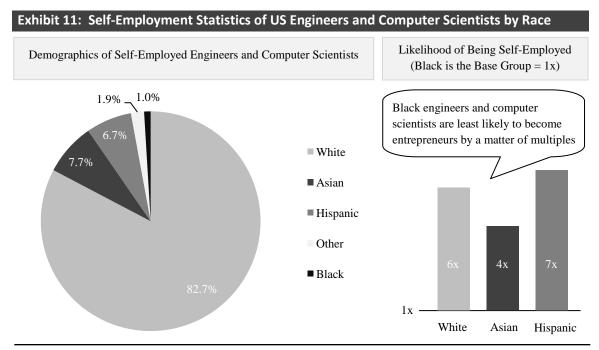
Note: Data represents a simple average of 8 classes of graduating engineering students (1999 – 2007).

Then there is the related issue of black engineers and computer scientists becoming entrepreneurs. The NSF's data shows African-Americans are well below all other race/ethnic groups when it comes to representation among self-employed engineers and computer scientists and are least likely among them to be self-employed (Exhibit 11).

This data supports more general research on African-Americans and entrepreneurship presented by Scott Shane, professor of entrepreneurial studies at Case Western University and author of *The Illusions of Entrepreneurship*, where Shane states:

One stubborn tall tale maintains that because blacks face a glass ceiling in Corporate America, entrepreneurship among them is very common. ... [Yet] entrepreneurship is quite rare in the black community. Consider for instance the following statistics:

(1) Only 5.1 percent of business owning households have a black head as compared to 12.7 percent of non-business-owning households. (2) More than twice the proportion of whites are self-employed than the proportion of blacks. 13.1 percent of white men and 7.4 percent of white women are self-employed, as compared to 5.1 percent of black men and 2.7 percent of black women. Clearly, the myth of black entrepreneurship is just that: a myth. [40]



Source: National Science Foundation: Women, Minorities, and Persons with Disabilities in Science and

Engineering 2009.

Note: Data represents a simple average of 8 classes of graduating engineering students (1999 – 2007).

In light of this information, the underwhelming movement by black engineers and computer scientists, an already diminutive group in representation among their field's counterparts, to choose entrepreneurship as a profession appears to have less to do with the field of study than it does a racial bias. Shane explores this potential bias by dispelling a lack of interest, the amount and levels of education, access to social networks, and a deficiency of self-employed black role

Shane, Scott A. "The Illusions of Entrepreneurship: The Costly Myths That Entrepreneurs, Investors, and Policy Makers Live By," New Haven, Connecticut: Yale University Press, 2008, Digital Edition.

models as primary factors. Money, he purports, is the overwelming source of bias asserting that "the limited net worth of black households keeps blacks from starting businesses at the same rate as whites." Fittingly, the topic of lack of access to capital by black Web entrepreneurs was the second most common answer to my question posed to participants on the dearth of black founded blockbuster companies, and is presented for discussion next.

## 4.3.2 A Lower Case of Capital

I have experienced fundraising to generally be a sore point of discussion among many black entrepreneurs, and so I expected the point to be near top of the list of potential barriers communicated by my consumer Web focused participants. A wealth of meaningful research has been conducted on this topic, and I have found that a 2009 report published through the Ewing Marion Kauffman Foundation provides a fantastic summary of the most salient considerations:

The median level of net worth among blacks is \$6,200, eleven times lower than the white level. Low levels of black personal wealth may be detrimental to securing capital because this wealth can be invested directly in the business or used as collateral to obtain business loans. In addition to relatively low levels of personal wealth, previous research provides evidence that is consistent with black entrepreneurs facing lending discrimination. Black-owned firms experience higher loan denial probabilities and pay higher interest rates than white-owned businesses even after controlling for differences in creditworthiness and other factors. Finally, black-owned businesses have very low levels of startup capital relative to white-owned businesses and these differences persist across all major industries.<sup>[41]</sup>

<sup>41</sup> Robb, Alicia. Fairlie, Robert. Robinson, David. "Patterns of Financing: A Comparison between White- and African-American Young Firms," Ewing Marion Kauffman Foundation, February 2009, p.1.

Some of the data backing the Kauffman Firm Survey report is presented in Exhibit 12, from which I have drawn a few observations. The total mean amount invested in the start-up process for black entrepreneurs (\$28,198) is a third of the level white entrepreneurs (\$81,773) invest and the level of investment from third parties (Outsider Equity % Total + Outsider Debt % Total) is significantly higher for white entrepreneurs (47%) than it is for black entrepreneurs (29%).

	White	% Total	Black	% Total
Total Financial Capital	\$81,773		\$28,198	
Owner Equity	27,503	34%	15,828	56%
Inside Equity	1,758		453	
From Spouse	499	1%	147	1%
From Parent(s)	1,259	2%	307	1%
Outsider Equity	7,294		461	
From Internal Investors	2,721	3%	174	1%
From Other Businesses	1,775	2%	*	*
From Government	388	0%	*	*
From Venture Capitalists	1,924	2%	*	*
Owner Debt	3,661		788	
Personal Credit Card(s) and Other Loans		4%		3%
Insider Debt	7,838		3,018	
Family Loan	4,081	5%	2,506	9%
Business Loan by Owner	2,179	3%	*	*
Other Loans from Employees/Owners	1,577	2%	464	2%
Outsider Debt	33,720		7,649	
Family Loan	13,390	16%	5,034	18%
Business Loan by Owner	2,575	3%	1,115	4%
Other Loans from Employees/Owners	10,103	12%	718	3%
Credit Line Balance	3,458	4%	482	2%
Other Business Debt	4,193	5%	300	1%

Source: Kauffman Firm Survey Microdata. "Patterns of Financing: A Comparison between White-and African-American Young Firms. Sample Size: 4,163.

Note: \* indicates there were too few observations for reliable estimates.

Pair these observations with research that says "racial differences in startup capital are the single most important factor explaining why black firms are less successful" and that "the difference in the startup capitalization of new businesses led by black and white entrepreneurs [explains] as much as 43.2% of the difference in performance between the two groups of firms," [43] and we arrive at another feasible component of an obstacle to blockbuster success for African-American Web entrepreneurs.

These results raise the question: Is start-up success (or super-success), in general, directly correlated to the level of initial capitalization? University researchers Robert Fairlie and Alicia Robb speak directly to this point in their 2005 study of the most recent Characteristics of Business Owners Survey, conducted by the US Census Bureau. They state:

[T]he amount of required startup capital is potentially endogenous to business success because potentially successful business ventures are likely to generate more startup capital than business ventures that are viewed as being potentially less successful. Thus, we cannot determine with certainty that lower levels of startup capital are primarily driven by constraints in obtaining financing.<sup>[44]</sup>

Based on these statements, it would appear to follow that since African-American start-ups are funded by third parties at nearly two-thirds the rate of white start-ups (Exhibit 12), that traditional third party funders more frequently view African-American start-ups as having less potential for success than white start-ups. This would support one of the listed participant quotes

Shane, Scott A. "The Illusions of Entrepreneurship: The Costly Myths That Entrepreneurs, Investors, and Policy Makers Live By," New Haven, Connecticut: Yale University Press, 2008, Digital Edition.

Fairlie, Robert W. and Alicia M. Robb. "Race and Entrepreneurial Success: Black-, Asian-, and White-Owned Businesses in the United States", Cambridge: MIT Press, 2008.

Fairlie, Robert and Robb, Alicia. "Why are Black-Owned Businesses Less Successful than White-Owned Businesses? The Role of Families, Inheritances, and Business Human Capital," Department of Economics, University of California, Santa Cruz, 2005, p.18.

that there is a perception among Internet concept funders that white Web entrepreneurs simply "do it better."

But what of the notion that even the best Internet-based companies are started cheaply with shoestring budgets? Is it potentially the case that these general statistics on capitalization do not apply to consumer Internet start-ups? A 2008 article in XConomy, an online business and technology publication, sums up what many in the start-up community have exclaimed for the better part of the last decade, saying: "The new model for getting software startups off the ground involves incubators and small investments... Pay a two- or three-person team bread-and-water wages for a few months, say a total of \$20,000, and see if it works. If it does, the company can then raise more money." [45] Should this not level the playing field in some ways for African-American Web entrepreneurs even in light of lower capitalization levels? This could certainly be the case for *average* consumer Web start-ups, but this thesis is about the lack of game-changing blockbuster concepts and I remain unconvinced that the same rules apply because of the rather significant historical early-funding levels for super-successful Internet companies.

Take, for instance, the startup capitalization levels of some of the most notable blockbuster consumer Web concepts around: Google had an angel investment of \$100,000<sup>[46]</sup> from Andy Bechtolsheim, one of the cofounders of Sun Microsystems; Amazon.com received \$1.0 million of seed capital from a group of 15 angel investors, including Wall Street buddies of founder Jeff Bezos, friends of his parents, former classmates from Princeton, and a small group of local investors<sup>[47]</sup>; and Facebook had an infusion of \$500,000 from Peter Thiel, a cofounder of PayPal.

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Huang, Gregory T. "Software Startups No Longer Need As Much Venture Capital," XConomy, August 7, 2008.

<sup>&</sup>lt;sup>46</sup> CrunchBase, <a href="http://www.crunchbase.com/company/google">http://www.crunchbase.com/company/google</a>>

Bayer, Chip, "The Inner Bezos," Wired magazine, July 2003.

Even in light of their wide range of touch points with the consumer, each of these Web concepts secured well beyond the previously referenced \$20,000 level in start-up capital before accepting a venture capital infusion.

Acknowledging a potential bias given the aforementioned companies are outliers, I decided to take a look into the average funding levels of start-ups that have been deemed by the Web start-up funding community to be "high-potential." As a proxy for that group, I constructed a list (Exhibit 13) of consumer Web start-ups that have been invited through a competitive application process into relationship with TechStars, a mentorship-driven early stage investment fund that provides seed funding and on-site space for teams forming tech oriented companies with national or worldwide reach. TechStars itself "only" invests up to \$18,000 per company -- or \$6,000 per full-time employee -- in exchange for a flat six percent stake in each company. However, I have incorporated any cash infusion that was accepted before a defined Series A<sup>[48]</sup> round, typically a company's first significant round of venture and institutional investment. I identified 12 of the approximately 40 companies TechStars hosted from the last three years of the program as consumer focused and have listed them, along with their early stage (Seed + Angel capital) funding and total funding to-date, in Exhibit 13.

Of note from this data is that the average early stage funding amount for these 12 companies is about a half-million dollars, which is well in-line with the magnitude of start-up capitalization for our three example blockbuster consumer Web concepts -- Google, Amazon.com, and Facebook -- and is highly unlikely to qualify as a shoestring budget by most standards. Although there may not be "certainty" around linking start-up capital levels to heights of success, as stated

A typical Series A round is in the range of \$2 million to \$10 million and is intended to capitalize a company for six months to two years as it develops its products, performs initial marketing and branding, hires its initial employees, and otherwise undertakes early stage business operations.

in Robert Fairlie and Alicia Robb's research, it seems reasonable to conjecture that lower levels of start-up financing among black entrepreneurs at minimum handicaps the likelihood of supersuccess for their efforts online. Suitably, the next and final theme discusses Silicon Valley, home to nearly half of US venture capital funds and the epicenter of Internet start-up financing.

Exhibit 13: Funding Levels for Start-Ups Invited to Participate in TechStars Program			
		Seed + Angel	<b>Total Funding</b>
Company	Description	Capital	To-Date
AccelGolf	Mobile and online apps for golfers	\$672,000	\$822,000
AmpIdea	Web-enabled baby monitoring	18,000	18,000
Brightkite	Location based social network	1,015,000	1,420,000
DailyBurn	Fitness social network	540,000	540,000
Foodzie	Online marketplace for artisan goods	1,015,000	1,015,000
Ignighter	Group dating service	1,215,000	1,215,000
IntenseDebate	Blog commenting system	515,000	515,000
Occipital	Photo stream visualization	15,000	15,000
Oneforty	Twitter appstore	365,000	2,345,000
Search-to-Phone	Search for products/services by phone	265,000	265,000
TravelFli	Reward points program aggregator	265,000	265,000
Villij	People recommendation engine	15,000	15,000
	Average:	\$492,917	

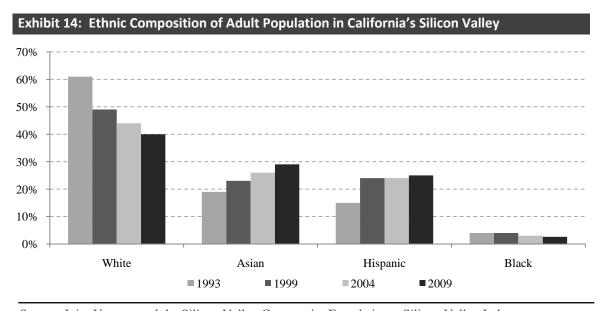
Source: TechStars; CrunchBase.

Note: 'Total Funding' includes any investments, including venture capital, listed as Series A or after.

## 4.3.3 The Silicon Valley Vacuum

The term "Silicon Valley" was originally popularized in a series of 1971 articles entitled "Silicon Valley USA" written for Electronic News, a weekly trade newspaper which covered all aspects of the electronics industry.<sup>[49]</sup> Geographically defined as the area between the Santa Cruz Mountains and the San Francisco Bay, the term originally referred to the region's large number

Tajnai, Carolyn E. "Fred Terman, The Father of Silicon Valley," Stanford, CA: Stanford University, IEEE Computer Society Press, May, 1985. of silicon chip innovators and manufacturers, but eventually became generally used as a metonym for the dense population of high-tech businesses in the area. Silicon Valley has experienced, like most growth areas within the US, a rapid shift in demographics and increasing ethnic diversity. In 1970, 83 percent of Silicon Valley's residents were white<sup>[50]</sup> while in 2009 it was just below half that proportion at 40 percent. Exhibit 14 shows the progression of ethnic mix in Silicon Valley from 1993 through 2009 among the four major race/ethnic groups.



Source: Joint Venture and the Silicon Valley Community Foundation - Silicon Valley Index

While there has been a noticeable decrease in the population of whites and increases in the population of Asians and Hispanics, there appears to have been a longstanding lack of black representation in the region with only 4 percent in 1993 (~85,000 residents) and 2.6 percent (~75,000 residents) in 2009. It is almost as if the region has existed in a geographical vacuum when it comes to African-Americans. This data certainly assists in validating the participant observations that African-Americans simply are not living in Silicon Valley in large enough numbers to meet the critical mass likely necessary to propagate iconic Internet companies.

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Fisher, Lawrence M. "Job-Rich Silicon Valley Has Turned Fallow, Survey Finds," The New York Times, January 20, 2003.

What is it exactly, though, that African-Americans are missing out on by not having a large enough entrepreneur presence in Silicon Valley to successfully leverage its ecosystem? A 2006 article in the New York Times on the region's unique environment summed it up well:

Meet the "20-minute rule" that guides fateful decisions in Silicon Valley: if a company seeking venture capital is not within a 20-minute drive of the venture firm's offices, it will not be funded -- close proximity permits the investor to provide inperson guidance. It's convenient for venture capitalists to have entrepreneurs close by, but the reverse is true, too. A prospective entrepreneur would, on average, need to have three to eight meetings with a venture fund before he or she was successful, but would have to go through a similar process with 5 to 10 firms before finding the one that approved the funding request. Entrepreneurs who live in Silicon Valley also find the technical talent they need faster than they can in any other place; they pay more for that talent, but speed is the sine qua non for success. The ecosystem in Silicon Valley includes incredible techies, who live there because it is the epicenter, where they can find the most interesting projects to work on. The ecosystem also includes real estate agents, accountants, head hunters and lawyers who understand an entrepreneur's situation -- emptied bank accounts and maxed-out credit cards. [51]

I chose to explore this discussion point a bit further by taking a sample of recent blockbuster consumer Internet companies -- Twitter, Facebook, LinkedIn, and Zynga (a casual game developer) -- and examine the geographical proximity of their investor bases to their own headquarters in Silicon Valley (SV):

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<sup>51</sup> Stross ,Randall. "It's Not the People You Know. It's Where You Are." New York Times, October 22, 2006.

Exhibit 15: I	nvestors by Location for Twitter	, Facebook, LinkedIn	ı, and Zynga
Company	Investors	<b>HQ</b> Location	<b>Investment Round(s)</b>
Twitter			
	Benchmark Capital	SV	Series C, Series D
	Bezos Expeditions	Seattle, WA	Series B
	Brian Pokorny	SV	Series A
	Charles River Ventures	Waltham, MA	Series A, Series C
	Chris Sacca	SV	Series A
	Disk Costolo	Chicago, IL	Series A
	Digital Garage	Tokyo, JPN	Series B, Series C
	Greg Yaitanes	Los Angeles, CA	Series A
	Insight Venture Partners	New York, NY	Series D
	Institutional Venture Partners	SV	Series C, Series D
	Kevin Rose	SV	Series B
	Marc Andreessen	SV	Series A
	Morgan Stanley	New York, NY	Series D
	Naval Ravikant	SV	Series A
	Ron Conway	SV	Series A
	Spark Capital	Boston, MA	Series B, Series C, Series D
	T. Rowe Price	Baltimore, MD	Series D
	Tim Ferriss	SV	Series B
	Union Square Ventures	New York, NY	Series A, Series B, Series C
	% Silicon Valley (SV) Based:	47%	
Facebook			
	Accel Partners	SV	Series A
	Digital Sky Technologies	Moscow, RUS	Series D
	European Founders Fund	Germany	Series C
	Greylock Partners	SV	Series B
	Li Ka-shing	Hong Kong, PRC	Series C
	Meritech Capital Partners	SV	Series B
	Microsoft	Redmond, WA	Series C
	Peter Thiel	SV	Angel

Source: CrunchBase.

Exhibit 15: I	nvestors by Location for Twitter	, Facebook, LinkedIr	n, and Zynga (continued)
Company	Investors	<b>HQ Location</b>	<b>Investment Round(s)</b>
Facebook (c	ontinued)		
	Reid Hoffman	SV	Angel
	The Founders Fund	SV	Series B
	TriplePoint Capital	SV	Debt
	% Silicon Valley (SV) Based:	64%	
LinkedIn			
	Bain Capital Partners	Boston, MA	Series D
	Bessemer Venture Partners	SV	Series C, Series D, Series E
	European Founders Fund	Moscow, Russia	Series C
	Goldman Sachs	New York, NY	Series E
	Greylock Partners	SV	Series B, Series D
	McGraw Hill	New York, NY	Series E
	SAP Ventures	SV	Series E
	Sequoia Capital	SV	Series A, Series D
	% Silicon Valley (SV) Based:	50%	
Zynga			
	Andreessen Horowitz	SV	Series C
	Avalon Ventures	La Jolla, CA	Series A, Series B
	Clarium Capital	New York, NY	Series A
	Digital Sky Technologies	Moscow, RUS	Series C
	Foundry Group	Boulder, CO	Series A, Series B
	Institutional Venture Partners	SV	Series C
	Kleiner Perkins	SV	Series B
	Peter Thiel	SV	Series A
	Pilot Group	New York, NY	Series A
	Reid Hoffman	SV	Angel, Series A
	Tiger Global	New York, NY	Series C
	Union Square Ventures	New York, NY	Series A, Series B
	% Silicon Valley (SV) Based:	42%	

Source: CrunchBase.

One interesting observation from Exhibit 15, juxtaposing it with the claims from the above quoted New York Times article, is that all of the four blockbuster consumer Internet companies presented have far less than 100% representation from Silicon Valley for their investor base. In fact, the combined percentage of Silicon Valley based investors is 50%. What does this say, though, of the notion that Silicon Valley based companies are funded overwhelmingly by Silicon Valley based investors? It appears that for a representative group of blockbuster consumer Internet companies, the very investors (primarily venture capitalists) who claim to highly prefer capitalizing companies within their immediate proximity had half of their cohort soften this criteria for a "convincing" opportunity. To the Silicon Valley investors' credit, however, it seems like the earlier rounds of financing (Angel and Series A) for these Silicon Valley area companies were led by local investors, only to be followed by others based outside the region.

Although not nearly an exhaustive set of companies was used for my sample group, we can most certainly draw at least a couple of tentative conclusions: (1) the initial higher-risk rounds of funding appear to be dominated by investors from the region (validating the quoted New York Times article's claims), and (2) as the investment rounds progress, capital from around the country and the world seems to find its way to blockbuster concepts through some avenue(s) that I would expect are facilitated by people within various networks who are a part of the ecosystem. Thus, although I cannot definitively establish that living and playing in Silicon Valley as a consumer Internet start-up is critical to success at the blockbuster level, I believe we can rightfully reason that the Silicon Valley ecosystem is, at minimum, an indirect keystone in the ascension of the most successful consumer Internet companies in the US.

### CHAPTER 5: LEAPING THE OBSTACLE

## 5.1 Problem on the Table; Solutions in Hand

Somewhere along the line, I was taught it is best to come to the table with at least one proposed solution in hand when delivering news of a problem, and so I have chosen to stick to that modus operandi in the composition of this thesis, as well. This chapter presents what I hope are at least viable starts to initiatives that might serve as catalysts for the promotion of black-founded consumer Internet concepts to the level of blockbuster.

Having analyzed three potential components of an online obstacle for African-American Web entrepreneurs in the previous chapter, many of the identified barriers would seemingly benefit from a shift in mind frame and increased fundamental exposure -- more African-American youth becoming interested in pursuing technical fields, more technically capable black professionals viewing Web entrepreneurship as a career option, and more African-American Web entrepreneurs getting involved in ecosystems proven as critical to Internet concept stardom. Two solutions I would like to propose and briefly outline are:

- 1. Creation of Internet company incubators to be housed at several of the Historically Black Colleges and Universities (HBCUs), and;
- 2. Creation of funded competitions for Web application and Internet content development targeting pre-college African-American students.

# 5.2 HBCU Campus Based Internet Company Incubators

In my opinion, one of the most interesting observations about existing blockbuster consumer Internet companies that arose from the analysis in Chapter 4 was the concept of ecosystems -- Silicon Valley's being the one specifically highlighted. There are other types of ecosystems

besides those that are geographically defined that assist in the cultivation of up-and-coming Internet concepts, though. For instance, one common thread among some super-successful consumer Internet companies is gaining their start on a university campus. A few examples of such companies are presented in Exhibit 16:

Exhibit 16: Selected Consumer Internet Companies Founded on University Campuses		
Company	Summary of Founding Conditions	
	David Filo and Jerry Yang meet as a grad students at Stanford; Duo left	
Yahoo	PhD program in 1995 to form Web portal that became Yahoo!;	
	Company goes public a year later.	
	Larry Page and Sergey Brin meet as grad students at Stanford; Duo	
Google	left PhD program in 1998 to start Google in friend's garage; Company	
	goes public in 2004 after private funding rounds worth \$25.1 million.	
	Mark Zuckerberg launches Facebook from Harvard dorm room in 2004;	
Facebook	Left school for Silicon Valley later than year; Received initial \$500K	
	investment from PayPal co-founder Peter Thiel shortly after relocation.	

Source: CrunchBase.

There is something special about university campuses, especially in their offering a unique opportunity to come into frequent contact with likeminded, similarly talented, entrepreneurial individuals who might potentially become partners or advisors. They also often provide a start-up with access to affordable computing resources, subject area experts, and an assortment of investors who are constantly on the prowl for the next gem of an idea. Effectively, university campuses have served as laboratories for robust start-up Internet companies to develop, and where university environments have not satisfied needs, start-up incubators have offered a proxy.

Start-up incubators are programs sponsored by an assortment of funders, including industry related for-profit corporations, venture capital funds, and angel investors, and are designed to promote the successful development of new ventures. This is accomplished through the incubators offering an array of resources and services (e.g. data storage and attorney consults)

that would likely prove useful to a seed stage or early stage company that has yet to take on money from professional investors. Most programs have an application process that entrepreneurs must successfully traverse before being offered admission, after which the companies are either invited to relocate (usually temporarily) to a physical facility, where many other start-up companies reside, or serviced virtually. Data from the National Business Incubation Association (a trade organization whose members support advancing business incubation and entrepreneurship) shows that of the companies that enter a start-up incubator environment and successfully complete the program, 87% remain in business afterward. [52]

The concept of the start-up incubator (or some similar derivation of it) remains extremely viable in the Internet sector with several recently launched programs, such as YCombinator in California (2005), TechStars in Colorado (2006), and Betaworks in New York (2007), enjoying early popularity with several of their funded companies. I believe similar centers of innovation should be housed on the campuses of HBCUs to cater specifically to a concentrated population of college age African-Americans with technology and / or business acumen. HBCUs collectively graduate about a third of African-American engineers in the US, as well as a third of African-Americans in the US with bachelor degrees in business. Thus, there is a huge opportunity to create a nexus between these two fields, as is done on many of the university campuses around the country that deliberately foster innovation and the creation of Internet ventures, such as the Massachusetts Institute of Technology.

I would suggest targeting three of the 105 HBCUs that exist in the US today for the incubator launch -- Howard University in Washington, DC, Florida Agricultural and Mechanical

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University of Michigan, NBIA, Ohio University and Southern Technology Council, Business Incubation Works. Athens, Ohio: National Business Incubation Association, 1997.

University (Florida A&M), and North Carolina Agricultural and Technical State University (NC A&T). Besides being geographically spaced in such a manner to allow multiple distinct pockets of innovation to develop, the three institutions represent the highest number of graduates from both engineering and business within the African-American population. In 2002, Howard graduated 218 students in business and 148 students in computer science and engineering, Florida A&M graduated 270 and 171 and NC A&T graduated 226 and 149, respectively. [53]

As was established earlier in this section, university campuses and incubators seem to successfully replicate at least some of the key characteristics of the Silicon Valley ecosystem for start-up Internet companies. It appears to me that placing an incubator on an HBCU campus would at minimum create another, perhaps more deliberate, opportunity for African-American students within business and Internet-relevant technical disciplines to coalesce. There are certainly myriad additional factors to consider within this idea, such as finding outside sponsors for the incubator and attracting third-party investors who would frequent the incubator's demonstration days (when resident start-up companies showcase their concepts and progress in hope of attracting a willing outside investor), but most may prove to be easily addressed with the right individuals engaging in explorative conversation about the idea's potential merits.

# 5.3 Pre-College Web Application / Internet Content Competitions

One interesting observation from the brief storylines of Twitter and Facebook presented in Chapter 3 was the early age at which the companies' founders began developing applications -- Dorsey at 14 and Zuckerberg in 6<sup>th</sup> grade. Although the previously described solution of an HBCU incubator focuses on African-Americans who have received formal training in some

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Provasnik, Stephen. Shafer, Linda. Snyder, Thomas. "Historically Black Colleges and Universities, 1976 to 2001." National Center for Education Statistics. Washington, D.C. September 2004.

Internet-relevant technical discipline, there appears to be an increasing occurrence of and value in self-trained application developers who get their programming start in pre-teen or early-teen years. Based upon this observation, it would seem to be prudent to assist more African-American youth in developing a similar skill set, such that they would hopefully land at the intersection of preparation and opportunity in greater numbers.

In a 2009 speech to the National Academy of Sciences, President Barack Obama stated:

I want us all to think about new and creative ways to engage young people in science and engineering, whether it's science festivals, robotics competitions, fairs that encourage young people to create and build and invent -- to be makers of things, not just consumers of things.<sup>[54]</sup>

President Obama's remark speaks directly to the producer-consumer dynamic addressed in Section 2.3 of this thesis, and references a tactic that may assist African-American youth to become more engaged in creating Web applications and Internet content -- competitions.

One of the most high profile public competitions organized to date has been the Ansari X Prize Space Competition (offered through the X Prize Foundation) which was intended to inspire research and development into technology for space exploration. The competition resulted in the collective entrants investing more than \$100 million in new technologies in pursuit of the \$10 million prize, and enticed active participation from some of the best minds in business, including Sir Richard Branson (founder and CEO of Virgin Group), Jeff Bezos (founder and CEO of Amazon.com), and Paul Allen (co-founder of Microsoft). Apparently, the benefit of entering the competition had less to do with the monetary prize than perhaps advancing the field or simply

The White House, "Remarks by the President at the National Academy of Sciences Annual Meeting," Washington D.C., April 27, 2009.

being first to the finish line, which carried high visibility with the public through media coverage. I think some of the characteristics of the Ansari X Prize could be translated into a competition that imbues similar, near philanthropic, enthusiasm into encouraging more African-American youth to engage application development and Internet content creation.

An organized Internet-focused competition targeting African-American youth might approach middle- and high-schools in areas well populated by black families to seek access to students for training in programming languages and software design. This would increase exposure to subject areas that are often outside the scope of most school curricula, as well as allow the students additional opportunities to think creatively, problem solve, and express themselves. The competition might have a mentor-based model, where industry professionals and college-level students could be recruited to serve as coaches and advisors (whether in person or virtually through video conferencing) for the participant groups formed by the African-American students. As coaches, the mentors might assist teams in brainstorming about solutions to issues they may encounter and facilitate their group's progress through various competition milestones; while as advisors, the mentors might engage the students in a group setting about their thoughts and perspectives on Internet technologies and the pursuit of technical careers.

As with the prior proposed solution, there are many additional factors to consider within this idea, such as finding sponsors for the competition's prizes (which I presume could range from cash to scholarships to internships), structuring interactions with the students such that it coincides with in- or after-school time, and ensuring the students have fair and equal access to resources. However, I believe, once again, that most of these issues may decrease in perceived complexity once the right individuals are engaged in meaningful discussion about the idea.

## 6.1 Embracing My Inner Entrepreneur

In the introduction to this thesis I mentioned that its composition was very much an entrepreneurial process. One of the guidelines I initially learned as a Web entrepreneur and then had reinforced throughout my time at MIT Sloan was that successful entrepreneurial ventures always provide simple and compelling answers to three fundamental questions: "So what?," "Who cares?," and "Why Me?" Thus, I would like to make sure to address each in conclusion.

### 6.2 The Online Obstacle -- So What?

In his book *Outliers*, Malcolm Gladwell says the following about the logic behind who succeeds in the world and who does not:

Biologists often talk about the ecology of an organism: the tallest oak in the forest is tallest not just because it grew from the hardiest acorn; it is the tallest also because no other trees blocked its sunlight, the soil around it was deep and rich, no rabbit chewed through its bark as a sapling, and no lumberjack cut it down before it matured.<sup>[55]</sup>

What I glean from this logic as it relates to consumer Internet start-ups is that achieving a mix of conditions such that a concept reaches the highest echelon of acceptance by the universe of Web denizens involves an astute strategy and a great deal of luck. However, it is also apparent to me that regardless of the level of preparedness of an African-American founder of one of these start-ups, the set of impediments that (at least partially) constitute an online obstacle for these founders serves to diminish what opportunity there might exist to simply be in luck's time zone. Placed in the storyline of Gladwell's example, too few technically capable entrepreneurs, impaired access to the necessary levels of funding, and absence from critical ecosystems is akin

<sup>&</sup>lt;sup>55</sup> Gladwell, Malcolm. "Outliers: The Story of Success," New York, NY: Little, Brown and Company, 2002, p.19.

to being an oak in a portion of the same forest where constant cloudy skies work to deny sunlight, recurrent rain-showers erode soil and nutrients, and grass is not available as a second food source for hungry rabbits -- an oak's chance at being tallest is narrowed considerably.

My futile attempt to identify at least one African-American who has founded a blockbuster consumer Internet company is important for a fairly simple reason, but the ramifications of this result is huge in my opinion, both for the nation and for the African-American community. The importance for having a Sergey Brin- (Google), a Mark Zuckerberg- (Facebook), or a Jack Dorsey- (Twitter) like founder be an African-American at some point soon is simply to have an example with whom black youth can identify or like whom they can aspire to become. It is not a stretch to reason that training to become the next Internet billionaire from an early age likely leaves students with skills and knowledge that can be used in a thousand different jobs, while the same cannot be said for other highly visible lines of work if the end goal goes unreached.

A potential ramification of the continued dearth of African-American online royalty for the nation is that a sizeable technology consumer segment of the population will remain on the margins of technological innovation as producers of cutting-edge Web applications and innovative Internet content. This outcome is likely to not be beneficial to America's positioning in the world's burgeoning information economy. A potential consequence for the African-American community is that it will be completely circumscribed in a period that history may regard as America's second Gilded Age -- the commercialization of an online, information based society. The nation's first Gilded Age was a period of the late-nineteenth century characterized by generational fortunes being made by industrial pioneers such as Carnegie, Rockefeller, and

Vanderbilt. The economic disadvantage to such a scenario is apparent, but there will certainly be unappealing political and social realignments to face, as well.

### 6.3 The Online Obstacle -- Who Cares?

I am a huge fan of the Internet and its potential to revolutionize everything from the most mundane of activities to the most exciting of interactions in the world. In fact, I believe that even with the apparent leaps in communication and connectivity via the Internet over the last decade or two, society is merely scratching the surface of what exists to be harnessed through the technology. It has become ever more apparent that creating means to unlock the power of the Internet to connect and digitize that which was separate and analog before, is a measure of accomplishment for which the world rewards innovators quickly and richly -- and African-Americans appear to be getting left behind.

For this reason, I believe two sets of individuals should concern themselves most with the online obstacle: black Internet entrepreneurs and anyone who believes they have a resource that might well serve the potential solutions I have outlined in this paper or any other solution that might work to systematically increase the exposure of African-American youth to the production of Web applications and Internet content.

Black Internet entrepreneurs should care because they are in a fantastic position to encourage African-American middle-school and college students into the technological mainstream. They collectively have a diversity in educational training, professional experiences, and sector interests that allows for quickly developing mentoring relationships with youth, and most importantly they have made the critical step to set out to create something from nothing. If there is anything that is likely to ignite a vision in a young person who has had little or no exposure to

producing Web technology / content or business strategies, it is the personal story and ambitions of someone who was in the same position and found a path.

Resource holders should care simply because they have access to the money, the personal contacts, the political clout, etc. to push demanding solutions forward and are therefore able to contribute to this conversation through definitive action. Often without the right people quickly involved in solutions to systemic issues, progress is limited to words on a page and underproductive meetings that focus on how to get the right people involved so that true progress can finally be accomplished.

# 6.4 The Online Obstacle -- Why me?

Why me? Because I accept the responsibility that if not me, then who? I am an African-American graduate of an Ivy-League institution with degrees in engineering and computer science who grew up in the urban New York neighborhood of Bedford-Stuyvesant, Brooklyn (which although considered a cultural mecca of sorts for black people in America, is a ways from being labeled a hotbed of technology development), worked full-time as a bootstrapping Web entrepreneur who knocked incessantly (albeit unsuccessfully) on the doors of potential investors to move beyond proof-of-concept, and is a soon-to-be graduate of one of the preeminent MBA programs in the world. If I am unwilling to make use of my time, experiences, and resources to make an attempt to begin an earnest conversation on the state of African-American enterprise on the Internet by way of this thesis, then I do not know who I should expect to do so.

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#### APPENDIX: ONLINE SURVEY

Below are the questions and corresponding multiple choice answers presented to collect demographic information from survey participants:

#### BASIC INFORMATION

- Current City / State Of Residence:
- Gender: M, F
- Birth Year:
- Highest Schooling Level:
- School Last Attended:
- City / State You Claim Most As Your Hometown:

#### FAMILY INFORMATION

- What Is The Highest Schooling Level For Your Father? High School, Some College, Completed College, Masters, Ph.D. / M.D
- What Is The Highest Schooling Level For Your Mother? High School, Some College, Completed College, Masters, Ph.D. / M.D
- What Was Your Father's Profession During Your Childhood?
- What Was Your Mother's Profession During Your Childhood?
- Did You Have Anyone Else In Your Environment Who Was An Entrepreneur?
- If The Answer To The Previous Question Was Yes, Please List Who?
- How Many Siblings Do You Have?
- What Number In The Order Of Birth Are You?

#### INTERNET VENTURE INFORMATION

- What Is The Name Of Your Last Internet Venture?
- Please provide a brief description of the nature of the consumer-facing Internet concept:
- Is The Website Currently Active? Yes, No
- If Yes, Please List The Web Address Of The Venture:
- In What Year Did You Launch Your Last Internet Venture?
- How Many Internet Ventures Have You Launched?
- How Did You Fund The Company: Bootstrapped, Family & Friends, Angel, VC Fund, Other
- How Much Did You Spend (Approximately) To Develop / Launch The Concept?
- If You Sought Outside Capital, How Much Did You Ask For?
- If You Accepted Angel / VC Capital, How Much Did You Receive?
- How Many Monthly Users Did / Does Your Website Support?
- Did You Have Co-Founders?
- If Yes, Were Your Co-Founders Also Of African Decent?
- If You Closed Up Shop, When Did That Officially Happen (Month / Year)?
- How Many Companies Of Any Kind (Online or Offline) Have You Started?

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#### Survey

#### African-American Internet Entrepreneur Survey (5-7 min.)

This survey will be closed to responses on February 20, 2010.

NOTE: Your responses to this survey will be treated as confidential and is intended for empirical support within the thesis study ("The Online Obstacle: A Study of African-American Enterprise on the Internet") of Allen T. Lamb, a 2010 MBA candidate at the MIT Sloan School of Management. Any reference to or further use of your responses will be anonymous in nature, unless written consent has been received from you or your designated representative beforehand. Your participation and input is appreciated.

Full Name (required)	1
Your Email (required)	1
BASIC INFORMATION Br	iefly About You
Current City / State Of Residence	
Gender Male Female	
Birth Year	
Highest Schooling Level	
School Last Attended	
City/State You Claim Most As Your Hometo	омп ]
What Is The Highest Schooling Level For You What Is The Highest Schooling Level For You	
What Was Your Father's Profession During	Your Childhood? (List as Entrepreneur If Owned Own
What Was Your Mother's Profession During Business)	Your Childhood? (List as Entrepreneur If Owned Ow
Did You Have Anyone Else In Your Environr Entrepreneur?  Yes No	ment (Outside Of Your Parents) Who Was An
If The Answer To The Previous Question Wa	as Yes, Please List Who?
How Many Siblings Do You Have?	
What Number In The Order Of Birth Are You	7

What Is The Name Of Your Last Internet Venture?
Please Provide A Brief Description Of The Business:
Is The Website Currently Active?  Yes  No
If Yes, Please List The Web Address Of The Venture: http://
In What Year Did You Launch Your Last Internet Venture?
How Many Internet Ventures Have You Launched?
How Did You Fund The Company (Select All That Apply)    Bootstrapped   Family & Friends   Angel   VC Fund   Other
How Much Did You Spend (Approximately) To Develop / Launch The Concept?
If You Sought Outside Capital, How Much Did You Ask For?
If You Accepted Angel / VC Capital, How Much Did You Receive?
How Many Monthly Users Did / Does Your Website Support?
Did You Have Co-Founders? <sup>®</sup> Yes <sup>®</sup> No
If Yes, Were Your Co-Founders Also Of African Descent?  ◎ n/a ③ Yes ③ No
If You Chose To Shut Down Your Venture, When Did That Officially Happen (Month / Year)?
How Many Companies Of Any Kind (Online or Offline) Have You Started?
E T C E T E R A All Of The Stuff I Missed
Personal Etcetera – Is There Any More Relevant Information To Share About Yourself?
Family Etcetera – Is There Any More Relevant Information To Share About Your Family ?
Internet Venture Etcetera – Is There Any More Relevant To Share Information About Your Las Internet Venture?
Any Additional Comments Or Critiques With Regard To This Study Or Survey?
ray rauntonial comments of chaques was regard to this study of survey.
Would You Be Open To Scheduling A Brief Phone-Interview To Answer A Few In-Depth Questions? ◎ Yes ◎ No
Would You Be Interested In Advertising On The Online Obstacle Blog?  ⑤ Yes ⑤ No
Thank you for completing this survey!
Send

