COMPETITIVE ADVANTAGE IN THE NETWORKED ECONOMY

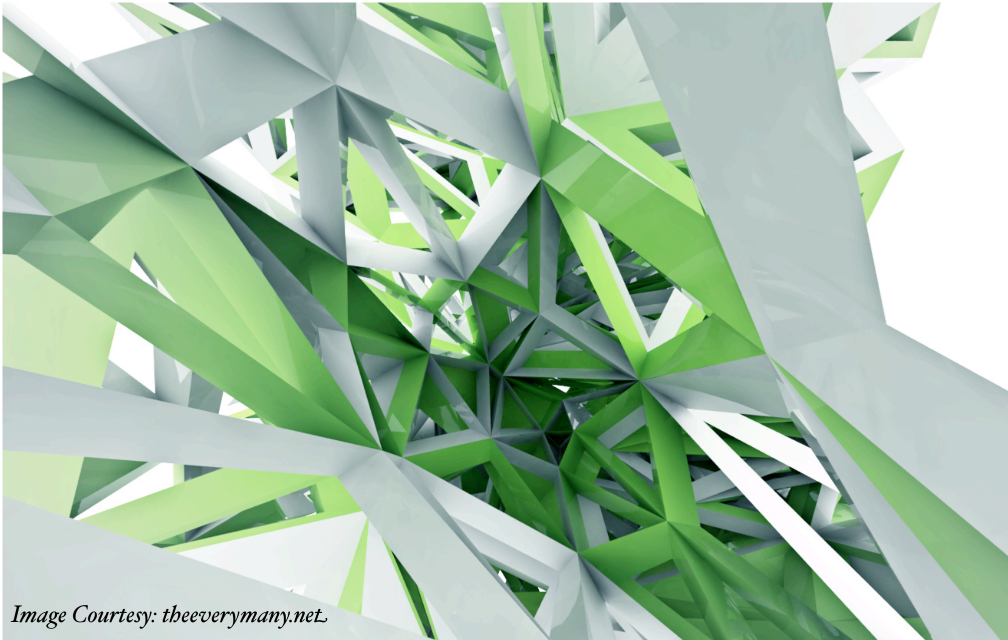
Image Courtesy: theeverymany.net

Organizational Structure, Management Role, and the Financing of High Performing Teams within a Corporate Network

Grayson Bass
July 2011

ABSTRACT

As technology allows and creates global opportunities and Globalization creates networks that interconnect people and companies around the world, a framework is needed that allows for the development of strategy and operational benchmarking in order to find success in a constantly changing competitive landscape. The *G.L.O.W.* Framework has been suggested in order to align the needs of Global Efficiency, Local Responsiveness, Organizational Heritage, and World-wide Learning throughout a networked organization. The paper argues that in a networked organizational structure, management and financial goals must be aligned with strategy and structure. Further, the evidence shows the importance of high performing teams connected to a strong network will create considerable value and strategic advantage.

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Any mistakes found within are certainly my own, and any benefit found is through the Grace of “The Invisible Hand”.

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FOREWORD

Why this paper needed to be written

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June 2011

The Main Idea

While the question of Globalization has been asked and answered in numerous ways, it continues to be a mystery as to what strategy will most affectively address the seemingly endless definitions (not to mention opportunities and challenges) that these answers bring.

During a lecture at Georgetown, given by Professor Marc Busch in the Summer of 2010, he opened by asking *THE* question, "What does Globalization mean?" The answer he gave lead to a new question regarding strategy in this interconnected world.

His answer was, "Globalization is 360° competition." If this statement is true, then what makes for a successful 360° strategy?

Economists, investors, academics, politicians, and - more often than not - the millions of executives around the world attempting to manage and grow businesses in the dawn of the 21st century, require a framework that answers this question from a perspective that takes into account organizational structure with a combined integrated strategy and operational lens.

While this paper began as a focus on pure strategy, the effects of networks on how people communicate as well as create and open markets began to emerge as an

underlying theme. Once apparent, the basis for this paper shifted solely from a strategy commentary into a set of frameworks that can be applied with global success in developed to emerging markets.

As an entrepreneur that has had the benefit of working with and bringing to market products for large global corporations as well as start-ups, my view point has been shaped equally by personal successes (and failures), empirical evidence surrounding the performance and impact of small teams on a company's bottom-line, increased interconnectedness brought on by the integration of technology, and the changing landscape of organizations brought on by Generation Y's entry into the work force. The basic thesis is that small, high-functioning teams create value and provide such a high degree of organizational benefit that organizations now need to be structurally networked as opposed to hierarchically structured.

To that end, this paper has been written to provide managers (as well as economists, policy makers, and investors) with the tools to address these challenges from an Organizational, Management, and Financial standpoint. While the tools presented in this paper have been developed and based on the past 60 years of management and business study, they have taken into account the rapidly changing dynamics of the world economy and the ability to be connected virtually to nearly every corner of the globe.

A Revelation

In a century which opened with promise; a growing economy, the emergence of the BRIC (Brazil, Russia, India and China) countries into the world economy, and an

information revolution lead by the breaking down of walls through the interconnection and networking of peoples around the world, it quickly erupted into global political and economic upheaval causing the downfall of many established companies and the ruin of the financial system on a global level.

The result, organizations of all types from Governments and Multi-national Corporations to Non-Profits and small businesses have to wake up every morning and compete in an uncertain environment that seems to change faster than they have been accustomed to adapting.

This is not a pretty picture for managers - nor is it possible to manage and grow organizations in such an environment with processes and strategies that have been proven in the past.

However, as a student of history, these things are not new. They have happened (and will continue to happen) as long as there is a form of trade that stretches beyond the walls of a city, let alone the countries of the world. Organizations and People adapt. Solutions emerge and technology creates far more opportunities than it takes away.

What is new; however, is how information travels and its effect on an organization, the management team, investment, and operations. The quote[1], “Nothing travels faster than the speed of light with the possible exception of bad news...” has never been more true. Thankfully, those same tools allow for the management and value creation when used effectively. The challenge for managers in the 21st century is not to mitigate these

1 Quote is found in “The Hitchhiker’s Guide to the Galaxy” by Douglas Adams

risks but how to grow their organizations in an environment where anyone with a computer and internet connection is a competitor.

By utilizing networks - both corporate footprint (vertical geographical and diversified) as well as employee and industry social networks - an organization can maximize competitive advantage and value through strategic investment in small entrepreneurial teams and individuals. These individuals and teams have a name: *GLOW Units*.

GLOW is an acronym that defines the characteristics of networked organizations and is a framework for guiding management decision making around organizational design, management goal setting, and financing of networked organizations by creating:

Global Efficiency - the ability to compete globally and find multiple profit centers throughout a decentralized network and in response to constantly changing competition.

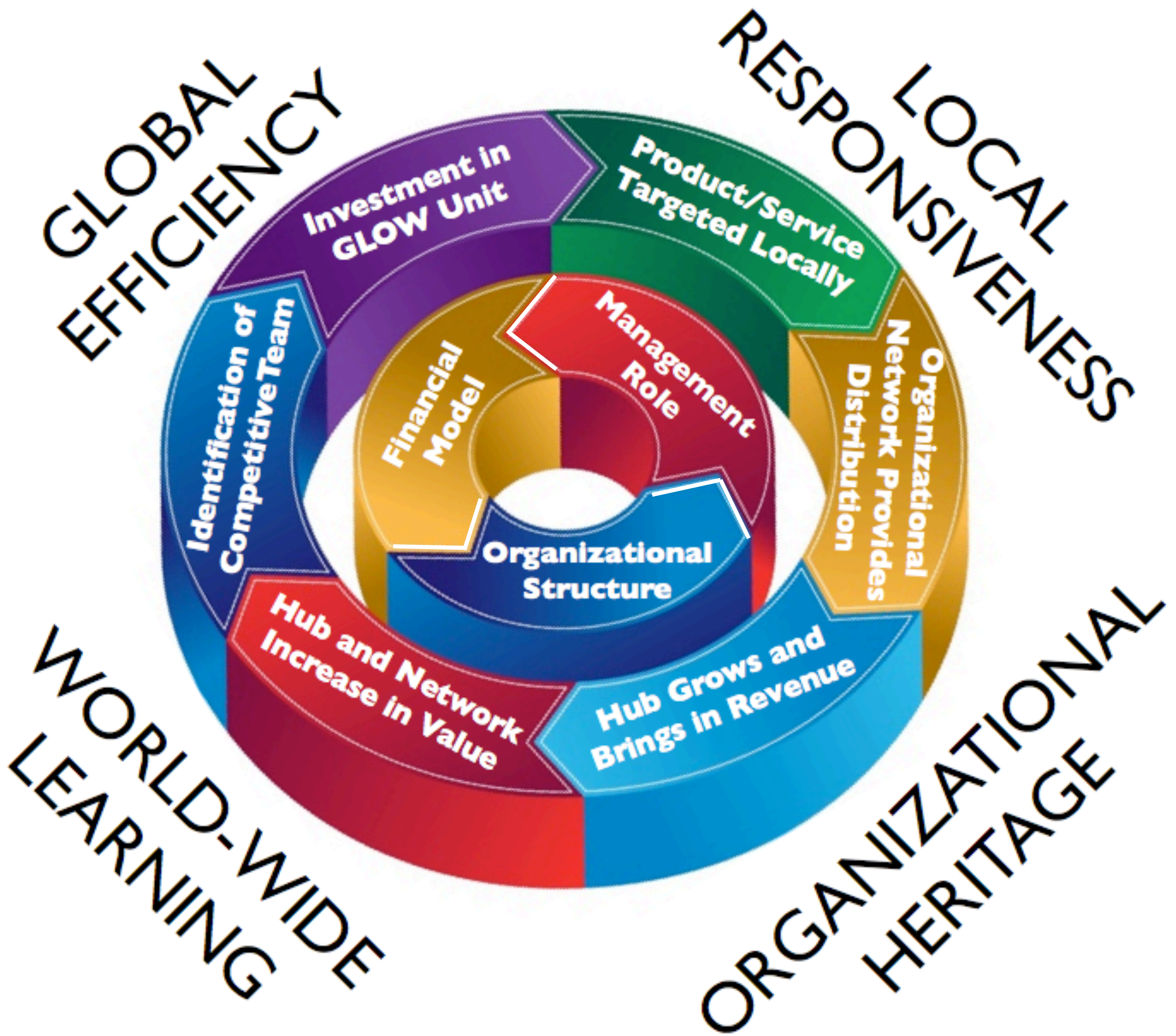
Local Responsiveness - instead of incorporating “corporate policy” made at company Headquarters, GLOW Units are given the autonomy to respond to local conditions increasing the likelihood for success.

Organizational Heritage - while a network by its very nature is decentralized, GLOW Units/Teams within the network are connected to the Hub equally by support and financing as they are to the common goal of growth and success.

World-wide Learning - because of the benefit and connections of a world-wide network and supported by the Hub, a networked organization is more likely to create knowledge centers and adopt best practices across the network that have been learned and proven by other Units eliminating “information silos”.

GLOW MODEL VISUALIZATION

The Benefits of Network Organizational Structure and Growth



ORGANIZATIONAL STRUCTURE

Network Behavior in Multinational Organizations

Considerable debate and volumes of ink have been spent defining and rewriting the "rules" of organizational excellence. The forms - varied and abundant - that an organization can take as it transitions from national player into international firm follow a near evolutionary path with the desired goal (in most cases) to achieve a multinational presence where strategic advantage can be found through Adaptation, Aggregation, and/or Arbitrage[2].

Current trends[3] in organizational theory seek to find advantage in what could be described as "think glocal, act glocal". For managers and agents of firms tasked with developing and growing subsidiaries, this challenge is ever more daunting. However, when the the organizational map is de-cluttered; it is evident that in many cases, successful units exhibit a degree of autonomy that allows for strategic growth and advantage. This autonomy is more of a function of the individual's connection to a strategic center or headquarters rather than a corporate mandate. While these units can thrive in various organizations despite the structure, it is of particular note as the methods to success shed light on how organizations are able to GLOW.

There is evidence of organizational GLOW through the lens of three companies: ABB, Novartis in Indonesia, and Seven Eleven Japan. In each case, a different structure produced strong results. The unifying characteristic was the dual presence of a strong

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2 "Managing Differences: The Central Challenge of Global Strategy", Pankaj Ghemawat, *Harvard Business Review.* March 2007

3 Presentation Slides: Dr. Xavier Mendoza, ESADE Campus Argentina. November 2010

network connection and entrepreneurial leadership that solved for unit specific situations impacting the company as a whole.

Case Examples

The companies selected for this review all have different organizational structures. They were selected based on their size, as well as the diversity of industry, and time period of their particular operational activities. Each firm is briefly summarized below:

1. ABB Group, perhaps one of the best examples of a multinational using the matrix structure. Operating globally with approximately 5000 profit centers, the company has dedicated teams that work on acquisitions and entry into local markets and works to integrate and leverage global best practices. After a recent reorganization in 2010, there is one corporate division and five production divisions.

2. Novartis, formed in 1996 from a merger between Ciba-Geigy and Sandoz the combined company was renamed. It reorganized its operating units and spun off its specialty chemical business. It operated in a Global Division Structure. In 1998, two years after the merger, GLOW Unit behavior is observed in Indonesia.

3. Seven Eleven Japan, established in 1973 under a licensing agreement, has been viewed as “unique” in the literature as it is an example of a company that not only outperformed the original entity, but eventually succeeded in buying out its parent company.

Questions Raised

What is it about these companies that allowed for various units to achieve growth and operate uniquely within an organization? Why did these units outperform or outpace other units - is it simply managerial effectiveness, operational efficiency or something else? While it is difficult to isolate one specific factor that lead to the firms' success at the particular instance in time, the GLOW model suggests that they benefited from a network organizational structure over the traditional hierarchical and dominate HQ approach.

When the case of Novartis in Indonesia (NI) is observed, there is evidence of GLOW Unit behavior as a specific result of the company's operating structure and environmental pressures. The benefit of operating "GLOW" became evident as Indonesia entered into an unprecedented economic crisis. Because of the strong connection to Headquarters (HQ) held by then President Director-Country Head Jan Eriksson, the company was able to gain considerable flexibility through financing activities through HQ as opposed to locally.

Additionally, the in-country management took risks that most certainly would not be allowed had a tighter corporate presence been observed. Contrary to corporate policy, NI had hedged its exposure to the rupiah. The result was an economic savings of Rp. 100 billion in less than 6 months. A similar story[4] is told by Eric Davis, then CFO of Coca-Cola Thailand. He had hedged against the Thai baht - independently of Mr. Eriksson's team - after realizing that rent rates and available office space in Bangkok

4 Author Interview with Eric M. Davis (SVP & CFO Johnson Electric), Hong Kong 2005

signaled an oversupply of office space and an overheating of the Thai economy. His timing was nearly perfect; while he met with heated exchanges from the corporate HQ and came under intense fire for implementing a hedging strategy that was against corporate policy - almost costing him his job - he met with a similarly favorable outcome as Mr. Eriksson only a few weeks after his hedge when the baht collapsed. (A move that was not lost on Coca-Cola HQ and earned him considerable acclaim for avoiding what would have been a significant loss.)

While these decisions happened during or in anticipation of a crisis, the argument for GLOW organizational structure is that decentralization and local responsiveness should be the normal behavior for organizational units; and not a response only during times of crisis[5]. This showcases the odd duality of headquarter-subsidiary relationships. On one hand, the Country Management felt empowered (and arguably their job required them) to act; however, what was required, as deemed by the in-country management, to move quickly, was in direct contrast to how the reporting system was designed. What is evident is that decisions made on the ground outpace the ability of the reporting system to react and result in delays in implementing strategy that could give the company significant operational advantages.

When the case of Seven Eleven Japan (SEJ) is observed, benefit of GLOW Behavior is showcased during a non-crisis moment. A unique case in the sense that a subsidiary outperformed HQ so dramatically that it actually out-grew the company and engineered

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5 "Leadership in a (Permanent) Crisis". Ronald Heifetz, Alexander Grashow, & Marty Linsky. *Harvard Business Review*, July 2009

Author's Note: ***Globalization coupled with disruptive technology advancements effectively leads to a constant changing of the landscape of competition, i.e. a "Crisis" as defined by Seeger, Sellnow & Ulmer in "Communication, organization and crisis".***

a takeover. While starting out in essentially a Joint Venture relationship through Licensing the 7-11 brand, SEJ's distance - both physically as well as culturally - from the corporate center allowed a high degree of autonomy to develop. Within a year of beginning operations[6], it became the top convenience store chain in all of Japan - a distinction it has continued to hold. SEJ structured itself in a way that allowed it to operate outside of the corporate HQ model and build a significant business intelligence platform in Japan - one that far outpaced that of Southland (the then corporate HQ) in the US. Where in the case of Novartis Indonesia, a crisis required local management to react and make decisions faster than HQ could respond, in Japan processes were implemented successfully that failed to translate back to the home country because information was locked in a silo and SEJ was disconnected from HQ. The result was that when the parent company, Southland, faced bankruptcy in 1991; SEJ was in a position to purchase a majority interest in the company and through the implementation and sharing of processes designed in Japan, turned the company around to achieve a net gain in profits[7].

A Prescient Model

Today, Novartis continues to operate in Indonesia and grows faster than the industry average[8]. SEJ continues to lead the market and innovate in its processes in Japan. While both Novartis and SEJ represent different types of organizations on the multi-national playing field, a precursor to the 21st century evolution of the multi-national

6 "Seven Eleven Japan", *Stanford Global Supply Chain Management Forum*, January 4, 2006

7 "Seven Eleven Japan", *Stanford Global Supply Chain Management Forum*, January 4, 2006

8 Novartis, www.id.novartis.com

could arguably be best exemplified by the ABB Group. ABB has established a system whereby the concept of GLOW Units is almost internalized as a defined process. ABB begins an acquisition or expansion by sending teams that are not focused on strategy but rather "education and reeducation" of the company through training efforts. This was in an effort to implant what is termed "corporate DNA" by Gupta and Govindarajan[9], into the target company. Further, the company would distribute internal operating parameters that would encourage a peer-to-peer learning but also place more pressure on underperforming units. The challenge was to "structure a complex, global organization...to make it as simple and local as possible."[10]

This effort of "corporate genetic engineering" has arguably been the focus of any organizational structure. The idea of "cloning" what is successful in the home market and taking it abroad. The difficulty is that in many cases, the operating environment is subordinate to the form as opposed to function of a subsidiary. ABB has recently reorganized to operate in a manner that maintains a corporate center that functions more as a portfolio advisor and shareholder than manager. While this has placed ABB at the forefront of organizational structures, the result has allowed for 5 distinct business operating units that have less of an operational tie than before.

A New Model

While this structure is certainly effective, organizations must adapt to the technology and advantages held in networks. In this light, corporations must move to become

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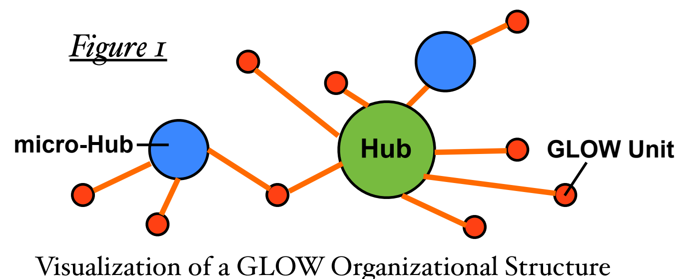
9 "Managing Global Expansion: A Conceptual Framework", p45, Anil K. Gupta and Vijay Govindarajan, *Business Horizons*, March-April 2000

10 "Organizing International Operations" p292, Phatak, Bhagat, Kashlek, *International Management*. 2005

Network Organizations. Network Organizations (*Figure 1)* in the 21st century will function and look more like a federation of states than individual business units. Individual GLOW Units will be connected to the center and each other, with a premium placed on inter-Unit cooperation by the HQ - which would function more as a manner of agent (in the sense of a Hollywood or Literary agent representing a client) and Venture Capitalist rather than a corporate overlord. The HQ - now a *Hub* - would be responsible for creating the highway of commerce and in turn taking a toll for the use. It would proactively and supportively create access for individual GLOW Units.



Visualization of a GLOW Organizational Structure

GLOW Units in a Network Organization

GLOW Units offer organizations the ability to be nimble and respond quickly to local conditions. When bound to the corporate center, there exists the possibility for both the unit and the entire organization to GLOW. However wonderful this may sound, their are several obstacles that limit organizational growth and adoption of this model. The primary reasons are agent related over that of the firm. To successfully launch GLOW Units, the organization must have strong leadership both at the Hub as well as in the individual units. Ideally, the bond between these two agents is strong and communication is clear. In the event where one or both parties lack the ability to execute and/or communicate, the possibility for disaster - or perceived disaster - is nearly certain. Further, successful GLOW Units are almost universally overseen - either

tacitly or implicitly - through a hands-off management style[11]. The result is that operators on the ground are able to act in order to build early successes, survive early setbacks, and then present results and strategy that favor the realities on the ground. Generally speaking, strong oversight, for whatever reason, can lead to these opportunities being lost or delayed[12] resulting in less than favorable outcomes and seemingly proving the logic that a specific unit requires more oversight; a vicious circle. Additionally, the goal for any organization is to import best practices learned from abroad. In most structures, the communication between subsidiaries and different units is limited. The need for individuals that are capable of translating best practices by function into local form is a serious gap that most organizations face.

Actions Needed

In order for an organization to transition into a Network Organization and successfully adopt the concept of GLOW Units, it must first start with organizational effectiveness at the Hub and developing managers capable of executing on the GLOW Model. There is ample literature that gives support that these individuals exist and can be trained. Bartlett and Ghoshal[13] have defined four key roles that are able to function within any organizational structure, though notably, designate the role of "Corporate Manager" as being key. This role allows for the management and empowerment of various units. As multinationals continue to evolve, the need to equally support as well as franchise GLOW Behavior is needed. Processes, like those of ABB, locating "Business

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11 "Casino Payoff: Hands-Off Management Works Best", Dennis Fisher, *HBS Working Knowledge*, May 2, 2011

12 "A matter of trust and respect". Marcel Côté, *CA Magazine*, March 2002

13 "What Is a Global Manager?", Christopher A. Bartlett and Sumantra Ghoshal, *Harvard Business Review*, August 2003

Managers...where strategic and organizational dimensions collide"[14] are a start, but sustained advantage - and advantage from global operations - is likely to come from the increase in unit-to-unit communication over Hub-unit communication breaking the silo approach and disrupting the hierarchical dissemination of information. A situation that most organizations would find shocking, but is empirically proven the best way[15] to break the silo approach to information hoarding and mitigating risk of poor decision making.

Summary

In the final analysis of an organization, the effectiveness of any organizational structure can be observed through two metrics: profitability and growth. In each company profiled here, each GLOW Unit accounted for a considerable allowance of managerial decision making and each were allowed to focus on maximizing local value and therefore contributing to the organization as a whole by increasing its total value. This leads to the observation that the most desirable situation for any organization - in the GLOW framework - is decentralized decision making backed by organizational strength (human and capital resources as well as "organizational DNA"). Through this structure, the unit and/or subsidiary in emerging markets or through growth markets in mature markets, are able to seize opportunities quickly and adapt at a pace that favors more profitable models and leads to the discovery and growth of disruptive models. Additionally, due to relationships with the organization's Hub, risk of catastrophic failure can be decreased

14 "What Is a Global Manager?". Christopher A. Bartlett and Sumantra Ghoshal, *Harvard Business Review*, August 2003

15 "The Learning Effects of Monitoring". Dennis Campbell, Marc Epstein, and Francisco de Asis Martinez-Jerez, *HBS Working Paper,* November 2010

and best practices in one market are able to flow back towards the center for disbursement throughout the organization's other units, while an ideal situation would allow for direct unit-to-unit knowledge transfer, this is part of the next challenge of designing the global firm.

MANAGEMENT ROLE

The New Agent

GLOW applies to individuals as much as it does to organizations. The concept of the "company man" is fading[16], while there will always be a level of management and level of employees, that hierarchy is flattening and the GLOW framework seeks to encourage and provide a tool for management to attract talent, support and grow innovative concepts, and find new products and new markets. These tools are necessary in a networked and globalized economy.

GLOW Management is as much about decentralization of organizational structure as it is about strengthening the way organizations view the role of management in how they promote leaders and ideas. Agent costs to companies can be high and the corporate HQ can be more of a cost center than a strategic Hub[17]. When fiefdoms emerge, growth can be limited. Additionally, pressures to achieve quarterly targets limits the willingness of most managers to risk a new venture[18]. Further, competition between agents may lead to new ideas being shelved that could generate positive revenues for a company and/or place it in a strategically beneficial place (though possibly decreasing the revenues of a different division).

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16 "Generation Y: How twentysomethings are changing the workplace", Erin Pooley, *Canadian Business*. January 2006

17 "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure", Michael C. Jensen and William H. Meckling, *Journal of Financial Economics* 3 (4): p. 305–360

18 "Transaction Costs, Risk Aversion, and the choice of Contractual Arrangements", Steven N S Cheung, *Journal of Law & Economics*. 12 (1): p. 23–42

Through the GLOW framework, an organization becomes flat and there is a change in the role of management at the Hub. There are examples of GLOW Management at Infosys - in how they recruit and retain talent. As Infosys has grown to be a multi-national company, the strategic nature of its management process and focus on training has been part of the driving force of its growth. Bungie, originally a small team within Microsoft, created a multi-billion dollar game franchise. Built from the ground-up, the identification and support of this team gives us a prescient model on GLOW Management and the evolution of GLOW companies.

Case Examples

There are numerous entrepreneurial units and divisions that could be profiled as to show what a small GLOW Unit looks like and its relationship with the Hub and GLOW Management. These examples were chosen to showcase that the GLOW Management framework is culturally agnostic, can be executed in companies that are entrenched market leaders, and used to drive companies through a growth phase or transition.

1. Infosys, part of the "Indian Miracle" story; written and spoken about so often by Western commentators; the idea that a "backwater" country not only was able to launch a global IT consultancy on to the world-stage, but one that was capable to compete and win in a newly "flat" world[19].

2. Microsoft (MSFT), as it prepared to launch the XBox, was seeking a "killer game" that would drive purchase of the new platform. The search for what later became

19 Note: This phrasing, made famous by Tom Friedman in his book "The World Is Flat", is attributed to Nandan Nilekani - former CEO of Infosys.

the *HALO* franchise shows how the search for talent and new products begins with a Management philosophy and lead to the acquisition of Bungie in 2000.

3. Bungie, now an independent company after spinning off in 2007, is now developing its second “universe” to find the next hit game. Further, it has adopted aspects of the GLOW Framework in how it advances corporate knowledge through discovery and promotion of new initiatives and smaller (and entrepreneurial) game developers.

Questions Raised

What traits do companies promoting GLOW Management focus on most? What made Infosys different from other companies performing IT consulting? What is it about Bungie’s Management that allowed them to innovate within Microsoft? Why did this unit outperform or outpace other units? The GLOW model provides one framework to answer these questions.

IT consulting is a competitive industry. The most important asset a company effectively has - its people - does not show up on the balance sheet. Any given company is limited in its growth by both gaining clients and, more importantly, its ability to staff jobs. This is the landscape for competition in the world of Infosys: Volume, Bodies and Maintaining Margins. In an effort to continue sustained (and sustainable) growth and a competitive advantage, the company must not only develop a pipeline of clients’ billable hours (Volume), it must also maintain a strong and motivated employees and “bench” (Bodies) and finally it must make sure that the spread between them earns a profit (Margins).

WHAT INFOSYS IS DOING RIGHT+

RECRUIT - Even though the company is a well respected employer, the increasing number of IT services firms coupled with the ability for smaller firms to compete in the US market, made finding talent a continuous chore. It is estimated that only 4.2% of India's engineers are qualified to work in a software firm and 17.8% in an IT services firm. With a need to hire tens of thousands of people, Infosys alone will represent nearly 8.6% of the total "fresher" IT hires in India. This is a significant goal. In order to meet this target, Infosys opened the recruitment process up to all engineering disciplines (with the belief that Training was needed, even for IT graduates). Because the company required its employees to work with a broad set of clients, **it focused its hiring on smart, positive people with excellent problem solving skills and an ability to learn.** The later proved to be a key piece as it effects a person's ability to perform in an industry with a constantly changing landscape of technologies and integration.

RETAIN - Training new hires is an important strategy to expand the pool of potential applicants (as mentioned above with hiring occurring outside of the Computer Science disciplines). Further, training was needed to integrate new hires into the organization's culture and systems. This represented a cost to the company that would only be paid back through retention. However, this was not the goal of the company's retention policy. Because of the importance of available bodies in consulting, the need to keep current staff was critical in maintaining a critical mass of employees. As Infosys prepared to open up an internal talent market, keeping a strong bench would be a key requirement to make it work. Further, the available applicant pool of new hires was not deep enough to replace even a small percentage increase in attrition rates at the company (a rate that has now almost doubled from 10.2% to 17.1% a year ago and is higher than competitor TCS' rate of 14.1%) so the implementation of specific strategies is necessary. **In addition to providing services available to employees working long and odd hours (similar to Silicon Valley companies) the company relies on each department to produce a talent management plan along with its revenue forecast.** This forward looking strategy allows a direct relationship of time, money and human resources to be tied together and forces each department to tackle issues of resource management as a key priority.

TRAIN - As mentioned, **training was a key portion of the company's strategy both in the ability to expand the applicant pool as well as give employees the ability to adjust and compete in an industry with consistently changing norms and standards.** The fact that Nordstrom - renowned for customer service - was one of the company's first clients, arguably contributed to the company operating at such a high level of service and with a focus on training. Training also provided employees with a sense of belonging at Infosys. The training process as well as the promotion process (and focus on internal promotions as opposed to lateral hires) allowed the company to methodically build leadership and experience across the organization. Perhaps the best example is the rotation of roles among Sr. Leadership at Infosys. T. V. Mohandas Pai, former CFO, switched to an HR role and the previous CEOs had all served in other locations in the company as well.

Infosys Management realizes that "at the end of everyday, our market capitalization comes down to zero."[20] Because of the high importance (and strategic importance) placed on people, Infosys' success hinges on its ability to Recruit, Train and Retain its employees (see insert: "What Infosys is Doing Right").

The story of Bungie - the company behind the billion dollar *HALO* franchise - developed over three chapters. The first was the acquisition of Bungie by MSFT, the second chapter was Bungie's eventual spinoff, and the the third is how Bungie has operated as a single entity and its process of innovation.

In 2000, Microsoft (MSFT) had made a number of acquisitions of game developers in preparation of the launch of the Xbox. The goal was to find the next "Super Mario" or "Sonic the Hedgehog" - a character and title that would forever be associated with the Xbox platform and become a "must-have" game for gamers.

After a number of soured acquisitions (due to MSFT over managing and changing the team structures to "fit" within the MSFT corporate model) a decision was made to allow a development group to retain autonomy and its own "local" organizational structure.

Bungie was acquired in 2000 and was a team of 36 people working on what would become *HALO* - a multi-billion dollar game franchise - and the game that "made the Xbox".

Game development was a new world for MSFT, unlike the giant top-down corporate structure, Bungie - like most studios - was less hierarchical and far more open. What

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20 Quote is attributed to Narayana Murthy, the first CEO of Infosys.

initially was a culture clash was smoothed over by then MSFT Director Pete Parsons. Parsons role was to “act as a lead shield”[21] between Bungie and MSFT. His goal was to remind MSFT that they had acquired Bungie to build something MSFT couldn’t do internally - and therefore should be allowed to operate differently than MSFT (for example, the hiring and firing process was unique to Bungie in comparison to MSFT’s corporate policy. What took 6 months to fire someone at MSFT, took a day within the Bungie team).

This reflected as much the realities of the development of world class content within the entertainment industry as it did the differences between a large corporate structure versus a small entrepreneurial group. Further, these differences were apparent in how compensation was structured. When *HALO* was launched, it “made the Xbox”. The downside was that none of the (then 43) people on the Bungie team saw any of the upside. This immediately created tension between Bungie and MSFT. This lead to Bungie team members threatening to leave and placed the *HALO* franchise in jeopardy. MSFT agreed to renegotiate terms for *HALO 2* in 2002.

The renegotiation had three main points:

1. Bungie would be allowed to have its own space separate from the MSFT campus in order to maintain creativity and autonomy.

2. The contracts for the team would be changed to pay-for-performance (and a back bonus was given for *HALO 1*). This was within norms for the entertainment industry, but outside corporate policy at MSFT.

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21 Author Interview with Pete Parsons, COO of Bungie (former Director at Microsoft)

3. Finally, the non-compete clause for Bungie management was amended and MSFT was not allowed "a seat at the table" for decision making around any of the games.

MSFT VPs originally balked at the terms - especially the pay-for-performance clause - but MSFT CEO Steve Ballmer supported the move[22]. The stage was set for a near autonomous team within the MSFT network to create an amazing franchise (and in-line with GLOW Framework). However, MSFT made a "fatal mistake" that soured the goodwill created in the negotiations. At the last second, they effectively changed the royalty structure to be inversely proportional to the success of *HALO 2*. This was seen as being a MSFT negotiation policy more than a singular event (and in direct conflict with GLOW Financing Models).

This lead to internal Bungie talks about an eventual separation form MSFT. For the next 5 years the groundwork was laid to set-up a fully independent studio. MSFT originally argued against the spinoff, however due to the renegotiation of the original contracts, and the success of both *HALO 1* and *HALO 2*, Bungie (now 67 people) was able to negotiate the spinoff.

The spinoff was contingent on *HALO 2* hitting certain revenue targets (which was easily achieved) and the agreement to produce *HALO 3: ODST* and *HALO: Reach* to close out the franchise.

Similar to the Pixar-Disney relationship, Bungie retained all its IP (minus the Characters around *HALO* which remained with MSFT, as Disney did with *Toy Story*) and MSFT

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22 Author Interview with Pete Parsons, COO of Bungie (former Director at Microsoft)

continued to hold equity in the company. At the last minute, MSFT tried to stop the spinoff. However, after 9 months of negotiation, Bungie was finally able to spinoff and eventually signed a 10-year agreement with Activision in order to publish the next "universe" created by Bungie.

The rise and success of Bungie and the *HALO* franchise is a prime example of how management can identify and promote successful teams within a network. While Bungie eventually became its own entity, MSFT continues to hold equity in the company and solidified its place in the entertainment world as the creator of a key gaming platform.

A Prescient Model

GLOW Management is as much about decentralization of organizational structure as it is strengthening the core. A trait that is realized by Bungie senior management. Since spinning off from Microsoft, Bungie has continued to innovate and grow. Now roughly 200 people, Bungie has begun to develop the second universe as well as invest in smaller developers. In a new initiative (announced in July of 2011), Bungie has invested in a program called "Bungie Aerospace" (BA). Bungie has set aside a small capital pool to provide independent game developers with funding to develop mobile games. To date, Bungie has signed up well known developers as well as unknown teams to create games that cost between $150,000 - $300,000. The goal (in addition to creating a hit game for mobile devices) is to institutionalize best practices that can be carried over into the new "universe" that Bungie is creating. Effectively, Bungie is monetizing its R&D process early and contributing to the institutional knowledge of the

company - strengthening the Hub and revenues in the process. Because Bungie's new "universe" will be multi-platform and capable of interaction among multiple devices (using the Bungie.net as its hub - something developed "in stealth" while still attached to MSFT), Bungie leadership wanted to gain best practices through the launch of smaller independent titles and tapping into best practices of established and unattached, entrepreneurial teams. The difference, is that where MSFT failed in its dealings with Bungie, Bungie has learned that lesson and has adopted a management structure reflective of the GLOW model.

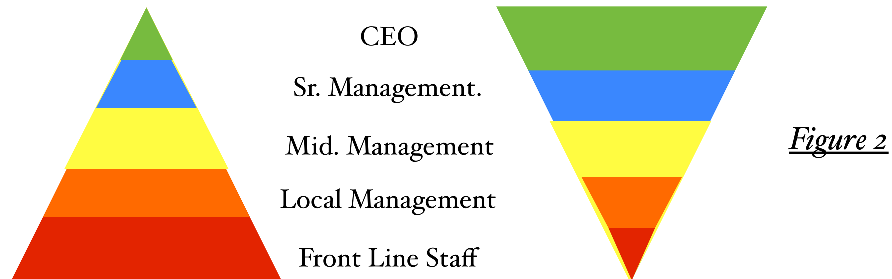
The New Model

As has been seen with the GLOW Framework in an organizational structure, GLOW Management is a distillation of best practices adapted to the technological and highly networked environment that makes up Globalization's competitive landscape. The Hub is responsible for creating the highway of commerce and in turn taking a toll for the use (similar to how MSFT promoted and enabled Bungie to launch the *HALO* franchise), management's main function within the Hub is to find, groom and promote entrepreneurs and ideas throughout the organization's network (as Bungie is doing now). A GLOW Manager's biggest asset will be the ability to on-board entrepreneurs in a way that maintains Organizational Heritage and Worldwide Learning.

Entrepreneurs and Innovation in GLOW Units

Entrepreneurs in the GLOW framework are more than employees, they hold ownership in their product, service or offering. Currently, in organizations (both public and private) the connection to mission understanding and action is inversely related to the hierarchy

(see *Figure 2* below). When the mission focus of an organization shifts to supporting product creators and entrepreneurs as “owners” over employees, one of the benefits of GLOW Units is realized - Organizational Heritage.



Organization Hierarchy v. Organizational Understanding

The ability to translate goals and ideals across smaller networked units is more accessible and allows for local adaptiveness to take place. Where GLOW Managers will find their greatest challenge is not in the sourcing of ideas or individuals willing to act as a GLOW Unit within the network, but rather how to promote and find the most talented entrepreneurs and most innovative and marketable products. Ideally, the creation of a GLOW organization will attract those entrepreneurs that see the need to bring in the strength of a larger organization or gain financing in a way that is outside the traditional forms of venture capital or bank loans in order to gain scale (this is arguably what happens in reverse to entrepreneurs seeking to build a business large enough only to sell it at some point to a larger competitor or seek an initial public offering). Within the context of a GLOW Organization, Innovation and Entrepreneurs (and Employees) become less of a commodity and it will be up to the organization to attract and finance these people under the most agreeable terms. GLOW

Organizations will resemble a championship athletic team[23] - attracting top talent and coordinating them to behave as a cohesive unit.

Actions Needed

Attracting the best team and building a franchise of hits that has global strength (similar to that of Pixar or Bungie), companies will seek to offer a path to ownership and more equity to GLOW Units than has ever been observed in the history of modern business. Where MSFT and Disney "pulled" ownership from the original teams and souring a relationship, GLOW Mangers will seek to cooperate and provide the tools for teams to grow and expand. People are drawn to hits and as both the *HALO* franchise and Pixar[24] films strengthened MSFT and Disney, respectively, successful entrepreneurs will do the same for organizations. In order for an organization to find and retain the best Innovators and Entrepreneurs, the ability for the Corporate Managers to promote, support and attract GLOW Leaders will be key. Finding successful operators that can work in a GLOW framework as Entrepreneurs can be accomplished. Clayton Christensen has written volumes on innovation and disruption[25]; his research has shown that the ability to spot and find successful disruptive models is a matter of training over luck. As Managers seek to build a powerful network, the ability for them to manage the financing and growth of various units' needs will be a key Agent trait.

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23 "Too Many Cooks Spoil the Broth: How High Status Individuals Decrease Group Effectiveness". Boris Groysberg, Jeffrey T. Polzer and Hillary Anger Elfenbein. *Organization Science*. May-June 2011

24 "How Pixar Fosters Collective Creativity". Ed Catmull. *Harvard Business Review*. September 2008

25 "The Innovator's Dilemma", "The Innovator's Solution"

Summary

Managers operating within the GLOW framework have to balance the need of the Hub and maintaining a cohesive networked organization with the local needs of individual teams within the GLOW network.

Infosys represents - in form and function - the growth of Global Outsourcing at its best and the Management Competencies needed in recruiting, training and retaining talent in a GLOW Organization. As a company that has grown from an original 10,000 Indian Rupee investment into a company with over $5.735 billion in revenue and $1.705 billion in Operating Income, it is certainly a success. Compared to its competitors in the Indian market, it is more well known and capable of paying more than 3X the salary of second tier consultancies thus capable of attracting talent (a trend GLOW Organizations will follow through equity offerings). This allows the company to staff large projects with highly competent engineers and is a positive feedback loop: Infosys hires top talent, Clients are satisfied and become repeat customers, "Cool" projects attract top talent, New clients are attracted to the company's great resources, etc.

Microsoft was able to launch the Xbox with a hit title and create a billion dollar franchise by giving support and autonomy to a small team at Bungie (a similar story is that of Best Buy's acquisition of Geek Squad[26]). By allowing the Bungie team to operate in a way that was "locally" responsive to the needs of creating a hit game, MSFT was able to launch itself into the highly competitive world of gaming platforms (and compete against highly entrenched competitors). This ability to compete effectively in new markets is a

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26 "Innovator's Guide to Growth: Putting Disruptive Innovation to Work". Scott D. Anthony, Mark W. Johnson, Joseph V. Sinfield, Elizabeth J. Altman. 2008

key trait of the GLOW Framework in adapting to 360° competition. Managers needing to create a competitive edge need to do so in markets they understand as well as the ones that they lack knowledge. Additionally, the need to create profit centers that fund expansion and growth on a global level will require Managers to focus on supporting teams and investing in disruptive and established businesses creating institutional knowledge throughout a network over domain knowledge over a specific product or market.

FINANCIAL MODEL

Seeking Growth[27]

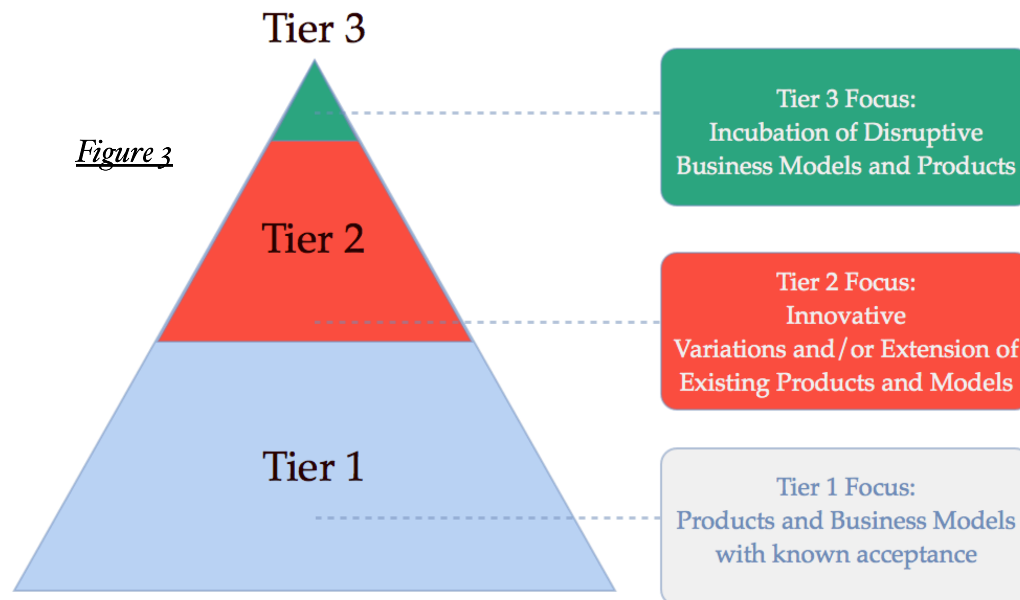
In order for companies to achieve growth, there must be consistent innovation and investment. The GLOW model seeks to provide managers and organizations the framework to build a networked structure and guide agents to a new role in that structure. The final piece in the GLOW model is the financing mechanisms needed to achieve the strategic alignment of Organization and Management within the framework.

Succinctly put, the GLOW model seeks to align an organization's strategy with the way it finances growth and uses the financing of entrepreneurs as a means to achieve sustained advantage. Investment decisions begin via a tri-tiered framework (*Figure 3)* and are initially made in Groups (in this scenario investments are placed across five groups representative of various industries or verticals which a company operates or is seeking growth). The benefit of this model is that not only does it allow for more rapid growth and higher targeted returns, it also builds into the structure a model of R&D that could lead to breakthroughs into an untapped billion dollar industry[28].

The prescient example of Financing according to the GLOW framework is taken from the world of Venture Capital - specifically Royalty Capital New England (RCNE) operated by Arthur Fox. RCNE launched two funds, Royalty Capital Fund I (RCF I) and Royalty Capital Fund II (RCF II). Both funds achieved remarkable results and over the

27 Financing of an organization is more complicated and detailed to present as a single subsection of this paper. The goal here is to present an overview for discussion and provide a financial model that can be followed (and has been followed with great success).

28 This statement is an extrapolation of the argument made by W. Chan Kim and Renée Mauborgne in "Blue Ocean Strategy"



past 20 years saw returns greater than 80% and an average of all capital being returned before Year 3 in both Funds.

Case Examples

While the concept of Venture Capital Funds within a corporation are not new, their performance has been suspect at best[29]. Part of the reason is that firms are choosing to invest in a way that is outside of their core operational competency or organizational structure and under a model that is - at best - outdated.

The following cases showcase the potential of the GLOW Model when applied to the strategic alignment of finance within an organization.

1. Clarity, an RCF I and II investment, held a patent on double-yield ink cartridges. The company had limited early success and yearly revenues were stalled under

29 "Why corporate venture capital funds fail – evidence from the European energy industry", Tarja Tepp and Rolf Wustenhagen. *World Review of Entrepreneurship, Management and Sustainable Development*. Vol. 5, No.4: p.353 - 375.

$400,000. After an initial investment by RCF I and a follow on investment by RCF II, Clarity was able to gain scale and acquire patent technology related to the manufacture of laser toner cartridges. Today the company has revenues greater than $20,000,000 annually.

2. Andover (a pioneer of digital morphing technology), at the time a small company in need of investment in order to license the rights to a technology that allowed for augmentation of a core service offering in digital media. RCF I provided investment and arranged for a dual signing for the technology transfer and close of the investment round. RCF II followed on with an equity investment. The company returned capital in Month 19. Today, the company is publicly listed and returned nearly 146X to investors

3. Royalty Capital New England, is now in the process of raising its next fund. The structure of RCNE has defined the GLOW Model of Financing.

Mitigated Risk, Higher Returns

Early versions of revenue capital were pioneered in the oil, gas and mining industries and resembled collateralized debt. As the concept became popular with natural resources, it emerged in other industries such as life sciences, biotech, [entertainment] and intellectual property financing[30].

30 Sentence taken from: "Revenue Capital & Disruptive Models: Venture Funding Tools for Developing Nations". *MIT Entrepreneurship Review. 24 October 2010*. http://miter.mit.edu/article/revenue-capital-disruptive-models-venture-funding-tools-developing-nations
"entertainment" has been added by the author

Figure 4

Clarity Imaging Technologies (originally Recycling Technologies Inc., then RTI) was a company that was founded during the early boom of ink-jet printer replacement cartridges.

> *"The core technology of the double-yield cartridges was developed and utilized in 1991 by a small regional company in Western Massachusetts. This unique technology led to a US patent in 1995. Clarity Imaging Technologies, Inc. acquired the patented technology and started utilizing it in the manufacturing of laser toner cartridges in 1998.*
>
> *Since then, further development has led to more advancements and more patents, and is responsible for the next generation technology inside today's PageMax double-yield laser toner cartridges."*[31]

After operating for several years, growth had plateaued and the company was in need of capital to finance growth and R&D. Traditional equity models of financing were unavailable due to the small size and, at the time, small market. Bank loans were also unavailable and had they been, would have lacked the added benefit of a strategic investor. After completing due diligence, RCF I made an initial investment in 1993. This was followed on by investments in 1998 and 2003 and by a staged equity investment from RCF II in 1999, 2000, and 2001. With a stream of financing available, the company grew revenues to $20,000,000[32]. More importantly, the financing and expertise provided by RCF I & II partners allowed the company to successfully acquire a patent on laser cartridge manufacturing that has secured its place as a market leader.

Andover, a software firm that pioneered digital "morphing" technology, had also been rejected by traditional venture capital firms as it was an early competitor in an as yet

31 Taken from Clarity's website: www.clarityimaging.com

32 Taken from Interview with Arthur Fox May 2011, this information is not publicly verifiable as the company is still private - though a public offering could be as soon as the next 24 months.

proven market. However, under a royalty structure the terms were highly attractive. The company had the ability to close an anchor client that would provide early revenues and an increased profile for the company. RCF partners arranged for a dual closing of financing and the licensing of their core technology. Several years later - and after returning capital to investors in month 19 - a follow up equity investment was made (in addition to the initial royalty/equity investment). As a result, Andover went public and was then acquired by VA Linux, Inc. Andover eventually returned more than 140X to investors.

A Prescient Model

Royalty Capital New England (RCNE) was begun by Mr. Fox after success as an entrepreneur - both founding and taking to exit and optical scanning company. Formerly an HP and Westinghouse engineer, he had researched traditional and alternative investment models and found royalty capital to meet a need that wasn't filled by traditional venture capital[33]. Mr. Fox launched RCNE and RCF I in 1992 as a response to the realization that most businesses needing investment capital do not fit into an equity model - similar to the development of new products or service offerings within an organization.

After achieving a +96% annual IRR on Fund I, Mr. Fox raised a second larger fund. RCF II launched and eventually returned over 5X capital and achieved an +81% annual IRR. Mr. Fox will typically invest in several rounds with the first as a royalty investment limited to a 5X return and then subsequent rounds as equity. For organizations this

33 Author's Interview with Mr. Fox March 2011

model works on several levels. First, an organization is able to back concepts that may not be ready for equity but have the potential to be hits (like Andover). Second, through a royalty structure, a percentage of capital is nearly always returned and the risk profile is offloaded significantly to the investee. Third, the risk of the entire portfolio is significantly reduced. In RCF I & II, *all* investments returned a portion of capital (which is nearly unheard of with traditional venture investments) and 4 out of 9 investments were profitable[34]. This lessens the total risk of an investment pool and results in a higher annualized internal rate of return.

The Financial Model

The GLOW framework opens the door to strategic alignment of financing with organizational structure and management goals. Additionally, the deployment of the GLOW Model allows for a higher yield on investments and creates a hybrid growth model split between organic and inorganic growth. The difference from traditional venture capital or corporate venture capital is that there is strong organizational alignment with the Hub. GLOW Financing is intended to build and grow "empires" that are overseen by agents at the Hub. This is similar to the argument first offered by Adam Smith in "The Wealth of Nations"[35] on attracting the best labor and monetized in corporate form by the East Indian Trading Company[36] in achieving a global trade advantage.

34 Information provided by Arthur Fox May 2011, audited by Deloitte (and previously Arthur Andersen)

35 "An Inquiry into the Nature and Causes of the Wealth of Nations" Book I, Adam Smith, 1776

36 "The British East India Company — the Company that Owned a Nation (or Two)", George P. Landow, April 2010

Figure 4

Royalty rate	10%										
	Yr 1	**Yr 2**	**Yr 3**	**Yr 4**	**Yr 5**	**Yr 6**	**Yr 7**	**Yr 8**	**Yr 9**	**Yr 10**	**Total**
Group 1 (5x in 10 yrs)											
Investment ($10mm)	(2,500,000)	(2,500,000)	(2,500,000)	(2,500,000)							
Portfolio companies' cumulative revenues	7,500,000	18,000,000	30,000,000	50,000,000	60,000,000	60,000,000	65,000,000	70,000,000	70,000,000	70,000,000	2.33 avg. growth over criteria
Revenues/investment (initial criteria = 3x)	3.00	3.60	4.00	5.00	6.00	6.00	6.50	7.00	7.00	7.00	
Royalties received	750,000	1,800,000	3,000,000	5,000,000	6,000,000	6,000,000	6,500,000	7,000,000	7,000,000	7,000,000	50,050,000
Net cash flows	(1,750,000)	(700,000)	500,000	2,500,000	6,000,000	6,000,000	6,500,000	7,000,000	7,000,000	7,000,000	40,050,000
IRR	74%										
Group 2 (3x in 10 yrs)											
Investment ($15mm)	(3,750,000)	(3,750,000)	(3,750,000)	(3,750,000)							
Portfolio companies' cumulative revenues	11,250,000	25,000,000	38,000,000	52,000,000	52,000,000	52,000,000	55,000,000	55,000,000	55,000,000	55,000,000	1.22 avg growth over criteria
Revenues/investment (initial criteria = 3x)	3.00	3.33	3.38	3.47	3.47	3.47	3.67	3.67	3.67	3.67	
Royalties received	1,125,000	2,500,000	3,800,000	5,200,000	5,200,000	5,200,000	5,500,000	5,500,000	5,500,000	5,500,000	45,025,000
Net cash flows	(2,625,000)	(1,250,000)	50,000	1,450,000	5,200,003	5,200,003	5,500,004	5,500,004	5,500,004	5,500,004	30,025,022
IRR	49%										
Group 3 (1x in 10 yrs)											
Investment ($15mm)	(3,750,000)	(3,750,000)	(3,750,000)	(3,750,000)							
Portfolio companies' cumulative revenues	11,250,000	18,000,000	25,000,000	20,000,000	18,000,000	14,000,000	12,000,000	12,000,000	10,000,000	10,000,000	0.22 avg growth over criteria
Revenues/investment (initial criteria = 3x)	3.00	2.40	2.22	1.33	1.20	0.93	0.80	0.80	0.67	0.67	
Royalties received	1,125,000	1,800,000	2,500,000	2,000,000	1,800,000	1,400,000	1,200,000	1,200,000	1,000,000	1,000,000	15,025,000
Net cash flows	(2,625,000)	(1,950,000)	(1,250,000)	(1,750,000)	1,800,001	1,400,001	1,200,001	1,200,001	1,000,001	1,000,001	25,005
IRR	0%										
Group 4 (.5x in 10 yrs)											
Investment ($5mm)	(1,250,000)	(1,250,000)	(1,250,000)	(1,250,000)							
Portfolio companies' cumulative revenues	3,750,000	5,000,000	5,000,000	4,500,000	3,000,000	2,000,000	1,000,000	500,000	250,000	100,000	0.01 avg growth over criteria
Revenues/investment (initial criteria = 3x)	3.00	2.00	1.33	0.90	0.60	0.40	0.20	0.10	0.05	0.02	
Royalties received	375,000	500,000	500,000	450,000	300,000	200,000	100,000	50,000	25,000	10,000	2,510,000
Net cash flows	(875,000)	(750,000)	(750,000)	(800,000)	300,001	200,000	100,000	50,000	25,000	10,000	(2,489,999)
IRR											
Group 5 (.25x in 10 yrs)											
Investment ($5mm)	(1,250,000)	(1,250,000)	(1,250,000)	(1,250,000)							
Portfolio companies' cumulative revenues	3,750,000	4,000,000	2,750,000	1,000,000	1,000,000	-	-	-	-	-	
Revenues/investment (initial criteria = 3x)	3.00	1.60	0.73	0.20	0.20	-	-	-	-	-	
Royalties received	375,000	400,000	275,000	100,000	100,000	-	-	-	-	-	1,250,000
Net cash flows	(875,000)	(850,000)	(975,000)	(1,150,000)	100,000	-	-	-	-	-	(3,750,000)
IRR											
PORTFOLIO TOTALS											
Investment ($50mm)	(12,500,000)	(12,500,000)	(12,500,000)	(12,500,000)	-	-	-	-	-	-	
Portfolio companies' cumulative revenues	37,500,000	70,000,000	100,750,000	127,500,000	134,000,000	128,000,000	133,000,000	137,500,00	135,250,00	135,100,00	0.90 avg growth over criteria
Revenues/investment (initial criteria = 3x)	3.00	2.80	2.69	2.55	2.68	2.56	2.66	2.75	2.71	2.70	
Royalties received	3,750,000	7,000,000	10,075,000	12,750,000	13,400,000	12,800,000	13,300,000	13,750,000	13,525,000	13,510,000	113,860,000
Net cash flows	(8,750,000)	(5,500,000)	(2,425,000)	250,000	13,400,005	12,800,005	13,300,005	13,750,005	13,525,004	13,510,004	63,860,028
IRR	**33%**										
Cumulative cash flows	(8,750,000)	(14,250,000)	(16,675,000)	(16,425,000)	(3,024,995)	9,775,010	23,075,015	36,825,020	50,350,024	63,860,028	
Operating expenses	1,000,000	1,000,000	1,000,000	1,000,000	500,000	500,000	500,000	500,000			
Net cash flow after 2% operating expense	(9,750,000)	(6,500,000)	(3,425,000)	(750,000)	12,900,005	12,300,005	12,800,005	13,250,005	13,525,004	13,510,004	
IRR	**28%**										
Cumulative cash flows after operating exp	(9,750,000)	(15,250,000)	(17,675,000)	(17,425,000)	(3,524,995)	9,275,010	22,575,015	36,325,020	50,350,024	63,860,028	
General Partner allocation						2,460,001	2,560,001	2,650,001	2,705,001	2,702,001	
Net after operating expenses & GP allocat	(9,750,000)	(6,500,000)	(3,425,000)	(750,000)	12,900,005	9,840,004	10,240,004	10,600,004	10,820,004	10,808,003	
IRR	**24%**										

The Financial Model for GLOW investments is shown above in *Figure 4*. Several assumptions[37] should be noted:

Group 1: Basically, each company in this group, on average, doubles its revenues over a 10 year period.

Group 2: Basically, each company in this group, on average, increases its revenues by a TOTAL of 22% over a 10 year period.

Group 3: Basically, revenues for each company in this group, on average, DECREASES by a TOTAL of 78% over a 10 year period. Yet 100% of capital is returned.

Group 4: Basically, an organization can still get 50% of capital back even if the investment criteria is immediately violated and each company folds within 10 years.

Group 5: Basically, each company in this group, on average, is a complete failure.

As evidenced by the financial model, and through the investment activities of RCNE, the model is highly successful in creating value for the Hub - despite the fact that, on average, each company in the model had a total DECREASE of 10% of revenues over a 10 year period - yet the royalty investments will have an IRR of 33%[38].

Financing of GLOW Units in a Network Organization

Perhaps the biggest departure from traditional management theory, is the role of financing GLOW Units. The need to maintain Global Efficiencies and Local

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37 While they are assumptions, the data has been extracted from typical and assumed growth rates for a given business as well as performance of the portfolio of Royalty Capital New England (RCF I & II)

38 Information provided by Arthur Fox May 2011, figures do not include equity or benefits of organizational knowledge/advantage

Responsiveness will be directly connected to the function and strength the Hub takes in financing GLOW Units. The GLOW framework differs from a typical holding company structure or divisional structure in that the Hub is less prescriptive to companies within the network and has a strict focus on creating value for network companies over value across the network as a whole. Additionally, the financing of companies is lead by Agents at the Hub (similar to partners in a Venture Capital Fund) that are capable of focusing P&L on the performance of a portfolio that spans verticals and industries as opposed to a division that spans a variety of products.

Summary

Perhaps the biggest departure from traditional management theory, is the role of financing GLOW Units. The need to maintain Global Efficiencies and Local Responsiveness will be directly connected to the function and strength the Hub takes in financing GLOW Units. The result is that investments made in GLOW Units serve the need of the Hub to grow through network effects, are overseen by agents, but are then tailored to operate in a way that is region or industry specific. This allows the use of funds to be directly tied to the mission of the GLOW Unit and allows the company to operate in a way that will most likely lead it to success. On a Global level, the Hub is then able to showcase and adapt to best practices found throughout GLOW Units and increase the likelihood that GLOW units will achieve success (or at the very least return capital) and benefit from a network that will allow for a lower acquisition cost of customers, experienced operators in various industries and regions and result in increased performance of the network as a whole.

CONCLUSION

Next Steps for the Manager and Organization

What does this Mean?

The case for a networked organizational structure and adoption of GLOW Units is strong. Organizationally, the network structure suggested by the GLOW framework is more adaptive and responsive to the changing landscape of global competition. When an organization achieves a network structure, GLOW Units/Teams are able to create value for both the company and themselves with greater speed and time to market. The result is that companies monetize their R&D early on and are able to create profit centers and find and monetize disruptive technologies earlier and with greater success.

Additionally, the strategic alignment of Management Incentives, Organizational Structure, and Financing potentially solves criticisms that traditional corporate structures lead to a siloing of information, impose a high agent cost to the firm, and limit the ability of a corporation to respond quickly to the changing landscape of competition. Further, the framework allows for the creation of value through investment activities and mitigates the risk of inorganic growth through acquisitions.

The Framework in Brief

The GLOW Model offers the potential for organizations to compete with more certainty and less risk in times of uncertainty and change. Arguably, the environmental and competitive landscape moving forward will require organizations to be leaner and more adaptive. The GLOW Framework assists organizations by:

1. Creating a organizational structure responsive to and reflective of global competition and networked economies and peoples.
2. Provides Managers with a mandate to seek and promote small teams and disruptive products.
3. Allows for the strategic alignment of financing with organizational structure and management goals in order to build and create sustained advantage.

New Questions to Explore for Further Research

The GLOW Framework, while based on established research and concepts is new. Further exploration and research is needed to strengthen the organizational structural component. While the cases chosen represent aspects of the GLOW Organizational Framework, true networked organizational models are difficult to find and unfortunately this paper has been limited by second-hand research in this area. Perhaps the best example of operational GLOW is in the activities of Special Forces units. These units possess a strong organizational heritage, have the ability to operate globally by virtue of the network as a whole and are specifically trained to respond to local conditions. Combined with first hand research into investment activities by various venture funds and the success of streamlined product development/investment models adopted by Proctor & Gamble or 3M would strengthen the model considerably.

Finally, there is validity in research that seeks to link and adopt (or to eliminate) traditional strategy paradigms within the GLOW Model. This would potentially create significant understanding and a success path in response to a world of 360° competition.

BIBLIOGRAPHY

Adams, Douglas. “The Hitchhiker’s Guide to the Galaxy”. Pan Books, 1979.

Anthony, Scott D., Johnson, Mark W., Sinfield, Joseph V., and Altman, Elizabeth J. “Innovator’s Guide to Growth: Putting Disruptive Innovation to Work”. Harvard Business Press, 2008.

Bartlett, Christopher A. and Ghoshal, Sumantra. “What Is a Global Manager?”, Harvard Business Review, August 2003.

Campbell, Dennis, Epstein, Marc, and Martinez-Jerez, Francisco de Asis. ”The Learning Effects of Monitoring”, HBS Working Paper, November 2010.

Catmull, Ed.”How Pixar Fosters Collective Creativity”, Harvard Business Review, September 2008.

Cheung, Steven N S. “Transaction Costs, Risk Aversion, and the choice of Contractual Arrangements”, Journal of Law & Economics. 12 (1), 1969.

Christensen, Clayton. “The Innovator's Dilemma”, Harper Paperback; 2 edition, 2003.

Christensen, Clayton. “The Innovator's Solution: Creating and Sustaining Successful Growth”, Harvard Business Press, 2003.

Côté, Marcel. “A matter of trust and respect”, CA Magazine, March 2002.

Davis, Eric M. “Author’s Interview.” Hong Kong, China 2005.

Fisher, Dennis. ”Casino Payoff: Hands-Off Management Works Best”, HBS Working Knowledge, May 2, 2011.

Friedman, Thomas L. “The World is Flat: A Brief History of the Twenty-First Century”, Farrar, Straus and Giroux, 2005.

Fox, Arthur L. “Author’s Interview.” Lexington, MA 2010 - 2011.

Fox, Arthur L., Thurston, Thomas, and Zaheer, Safwan. “Revenue Capital & Disruptive Models: Venture Funding Tools for Developing Nations”. MIT Entrepreneurship Review. 24 October 2010.

Ghemawat, Pankaj. “Managing Differences: The Central Challenge of Global Strategy”, Harvard Business Review, March 2007.

Gupta, Anil K. and Govindarajan, Vijay. “Managing Global Expansion: A Conceptual Framework”, Business Horizons, March-April 2000.

Groysberg, Boris, Polzer, Jeffrey T., and Elfenbein, Hillary Anger. “Too Many Cooks Spoil the Broth: How High Status Individuals Decrease Group Effectiveness”. Organization Science, May-June 2011.

Heifetz, Ronald, Grashow, Alexander, and Linsky, Marty. “Leadership in a (Permanent) Crisis”, Harvard Business Review, July 2009.

Jensen, Michael C. and Meckling, William H."Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure", Journal of Financial Economics 3 (4), 1976.

Kim, W. Chan and Mauborgne, Renée. “Blue Ocean Strategy”, Harvard Business School Press, 2005.

Mendoza, Xavier. “Presentation Slides”, ESADE Campus Buenos Aires, Argentina, November 2010.

Landow, George P. “The British East India Company — the Company that Owned a Nation (or Two)”, updated April 2010.

Parsons, Pete. “Author’s Interview.” Seattle, WA 2011.

Phatak, Bhagat, Kashlek. “Organizing International Operations”, International Management, 2005.

Pooley, Erin. ”Generation Y: How twentysomethings are changing the workplace”, Canadian Business, 2006.

Seeger, M. W.; Sellnow, T. L., & Ulmer, R. R. "Communication, organization and crisis". Communication Yearbook 21, 1998.

Smith, Adam. “An Inquiry Into the Nature and Causes of the Wealth of Nations”. General Books, LLC, 2010 - original published in 1776

Tepp, Tarja and Wustenhagen, Rolf. ”Why corporate venture capital funds fail – evidence from the European energy industry”, World Review of Entrepreneurship, Management and Sustainable Development Vol. 5, No.4, 2009.

Case Studies and Web Information:

"Infosys: Building a Talent Engine to Sustain Growth", Stanford Graduate School of Business, 2007.

"Seven Eleven Japan", Stanford Global Supply Chain Management Forum, January 4, 2006.

www.clarityimaging.com, Retrieved June 2011.

www.id.novartis.com, Retrieved November 2010.

+What Infosys is Doing Right:

Baruah, Ayushman. "Attrition Rates in Indian IT Companies Stabilizing", InformationWeek, 29 November 2010.

"The Engineering Gap", The Economist, 28 January 2010.

Author Calculations: percentages calculated by author from given information "In 2007, Infosys expected to hire about 30,000 of the 350,000 people that the IT industry would hire in India."