IVEY BUSINESS REVIEW

IVEYBUSINESSREVIEW.CA

January 2012 • Issue 1, Volume 3

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THE IVEY HBA BUSINESS STRATEGY JOURNAL

The Editorial Board

The Ivey Business Review is an undergraduate business strategy publication conceived, written and managed exclusively by students at the Richard Ivey School of Business. The magazine aims to push the boundaries of student thought; foster the development of world-class business insights; and give the leaders of tomorrow a chance to voice their opinion on today's major business issues and strategies. Each article has been created specifically for the magazine and comes from several weeks of intense collaboration between the writers and members of the Editorial Board.

The Richard Ivey School of Business at The University of Western Ontario (www.ivey.ca) offers undergraduate (HBA) and graduate degree programs (MSc, MBA, Executive MBA and PhD) in addition to non-degree Executive Development programs. Ivey has campuses in London (Ontario), Toronto, and Hong Kong. Ivey recently redesigned its curriculum to focus on Cross-Enterprise Leadership – a holistic issues-based approach to management education that meets the demands of today's complex global business world.

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Exclusive Interview

Michael Denham

The Ivey Business Review discusses strategy with Accenture Canada's Managing Director

Conducted by Joseph Ghobrial

***[Joseph Ghobrial]* How does Accenture approach strategy with its clients?**

[Michael Denham] At Accenture, we use the expression "from issue to outcome." We try to help our clients by starting with a fact-based identification of the key issues they need to address in order to ensure a competitive advantage and sustainable growth moving forward.

We will do analysis – market research, segmentation, competitive and consumer trends analysis, etc. – to identify these issues.

Then, once the client identifies the key question that needs to be addressed for each of those issues, we will tailor our analysis and investigation to make sure those key questions get answered.

To make sure that work gets translated into a meaningful outcome - the successful implementation of the strategy - we then ensure that the right steps are agreed to, resourced, and followed through.

How does the strategy process differ as a consultant versus an internal resource?

It does not really. The steps that I just described should be taken whether it is an in-house approach to strategy issues or if it is a process that involves a third-party, strategy-focused consulting firm. The process should be the same. The issue should be properly identified, framed, answered, and then translated into an implementation plan.

What did you learn from your time in corporate leadership that has impacted your consulting skills and work?

On a personal level, it has made me a better consultant. When you have done work in an organization or a client-oriented organization, you realize very clearly what the key points are that need to be addressed to ensure full and complete implementation of a strategy.

Coming up with "the answer" is something that can be done by both in-house consultants and third-party strategy consultants. But having spent time in a corporation, one becomes more sensitive to and aware of the challenge of implementing a strategy and you are able to gain a better understanding of the bottlenecks to implementation. This has had a significant impact on how I create a strategies and how I help clients realize their goals.

How do you know when a great strategy is nearing the end of its life cycle?

You really need to think about it at the level of the individual product market strategies – and there would be dozens of these in large corporations. Depending on the product or service involved, the natural life cycle could be fifteen years if it's an airplane, or only fifteen months if it is some new kind of service or internet-enabled proposition.

What you look for is: one, the growth on some sort of volume measure for the product or service in question; and two, the margin that goes along with it. What you tend to find is, as the strategy is maturing, the rate of growth starts to flatten and the margins start to compress as the markets becomes saturated and new competitors enter.

You need to answer this question at the individual product market level, rather than at the corporate or business unit level.

About Michael Denham

Managing Director for Accenture in Canada

On December 1st 2011, Michael Denham became the Managing Director of Accenture Canada. Michael joined Accenture's Canadian leadership team as Managing Director of Management Consulting in December of 2007. More recently, he also led the Strategy practice for North America.

Prior to joining Accenture, Michael held a number of leadership roles in consulting and various industries. He spent five years at Bombardier Inc. as the chief strategy officer and corporate CIO, and was also responsible for Mergers & Acquisitions and Global Partnerships. Michael worked extensively with Bombardier's CEO, Paul Tellier, to lead the company's turnaround plan, which included divestments (such as Recreational Products, Defense Services and multiple portfolios within Bombardier Capital); the strategic restructuring of Bombardier Transportation and the wind-down of Bombardier Capital.

In addition, Michael spent close to 15 years at McKinsey & Company, where he became a Partner and led the firm's North American Manufacturing Practice.

Michael attended Princeton University, where he received his Associate in Business from the Woodrow Wilson School of Public and International Affairs in 1986, and graduated from the London School of Economics with a Master's of Science (Economics) with Distinction in 1987.

Can you speak to the difference between overall corporate strategy and individual product strategy?

Think of a big Canadian company, like Bombardier. At the corporate level, they have questions surrounding what kind of markets to be in geographically or what kind of product segments to be in. When you get down to the product market level, it's all about an individual brand, such as a specific type of airplane, so the level of detail is different. As a result, the type of strategic lever you pull will vary.

Is corporate strategy designed with those kinds of product line decisions in mind? How do they interrelate or differ?

I would think of corporate strategy as a "coat rack" with the individual product/service choice representing a "coat" on the rack. So you need to, as a company, have a strategy that seeks to be in a specific type of business or "style."

For example, a company in the aerospace business needs to make decisions about where to play within aerospace. Decisions like commercial vs. business, or services vs. products need to be made at the product market level within the context of a corporate decision to be in aerospace.

Having spent time in a corporation, I've become more aware of the bottlenecks and challenges of implementing a strategy. This has had a significant impact on how I create strategies and how I help clients realize their goals.

Can a manager of an organization achieve the level of objectivity required to find the best path for their organization? How can managers achieve objective decision-making?

Biases, as part of human nature, can play themselves out within strategic decisions and also within organizational hierarchies if you are not careful. The thing that I did when I was working in industry and what I try to do as a consultant, is to make sure the group that is determining the strategy is diverse, representing a cross-section of the company. You want to have a whole series of different interests, viewpoints, perspectives, and parts of the organization represented, so that you have multiple minds working on strategy formulation and, through that, you ensure a balance of objectivity.

How does a company strike the right balance between competing with businesses that they also work with or source from? For example, Apple sources parts from Samsung, while at the same time competes with them in the consumer electronics market.

There is no one right answer. Accenture's view is that you need to keep a Chinese wall between these relationships. When you are dealing with another company that is a supplier, you need to put in place your best practices around working with that supplier. If you are competing with that company in some market, then you need to aggressively compete against it as you would any another company. We find that the more you cloud and co-mingle these relationships, the harder they are to manage. Frankly, it also makes you less effective on the whole, as you are not really putting in place the "rules of the road" that your company needs to adhere to.

In your experience, have you found such Chinese walls to be sustainable?

In some cases, yes. In some cases, as industries re-emerge or change, it becomes difficult. You can look at the rail industry for an instructive example. You have Bombardier, Alstom and Siemens that are all suppliers to each other, partners with each other, and competitors with each other. That industry structure has been in place now for a couple of decades. They have disputes like any competitors do, but, by and large, the rules of the road are respected and they try to have traditional arms-length supplier relationships with each other and can coexist in the market.

The print news industry has struggled this past decade. What should legacy publications be doing to survive in today's world?

I think one overarching theme you see across all types of publications as they navigate the transition to digital media is the importance of content. I think having access to and ownership of this proprietary content at the end of the day is what is going to be essential for any media-based company, regardless of the format.

The conglomerate model seems to have gone out of fashion. Do you think today's spinoffs are being driven by short-term market interests, or does the model's certain costs simply outweigh its hypothetical benefits?

There is a lot of research that has been done on this question. If you look at recent cases, the answers are case by case as to whether a firm should remain as a conglomerate or separate. The most noteworthy example in Canada is the old Canadian Pacific Limited, which ended up disaggregating itself into its component businesses and that unleashed huge shareholder value because each of those businesses had its own goal to move towards. It allowed for business unit mergers – EnCana came out of the old CP. It allowed for different ownership structures. So, I think it depends on whether there are benefits through ownership changes of the different business units that would result from splitting up the conglomerate.

I think some of the recent comments in the press surrounding Tyco, which is looking to divide itself into a number of business units, have been on both sides of the debate as to whether this would unleash shareholder value or be shareholder value neutral. I think you need to answer the question on a case-by-case basis as to what the ownership options would be for the business units.

We've seen a number of companies, such as Kodak and Netflix, struggle to change their business models. What do you believe is most important when attempting this kind of business transformation?

There are a couple of books that are critical to answering this: the Attacker's Advantage by Dick Foster from the late 80s and Clayton Christensen's work from about four or five years ago.

I think the key thing is to, as a corporation, be willing to cannibalize your own business and be willing to innovate and put in place new models that may eat into the growth and margins of the current business. The short answer is, if you do not do it, someone else will. If you do it yourself, you will position yourself for success in the future.

You have to be willing to cannibalize your own business by innovating and putting in place new models that may eat into the growth and margins of the current business. If you don't do it, someone else will. If you do it yourself, you will position yourself for success in the future.

We're seeing businesses increasingly considering stakeholders beyond shareholders. How has this changed your views of business strategy? How do you think these considerations should be measured?

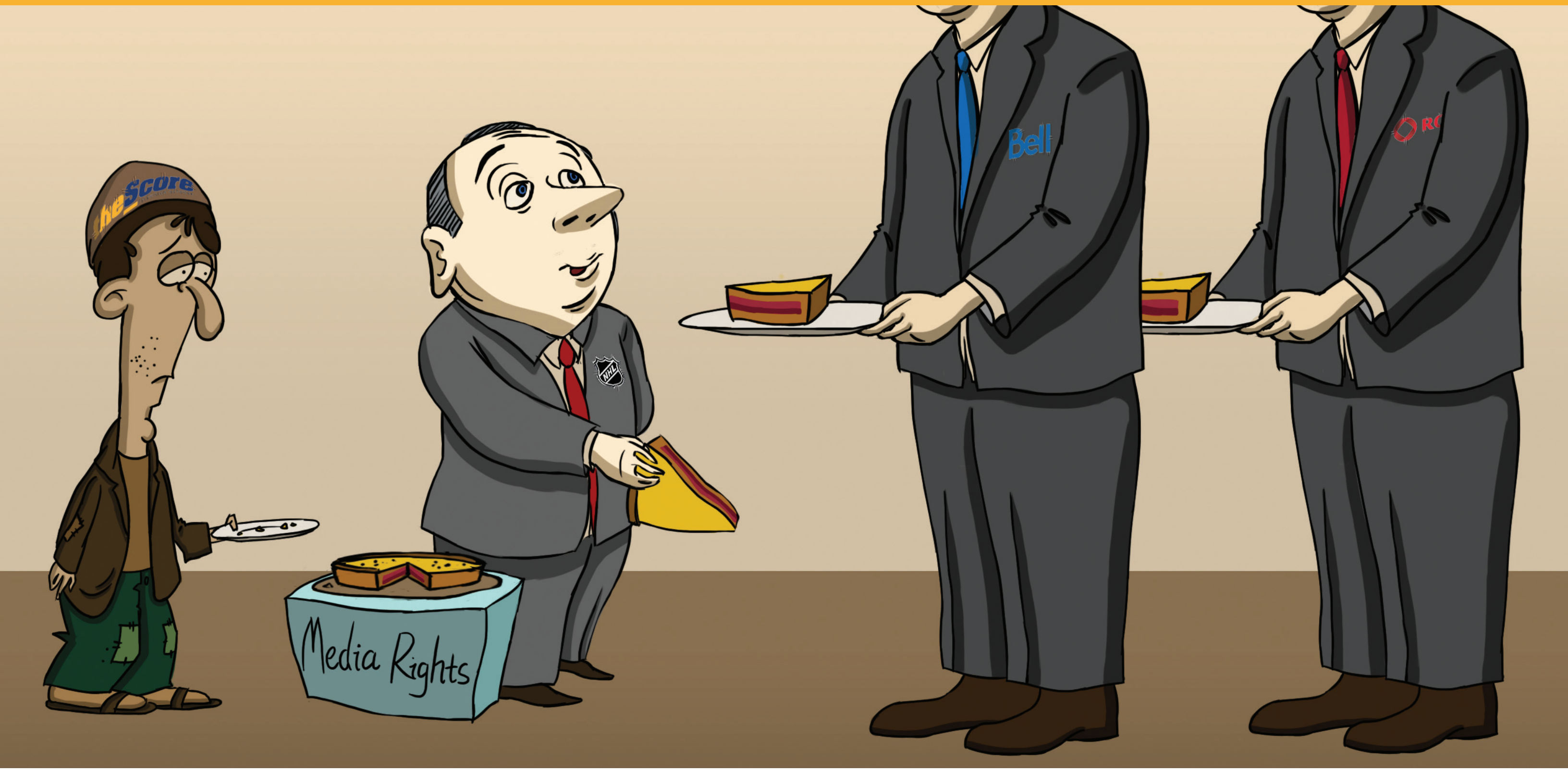
Each company has its own weighting and positioning when it comes to its stakeholders as it relates to issues like the environment. What we found across all companies is that programs and initiatives that are "good" in sustainability terms are typically "good" in bottom line terms. We tend to see companies focus on things they can do to eliminate waste, eliminate unnecessary carbon emissions, or modify businesses to make them more recycle-intensive. All those things make a business more sustainable and also save money and improve the bottom line.

What we find common with all of our clients is that they will embrace actions that are good for sustainability when they affect the bottom line, and the vast majority of action being taken to support sustainability has a good bottom-line effect.

What are your goals as Managing Director of Accenture Canada?

Accenture is focused on helping our corporate and government clients with the most important issues they face. My goals are to make sure that we have in Canada the people, the capabilities, and the ideas that will allows us to constantly be able to help our clients in this regard.

At the end of the day, it is a human capital challenge. We have to make sure we have the right set of leaders and people and the right way of bringing to bear our best for our clients and help them with their toughest issues.



How to Even theScore

Can theScore punch above its weight as costs for braodcasting rights soar?

By Alim Bhanji and Shaylyn Harper

While now seemingly a distant memory, it was not long ago that Canadian sports fans watched their favourite teams on three major networks: TSN, Sportsnet, and theScore. The Toronto Raptors, March Madness, Premiership soccer, and Major League Baseball games all once aired on theScore; but the network has since lost its broadcasting rights to virtually every mainstream sports league. To make matters worse, its most popular on-air personalities, Steve Kouleas and Cabral "Cabbie" Richards, have also defected to other Canadian networks. Add to this the cancellation of its satellite radio operations, and theScore's demise seems all but inevitable. Is there anything theScore can do to survive?

Launched in 1994, theScore did not acquire rights to air live programming until 2000. Since then, the sports broadcasting industry in Canada has changed dramatically. Rogers purchased Sportsnet in 2001, and subsequently launched Sportsnet One and expanded its platforms to include Sportsnet Radio and Sportsnet Magazine. Similarly, TSN, a subsidiary of Bell Canada, launched TSN2, TSN Radio, and TSN Mobile. The battle for wireless, cable, and internet customers between Rogers and Bell has escalated in recent years, with sports content taking on an ever-prominent role. In December 2011 it peaked, with Bell and Rogers each purchasing 37.5% of Maple Leafs Sports and Entertainment (MLSE), the $2.25 billion entertainment and real estate conglomerate, which owns the Toronto Maple Leafs, Toronto Raptors, and Toronto FC.

Why is the Competitive Landscape Changing?

Rogers recently announced that its quarterly earnings rose more than expected as strong performance from its media unit, specifically growth in Sportsnet One's subscriber base, compensated for a lackluster showing in its wireless division. Rogers and Bell clearly rely on their media businesses to provide a stable source of revenue, raising an obvious question: what drives the value of a Canadian sports network? The companies' decision to each invest $660 million in MLSE shows the importance of owning and controlling sports content.

Live sports content is valuable to advertisers because it provides access to a targeted market segment for up to three uninterrupted hours. Simply put, it is arguably the single most valuable advertising time on television. In addition, live sports is the only television content not susceptible to the increasing trend of watching television via the personal video recorder (PVR) or on-demand services. While this suggests an even brighter outlook for the sports media industry, sports networks are realizing that the major limitation of continued growth is the limited quantity of primetime sports content.

Is There Enough Content to Support Three Networks?

Sports networks must ensure that their primetime lineups generate strong ratings since live content has traditionally been considered the backbone of a sports network. Sensing that there is a finite amount of content, both Sportsnet and TSN have bid aggressively for exclusive, long-term content rights to everything from Major League Baseball to the English Premiership. Since the price of content rises with demand, the implication for theScore is clear: put forward the capital to acquire content or watch as TSN and Sportsnet poach all available rights to live sports.

As a result of the MLSE acquisition, theScore cannot compete with TSN and Sportsnet for Leafs, Raptors, or TFC content. Moreover, since theScore does not have the financial resources to compete with TSN and Sportsnet for other major live content, it must find different ways to capture the attention of Canadian sports fans. A $7.6-million profit last year suggests that theScore has achieved some success in spite of an unfavourable competitive environment.

Historically, theScore has provided high-quality analysis and programming to supplement its live sports broadcasting. Analysis quality is a function of the on-air talent providing it. If live content is the backbone of a sports network, then on-air personalities are the faces that generate repeat viewership. In 2001, Ron MacLean threatened to leave CBC's Hockey Night in Canada after it failed to give the iconic sports broadcaster a contract extension. Following a massive public outcry, CBC quickly gave in to his demands. MacLean's experience illustrates the massive support that sports personalities gain through their broadcasting careers, and demonstrates why theScore's loss of Steve Kouleas and Cabral Richards to TSN was so devastating.

Where is the Industry Headed?

The sports broadcasting industry in Canada is expected to continue on its current trajectory towards a duopoly, with the MLSE purchase representing another significant step in that direction. Sportsnet and TSN have the capital to handle the higher prices of sports content, which theScore cannot pay without greater financial support. Given the comparatively fragmented ownership structure of theScore, with no one investor controlling more than 29%, it is unlikely that current ownership would be willing to inject enough cash into the company. Therefore, being acquired is likely the only way for the theScore to compete with TSN and Sportsnet directly. One potential suitor is Shaw Media, Global TV's parent company, who may be interested in theScore for its valuable sports broadcasting license. However, fighting fire with fire may not be a sustainable strategy if all three players are willing to drive prices up, and Shaw's interest is far from certain. Under the current circumstances, theScore will have to redefine its position in the industry in order to compete.

How Can theScore Compete?

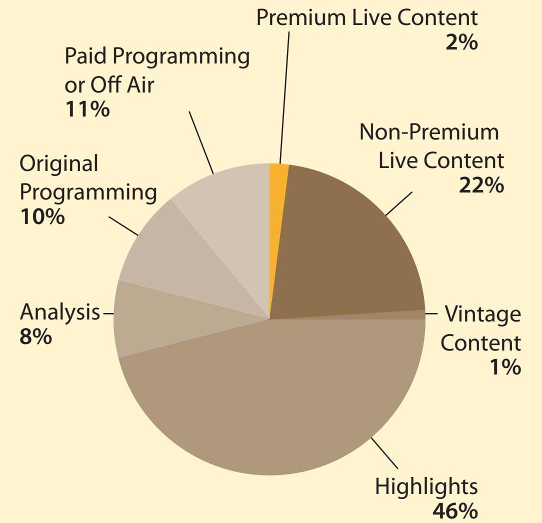
theScore should employ a two-pronged strategy: it should develop in-depth analytical coverage aimed at a younger demographic and secure content of secondary sports to round out its programming. To differentiate its analytical coverage from TSN and Sportsnet, who both invest heavily in this area, theScore should create a younger, edgier lineup that provides a fan's perspective.

During the NBA season, theScore airs Court Surfing which gives basketball fans a one-stop offering during game nights. This program is anchored by two Score personalities and switches between live basketball games depending on which game is most exciting, allowing the network to curate content for the viewer. The popularity of NFL Redzone, which is broadcast in a similar style by the NFL Network, demonstrates that such a format can be a draw for viewers. Court Surfing also allows theScore to provide instant analysis during games, which has been identified as one of the network's strengths. theScore should expand this type of fan-centric coverage to differentiate itself from its competitors and increase viewership.

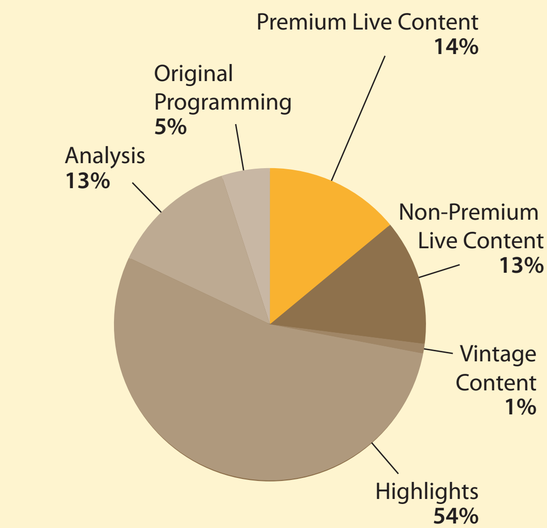
TSN's commitment to developing the World Junior Hockey Championships over the past 15 years demonstrates that it is possible to turn a small-scale sporting event into an annual tradition. Before TSN devoted significant resources to promoting the World Junior Championships, there was a very limited following outside of hardcore hockey fans. TSN made a big bet on the event and has since popularized it through heavy marketing and promotion. The success of TSN's approach is demonstrated by the 6.88 million viewers who tuned in for the 2011 championship game.

Broadcaster Content Mix

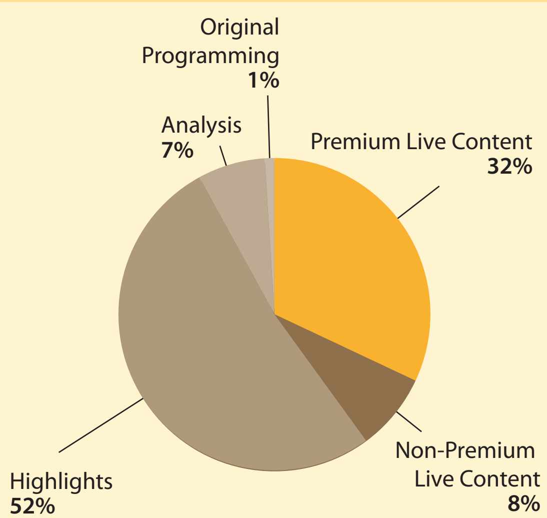
theScore



Sportsnet



TSN



Source: Broadcaster Schedules

Broadcast Rights

TSN and Sportsnet control the rights to a vast majority of leagues

Source: Broadcaster Websites

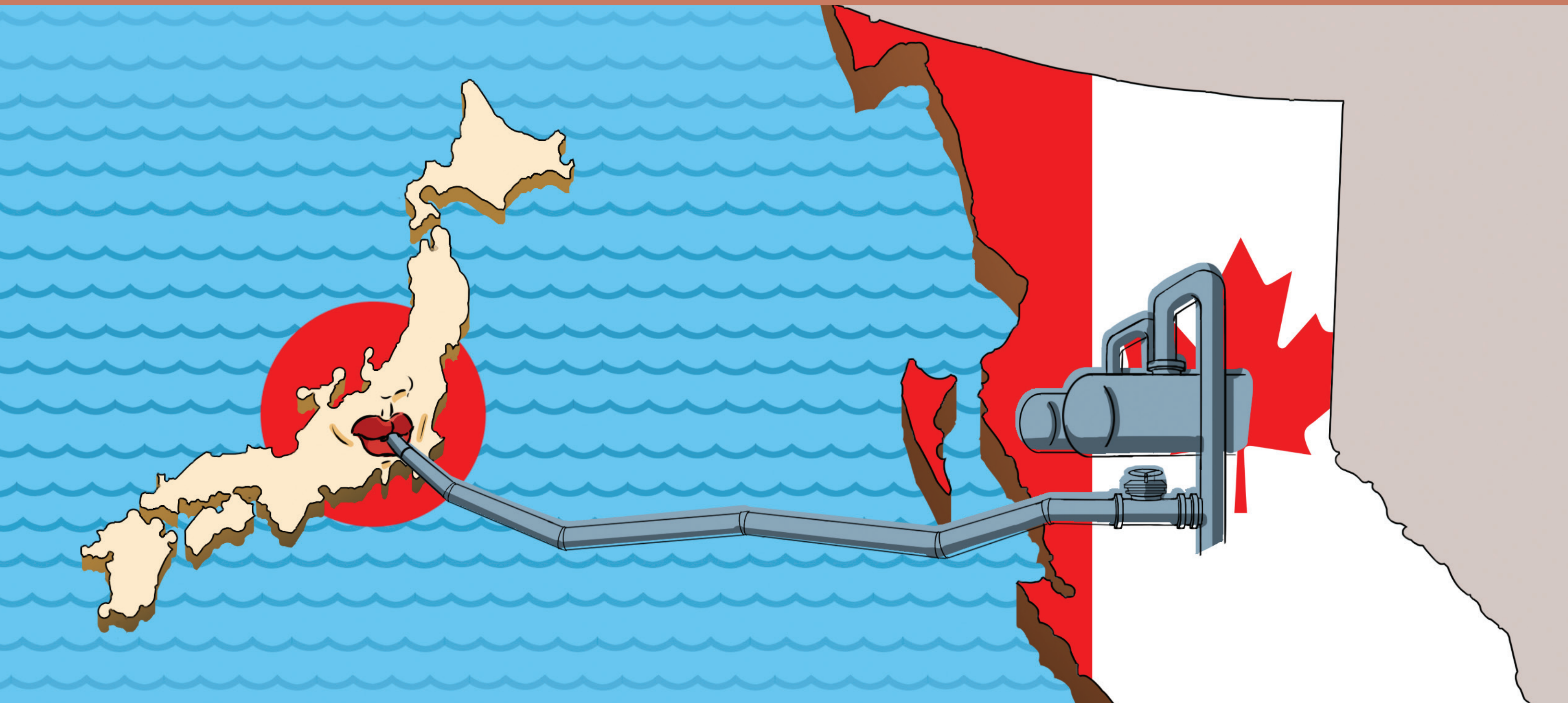
There is nothing particularly unique about the World Juniors that prevents theScore from replicating this strategy with a different sport or tournament. Instead, what is required is a substantial investment in smart promotions to create buzz around overlooked sporting events.

Earlier this decade, theScore regularly aired English Premier League (EPL) soccer. The sport has since become increasingly popular in Canada and is now shown on both TSN and Sportsnet while theScore no longer airs any games. In this case, theScore did not place a large enough wager on the future popularity of the sport, failing to lock in its rights for a long enough time period. Had it secured long-term contracts for EPL broadcasts in Canada, theScore would have had a very valuable property. Instead, it only held the rights long enough to watch the sport grow in popularity and then get outbid by TSN and Sportsnet for its rights. As the sport grew over time, theScore would have had the option to sublicense the content to the bigger players, opening new streams of revenue while maintaining its presence as a relevant sports network.

Due to its limited resources, the only way theScore can afford to secure the rights to popular live content is to make risky long-term bets on emerging sports or tournaments. Although it would require significant financial commitment, theScore's only hope of acquiring relevant content is to secure long-term, exclusive rights to emerging sports in Canada. Selecting the sport is the difficult part. The World Junior Championship succeeded because of Canada's national pride in hockey and the tournament's play during the holidays, while the EPL succeeded because enough Europeans in Canada watched the games before the sport took off.

Univision, a U.S. Spanish-language channel, has been widely successful competing against the larger U.S. networks by targeting an immigrant audience. For theScore, a focus on appealing to Canada's large, untapped, immigrant market could lead to similar success. Cricket poses an attractive option as a sport that appeals to various ethnic groups with a built-in audience in Canada, but has not yet reached its potential for popularity in North America. By making a long-term bet that the sport will grow in popularity, theScore can secure its rights at a discount before the sport takes off. Learning from the World Junior model, theScore must contribute to the growth of the sport's popularity by promoting it heavily and hiring personalities who will appeal to new viewers without alienating long-term fans of the sport.

theScore has a challenging road ahead as it fights to survive in the Canadian sports media battleground. Comparable to a small-market team in a league with no salary cap, theScore has a strong track record of content and talent development, but it is only a matter of time before the deep pockets of TSN and Sportsnet lure the talent away. If theScore continues with a mainstream approach, any internally-developed sports personalities or programming ideas can be bought or replicated by Sportsnet and TSN. theScore must avoid head-to-head competition and remain flexible. Focusing on the analysis niche and taking risks on new and emerging sports are two ways that theScore can create a competitive edge.



Pipe Dreams: Exporting Canadian Natural Gas

Can TransCanada Pipelines improve its competitive position in the Liquefied Natural Gas market?

By Andrew Cornhill and Michael Zawalsky

In a world of rising fuel costs and environmental concerns, natural gas seems like a natural fit. It is cleaner than most alternatives, cheap, and abundant, positioning it as a promising part of the Canadian economy. Historically, producers such as EnCana (who extract the commodity) and distributors such as TransCanada Pipelines (who link supply to demand) have relied on infrastructure designed to connect supply in Western Canada with demand in Eastern Canada and the United States.

Starting in 2009, however, the natural gas market began a fundamental shift. Technological advancements unlocked previously unrecoverable reserves across North America that permanently increased supply. As a result, TransCanada finds its existing pipelines poorly positioned for this new environment, creating significant headwinds for their business. This is a structural market shift and if TransCanada is to remain North America's leading pipeline company, it must connect its current supply with the region where Canadian gas is most competitive: Asia.

Asian Opportunities

TransCanada's business model requires large investments in energy assets (pipelines and power plants) that generate stable cash flow over long payback periods. Traditionally, the gas in TransCanada's pipelines has almost exclusively come from the Western Canadian Sedimentary Basin (WCSB). In 2009, an unprecedented glut of supply in the Eastern United States drove natural gas prices downwards, and consequently decreased gas drilling rates in the WCSB. Lower drilling activity means less gas travels through TransCanada's pipelines. Of greatest concern, in the past five years, volumes have dropped over 70% in the "Mainline," an asset representing 13% of TransCanada's $8B 2010 earnings. Due to low volumes, TransCanada had to increase its prices to recover operating costs. This made shipping gas even less attractive.

There is no true global market for natural gas because the commodity is so difficult to transport, resulting in disparate regional prices. To transport natural gas across the ocean, it must be liquefied and shipped by specialized tankers. As a result of limited domestic supply, Japan, Korea, and Taiwan (JKT) have relied on liquefied natural gas (LNG) to meet their energy needs. This gap between domestic supply and demand results in natural gas prices as high as $16.25/mcf ($/thousand cubic feet), a stark contrast to North America's price of roughly $3.25/mcf. Currently, there are no pipelines or liquefaction plants to connect Canadian supply with Asian demand, forcing producers to forego Asia's more lucrative prices. Recently, producers have taken notice; there are several proposals to ship liquefied natural gas out of Kitimat, British Columbia and the Gulf of Mexico.

Canadian LNG Exports

In Canada, natural gas producers are feeling the pain of depressed prices. If these persist, producers will have no choice but to stop production. Large players with strong balance sheets have recognized this risk and have plans to access higher prices using LNG. Apache, EOG, and EnCana currently represent Canada's first step into global LNG markets. Their project "KM LNG" includes a 1.4 Bcf/d (billion cubic feet per day) export terminal in Kitimat and the 1 Bcf/d Pacific Trails Pipeline connecting the terminal with supply. This terminal could provide an additional $1.3 billion in revenue annually on gas they are already producing.

Shell, Progress Energy, and Nexen, amongst others, have also recognized the value in exporting Canadian gas. Three further export terminals are slated to be online by 2020, which, if constructed, will raise Kitimat's export capacity to 5 Bcf/d: approximately one third of total current Canadian natural gas production.

Global Market for LNG

JKT currently meets energy needs by purchasing LNG under long-term contracts from Indonesia, Brunei, and other Asian natural gas exporters. However, many of these suppliers face a combination of shrinking supply and rising domestic demand, raising the possibility that these contracts will not be renewed. It is therefore forecasted that JKT will face a shortage of gas mid-decade that Canadian LNG is primed to fill.

Canadian companies may face competition, as other countries prepare for the anticipated Asian shortage as well. Qatar is expanding its LNG export capacity to become the largest gas exporter in the world. Not to be outdone, Australia has 13 proposed LNG export terminals in addition to four already operating or under construction. In Canada's favour, many of these proposed terminals are facing political and economic pressures. Presumably, JKT will prefer to contract with politically secure states with stable regulatory environments that can meet their demand mid-decade and beyond. Shell and Progress Energy have also managed to secure Asian energy firms as partners in their upcoming Canadian projects, perhaps providing Canada with an edge.

In the global LNG market, the wild card is demand from developing Asian economies such as China, India, and Thailand. Since gas can be piped from reserves on the Asian continent, these economies do not face the same supply constraints that confront JKT. LNG in these markets will serve to fill the gap between continental supply and demand. With global economic uncertainty clouding growth prospects for these nations, the rate at which these markets develop an appetite for natural gas and the need for LNG imports is uncertain.

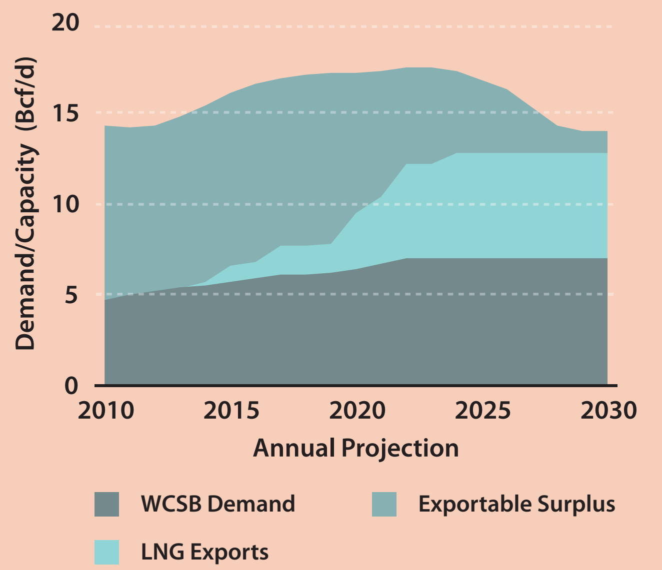
TransCanada's Position

With the potential for 5 Bcf/d of supply committed to Asia, the amount of gas left to be transported through TransCanada's pipelines is limited. Assuming Shell, KM LNG, and BC LNG come online by 2020, the supply available to TransCanada for shipment drops over 20% from current levels. If all proposed export terminals come online, TransCanada's position is even weaker. While some of this downside will be tempered through alterations of their pipeline toll structure, the position of their existing natural gas infrastructure remains weak. This, compounded with regulatory concerns faced by their Keystone XL pipeline, leaves the strength of TransCanada's competitive position less clear.

Fortunately TransCanada can still become the primary shipper of Canadian gas to Kitimat. Current existing and proposed

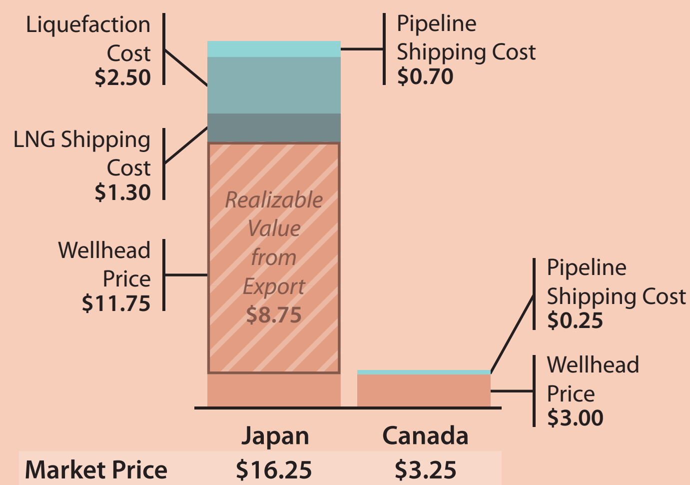
Stagnation and Pricing

20 Year Projection



Source: TransCanada Pipelines

Market Price Breakdown (per 1000 cubic feet)



Source: Progress Energy, Globe and Mail, ARC Financial

pipe capacity to Kitimat is only 1.2 Bcf/d. To preserve its status as Canada's premier pipeline company, it is imperative that TransCanada own and develop infrastructure connecting the WCSB to export terminals in Kitimat.

TransCanada's Strategy

TransCanada's first step should be to acquire the Pacific Trails Pipeline from Apache, EnCana and EOG. Building the Pacific Trails Pipeline in BC is risky due to the mountainous, rocky terrain and unresolved First Nations land claims. TransCanada's risk-averse business model does not fit with building this project; however, TransCanada would likely fare well as its operator. The core competencies of Pacific Trails' current owners do not include operating large natural gas pipelines. These companies (especially

Serving JKT Demand

Planned and proposed infrastructure

Legend

- Spectra Energy
- Pacific Northern Gas (PNG)
- Pacific Trails Pipeline (PTP)
- TransCanada Pipelines
- Recommended TransCanada Pipeline
- Western Canadian Sedimentary Basin
- Large Cities
- Trading Hubs
- Power Plant

Pipelines Serving JKT Demand

Pipeline	Capacity	Operational
Shell LNG	1.8 Bcf/d	2020
KM LNG	0.7-1.4 Bcf/d	2015-2017
BC LNG	0.25 Bcf/d	2014
Progress LNG (Proposed)	0.6-1.2 Bcf/d	est. 2020

The PNG and PTP pipelines can be expanded to meet incremental demand.

Source: Ziff Energy Group

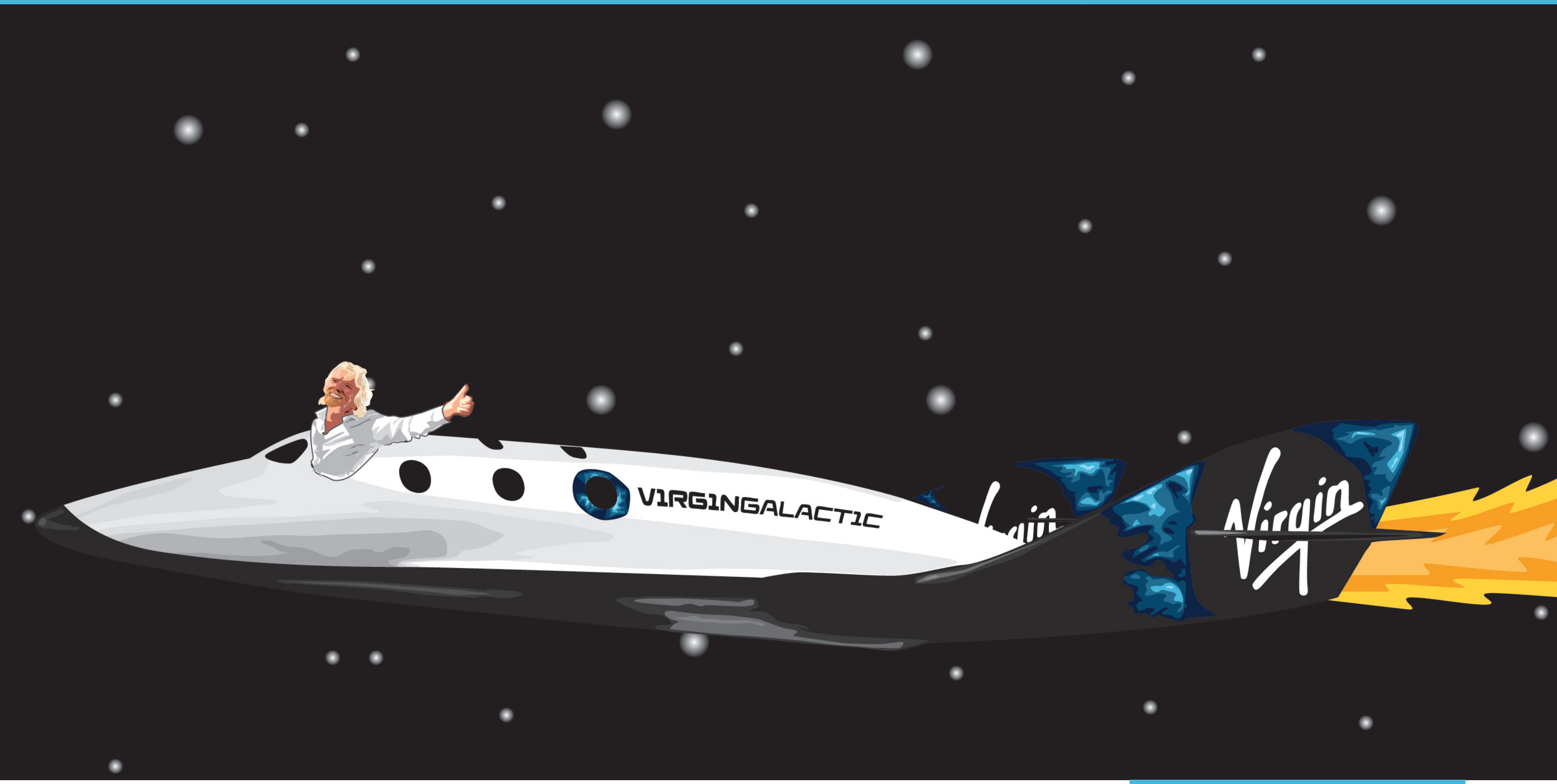
EnCana who has been heavily divesting assets) would likely be willing to sell their de-risked project to a pipeline operator given adequate consideration, including first rights to space upon completion.

TransCanada's competitor, Spectra Energy, is a motivated bidder as well; Spectra owns the major natural gas pipeline connected to Pacific Trails which makes this project a tempting target. The company that owns a controlling stake in Pacific Trails controls the export terminal's gas supply, an enviable market position. Of note, however is the different geography of Spectra's assets; the firm is currently making large capital investments developing its Eastern US assets, while its BC system is entirely isolated. Unlike Spectra, TransCanada is entirely dependent on the WCSB, and investments in this area represent an extension of its core business. Additionally, Pacific Trails would allow TransCanada to recapture lost volumes that LNG sales represent. TransCanada is well positioned for this acquisition and should be able to outbid Spectra for the rights to Pacific Trails.

The second step is to approach Shell or Progress to become the exclusive shipper of their gas to its proposed export terminals. TransCanada would connect existing pipe infrastructure in Alberta to Kitimat with a 2 Bcf/d pipeline. As a complement to Pacific Trails, it could share existing right of way and infrastructure which will dramatically reduce construction costs. Additionally, TransCanada would become the sole high-volume gas shipper to Kitimat, allowing them to capture more value from the Asian-Canadian price differential. Building the pipeline for Shell or Progress would allow TransCanada to almost fully recapture the gas flows lost to the rest of its system, and due to the toll structure, charge a higher rate per distance than its can charge on its older assets.

Finally, TransCanada should build a natural gas power plant at Kitimat to meet new industrial demand in the area which consumes enormous amounts of electricity. There is insufficient generation capacity in BC to meet growing demand without the government breaking its promise of electricity self-sufficiency by 2016. The power plant provides a synergistic low risk, long term capital project which diversifies revenues and lowers risk for TransCanada's BC operations. The power plant represents an additional customer for its pipeline, provides electricity to local mines and industry, as well other provincial consumers. This additional gas buyer decreases risk for TransCanada and the sale of electricity would provide an additional 10% increase in revenues. Only TransCanada's management has the experience to successfully develop and operate a power plant of this scale. This extra vehicle of return represents an additional competitive edge, especially when bidding for Pacific Trails, as TransCanada could accept lower returns on the pipeline.

Once built, these three projects will generate over $1 billion dollars in revenue annually. Although TransCanada is well positioned to gain from the North American LNG revolution, history has shown that natural gas markets are fickle. Prior to 2009, the North American gas story was also one of shrinking supply and future dependence on LNG imports to meet demand. Billions of dollars were invested to build import capacity to fill the gap in supply. Unfortunately, that gap never materialized and billions of dollars of investments were wasted, including some of TransCanada's. The energy industry is very volatile and presents sizeable risks for every investment. Despite the industry's riskiness, LNG exports are likely to materialize, grow, and develop into a market of their own. TransCanada cannot afford to be left behind.



Reigniting the Space Race

Can Space Tourism revitalize the culture of excitement and innovation that was once synonymous with space exploration?

By Owen Ou and Gareth Coombes

Over the past few decades, the space industry has suffered a loss in faith and support from the general public. To most, the excitement of a time when humans first set foot on the moon has come and gone, and all that remains is a numbed sense of wonder. What happened?

The space industry followed a path that few saw coming, but was destined from the start. Satisfied that humankind could, in fact, conquer the final frontier, the American public sat back and waited for the space industry to take off. Unfortunately, taxpayers gradually set their sights on matters back on Earth, and NASA shifted its budget to matters away from the public sphere. Over the next 40 years of frequent launch complications and high costs, the majority of the public became relatively apathetic.

NASA's Retirement

On July 23, 2011, NASA grounded its space shuttles for good, thus ending America's ability to send humans into space. Declaring that the expenses were too high and the shuttles too old, NASA chose to outsource its astronauts to the Russian space program. In the decades prior, NASA had held a virtual monopoly in the space industry. Inefficiencies were rampant due to a bloated budget, a complex bureaucratic system, and the majority of contractual work being solely in the hands of Boeing and Lockheed Martin.

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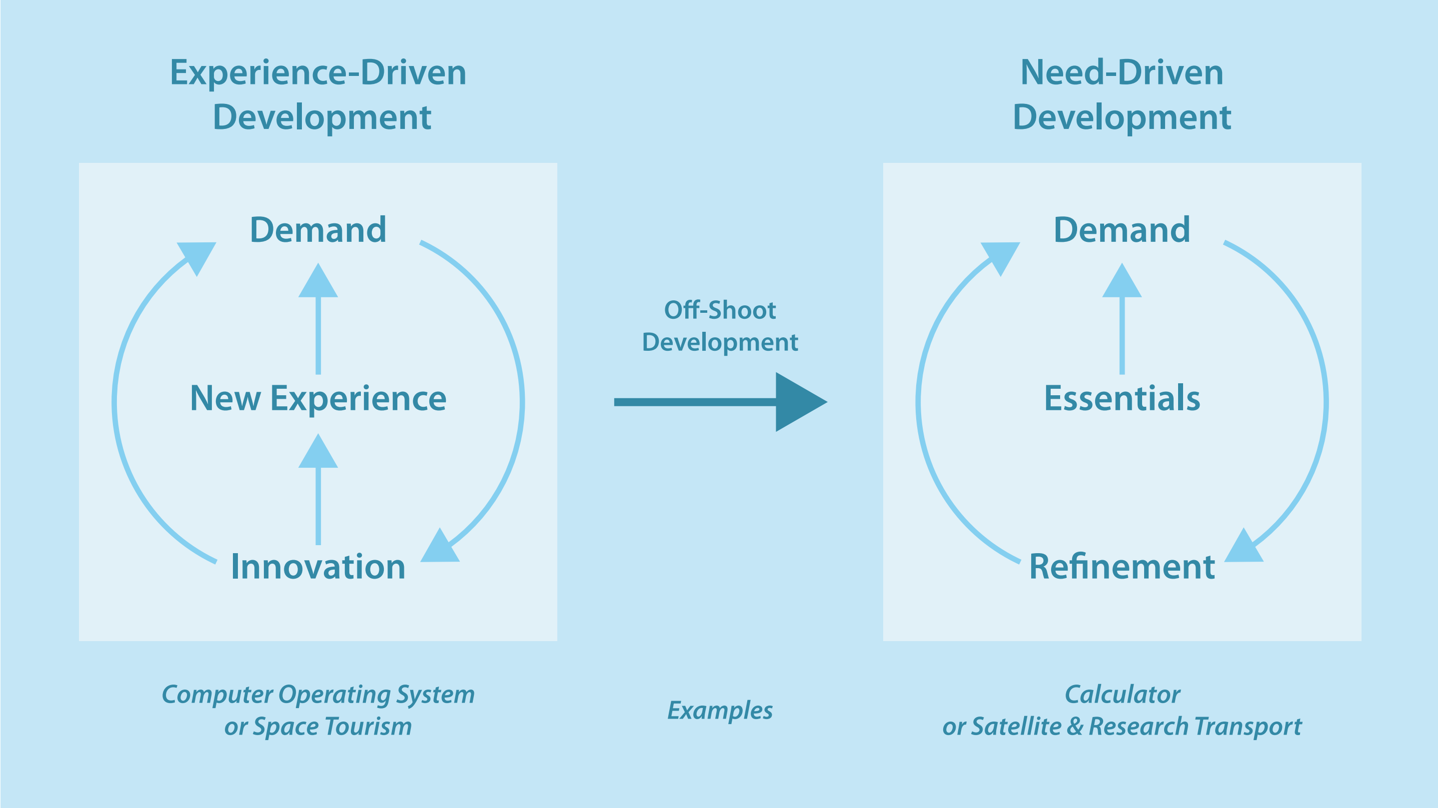
Where there was once a monopolistic NASA governed by voter interest, there is now an influx of smaller companies with large ambitions aiming to drive profits, dominate market share, and outperform competitors. In other words, this may just be the ideal scenario for the resurrection of a forgotten industry.

A key driver of the space market is Sir Richard Branson's Virgin Galactic, a company committed to sending its first customers into space by January 2013. These "Virgin astronauts" are early adopters of a new and developing segment of the space industry called Space Tourism. For the price of $200,000, 455 individuals from over 40 countries have prepaid to rocket 108 kilometres above the earth and weightlessly view the globe as only an elite few have done before. As a show of confidence, Branson's entire family, including his 90-year old mother, will be the first to launch. Compared to the $25 million tourists paid prior to 2010, this $200,000 price tag is a bargain.

Cycles of Development

How Space Tourism can fuel new growth



Dejá Vu

The deregulation of the commercial airline industry in the 1980s is analogous to NASA's recent withdrawal. In 1978, the U.S. signed the Airline Deregulation Act, which phased out the Civil Aeronautics Board's power of regulation, eventually exposing the industry to competitive market forces.

This act signaled the end of a governmental monopoly – as regulation softened on routes and fares, new airlines were able to enter the industry. This can be directly compared to NASA's new role as a facilitator of human spaceflight, rather than dictator. It now divests power to private firms by offering government grants that stimulate competition, innovation and market entry.

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The effects of airline deregulation were astonishing. A 1996 report created by the Government Accountability Office revealed that the average fare paid per passenger in 1994 was 30% lower in inflation adjusted terms than 1979. This was due to an influx of competition within the industry, and an explosion in demand as deregulated airlines reduced prices to a more affordable level. Airlines did not provide significantly greater benefits for transportation of cargo or collection of resources so they were forced to monetize travel. If the airline industry is any indication, NASA's deregulation of human controlled flight could signal similar exciting results for the space tourism industry.

Space Tourism – The Lone Saviour?

Transport for research was the first activity undertaken by mankind in space and has continued to be a major driver for academia. NASA's government-funded research and development has produced countless inventions and processes over the past 50 years, ranging from microchips to nano-ceramic hair straighteners.

Curiosity will continue to fuel missions beyond Earth's atmosphere. However, without NASA's space shuttles, patent-hungry corporations and large institutions will need new providers to transport researchers to and from the International Space Station. Consequently, this portion of the space industry will continue to be pursued out of the public's eye.

The same logic applies to the $102 billion commercial satellite launch market. Charged with the responsibility of "ferrying" multi-million dollar payloads into orbit to provide countless modern essential services not limited to telecommunications and national security, reliable launchers will be in great demand for the foreseeable future. Indeed, the U.S government recently took its first steps in announcing opportunities for commercial space companies to launch its national security satellites into space.

Despite obvious demand by capital-intensive institutions, neither research nor payload launching activities will ignite the potential inherent within the space industry for three key reasons. First, the satellite industry provides little incentive to send humans into space, as the entire process can be controlled from Earth. Second, the benefits that satellites provide are enjoyed on Earth, not in space. People appreciate the mobility and triangulation that satellites provide for smartphones but this does not draw public attention to the space industry. Third, both transport for research and satellites propagate the same ideas fostered by NASA: that space is reserved for elite astronauts and remains unattainable to the general public. For the space industry to expand, public involvement is absolutely necessary. Space tourism is the ideal catalyst.

Tourism, though often criticized as an elitist's thrill ride, holds the most promise for reducing prices and spurring the awareness and further development of the space industry. As the only experience-driven segment in the space industry, pressures to develop new offerings will drive key innovations and benefit related markets.

Experience Driven Innovation

Of the three segments discussed, only tourism offers the value-added experience of sending everyday people into space. Unlike the research and satellite transport sectors, both of which compete on propositions of price and reliability, tourism competes on providing a once in a lifetime experience worthy of its ticket price. Similarly, transport ships follow a different development cycle than cruise ships. The former, a need-driven market, is typically relatively stagnant in regards to innovation; whereas the latter, an aspiration-driven market, requires innovation to ensure a continuous flow of demand. Need-driven markets by definition operate only to match unwavering demand. As a result, businesses of this sort can be sustained by doing the same thing repeatedly, with only competition to keep operations in check. On the other hand, businesses that compete on providing the most unique experience have a higher propensity to carve out an entire industry through innovation. As more everday people are seen enjoying these experiences, the more obtainable space tourism will seem to all consumers. The lines will only get longer.

Commercial satellite launch and deployment is a maturing market. As shown through product innovation life-cycles, marginal improvements such as price, quality and efficiency will develop through economies of scale, but such advancements gradually taper off. There is little room for radical innovation in this "mature, need-based" market simply because the value proposition addresses only the necessity of transportation. However, the maturing of one cycle can lead to the disruptive birth of another - space tourism. This nascent segment will be poised to rekindle the innovation cycle, offering a service that competes on experience and thus driving a self-perpetuating cycle that continuously demands innovation in order to stimulate demand.

Future Expectations

The space industry will be forever changed once the first tourists return safely to earth. The opportunity to experience space as a travel destination will once again seem attainable. Demand for sub-orbital flights will increase with the onset of media activity and word of mouth drawing a wider consumer base. With early responders continuing to sustain the market, companies like Virgin Galactic plan to increase fleet size and flight frequency.

Additionally, developments in space flight will have the potential to cannibalize services currently offered by traditional airliners. Spaceflight is inherently faster than air travel and could one day serve as a real substitute, if prices come down to more reasonable levels. This could lead to opportunities for acquisitions or changes in organizational strategy, which would bring larger players into the industry. Various forms of innovation, unpredictable to us, now will carry the industry towards a tipping point as companies compete to find new ways to enhance the experience. If permanent real estate is ever established in space, such as a hotel or commercial space hub, an explosion of exciting offerings will follow and space will become the next "must-visit" destination for the masses.

Signals of a space revolution are undeniable. The list of private companies racing to deliver the best experience of human space travel has exploded in the last decade. Tourism, though often criticized as an elitist's thrill ride, holds the most promise for reducing prices and spurring the awareness and further development of the space industry. As the only experience-driven segment in the space industry, pressures to develop new offerings will drive key innovations and benefit related markets.

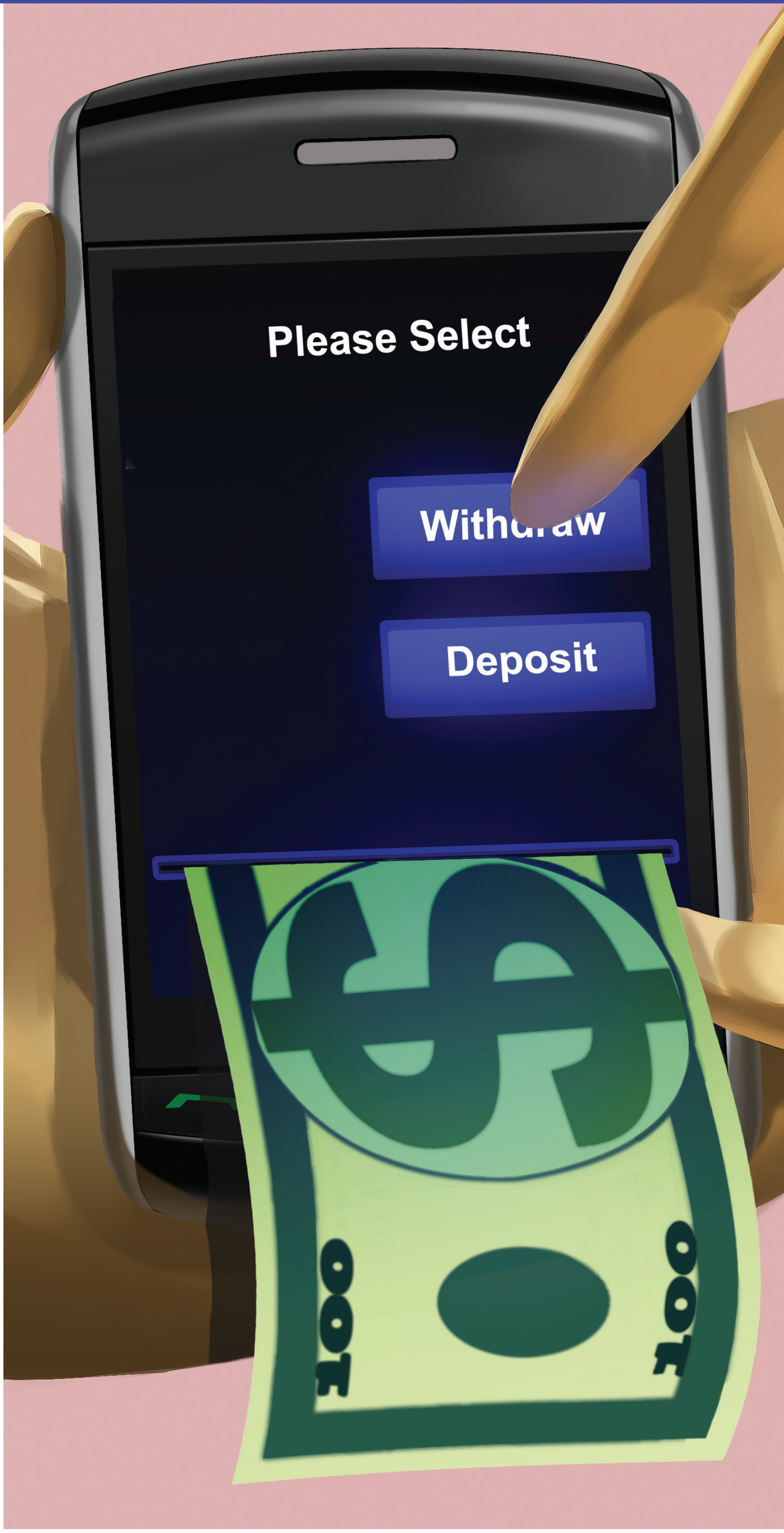
Comparisons with the airline industry have demonstrated the opportunities prevalent in an open-market industry when government deregulation occurs. As with the beginnings of all ventures, failures are unavoidable but the rewards are unimaginable. Many people are still apathetic towards space, but tourism may be the spark that ignites the long-awaited space age.

Imagine rocketing into Earth's orbit. Sensations heighten as the spacecraft surges through the atmosphere at three times the speed of sound; all familiar surroundings disappear to be replaced by an unfathomably small globe, and, for the first time in your life, complete and utter weightlessness.

Cracking the NFC Code

Is Rogers uniquely positioned to break into the payments industry?

By Scott Burton



The concept of mobile payment systems first emerged in 1997, when Coca Cola deployed vending machines in Finland capable of accepting payments through SMS. A year later, the ability to purchase cellphone ringtones directly from a mobile device, billed through the carrier, became ubiquitous. Outside of this early progress, mobile payments failed to take off in North America until recent technological developments, most significantly the implementation of "Near Field Communication" (NFC) chips in mobile phones.

NFC allows data to be exchanged between two devices at a very close distance. With the right software, this technology allows a phone to function as a wallet, access card, loyalty card, and fare collection system. Users can simply tap their phone against a designated terminal to pay for an item, with the payment itself going through a user's credit card, debit card, or cellphone bill. Mobile payments have the potential to permanently change how consumers pay for goods; while, in the process, disrupting the well-established and heavily fortified payments industry.

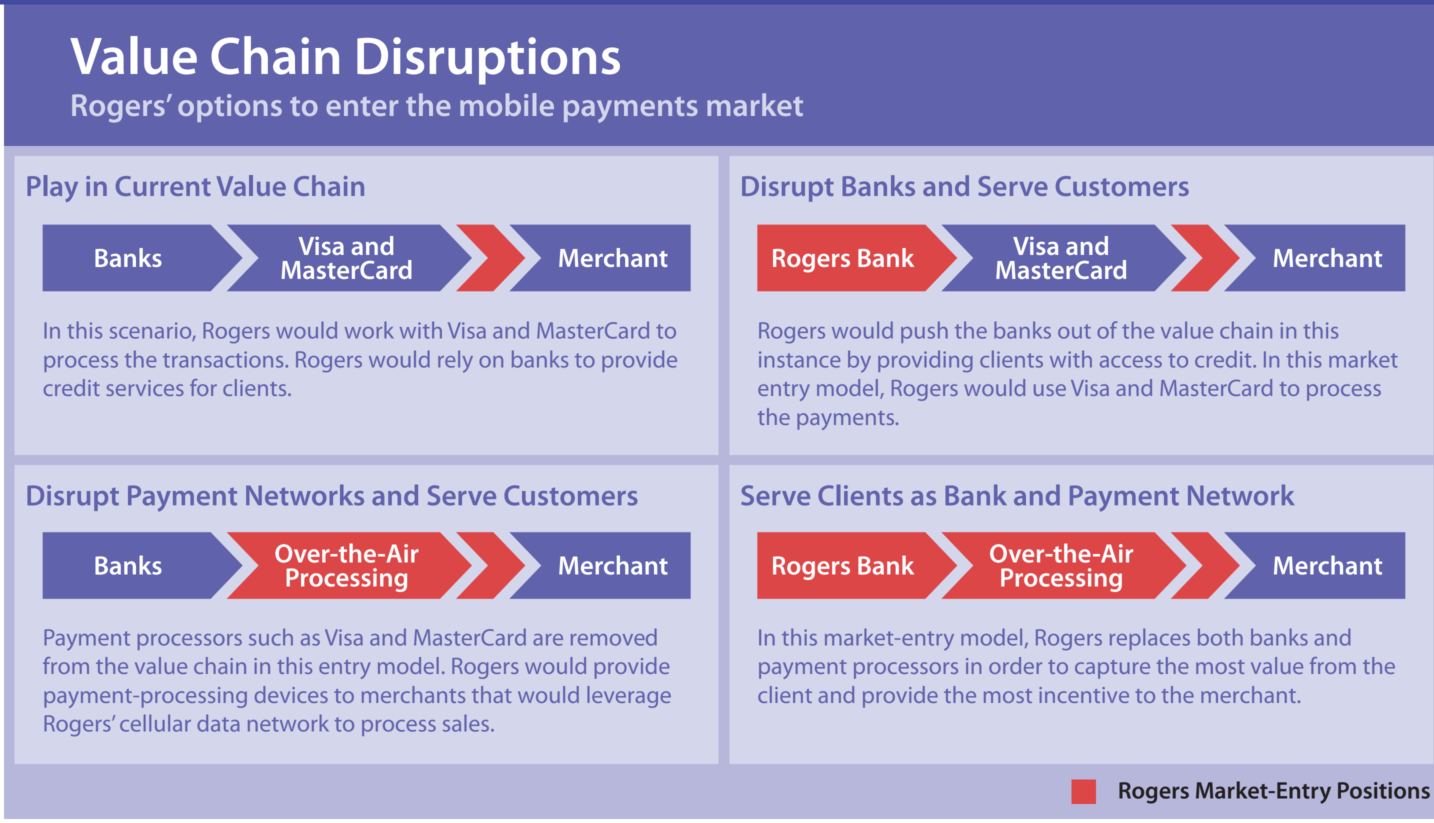
A recent report from Parks Associates estimates the size of the mobile payments market to be $800 billion by 2015. It also reveals that over 50% of U.S. smartphone users find an NFC-enabled phone with a mobile wallet application appealing. NFC demand is driven by the convenience of replacing a physical wallet's function with a device that users already carry. The rapid rate of smartphone adoption in North America and the emergence of NFC-enabled devices make this a real possibility.

With smartphone penetration currently at 43% in the U.S., and NFC chips poised to become standard hardware in smartphones, a significant proportion of North American consumers will soon have devices capable of making mobile payments. Since there is demand for a more convenient payment system and the widespread availability of technically-capable devices, mobile payments are likely to emerge as a powerful alternative to current payment paradigms in the near future.

Mobile Opportunity

The traditional payments value chain is comprised of banks, payment networks, and merchants. Banks provide users with chequing or credit services and issue debit or credit cards. Payment networks, such as Visa or MasterCard, provide a link between users' bank services and merchants, allowing customers from any bank to pay at participating merchants globally. In Canada, Interac, a not-for-profit organization owned by Canadian financial institutions, provides the payment network for bank deposits, while Visa and MasterCard provide the payment network for credit.

With mobile payments, debit and credit cards are replaced by NFC-enabled cellphones running specialized software connected to a cellphone carrier. As a result, cell-phone manufacturers, software companies, and wireless carriers are all in a position to enter and disrupt the long-standing and highly-lucrative payments system currently controlled by Visa and MasterCard. Further, based on the estimated market size of $800 billion, companies have significant incentive to attempt to do so, threatening incumbents' current profitability.



The emergence of mobile payments represents a rare and limited window of opportunity. Google released "Google Wallet" in conjunction with MasterCard, and Visa released a mobile wallet application called "Visa Mobile," effectively creating software replacements for physical MasterCards and Visas. American carriers have collaborated to form the ISIS payment system, and the Canadian carriers have formed EnStream. All these alternatives have yet to reach the scale necessary to be successful.

The success of a payment system depends on how well it connects disparate parties on a massive scale in terms of both customers and merchants. As a result, mobile payment standards will inevitability converge. Once they do, the window of opportunity to enter the value chain will close, and a small set of companies will be left with sustainable competitive advantages in the new system. Whether the incumbents are able to re-invent themselves as leaders in mobile payments remains to be seen. In the meantime, new entrants have an opportunity that does not come along very often.

For one well-positioned Canadian company, this opportunity is one that they should not pass up.

Roger Communications Inc.

The implementation of NFC technology provides wireless carriers with a disproportionate amount of power over how a device's NFC chip is used. Carriers must explicitly allow any application access to the NFC chip, giving them the ability to negotiate beneficial agreements related to its use. Furthermore, given its market leadership and the extent of the company's customer touch points, Rogers is well-positioned to exploit this advantage.

Rogers can enter the mobile payments value chain in a number of different ways. In the simplest model, Rogers can negotiate to receive a cut of every transaction processed by whichever mobile payment networks emerge as the standard, in exchange for allowing the applications access to the NFC chip. For example, if a customer uses a Rogers' device to pay for an item using "Google Wallet" or "Visa Mobile" software, Rogers would collect a small percentage of the transaction fee from Google or Visa.

Rogers Bank

More disruptively, Rogers can provide consumers with credit, in addition to collecting fees, replacing the role of the bank. While this appears to represent a materially new business model for Rogers, the company has been extending credit to its clients for years. By subsidizing cellphones at the start of a contract, Rogers effectively lends the amount of the subsidy to customers, collecting on the loan over the life of the contract. Perhaps more importantly, it knows and evaluates its customers' credit risks based on payment reliability. In Rogers' billing cycle, customers receive Internet, TV, and wireless services a month before they pay for them. As such, Rogers has developed the infrastructure and corporate capabilities necessary to provide and collect on loans.

Rogers' recent application to the federal government to become a chartered bank suggests it is considering offering credit. The company has indicated that, while it has no intention of becoming a full-service deposit-taking institution, it is interested in offering credit and is actively considering the mobile payments category. By entering this market, Rogers would be competing directly with some of Canada's most powerful institutions: the big five banks. While this will be difficult, it is not impossible given Rogers' existing relationship with millions of Canadian consumers. Just as President's Choice Financial was able to leverage its in-store consumer touch points to successfully carve out a niche in the Canadian financial market, Rogers can leverage its customer relationships and market credit services to existing customers.

Rogers Card

In the most ambitious model, Rogers could aim to replace the payment network itself, linking users' debit or credit services with merchants. In this scenario, the company would have to partner with both financial institutions and merchants to develop the critical mass of customers and merchants required to make a payment network successful.

As an ISP, Rogers already has experience distributing branded hardware to small businesses and merchants, and has pre-existing relationships with these customers. Any merchant that currently accepts Visa or Interac must have a phone line or Internet connection, and as such, is likely already served by Rogers, Bell, or Shaw. In addition to distributing Internet routers, Rogers would begin distributing POS terminals from companies such as VeriFone and Ingenico, after working with the companies to ensure the terminal can process Rogers' NFC services. In addition, Rogers would need to develop its own payments processing network, similar to Visa's VisaNet, in order to replace credit card companies in the value chain. Fortunately, the company can leverage its existing communications infrastructure to build a payments network that operates through Internet Protocol (IP) and cell phone towers.

Market Entry

Entering the payments value chain by offering users access to credit is a natural extension of Rogers' current business, and will allow the company to diversify into a profitable segment. Based on its application to become a bank, Rogers seems to be at least considering this opportunity. But that may not be ambitious enough. In the payments value chain, it is the payment networks, not credit services, which are the Holy Grail. Visa and MasterCard put no capital at risk and earn the highest margins in the retail financial services industry.

While Rogers has the infrastructure, merchant relationships, and corporate capabilities necessary to build a payment network, such a step would require a significant investment of time, effort, and money, and comes with a huge risk of failure. Building a successful payment network requires the concurrent adoption of the system by users and merchants on a large scale. Without a critical mass of users, merchants have no incentive to accept the payment system; likewise, unless enough merchants accept the system, users have no incentive to adopt it. If successful, the payoff is huge: Rogers would find itself firmly in control of the most lucrative and lowest-risk section of the payments value chain.

Controlling the payment network as mobile payments emerge should be Rogers' priority. However, the risks in execution resulting from the need for large-scale concurrent adoption by users and merchants alike, may be too high to bear. Though it may seem counterintuitive, to reduce this risk, Rogers should attempt to enter the credit services industry and launch a payments network simultaneously.

Implementation

In the traditional value chain, for Visa to get an additional user on its network, it must convince that person of the value of its credit card and its superiority over MasterCard. That person must then visit a bank, open an account, select and apply for a credit card, wait to get approved, and eventually receive the card in the mail.

Rogers' payment network for mobile payments can turn this entire process on its head. Because Rogers controls the phones on its network, and the NFC chips inside the phones, the company could automatically provision every NFC-enabled phone on a credit-worthy account with the ability to pay for items. Users would not have to make a conscious decision or effort to adopt the Rogers payment network; they will not even have to apply for credit. Payments would be automatically billed to a user's account, and credit limits would be determined based on the size of a user's typical bill and their payment track record.

As of mid-2011, Rogers had 8.97 million wireless subscribers. By automatically enabling mobile payments for the portion of those subscribers with NFC-enabled phones and good credit histories, Rogers can instantly achieve a critical mass of users. This would eliminate half the challenge of launching a payment network: Rogers would no longer need to convince users to actively adopt its payment system, which would have required convincing merchants to accept it simultaneously.

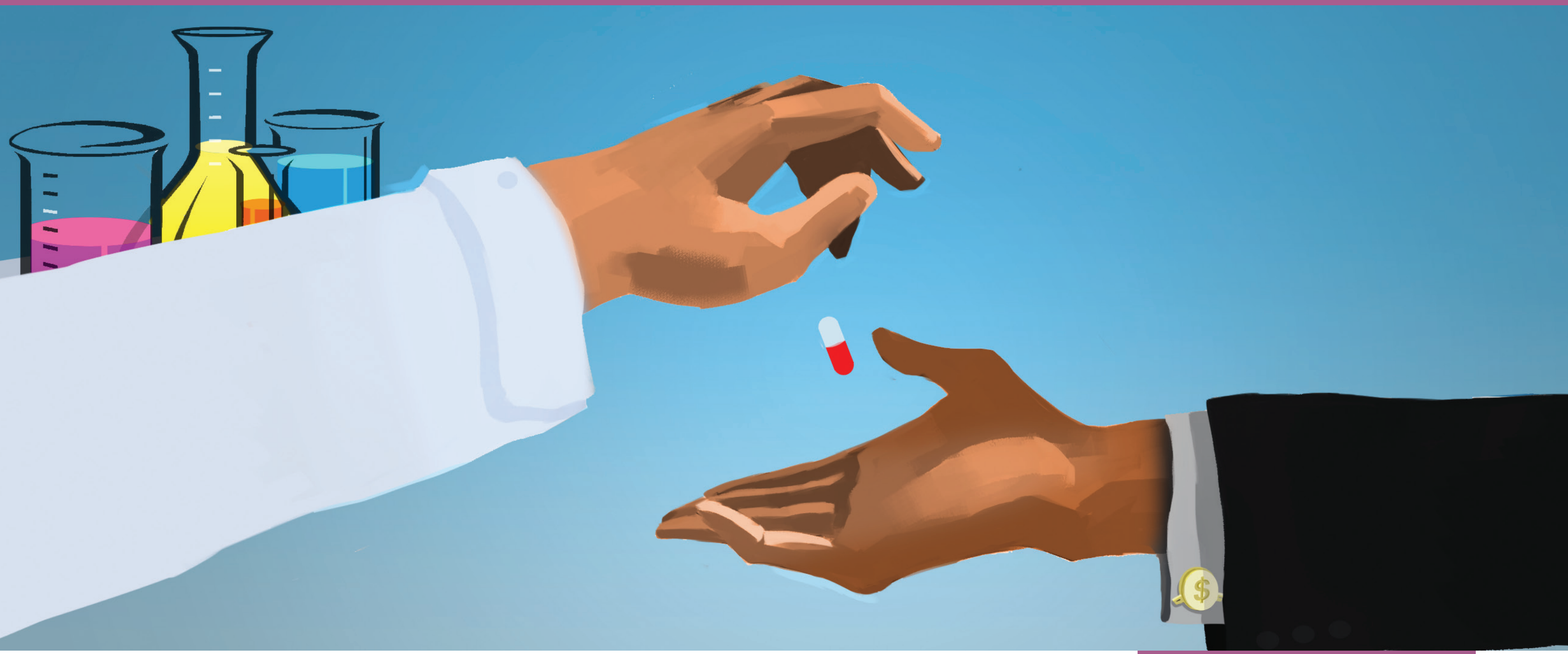
Instead, with millions of users automatically enabled for payments using a device they already carry with them, Rogers' pitch to merchants becomes a simple one: "a critical mass of your consumers are capable of paying using Rogers' payment network; so you may want to consider accepting it." Further, as a result of vertically integrating both the lending and payment network businesses, Rogers' payment network would be able to offer merchants lower transaction fees than competitors like Visa and MasterCard. Doing so will spur further merchant adoption, and give merchants a vested interest in pushing their customers to use the Rogers payment network instead of Visa and MasterCard.

Rogers can further incent customers by providing bundling discounts or rewards. To avoid customer dissatisfaction or reputational damage, Rogers must ensure that the system is completely void of fees, given that users are signed up involuntary. Further, credit limits and interest rates must be clearly displayed and consented upon by users the first time they use the system, and in the event of any subsequent changes.

According to a study conducted by TransUnion and Edgar, Dunn & Co., consumers choose credit cards based on pricing, rewards, and interest rates. Similarly, merchants choose to accept various credit cards by balancing merchant fees with the positive effect on sales from accepting a particular credit card. By leveraging its unique position as a wireless carrier to create a payment network and automatically enable wireless customers on it, Rogers can outcompete its peers on almost all of the above factors. In doing so, it can entice both consumers and merchants to adopt the Rogers payment network.

Shrinking Time to Act

However, this ambitious plan for market entry will not be easy. Rogers should expect Visa and MasterCard to respond aggressively to any attempt to enter the mobile payments value chain, especially one that threatens to replace them. These companies have almost limitless resources and a head start on offering mobile payments through their Google Wallet and Visa Mobile applications, respectively. Rogers' first line of defense is its ability to block competing applications from working on their devices, although this may not be sustainable. Consumer demand could force it to reconsider, especially if a rival carrier such as Bell chooses to allow these applications on its devices.This makes it all the more critical that Rogers act quickly to build a robust network of users and merchants, as it will inevitably have to allow competing products access to its devices.



The Perfect Remedy

Could drug incubation allow Canada to better compete in the global pharmaceutical industry?

By David Stewart and Sabriya Karim

In spite of society's reliance on their products, pharmaceutical companies are often portrayed as greedy, profit-seeking machines. The discovery and distribution of tuberculosis and polio vaccines in the 1940s and 50s, for instance, as well as the emptying of mental health wards in the 1970s due to a breakthrough in neurological drug treatments, demonstrate the benefits of a strong pharmaceutical industry. These kinds of successes are driven by innovations that stem from high-risk investments and a convoluted value chain.

The pharmaceutical industry provides jobs, tax revenue, foreign investment, and the accumulation of intellectual capital. A thriving local pharmaceutical industry not only improves societal health and allows for lower cost drugs, but also improves the host country's economic and scientific output. Unfortunately, Canada is struggling to compete internationally, leaving many of these benefits unrealized.

Lost Opportunities

The global pharmaceutical market is experiencing double-digit growth, but the Canadian market is growing at a rate of only 6.4%. Employment in the industry has dropped by more than 28% over the past five years and year-over-year growth, after a peak in 2001, hit a low of 4.5% in 2009. Imports have increased from $7 billion to $13 billion over the past 10 years.

According to Calvin Stiller, an Officer of the Order of Canada, "Canada has become almost completely dependent on multinationals coming in and selling to its economy." These trends have caused an 18% decrease in newly patented medicines launched annually in Canada over the past decade, thus creating a drug trade deficit of over $7 billion in 2010. Why is Canada failing to bring its own drugs to market?

A thriving local pharmaceutical industry not only improves societal health, but also improves the host country's economic and scientific output. Unfortunately, Canada is struggling to compete internationally, leaving many of these benefits unrealized.

The Value Chain

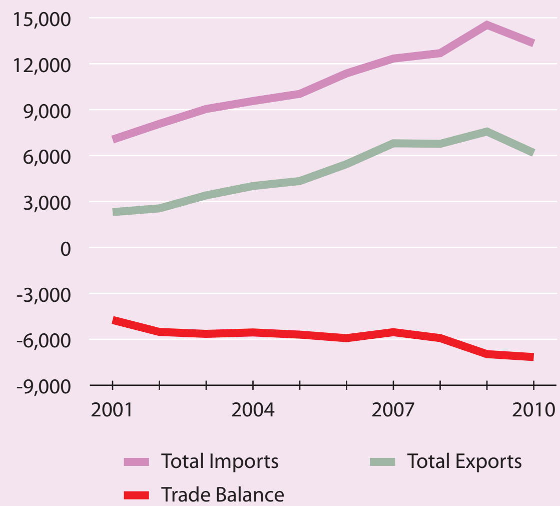
The process of bringing a drug to market begins with Research and Development (R&D), where the potential benefits of the drug are brought to light. The drug then undergoes rigorous testing and if successful, it is commercialized and sold. A funding cycle allows profits earned from a commercialized drug to fund the high investments in testing and R&D. Any disconnect in this loop stops R&D funding, and thus reduces the likelihood of future drug commercialization.

Industry Challenges

Relative to other countries, Canada offers comparable research quality but at a higher cost, and is consequently struggling to attract foreign investment. The pharmaceutical industry is facing one of the largest waves of patent expiration ever, and as a result multinationals are restricting investments to the final stages of testing in a desperate attempt to fill their production pipelines. The lack of demand for early-stage drugs has forced Canadian startups to license their products too early and at painful prices.

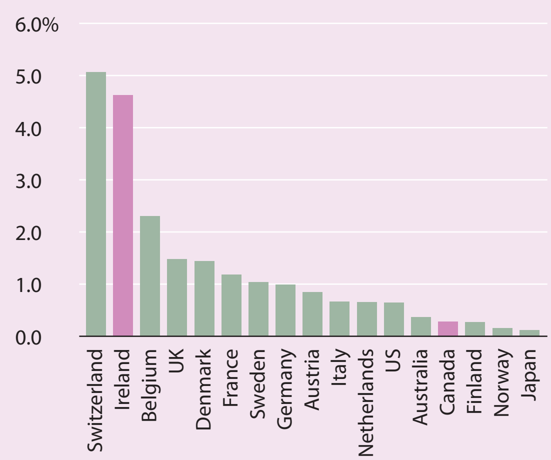
Canadian Pharma Industry

Pharma Trade Deficit ($ millions)



Source: Industry Canada

Export Market Share (2008)



Source: Conference Board of Canada

The Republic of Ireland illustrates the economic growth that a strong pharmaceutical industry can provide.

As a result, Canada is capturing less than 1% of the $100 billion invested in pharmaceuticals annually despite its 3% stake of the global market, which is growing at 7% annually. As IMS Health reported, the global market for pharmaceuticals is expected to grow nearly $300 billion over the next five years, reaching $1.1 trillion in 2014. If Canada cannot find the funds to scale up its comparatively small pharmaceutical companies, foreign multinationals will purchase many of Canada's innovative products at too early a stage in the value chain. As a result, Canadian companies capture much less value than they would otherwise.

Success Story

The Republic of Ireland illustrates the economic growth that a strong pharmaceutical industry can provide. In the early 1970s, the Irish pharmaceutical sector was stagnant, with few employees and exports relative to its international peers. At 50% of exports, Ireland is now the second largest net exporter of pharmaceuticals in the world. The government's initial investment paid off, as the pharmaceutical industry is now also the largest contributor to corporate tax revenues.

Like Canada's emphasis on only the research component of the pharmaceutical industry, Ireland initially focused only on a single part of the value chain. Instead of bringing new drugs to market domestically and then reinvesting the profits into R&D, the industry largely produced raw, active ingredients for export to other countries. As a result, they never saw revenues generated from finished products. Stemming from a belief in free trade, low corporate tax rates, and investment in education, Ireland managed to turn this situation around. The government adopted policies that facilitated foreign investment in both the R&D and production stages, and took advantage of the country's resources and intellectual capital.

It is clear that the Canadian pharmaceutical industry is in need of a similar change. In order to emulate Ireland's dominant presence in the global pharmaceutical market, drug research, testing, commercialization, and production must be domestic. This can only be achieved if the capital and facilities required to push drugs through the testing phases are made available in Canada. The importance of fusing the gap between research and commercialization can be seen in Finance Canada's estimate that for every $1.00 invested in Scientific Research & Experimental Development, the final yield is $1.38. Every dollar invested in R&D that is not commercialized forgoes this yield. Canada is in dire need of a system that leaves less money on the table.

High Risk, High Reward

With over 10 years of research and odds of success of about 10,000 to 1, it costs around $1 billion on average to bring a drug to market. This risk is too great for smaller, individual Canadian firms to bear, leading to high-risk drugs being sold too early in their development. A system to lower the commercialization risks faced by smaller drug companies through pooling would significantly improve their ability to push drugs forward in the value chain.

Enter: Incubation

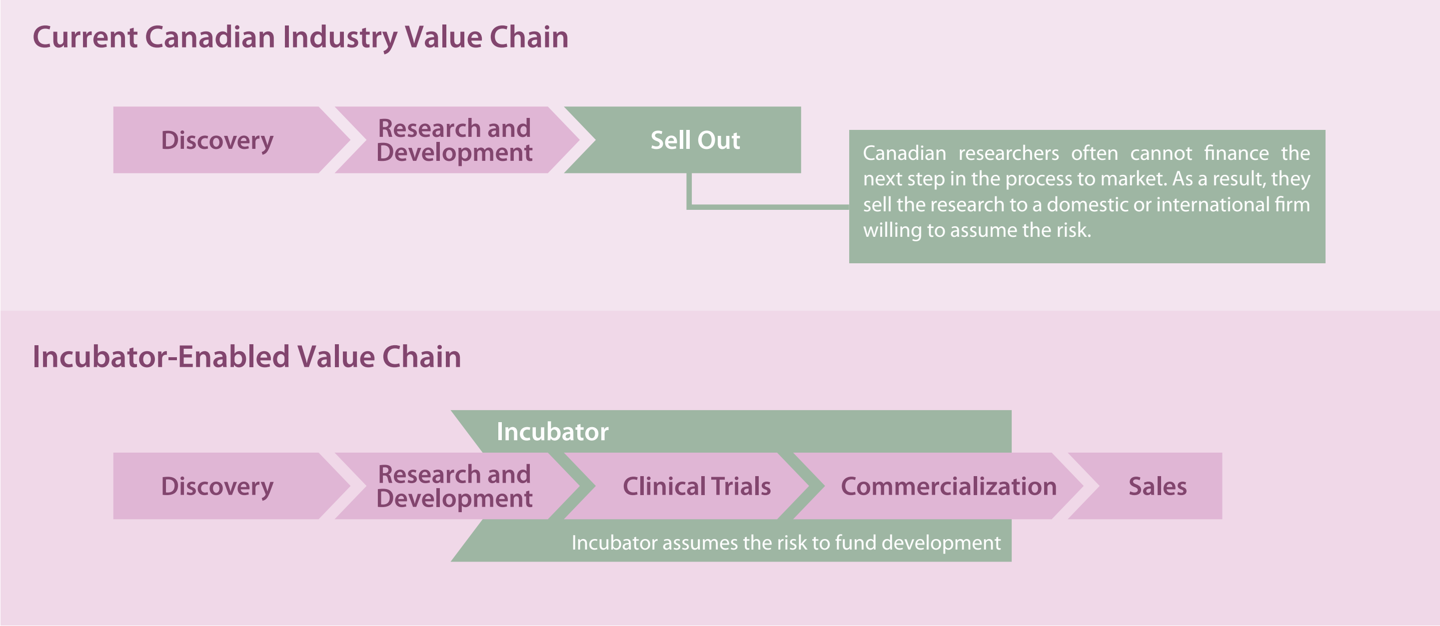
Business incubation is a dynamic industry that helps startups transition into self-sustaining companies. Incubation services include anything from marketing assistance to intellectual property management. Business incubation has a proven track record: 87% of incubated startups stay in business, compared to 44% of unaided companies.

Canadian incubators are admittedly still in their infancy, but some are established enough to push Canadian pharmaceutical R&D in the right direction. A prime example is MaRS Discovery District whose mission is to commercialize publicly-funded medical research with public-private partnerships. The MaRS Incubator offers state of the art facilities for entrepreneurs to conduct their own research and testing. This incubator model allows small startup pharmaceutical companies to utilize laboratory resources and helps them develop early-stage drugs. Firms like MaRS use their industry expertise and consultancy to provide concrete benefits to the underachieving Canadian pharmaceutical industry, but fall short at actually commercializing the research. To achieve this more difficult goal, a model that covers more of the value chain is needed. That idea was once attempted, but unfortunately faced a number of roadblocks that stopped it in its tracks.

"The Incubator" was proposed by a group of industry leaders twenty years ago. This concept differs from MaRS in that it would actually perform required testing and assume the risks of doing

Pharmaceutical Development Process

The role of the incubator in the value chain



so, allowing smaller Canadian pharmaceutical companies to lower the risk profile of their investments to levels acceptable for long-term sustainability. An effective drug incubator's goals are aligned with its partner companies, who have an interest in seeing drugs through the entire value chain.

This Drug Incubator would raise capital through industry partners, venture capitalists, government grants and multinational pharmaceutical companies. These stakeholders seek returns earned from drugs in the market and have a vested interest in the pharmaceutical industry's overall wellbeing. With a pool of financing available for R&D, the Drug Incubator would offer research staff capable of performing the phases of testing necessary for commercialization.

> *The Drug Incubator would actually perform the required testing and assume the risks of doing so, allowing smaller Canadian pharmaceutical companies to lower the risk profile of their investments to levels acceptable for long-term sustainability .*

Startup companies who not only lack the resources for high-cost testing, but also the know-how, would be able to turn their product over to the facility for development. Once testing is complete and the drug has been proven commercially viable, the startup company would have the opportunity to buy the drug back with a royalty premium. Unfortunately, The Incubator model never made it to fruition, due to the unwillingness of all stakeholders to invest in an opportunity where the risk may not have been matched by return.

However, due to recent trends in the domestic pharmaceutical industry, Canada cannot afford to let an innovative solution like this just sit on the shelf. Now is the time to bring The Incubator to life; the status quo's opportunity cost outweighs the risk of implementation. The Incubator will spark domestic commercialization and subsequently create high-paying jobs, boost drug sales, and most importantly, improve Canada's attractiveness for foreign investment.

Canada has been resilient through the most recent recession and has taken a leadership role in global economic policy. Calvin Stiller, founder of MaRS Discovery District and a member of the original group who proposed The Incubator, asserts that "in today's economic climate, Canada is truly an island of order and security in this ocean of chaos." Canada has the finances, human capital, and drive to become a global pharmaceutical leader. The industry is now well positioned to bridge the gap between research and commercialization, and take advantage of the economic and societal benefits that will come along with it. If the pharmaceutical industry's infancy can be incubated, there is no telling what it may grow up to be.

Strategic Patenting

How leading technology players should use their intellectual property to compete

By Nick Kuchtaruk

While many regard the legal battle between mobile device manufacturers to be stale news, it continues to be at the forefront of strategic decision-making for the major players in the industry. You would be hard pressed to find a smartphone manufacturer or operating system developer that is not in the midst of an ongoing lawsuit. In July 2011, Microsoft and Apple formed a consortium with EMC, Ericsson, Research In Motion, and Sony to purchase close to $4.5 billion in patents from the now bankrupt Nortel.

Less than a month later, Google spent $12.5 billion acquiring Motorola Mobility in order to gain access to its vast patent portfolio. This purchase represented a 63% premium on Motorola's market capitalization, and cost nearly 50% more than Google's entire 2010 profit – all for a company whose own profit was a mere $79 million. Though these acquisitions represent a potentially short-lived trend, their effects will be felt for years to come.

Strategic Patenting

Product-based companies have traditionally feared being out-marketed or out-produced. Patents were viewed primarily as a defensive or exclusionary asset – a "negative right" preventing others from utilizing a particular innovation or idea. Broadly speaking, patents were not revenue generators, but rather revenue protectors. To that end, firms rarely considered patent maximization a top priority.

However, the role of a patent today, especially for consumer electronics and software companies, has become far more complex. Patents are now truly strategic assets that provide their owners with a variety of different ways to realize value beyond simple exclusivity. In fact, they are now regarded as critical "strategic weapons" that enable firms to realize their marketplace goals.

Why Mobile Devices?

Strategic patenting is not an entirely new concept. For years IBM has used its robust patent portfolio to force competitors to sign royalty and cross-licensing agreements with little to no litigation. Since 1988, its patent royalties have skyrocketed from under $50 million to over $1.1 billion a year. Yet the recent widespread adoption of multiple patent strategies shows that strategic patenting is now more critical to competing in technology than ever before. The enhanced role of patents is due to the enormous potential of the mobile industry, and the nature of mobile devices themselves.

Today, mobile devices (including smartphones and tablets) are seen as the "ultimate prize" in technology for two reasons. First, the market is both exceptionally valuable and fast growing. Mobile

Utilizing Intellectual Property

Risk / Cost matrix comparing intellectual property strategies

	Low Risk	High Risk
High Cost	**Litigation – E.g. Apple** Successfully suing competitors for patent infringement can lead to considerable royalties based on both past and future sales, as well as current product injunctions. Lawsuits can also force competitors to make costly and sometimes uncompetitive changes to their products in order to avoid future royalty payments. However, litigation is expensive especially considering the uncertainty and numerous stages of most patent disputes.	**Acquisition – E.g. Google** Patent acquisitions are used to protect firms from future lawsuits. A strong patent portfolio represents retaliatory power. A party is less likely to be sued when they can threaten to countersue. A strategy based primarily on acquisitions can be both risky and costly for three reasons. First, it is difficult to properly value specific patents, which can make the negotiation process arduous, if not impossible. Second, effectively protecting oneself requires purchasing a variety of different patent types surrounding key technologies – a process which itself necessitates striking deals with a host of different patent owners. Third, the current relevance of patents means they sell at a premium, regardless of whether they are likely to succeed in court.
Low Cost	**Licensing – E.g. Microsoft** The main concept of licensing is that a firm threatens to sue for patent infringement unless they are paid royalties or a lump sum for the use of the patent(s) in question. Firms possessing the relevant patents incur little cost in attempting to convince the alleged infringers to sign licensing agreements. The risk associated with seeking licensing deals is minimal, as firms often enter into to such agreements due to fear of potentially astronomical litigation costs. As such, firms can often end up paying to license a patent they are not actually infringing, especially when bulk licensing deals are formed. Failed license negotiations are typically followed by lawsuits.	**Piggybacking – E.g. Android OEMs** Firms can also rely on the patents of their partners for protection during patent litigation. This strategy is highly risky for those being protected, as they are reliant not just on another company's success in court, but on the strength of a large and largely unknowable portfolio of patents. While "piggybacking" can save both patent acquisition and court costs, the indirect costs may be high. For example, a high level of reliance on a business partner's patent portfolio can reduce bargaining power in other areas.

phones alone are expected to grow from $175 billion in 2011 to close to $350 billion by 2015 according to MarketsandMarkets. In addition, these handsets will drive considerable additional revenue through accessories and app purchases.

As the primary gateway to both information and communication for most users, mobile devices often establish a consumer's foundational "ecosystem". For example, iPhone users are twice as likely to buy a Mac than other smartphone users. With each additional ecosystem product or service used, consumers become even more likely to use complementary offerings, such as Apple's iWork office suite or iTunes, and their likelihood of switching to a competitor's devices declines dramatically.

Mobile devices are also comprised of thousands of different technologies and innovations, from hardware and software design to the methods of access and interaction with wireless networks. As a result, it is not difficult for a patent owner to allege the infringement of a single patent, nor is it hard for an industry player to unknowingly infringe on one. The nature of software patents also encourages litigation as they can be difficult to distinguish from one another.

Due to the complexity of engineering mobile devices, as well as the fact that they are typically manufactured in high volumes and with weeks or months of stockpiled components, losing a patent infringement case can be exceptionally costly.

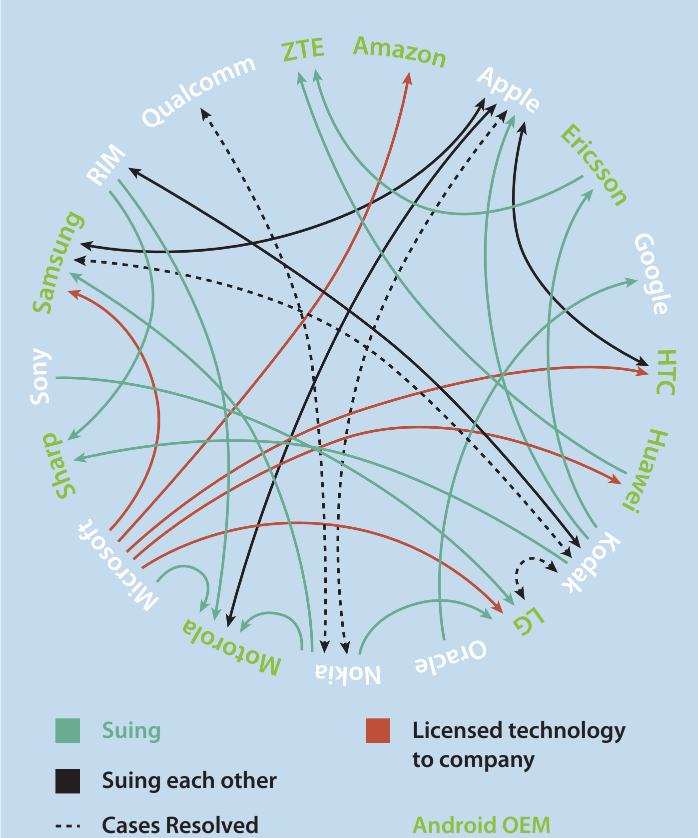
Furthermore, there are widely differing opinions on how old patents should be understood to apply to modern uses for which they were not originally intended. Due to the complexity of engineering mobile devices, as well as the fact that they are typically manufactured in high volumes and with weeks or months of stockpiled components, losing a patent infringement case can be exceptionally costly.

The Strategic Patent War

For three of the world's biggest technology companies, patents have become a critical part of their business strategies, with each company deploying them in a different way to fight for dominance of the mobile market.

A Web of Lawsuits

Microsoft's licensing strategy in action



Source: Reuters

Microsoft has utilized its patent portfolio offensively, convincing over 70% of Android device manufactures to sign licensing agreements. These manufacturers have decided to sign such agreements in lieu of risking expensive litigation or injunctions.

1. Microsoft – Licensing Revenue

Microsoft's portfolio of over 20,000 patents is considered one of the strongest in the industry. The company is typically regarded as one of the top ten largest patent producers in the world – registering 2,311 patents in 2011 alone. Microsoft has utilized its patent portfolio offensively, convincing over 70% of Android device manufactures to sign licensing agreements. These manufacturers have decided to sign such agreements in lieu of risking expensive litigation or injunctions.

One of the primary drivers of Android's explosive growth is the free operating system Google provides to original-equipment manufacturers (OEMs) including HTC, Samsung, and LG. Microsoft, conversely, charges $15 per handset for their Windows Phone 7 operating system. All things being equal, manufacturers prefer selling Android devices relative to those running Windows Phone 7, and focus their development and marketing accordingly. By suing Android manufacturers, Microsoft hopes to eliminate, or even reverse, this cost advantage and coerce them into embracing its own Windows Phone 7 operating system. This licensing strategy has been so successful that Microsoft is estimated to earn more from Android licenses than from the sale of its own phones. Despite the fact that Windows Phone 7's market share continues to languish in the low single digits, Android shows no signs of slowing down as it approaches 50% of new devices sold in major world markets.

2. Apple – Preserve Exclusivity

Instead of using their patents to generate licensing revenue, Apple uses its portfolio to differentiate their products and slow down competitors. Apple works diligently to build an extensive "patent fence" around its products to ensure a truly unique and recognizable experience. The company patents everything from their "slide to unlock" feature, to any design remotely similar to those actually used in their products. The company then aggressively pursues injunctions against any products within striking distance of their fence. For example, Apple had sales of several Samsung phones and tablets halted across several countries worldwide late last year. Though many of these injunctions were later overruled and Samsung was able to make a number of changes to its devices to eventually circumnavigate the bans, the ultimate impact of the litigation remains profound. Apple was able to slow down the adoption of a competitor's products and force them to waste resources that could have otherwise been spent on R&D innovation. Even the shortest injunctions can have a dramatic impact on a device's lifetime sales due to the short sales window for each "newest and greatest" device. All the while, Apple is able to focus on staying ahead of the curve.

3. Google – Acquiring Protection for Android Partners

Until recently, Google held fewer than 1,500 patents. However, the depth of its competitor's portfolios and seemingly endless litigation against Android manufacturers put it in a vulnerable position. This drove Google to purchase more than 2,000 patents from IBM and spend $12.5 billion on Motorola and its stockpile of 25,000 patents. Google's CEO, Larry Page made the purpose of these acquisitions clear when he stated Motorola "will enable us to better protect Android from anti-competitive threats from Microsoft, Apple and other companies."

With Google's mobile advertising revenue expected to surpass $4 billion in 2012, Google is understandably keen on ensuring Android's market position. By providing Android for free, Google encourages the adoption and use of both its operating system and Google's many other products and services – not the least of which is Google Search itself. The company recognized that its partners' loyalty would not continue if the platform became too costly. Consequently, the company decided to use its scale and cash-rich balance sheet to defend its partners. Not only will Google's patent acquisitions reduce the number of potential lawsuits and arm its legal defences, it will also provide the company with retaliatory leverage, forcing rival firms to think twice before attacking Android for fear of being countersued.

Strategies Moving Forward

Strategic patenting has caught on as executives realize the number of ways patents can drive market competition. When one considers the massive opportunity mobile represents, ongoing litigation and recent patent acquisitions are not surprising. Any opportunity to gain an edge in the smartphone race is not only worth investigating, but likely immensely valuable. The size of the opportunity, coupled with the vast resources of the firms competing, means that the battle for mobile will be hotly contested. Considering the fact that the mobile landscape is constantly evolving, it is essential that each company continually assesses whether they are deploying the right patent strategy.

1. Microsoft – Sue To Protect Differentiation

Despite the company's success in taxing Android through licensing fees, Android adoption continues to soar, while its own Windows Phone 7 struggles to gain traction. Considering Microsoft's strong cash position, licensing revenues are not critical to survival. Microsoft would much rather have its own competitive devices instead of simply riding the successes of its competitors. As such, its current strategy does not seem to align with its corporate goals. Additionally, with 70% of manufactures already licensed, it is unclear whether this current strategy has the potential to do more damage.

Apple, Microsoft, and Google have adapted the way in which they view their patents to suit the emerging mobile market. As the industry evolves, these companies may need to adapt new strategies. Microsoft, in particular, seems most in need of a drastic change – if it is not too late.

Microsoft should instead use Apple's approach to patenting. In doing so, it may be able to protect its proprietary technologies, restrict the quality of non-Windows Phone devices, and slow down the competition. However, it may already be too late for this strategy since the company's existing licensing deals provide "broad coverage under Microsoft's patent portfolio." Though the duration of these agreements is unclear, it is unlikely that they will be up for renewal soon enough to matter, given the industry's unrelenting pace. As such, Microsoft should not pursue new deals with remaining Android manufacturers and other competitors such as Apple, and terminate existing deals as soon as possible. One remaining opportunity for Microsoft is to purchase patents from key partners such as Nokia, a company that is critical to Windows Phone's future and has anextensive patent portfolio of device and network technologies. In doing so, the company would prevent competitors like Google or Apple from doing so themselves. Furthermore, the funds will then help Nokia, which only produces Windows Phone devices, develop more compelling products. That being said, things might have looked drastically different today had Microsoft simply acquired Nokia and used their combined portfolio to sue, not license, leading Android manufactures.

2. Apple – Fund R&D Through Licensing Revenue

In terms of profitability, Apple still reigns supreme in the mobile industry. However, Android's growth has surely caught the technology giant's attention. Apple has been successful in slowing down its competitors via litigation, preventing rival firms from selling similar products. However, recently overturned injunctions and speedy, though undoubtedly expensive, design changes by those it has sued, suggest that this strategy may not be sustainable. Apple could be better off taking a page out of Microsoft's playbook. Although Microsoft's Android tax has not prevented Android adoption, if Apple were to further tax Android products, OEMs would be forced to abandon the burgeoning operating system. Microsoft's fee is said to be $5 per device and many insiders speculate Apple could fetch twice that. Regardless of the exact figures, Apple could erode a large portion of Android manufacturers' margins – reducing their ability to invest in innovation and marketing. It could then use these royalties to fuel R&D on future devices, allowing Apple to leapfrog competitors with their next generation of devices.

3. Google – Continue Protecting Android Partners

If Google is to encourage Android adoption, then its current strategy of patent acquisition is necessary, though it does pose certain risks. For example, despite the large premium paid for Motorola's patents, Android manufacturers are still at risk – evidenced by the majority signing licensing agreements with Microsoft.

The difficulty of effectively valuing patents, as well as the uncertainty of patent lawsuits, means defensive acquisitions can be costly. HTC's planned acquisition of S3 Graphics is a prime example. S3 claimed that Apple was infringing upon its patents and the courts seemed to agree. As a result, HTC agreed to purchase the company in order to exert the threat of retaliatory lawsuits. Several months later, the International Trade Commission dismissed S3's patent infringement claims, and with it, the appeal of S3 to HTC. HTC is reportedly "re-evaluating" the acquisition and will likely be forced to pay a significant break fee if they terminate the acquisition.

Though manufacturers have largely been successful in defending their cases, they remain ill equipped to defend themselves. Moreover, their primary goal is to sell hardware and not a specific operating system. Despite the cost and risk, Google needs to continue to protect its partners from the likes of Apple and Microsoft, lest they turn to a better protected operating system.

Future Implications

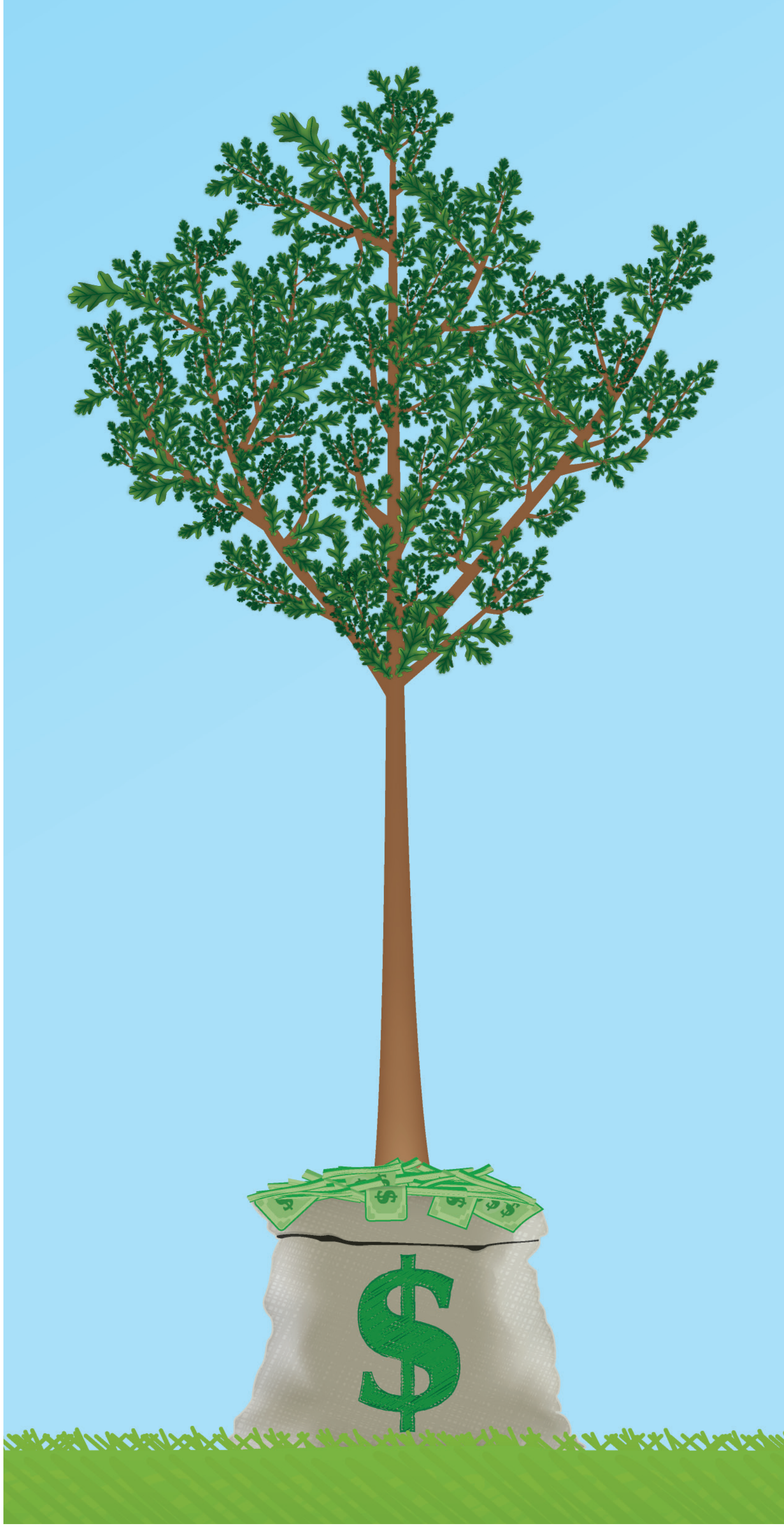
The future of the technology industry is mobile, and the players involved will do whatever it takes to dominate the market. The use of strategic patenting is one example of how industry leaders are fighting to get the upper hand. Patents are now strategic assets, which play a key role in overall business strategies. Apple, Microsoft, and Google have adapted the way in which they view their patents to suit the emerging mobile market. As the industry evolves, these companies may need to adopt new strategies. Microsoft, in particular, seems most in need of a drastic change – if it is not too late.

However, these three titans can only control one side of the ring. The other is controlled by technology design firms like Qualcomm and Texas Instruments who are giants in their own right. As a result, the game is not just about whom you are fighting, but also whom you can convince to be in your corner.

Impact Investing

Examining the sustainability and return of various socially responsible investment models

By Tom Hansen and Ryan Hui



During a trip to Argentina in 2006, Blake Mycoskie saw that many children in the country were shoeless. Realizing that these children needed to walk barefoot for miles to school, clean water, and medical help, Mycoskie created the "One for One" business model. By matching every pair of shoes purchased with a pair of new shoes given to a child in need, "Shoes for a Better Tomorrow," also known as TOMS, was born. Later that year, the first 'Shoe Drop' occurred in Argentina with 10,000 pairs of shoes. By 2010, TOMS 'Shoe Drop' had successfully delivered 1,000,000 pairs of shoes. The premium that customers pay on TOMS shoes finances a sustainable social enterprise model that supports Mycoskie's philanthropic ideals while remaining economically viable.

Despite promising business models, many social entrepreneurs like Mycoskie face considerable challenges raising capital, relying on friends and family for financing, while investors remain on the sideline.

An impact investment fund, however, could provide that capital.

The structure of an impact investment fund is similar to that of a typical investment fund. Revenues consist of interest income, dividends, capital appreciation, and, in some cases, donations. Costs include operating expenses, losses on investments, and unrecoverable loans. The most significant difference between the two is that the success of an impact investment fund is measured on both financial returns and social impact. Unlike charities, impact investors require investees to repay debt or equity, implying a business model that generates profit. The problem is that external financing for impact investment funds is limited as the industry is still quite small, and is not considered a reliable asset class. Without access to capital funding, social missions cannot start, creating a game of chicken in the impact investment industry.

Investing Your Social Dollar

As a socially conscious individual, there are a few options to put your dollar to work. Non-governmental organizations and charities are traditional vehicles to promote social change. Typically, NGOs are best suited to perform the roles that a government would perform. For instance, it is unreasonable to suggest that grass root social enterprises can manage large infrastructure projects like highways. NGOs are liable to donors for social returns (rather than to investors for financial return), which creates an accountability issue for two reasons. First, standardized social metrics that measure the effectiveness of an NGO do not exist. This problem is compounded by the second reason: a general apathy towards charities' operations because the donors have little to no vested personal interest in an NGO. These two phenomena create a vicious cycle of inefficient bureaucracy because they are liable to no one. An NGO's reliance on donations and lack of accountability create trade-offs between external promotion and social outcome. As a result, they are slow to adapt, have little innovation, and run "cookie-cutter" programs that fail to account for regional politics, culture, and history. While these programs are not always the most effective option, they are easy to "sell" to external donors. Fortunately, this cycle (and resulting lack of innovation) is changing as more NGOs introduce progressive programs. However, there is still a disparity between donations and impact among these organizations.

Impact investing funds can deliver both a social and financial return. Socially, they are more effective than NGOs because they are more accountable to their investors (who are more inclined to track the progress of the enterprise) and to the market since they operate on a for-profit basis, fostering sustainability in the value they deliver to their community.

Their approach is more sustainable in terms of reliance on donations and reinvestment of profits. For instance, donating to UNICEF will help provide sustenance for a child in need, but the organization is limited by donations—when the contributions stop so does the social change. A dollar donated to a charity has an impact of $1. Whereas, purchasing TOMS shoes fuels sustainable business. TOMS profits are reinvested in the company, growing the scope of impact that TOMS has. A dollar invested in a social enterprise has a greater effect, since the value it creates will generate future returns.

There is a shortage of seed capital for social enterprises, but impact investment funds are beginning to bridge this gap with money raised from donations, deposits, and investments. The funds then finance – through equity or debt – small social enterprises that would otherwise be isolated from the capital markets. As a result, the impact investment model allows investors and donors to leverage the efficiencies of profit-seeking companies, while reaping the social and environmental benefits of donated money.

On a return basis, comparing traditional investment opportunities with those of socially responsible opportunities helps to establish the credibility of impact investing. Created in May 1990, the Domini 400 tracks a broad range of socially responsible stocks in the United States, laying the groundwork for several other indices to be created. The index comparison with the S&P 500 shows that returns have been competitive to those of traditional market indices, dispelling any notion that impact investing provides sub-par financial returns.

Several years ago, anyone wanting to combine financial returns with virtue was limited to investing in microcredit and social housing for the poor in developing countries. Today, impact investing funds range from Blue Orchard, which has invested $1 billion in debt financing, to IGNIA, which has invested its first $100 million fund in social enterprises in Latin America.

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Demand for Sustainability

Currently, impact investing is still in the growth phase of its industry life cycle. The Global Impact Investing Network has estimated that the current size of the impact investing market exceeds $50 billion and is expected to increase to $500 billion within the next five to ten years. However, what's intriguing is not identifying this new niche opportunity. Rather, it is whether impact investing will remain a misunderstood, segregated market for years to come, or whether investors will provide the capital required to address our generation's most pressing challenges. An impact investment fund's financing strategy is a catalyst in this movement.

Gauging Performance

Index of socially responsible stocks vs. S&P 500

Source: Bloomberg

Root Capital, Acumen Fund, Charity Bank, and MicroCredit Enterprises (MCE) represent different models of impact investment funds, all four of which can be compared and analyzed for their effectiveness in delivering social change. Two metrics can be used to simply and effectively measure a fund's financial sustainability, the first measurement is donations as a percentage of revenue. Although Root Capital and Acumen Fund have posted net incomes in the past, these numbers are misleading given that both funds rely heavily on donations.

Root Capital and the Acumen Fund are losing money at a rate that is unsustainable and unattractive to investors. The Acumen Fund spends on developmental leadership programs, consultancy fees, and financial due diligence, resulting in an expense budget constituting 68% of revenues – extremely high by traditional NGO standards.

It is nearly impossible to quantify the social impact these funds achieve. However, for the purpose of analysis, a ratio between money distributed to social enterprises and income (before donations) was measured. This value can be described as the amount that the fund allocates in social enterprises for every dollar they incur in loss. Not surprisingly, this shows a similar trend to the donations reliance data. Acumen has the lowest by far, only distributing $2.55 for every dollar they lose. Interestingly, Root Capital, which has similar reliance on donations to Acumen, is actually almost four times more effective at allocating funds. This result arises because Acumen Fund finances social entrepreneurs through risky equity.

Social Investing Models

Comparing different impact investing models ($US)

	Root Capital	Acumen	Charity Bank	MCE
Donations as a % of Revenue	78%	89%	15%	22%
Net Income	$4,725,493	$313,336	$(1,199,500)	$405,177
Net Income Before Donations	$(3,286,225)	$(10,653,680)	$(1,486,500)	$(122,869)
Financing	Debt	Equity	Debt	Debt
Distribution per Dollar Lost	$10	$2.55	$36	$52

Note: all measurements based on 2009 and 2010 averages

Source: Fund Annual Reports

Based on the above two measures, equity financing, although desirable for social enterprises, is currently unsustainable for a profit seeking investment fund. For instance, Acumen fund has only recovered 8% of its principle since 2001. While some may argue that these equity losses are down payments on future improvements to society, the riskiness of equity in small-scale social enterprises is not appealing for the typical investor. In order to allow for mainstream adoption of impact investing as an asset class, impact investment funds should finance social enterprises solely through debt rather than equity.

This will ensure the fund's financial sustainability and efficiency by maintaining their accountability to both the market and investors. As described, reliance on donations and equity-based financing will limit a fund's efficiency through the introduction of less engaged donors and bureaucracy associated with NGOs.

In order to allow for mainstream adoption of impact investing as an asset class, impact investment funds should finance social enterprises solely through debt rather than equity. This will ensure the fund's financial sustainability and efficiency by maintaining their accountability to both the market and the investors.

The Future

MCE is a good example of how the impact investment industry will become more efficient as it grows. Instead of lending directly to social enterprises, MCE distributes loans to microfinance institutions worldwide, such as Root Capital, through a guarantor model. This structure insulates MCE from the risk associated with individual social entrepreneurs and allows them to maintain low overhead , roughly a third of its competitors. Funds like Root Capital perform due diligence on social enterprises while providing these fledgling businesses with advice, hence their higher overhead.

This symbiotic relationship shows how the impact investment industry will grow. MCE can only operate so efficiently because funds like Root Capital exist. Once more players enter the social enterprise market, the overall efficiency will improve as information becomes more consistent and accurate. Transaction costs will also decrease when organizations adopt and share best practices, complete comparable due diligence for investment opportunities, and decrease financing costs.

It has become apparent that NGOs alone are unsuccessful and unsustainable at tackling many of the world's social issues. Impact investments are an emerging asset class that can effectively help place capital with social entrepreneurs who have solutions for social and environmental problems. These funds should only offer debt financing because of the inherent risk associated with equity and subsequent negative investor sentiment.

Over time, the social investing industry will evolve and equity-based funds will one day become profitable. While it is undeniable that NGOs will continue to have an important role in international development, it is likely that the superior model of an impact investment fund will begin to take over. Impact investments leverage both market and accountability efficiency in their pursuit of social and financial returns. Most importantly, these funds actually post modest profits when run on a debt basis, allowing for reinvestment that ensures the sustainablity of their causes for a better tomorrow.

The Conglomerate Advantage

When does a conglomerate model provide an advantage over a pure-play startegy?

By Eric Rosset

It is no surprise that investors frequently discount the value of conglomerates. While investors may be interested in a particular function of a conglomerate, the rest of its business units are often considered a deterrent. Conglomerates claim to benefit from diversification, but investors are typically better off diversifying on their own. Further, many claim that conglomerates lack a "core competency" since managers rarely become specialists in each of the organization's business units. Traditional schools of thought dictate that conglomerates will thus be outperformed in each product or service area by specialized firms that have a more focused strategy – also known as "pure plays."

In the developed world, it is strategically advantageous for management to allocate resources to areas where the company operates most efficiently, while other aspects are outsourced to firms with comparative advantages. For example, manufacturers rely on road systems for the delivery of their products but rarely enter the transportation sector themselves. Rather, firms outsource their shipping needs to private transport companies that are able to provide dependable and cost-effective services due to government-built and maintained infrastructure.

So what, then, allows conglomerate giants such as India's Tata Group, South Korea's Samsung, and the U.S.'s General Electric, to thrive against the threat of pure play competitors? When is it in a company's best interest to apply a conglomerate strategy?

Institutional Voids in the Developing World

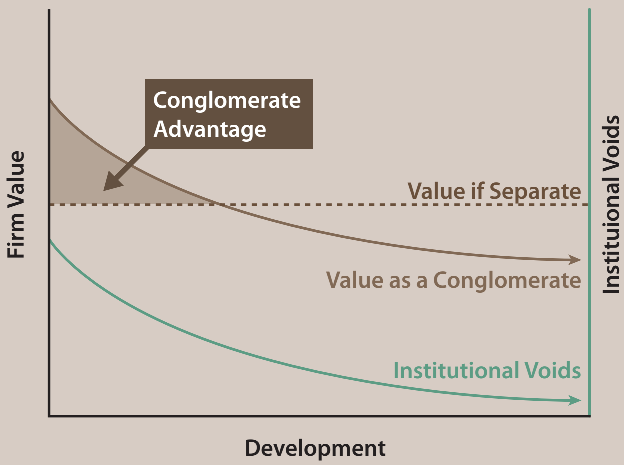
In contrast to the developed world, firms in developing countries often do not have the luxury of relying on government-built infrastructure that enable them to specialize efficiently. Among other things, a lack of infrastructure, underdeveloped capital markets, or an uneducated workforce represent institutional voids that force firms to invest in areas outside their core competency—detracting focus from their primary business. In such instances, vertically and horizontally-integrated firms are better positioned to earn higher returns than their pure-play counterparts.

Physical Synergies

In scenarios where a lack of physical infrastructure forces a company to operate sub-optimally—a common situation in developing markets—entry into new markets is essential for the firm to operate its core businesses effectively. Investing in necessary infrastructure allows a conglomerate to realize greater returns than smaller, independent businesses that are unable to control their supply chain. Conglomerates can also realize synergies when multiple business units share distribution, marketing, and administrative costs. Often times, new opportunities for cross-selling arise as well.

Locating the Conglomerate Advantage

Correlating firm value and institutional voids



As industries or economies mature, the value offered by a conglomerate structure diminishes. Economic development reduces the competitive advantage a conglomerate derives from its ability to fill institutional voids.

Suppose a small steel plant in rural India must deal with a regional power outage every few days that shuts down operations. The manager of the energy company that supplies power to the region claims the supply of coal is irregular. Often, the coal plant runs out of fuel, forcing the company to shut down its generator. As it turns out, the rail company that delivers coal to the region has ineffective management and poorly-managed logistics. As a result, the steel plant, the electricity company, and the rail company all suffer.

If the situation at the rail company were resolved, the profitability of all three firms would improve. The synergies of working together are clear: merging the three companies and centrally managing them as a conglomerate would decrease the costs involved in communication and coordination. Coal shipments could be better forecasted, the energy plant would receive adequate and predictable supply, and the steel plant's operations would improve. This problem may seem unrealistic in North America, but that is because the institutions and infrastructure which enable effective outsourcing and specialization are often taken for granted. In many places, freight and power supplies are unreliable, and the benefits of a merger become obvious. Larger firms must actually create the institutions that are void in the general marketplace.

Opportunities for Outsized Returns

In developing markets, conglomerates are also at an advantage as they are able to fill more subtle institutional voids like underdeveloped capital markets, deficient legal systems, or a limited availability of venture capital. Institutional voids become barriers to entry that conglomerates can scale, but other potential competitors cannot. As a result, larger firms can enter new, unrelated, markets and earn above-market returns due to limited competition. For conglomerates, the ability to fill institutional voids becomes a sustainable competitive advantage. In mature economies, an abundance of capital and established antitrust rules mean that a conglomerate cannot generate above-market returns in any adjacent industry for long, as specialized firms will soon enter and drive profits down.

A real-world example comes from the decision of Tata, a trading company, to enter into steel production and hydroelectric power. The company was able to earn outsized returns by doing so, since there was little competition between 1905 and 1910 (when the decision was made). Moreover, the lack of supporting institutions prevented others from entering those sectors. Tata Group was effectively acting as a financial institution and consultancy service, not merely a "pure play" trading company. This allowed it to raise capital to found businesses in steel and energy in the absence of credit rating agencies, capital markets, venture capital, and government support. With its sophisticated management, expertise, and available credit and capital, Tata was able to fill the market void and do what no one else could at the time.

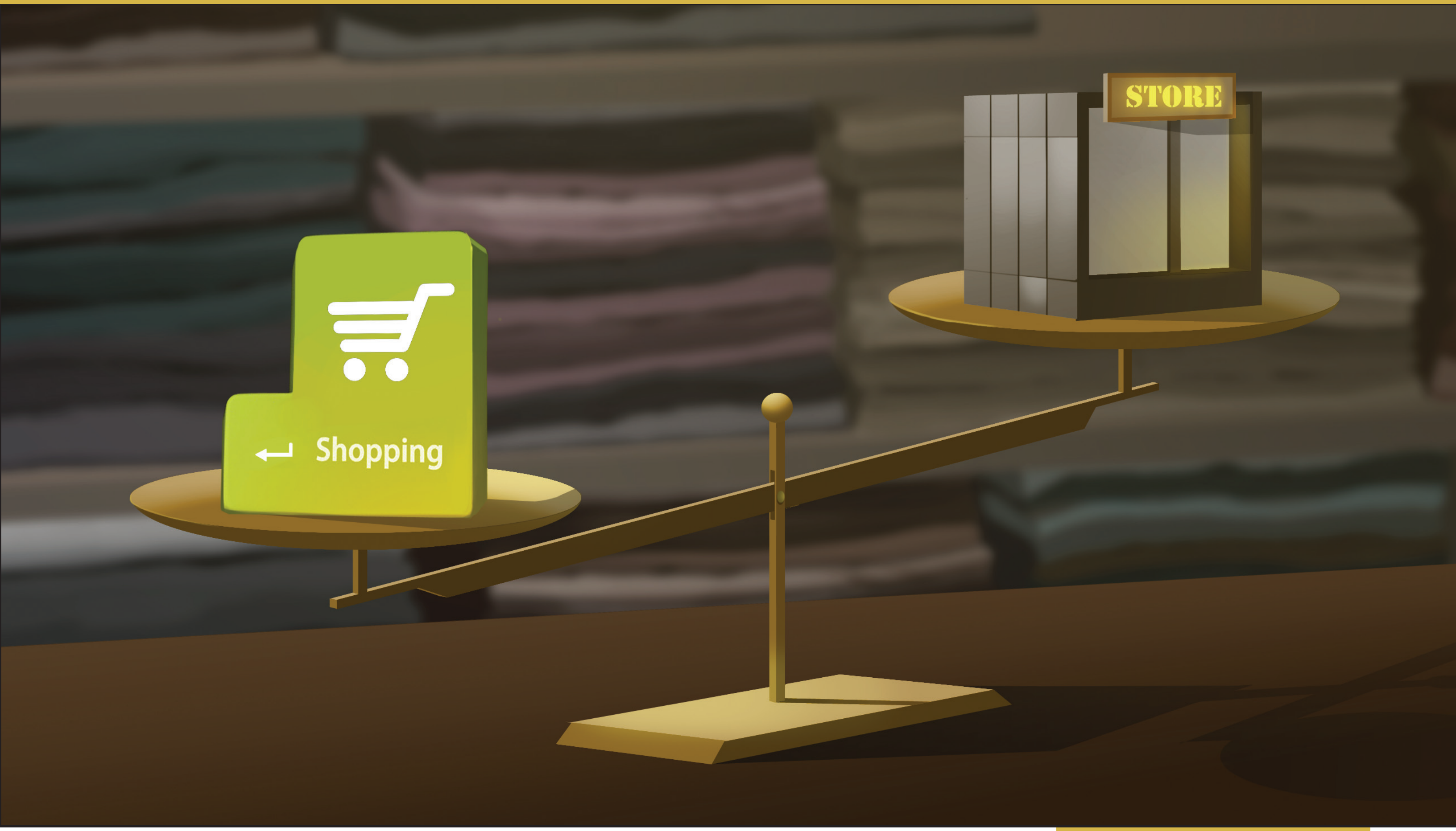
To keep knowledge in-house, it made strategic sense for Tata to found the Indian Institute of Science. Doing business in India is riskier than in areas that have well-enforced contract and patent laws. Tata Group subsidiaries, however, need not worry about contract breach or patent infringement since each subsidiary falls under the same corporate umbrella. Since sister companies would not cheat each other, it is as if the firm created its very own monitoring and law enforcement institution.

The Conglomerate Cycle

There are competing ideas about whether a conglomerate is a successful business model. There is certainly a tradeoff between the advantages of expansion (as enjoyed by Tata Group) and the advantages of specialization (as any pure play). The advantage tips in favour of one side or the other depending on the level of development of the market in which the company operates. Since development varies across the world and changes over time, any model to explain conglomerate advantage must be dynamic.

At lower levels of development, firms who are able to overcome marketplace voids first can leverage that advantage across various seemingly unrelated business units. At higher levels of development, the ability to rely on institutions increases (enabling outsourcing, for example) and conglomerates will be forced to compete against pure plays, resulting in the need for corporate spin-offs to maximize firm value. In essence, as opportunities for pure play success arise, the presence of specialized firms within the market shrinks conglomerate margins and results in a decrease in firm value. Consider a firm such as GE in the United States. Its continued success in the developed world may represent an anomaly or a unique advantage that is being leveraged to add value across multiple business units. At some point in market progression, however, a combination of public sector development or an increase in sophistication of private firms will reduce the advantage GE enjoys as a conglomerate.

The decision to break up a conglomerate is largely based on timing. As the conglomerate advantage slowly disappears, firms will experience squeezed margins as new players enter the market. For a conglomerate that is large enough, the process of breaking up may last decades. Even GE, the poster child for conglomerate success in a mature market, has slowly begun to detach itself from non-core businesses. The sale of NBC in 2009 and the failure of GE Capital have both been a product of the difficult conditions faced by the company since the financial crisis. While it remains to be seen whether GE will ever take real steps towards a break up, the 50% drop in share price since the recession suggests that the lingering effects of the conglomerate advantage in the mature North American market may finally be fading away.



The Retail Revolution

Applying the lessons of online retail to the brick-and-mortar retail market

By Christy Chak

In today's age of technology, there is debate as to whether brick-and-mortar stores are becoming obsolete. By 2014, roughly 8% of American retail sales will be made online. In addition, 45% of retail sales will be web-influenced - meaning the internet will drive 53% of retail spending in some way. Despite the growth of online sales channels and the influence of the internet on sales, traditional shopping avenues continue to dominate.

For consumers, online shopping offers benefits over traditional shopping in terms of convenience, information, and, often, price. For retailers, products sold online also yield higher margins due to the low overhead associated with online retailing. Although brick-and-mortar still dominates the retail sector, its online substitute is growing at a rapid rate.

If online retailing is so advantageous, why do brick-and-mortar stores continue to be the centerpiece of most retail strategies? Are physical storefronts still necessary?

The answer is unequivocally yes. Physical stores are the sole means by which customers can see, use, and try products before purchasing them. Storefronts also enable retailers to engage customers and market new products.

However, retailers recognize that while brick-and-mortar stores are necessary, they lack the convenience and customization of online retail outlets. Fortunately, a number of strategies exist to improve the customer experience offered by brick-and-mortal retailers. In fact, applying online sales strategies as a framework to improve the brick-and-mortar experience may help rejuvenate physical retail sales growth.

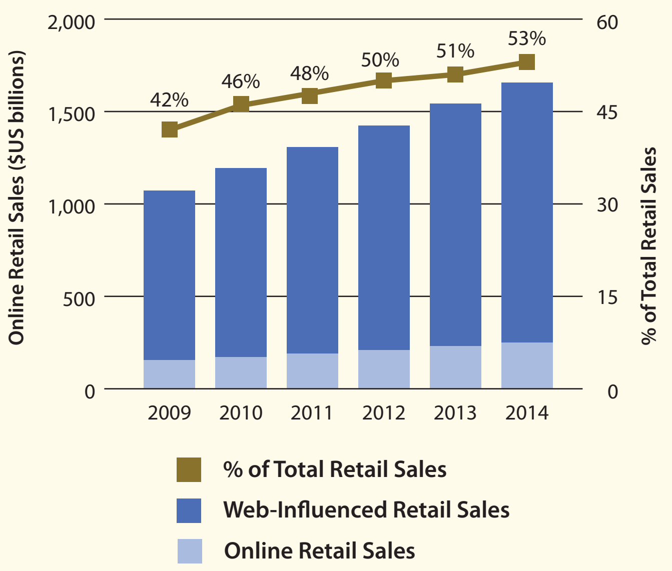
By 2014, roughly 8% of American retail sales will be made online. In addition, 45% of retail sales will be web-influenced – meaning the internet will drive 53% of retail spending in some way.

Personalize the Retail Experience

Internet shopping is increasingly tailored and personalized to suit consumer needs. For instance, Amazon and iTunes gather personal data and make recommendations for a customer based on previous purchases. While this level of customization only exists online, customers will gradually come to expect this level of personalization offline as well. As consumer demands evolve,

The Importance of Online Retail

Expected influence and sales growth



Source: Forrester Research

retailers must revamp their sales strategies to meet this need.

An example of a retailer who stands to benefit from such an approach would be Sephora. With sales of approximately $1.5 billion, this cosmetics giant is recognized for its dizzying array of products. Nonetheless, the average consumer is only interested in the small fraction of these products that correspond with their skin type and personal style. While Sephora has a strong "BeautyInsider" loyalty program that stores a wealth of consumer data, it does not use this information to its fullest potential.

Rather than simply analyzing purchasing habits, Sephora should implement an individualized customer service program using the information available from its database. Based on prior purchases, the program should recommend new or related products in the correct shades and product lines to improve the customer experience.

> *Informed by past purchases, the analytics system could also provide product suggestions that would fit with a customer's style, taste, and existing wardrobe. This model mimics that of Netflix, where the value of the company lies not only in its product offering or prices, but also in the comprehensiveness of its recommendation system.*

The simplest implementation of this program would involve sales representatives introducing themselves to customers as they enter the store and requesting the customers' BeautyInsider cards. The employees would swipe an individual's card on a handheld device to obtain their purchase history. Additionally, the system would output images, prices, and locations within the store of products that, based on past purchases, should appeal to the customer. This list could be printed for the customer or simply used by the sales rep to guide the customer in the right direction.

The same concept could be applied to clothing retailers. Customer loyalty cards could be synchronized with a record of past transactions with sizes and colour preferences embedded in the customer's profile, allowing salespeople to make customized recommendations more efficiently.

The guesswork would be taken out of approximating a customer's size and the risk of offending the customer would be minimized. Informed by past purchases, the analytics system could also provide product suggestions that would fit with the customer's style, taste, and existing wardrobe. This model mimics that of Netflix, where the value of the company lies not only in its product offering or prices, but also in the comprehensiveness of its recommendation system. It is this system that helps retain customers and ensure their loyalty.

In the long term, there is also potential for partnerships between retailers. For example, a cosmetics company and clothing retailer could share consumer data to formulate a comprehensive profile of their common customers. Expanding the retailers' information network will allow the stores to better serve their customers by, for instance, recommending clothing and make-up in complementary hues.

This proposal is similar to the highly successful model used by Amazon, which provides purchase recommendations spanning multiple product groups. Moreover, data sharing amongst various retailers will generate more accurate customer profiles. One approach to data sharing would be to issue joint loyalty cards that could be used at a variety of retail chains, creating more value for both retailers and shoppers.

Analytics-based recommendation systems also enable retailers to offer outstanding customer service without the cost of hiring and retaining highly skilled salespeople. While 12% of Canadians are currently employed in the retail sector, many of these positions are short-term or seasonal.

Creating a comprehensive database will allow retailers to minimize the disruptions caused by high employee turnover, which tends to plague retailers. Customers, who typically outlast employees, will receive uninterrupted, high quality service, as their information will be stored in the retailer's database rather than a particular employee's memory.

Finally, this analytics-based recommendation may offer an ideal vehicle for point-of-purchase advertising, in the form of mobile couponing. Upon swiping a customer's loyalty card, a well-integrated system could alert consumers of coupons available to the shopper.

Point-of-entry couponing prevents consumers from having to preemptively collect, clip, and store coupons. It also minimizes email spam since future promotions can be better tailored to the individual and only emailed to customers who demonstrate a genuine desire to make a purchase. Mobile couponing may also improve retailers' inventory management, as retailers are able to offer sizeable discounts on merchandise that has been underperforming to customers who have demonstrated an interest in similar products.

Offer Exclusive Products

Online stores, with distinct competitive advantages, are unlikely to decline in popularity. Between 2007 and 2009, online customer spending increased by roughly 18% and shows no signs of slowing. As such, retailers must identify ways in which they can use their traditional brick-and-mortar stores to compliment their booming online business. An effort to more closely link the online and offline shopping experience will help increase a retailer's overall share-of-wallet, rather than shifting it from physical stores to online outlets.

One way to do this is by offering exclusive products and expereinces through the physical retail channel. Retailers like Hennes & Mauritz (H&M), have been able to attract large audiences with limited edition designer collections, through partnerships with the likes of Madonna, Roberto Cavalli, Jimmy Choo, and most recently, Versace. The notion of exclusivity creates a sense of urgency and scarcity in the consumer since products are only available for short periods of time and only in retail stores.

In today's technology era, ecommerce is not going anywhere, but neither is traditional brick-and-mortar retail. It is now a retailer's job to ensure that its online stores and physical stores are complementary, not redundant.

As an extension of featuring exclusive lines, retailers are increasingly establishing their actual stores as limited editions. Flash retailing, also known as pop-up stores, allows companies to lease storefronts for short durations, generating hype for new brands and designers. U.K. fashion behemoth Topshop recently used a pop-up store in Toronto to promote its entry into Canada through an exclusive agreement with The Bay. Similarly, Wal-Mart successfully introduced its Metro 7 fashion clothing line in South Beach, Miami through a two-day pop-up store. This initiative allowed the company to deviate from its reputation as a low-end merchandiser and successfully target a new, higher-income consumer.

Not unlike the limited edition collections previously mentioned, pop-up stores further add to the sense of urgency and scarcity that encourage consumers to visit the stores more quickly. While these campaigns have been wildly successful, it is still a relatively new concept in the retail industry. These exclusive lines help retailers differentiate their physical stores from their online space, creating a more cohesive consumer experience by leveraging the efficiencies and convenience of online shopping while creating a unique in-store experience.

Extend the Shopping Experience

The physical layout of a traditional store can allow a retailer to keep clientele inside its store for longer. Online stores, in contrast, must be designed for convenience in order to attract and offer value to their shoppers. Intrinsically, online retailers are unable to control how long potential customers spend on their website.

Ikea has long utilized this strategy to maximize the time spent by customers within the store, in hopes of raising customer revenue per visit. The fundamental layout of the store requires customers to walk through every department, exposing them to products outside their radar and thereby increasing potential sales. Childcare service and in-house dining facilities are two complementary amenities designed to further increase the time a customer spends in the store.

Retailers may also extend the shopping experience by enticing customers with a social setting, interactive activities, or restaurants. Partnerships between coffee shops and bookstores enable customers to browse through products and meet with friends in a social, café setting to discuss potential purchases.

FAO Schwarz, the legendary New York toy store, has successfully enticed children and parents to spend hours perusing aisles of games by allowing them to play with an array of interactive, limited-edition toys. Most would concur that a day at FAO Schwarz makes for a unique and memorable experience. More importantly, few leave empty handed.

In general, retailers should aim to maximize sales by leveraging the product exposure and level of service that only physical stores can offer. In today's technology era, ecommerce is not going anywhere, but neither is traditional brick-and-mortar retail. It is now a retailer's job to ensure that its online stores and physical stores are complementary, not redundant. The ultimate goal is to maximize profits and market share. The best way to do this is to not only maintain an online presence, but also to personalize and extend exclusive brick-and-mortar retail experiences. Learning from their online success, retailers can apply similar strategies to traditional storefronts and therefore better take advantage of the personal customer touchpoints that only physical retail can provide.

Nintendo's Next Level

Can Nintendo leverage its iconic characters to change the game once again?

By Kunal Kapoor and Jonathan Pinto

In the late 1990s, a national study by Duke University found that Mario was more recognizable than even Mickey Mouse among young American children. This conclusion was a testament to the 121 year old company's ability to influence pop culture. Nintendo, like its most famous creation, has had many different iterations – some more successful than others.

Nintendo was founded as a playing card company in 1889 – more than 50 years before the first electronic computer. The company stayed in the business until the late 1950s, when Hiroshi Yamauchi, Nintendo's third President, discovered that the world's leading playing card company operated out of a small office in Cincinnati. Two decades passed before the company finally entered electronic gaming, during which Nintendo tried everything from instant rice, to taxicabs and "love hotels."

Between 1975 and 1995, Nintendo took the world by storm with its massively popular consoles and iconic characters. However, the company's Nintendo 64 and GameCube consoles, released in 1996 and 2001, were both critical and commercial failures. By 2005, Nintendo was a distant third place, having ceded much of the video game market to console newcomers Sony and Microsoft. In 2006, Nintendo bounced back with the revolutionary Nintendo Wii, which went on to sell close to twice as many units as the Nintendo 64 and GameCube combined and captured close to 50% of total market share.

Only five years later, Nintendo has projected its first annual loss since it entered the video game business – after booking a staggering $1.3 billion operating loss in the first half of fiscal 2011 alone. The Wii's ground-breaking capabilities have not just been outdone by the PlayStation Move, but also outshined by Microsoft's Xbox Kinect. Meanwhile, the company's previously unstoppable family of handheld devices now struggles to succeed in a world where touchscreen smartphones have become the standard. For the company to survive, yet another change is needed.

What Happened to the Wii?

After motion-sensory gameplay, the Nintendo Wii's primary selling point was its price. At $249.99, the console was, at most, half as expensive as the PlayStation 3 ($499 and $599 depending on the model) and up to 35% cheaper than the Xbox 360 ($299 and $399). However, the ubiquity of video gaming in households has driven the industry's competitive focus to new console capabilities.

The PlayStation 3 and Xbox 360 are now able to replace your cable set-top box, access subscription services such as Hulu and ESPN, surf the internet and play DVDs and Blu-ray discs. Furthermore, consumer electronics have increasingly become about fitting into a larger ecosystem. Microsoft's Xbox, for example, provides considerable integration into other Microsoft products, such as Windows Phone and the forthcoming Windows 8 tablet and PC operating system. Nintendo's cost-conscious console offers none of these capabilities. Given that both the PlayStation and Xbox 360 now offer Wii-like gaming, it is little surprise that Wii's sales have stalled while its competitors continue to gain momentum.

With 95 million units sold compared to Xbox's 65 million and PlayStation 3's 55 million, it might appear that the Wii is simply reaching its saturation point. However, it is still more than 50 million units short of the PlayStation 2's total sales and 0 million short of the first PlayStation – despite the fact that many of the Wii's sales are believed to be to new gamers. While Nintendo's decision to target casual, rather than hard-core gamers appeared to pay off early, it has had two consequences. First, its customer base purchases fewer games than those of the Xbox or PlayStation – meaning less distribution royalty revenue for Nintendo as hardware manufacturer. Second, and perhaps more importantly, Nintendo now competes with smartphone games for the same "casual gamer" dollars - and smartphone games are typically only a fraction of the cost.

Understanding Nintendo's Gaming Division

Even at 95 million units sold, it's unlikely that the Wii itself has contributed much profit to Nintendo. The company, like Sony and Microsoft, is believed to sell the unit at or below cost. These companies recoup their investments through licensing and distribution fees paid by video game publishers like EA or Ubisoft when they release games for it consoles (an estimated 10% to 20% of the game's sales). However, Nintendo is unique: its primary source of revenue has been its own games.

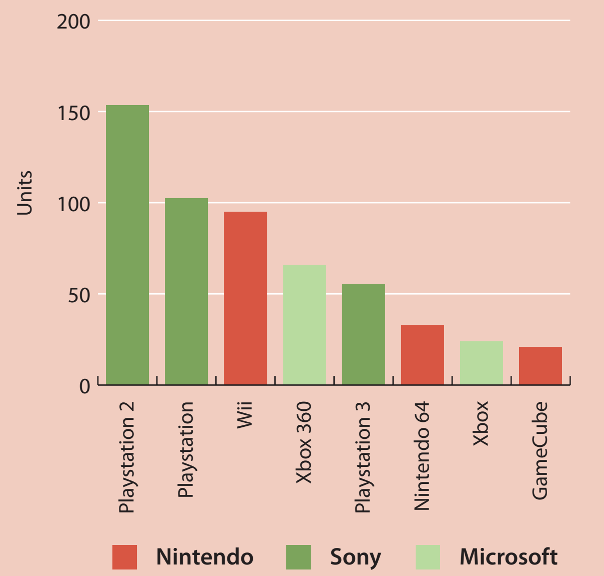
Nintendo has historically published its video game franchises, such as the Legend of Zelda and Donkey Kong, in-house to reduce licensing and distribution costs and ensure that its titles were exclusive to Nintendo's own consoles, thereby driving console adoption. The quality of these games is without question, with Nintendo developing the three best reviewed games of all time according to GameRankings. Despite the fact that the Nintendo 64 sold only a third of the units that Sony's PlayStation did, its best-selling game – a Mario title – still outsold PlayStation's best seller. Although quite a few of its games became cultural icons, the top-selling video game lists remain barren of hit titles for the GameCube, and the Nintendo 64 performs only marginally better. Nintendo's games division ultimately sinks or swims with the success of its hardware. As a result, even its universally praised titles can drown.

Between 1975 and 1995, Nintendo took the world by storm with its massively popular consoles and iconic characters. However, the company's Nintendo 64 and GameCube consoles, released in 1996 and 2001, were both critical and commercial failures.

Nintendo's strong first party game library has undoubtedly been a primary driver of its console sales. However, the strategy may no longer work in today's hyper competitive gaming market. Sony's PlayStation and Microsoft's Xbox each have their own set of high-end franchises, such as Uncharted and Halo. More importantly, third-party game developers have created a series of high-end franchises which can be played on all consoles. These trends have dramatically diminished Nintendo's historical advantage in the console market. What's more, Nintendo's own third party library has typically struggled to match that of the PlayStation and Xbox 360. Independent studios are somewhat unenthusiastic about developing games for Nintendo's relatively underpowered consoles and argue the company's immense first-party focus has meant that independent studios end up mistreated. As a result, some third party games end up on the PC, Xbox and PlayStation, but not Nintendo's own console.

The Sales Ceiling

Game console sales comparison

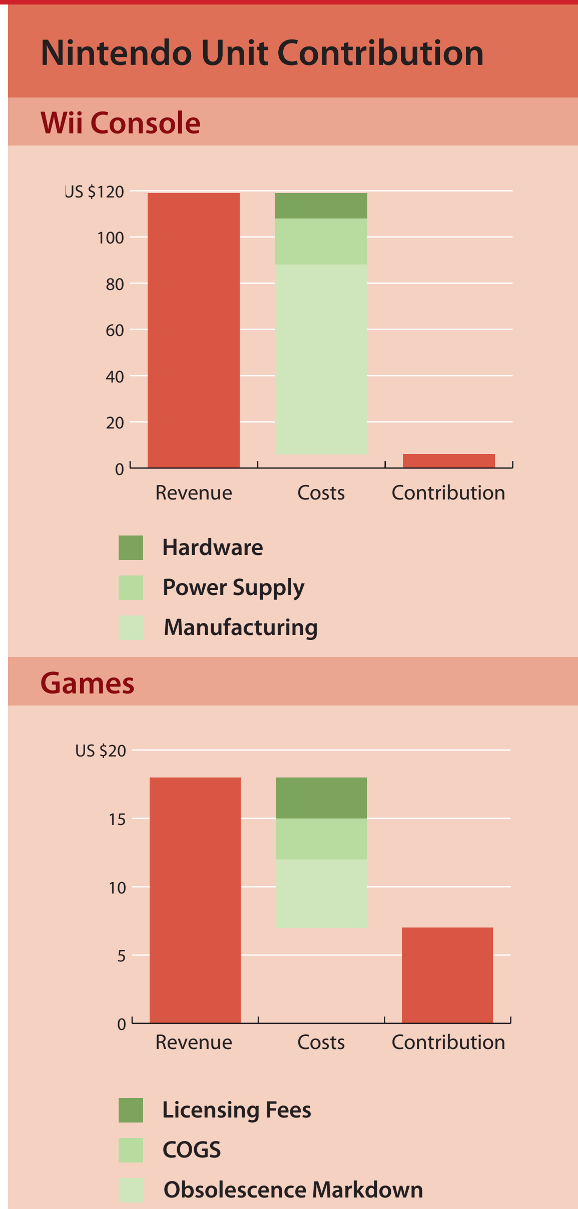


Source: Company Statements

3DS and Wii U: A Hit or Miss Philosophy

Nintendo's handheld gaming devices are a significant part of its overall revenue and, at times, even contributed more than its console counterparts. Releases such as the Game Boy and DS series have previously allowed Nintendo to stabilize earnings when console sales declined. Given this, the release of the Nintendo 3DS – which features a glasses free 3D playing experience – should have been a boon for shareholders. However, the handheld has been a massive disappointment, for three reasons. First, while the Nintendo DS cost only $149 at launch, the 3DS launched at $249.99 due to its significantly more advanced technologies – the same cost as most modern day consoles. Secondly, the category faces growing competition from mobile games on multipurpose smartphones, a point exacerbated by the fact that the 3DS costs more than most on-contract smartphones and that games on the 3DS cost up to ten times more than those on smartphones. Lastly, the device's launch library was criticized as weak, with too few first and third party titles to justify the purchase. Nintendo quickly cut the cost of the 3DS by a third to $169. However, sales of the handheld device have yet to pick up, suggesting Nintendo's cash cow is beginning to run dry.

The impending release of the Wii U draws surprising parallels with the troubles faced by the 3DS. Similar to the 3DS, the Wii U aims to be more technologically competitive with Microsoft's and Sony's consoles. The system will provide HD and 3D video, front facing cameras, and tablet-style controllers. However, these decisions mean that Wii U will need to be sold at a more significant loss than the Wii, or priced much higher than Nintendo's consoles have been in the past. Furthermore, this will occur at a time in which the Xbox 360 and PlayStation 3 are approximately half their launch prices. From an innovation standpoint, the Wii U makes a progression similar to the 3DS, and if consumers are not satisfied with the perceived leap in user experience, the console will likely suffer the same fate as the handheld.



Source: Macquarie Group & IGN

Getting the 1UP

Nintendo's leading capability is without a doubt game development. However, the success of its games relies on the company's rollercoaster hardware sales. While Nintendo's licensing and distribution fees do help line its pockets, they prevent it from pursuing an opportunity that could potentially triple its game sales: licensing games to the two other major consoles. If Nintendo were to shift to a purely games-focused business model, the company would detach its gaming properties from the sales of its consoles and be able to fully exploit the appeal that franchises like The Legend of Zelda or Mario hold for young gamers. Family-friendly and youth-oriented games are vastly underdeveloped on Microsoft and Sony's platforms and Nintendo's success in this area can easily be brought over to the Xbox and PlayStation through lucrative licensing agreements. Furthermore, relatively weak publishing for Xbox's and PlayStation's motion-sensory add-ons has left consumers and producers hungry for compatible games. The Kinect has sold 18 million units, but a poor array of titles leaves a gap that the Wii's games can easily fill. Xbox owners only purchase one Kinect-compatible game on average, which pales in comparison to the 7.5 traditional games sold per customer. Nintendo's games could boost this figure and expand the Kinect's value proposition.

Games typically generate higher unit contribution than consoles, and in the case of a console failure like the GameCube, Nintendo could see already low console contributions cut in half or worse. According to data from Macquarie, Nintendo achieves a unit contribution of $7 per game, compared to only $6 per Wii sold. For games, average production costs of $12 million each mean that roughly 1.7 million units must be sold to break-even. This number is easily surpassed by top-selling Nintendo franchises, by as much as 540% in the case of Super Smash Brothers Brawl for the Wii. Expanding title sales to PlayStation and Xbox would make it even easier to surpass that threshold. If Nintendo were to shut down hardware sales, and is able to even double title sales within three years, operating profit would be roughly 30% greater than current projections.

Furthermore, the success of Angry Birds and Zynga's multibillion dollar valuation speaks to the growing popularity of gaming in non-traditional segments. The expanding functionality of mobile platforms, combined with the low-price of mobile applications, has drawn crowds of start-up publishers to mobile gaming. Nintendo's handheld devices remain in a market somewhat segmented from cell phones, but its experience in portable game development would likely allow them to easily exploit new opportunities in this area. Nintendo's classics already sell for between $5 and $10 through its virtual console delivery system. Furthermore, Rockstar games' Grand Theft Auto 3 has already been a tremendous success on Apple's App Store since it was released in December 2011 at $4.99. Nintendo would be loath to give up the $40 price points its handheld games currently run for. However, the company's leading franchises and brand would allow it to charge a considerable premium for its games and a massively expanded customer base would help compensate for reduced per unit profit.

Nintendo's strategy traditionally hinges on how consumers will respond to its next gaming innovation. While this approach has repeatedly propelled the industry as a whole forward, it exposes the company to considerable and unnecessary risk. What's more, Nintendo's consoles are increasingly out of place in today's world of integrated consumer electronics and smartphones. Nintendo should abandon its hardware business and dedicate its efforts on delivering its industry-leading franchises to the largest audience it can. In doing so, the company will be able to improve revenue stability and cut a substantial portion of its costs. What's more, it allows Nintendo to truly focus on what it does best. Exiting the hardware business is no easy task. However, Nintendo, like its most popular character, has always been about reinvention.

The Declining Times

How the Times' greatest enemy will be its most important ally in the fight for survival

By Adam Edgerley and Michael Rabinowitz

In 2009, Jason Jones of The Daily Show sat down with Bill Keller, then Executive Editor of the New York Times, and posed a question: "What's black and white and red all over?" "A newspaper," Keller casually replied to the ancient industry joke. "No, your balance sheet" Jones corrected. It was a poignant moment, with one of America's oldest and most venerable news institutions mocked by one of its newest and most ascendant. Yes, the New York Times Company has become a business in distress.

At The New York Times, the company's flagship newspaper, print advertising revenue has dropped by over 50% since the mid-1990s, while circulation is down by more than a fifth. Earnings, once routinely surpassing $200 million, have tumbled drastically.

The 2008 financial crisis intensified the exodus of advertisers and the climate of fear at the Times: cuts were made to its newsroom for the first time, trimming its 1,300-journalist staff by 8%. Emergency loans at a desperate 10% interest rate were hastily arranged, as debt was downgraded to junk grade. Fear of the Times' demise has led to its market capitalization dropping from a height of $9 billion to roughly $1 billion.

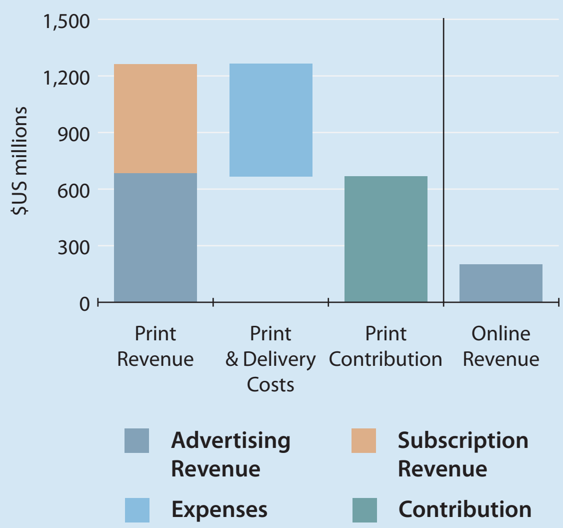
The humbling of the Times mirrors the collapse of the entire newspaper industry. Indeed the Times, winner of a dominant 106 Pulitzer Prizes since its inception in 1851 and the leading newspaper-of-record of the English-speaking world, is well off by industry standards. Hundreds of American newspapers have folded since the 2008 crash. Media magnate Rupert Murdoch, owner of The Wall Street Journal, once referred to newspaper profits as "rivers of gold." These days, he bitterly notes that "sometimes rivers dry up." Is the age of the newspaper over?

The Iceberg is the Lifeboat

Today, the newspaper industry is fixated on the Internet as both its greatest menace and opportunity. In the early 1990s, in what came to be known as the "Original Sin," many papers experimented with offering articles for free on their fledgling websites, hoping to attract readers to the print brand and to eventually earn digital ad revenue. Instead, the sudden rise of online news consumption cannibalized print circulation and print advertising dollars, while online advertising revenue proved to be a meager substitute. Even the New York Times' enviable $200 million in web advertising sales, the most of any news website, represents only a third the advertising revenue of the print edition — even with 30 times the readership online.

Print vs. Online Business

New York Times 2010 results



Source: 2010 Company Statements

The New York Times is at a crossroads. With print circulation ebbing, print advertising diminishing even more rapidly, and print subscribers already squeezed for up to $800 per year, the company has turned to the Internet as the only source of sustainable revenue growth. Yet in spite of its immensely content-rich website, which until recently featured every published article for free, established newspapers must compete for eyes online. Blogs, search engines, and news aggregators like the Huffington Post retain enormous readership largely by reusing, at minimal expense, the journalistic work of the large mainstream media companies. The Internet has been proclaimed far "flatter" than print, and its low barriers to entry accommodate thousands of specialized, nimble websites uniquely attractive to online readers.

The rarity of digital advertising revenue has led several publications to try to raise circulation revenue online by charging readers for access — a daring proposition in the flat, fragmented online news industry. The Wall Street Journal and Financial Times, the world's leading business newspapers, have introduced rigid limits on free readership and garnered over 500,000 and 200,000 paid subscribers, respectively. In April 2011, the New York Times introduced its paywall and now has roughly 400,000 paying customers.

With print circulation ebbing, print advertising diminishing even more rapidly, and print subscribers already squeezed for up to $800 per year, the company has turned to the Internet as the only source of sustainable revenue growth.

As satirical newspaper The Onion mocked, the Times is making the shift away from the "standard everything-online-should-be-free-for-reasons-nobody-can-really-explain-based model… It's almost as if The New York Times is equating itself with a business trying to function in a capitalistic society." Indeed, the Times is challenged with the task of monetizing some of its costly services, including investigative reporting, global coverage and analysis, dozens of other sections, which 40 million people formerly read for free.

The Scale of the Challenge

For the foreseeable future, digital advertising alone will not be able to support an operation of the scale and quality of the Times newsroom, whose journalists and editors cost $200 million in addition to roughly $500 million for supporting operations. The digital subscription model represents the best option for the New York Times to survive and grow in this ultra-competitive landscape. In spite of the wealth of criticism and doubt, its new paywall has attracted 400,000 paying customers. More broadly, the paywall should anticipate the continued decline of print. Oracle and Microsoft executive Dick Brass' notorious 2000 prediction that the Times' last issue would roll off the presses in 2018 may be too acute. The Times' digital services must ultimately aim to singlehandedly support the paper's newsroom and core operations.

How lofty is this goal? In 2010, print revenues totaled $1.26 billion, broken down into $683 million in subscriber fees and $580 in advertisement sales. Print and delivery costs total ed $597 million, yielding a print net contribution of $666 million per year. By contrast, NYTimes.com's contribution totaled roughly $150 million, broken down into $200 million in digital ads and approximately $50 million in website operating costs. Thus, to truly hedge the Times against the decline of print, the paywall should eventually generate the contribution difference – a half-billion dollars per year.

Appealing to Advertisers

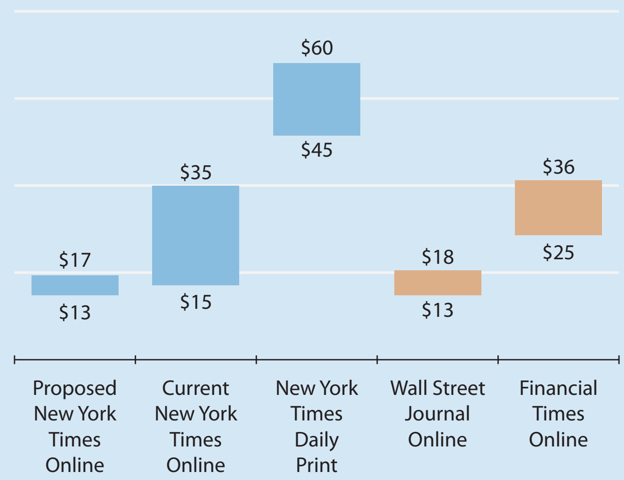
The Times must prove to advertisers that digital readers deserve exposure rates at least comparable to print readers. Advertisers value each of the Times' 1.4 million print readers at $380 per year. By contrast, the Times' $200 million in online ad revenue implies a value of $5 per year for each of its 40 million unique monthly web visitors. Online readers are unfairly valued at 1.3% that of print readers.

The subscription model allows the Times to demonstrate to advertisers that its online customers are as committed to the newspaper as print subscribers, and thus warrant higher exposure values. Improved reader-tracking technology would also allow the site to offer more targeted advertising options than those in ink. The Times certainly has a long way to go in monetizing its web viewership, but opportunities do exist.

In addition to working to increase advertising rates, the NYTimes must continue its current policy of offering 20 complimentary web articles per month. This keeps NYTimes.com available to occasional users, whose readership underlies today's $200 million in digital ads. Indeed, the Times' paywall has reduced site page views by only an estimated 10%-20%, calming fears that a paywall could hinder ad sales. The Wall Street Journal's stricter paywall has

Pricing Online Subscriptions

Rates for comparable publications (monthly)



Source: Company Sites

pushed WSJ.com from the list of America's most visited news sites and The Times of London's even stricter one has slashed online views by 90%. A limited degree of unpaid access serves as ideal advertising for paid subscriptions, as many of today's free riders will eventually become paying subscribers.

Pricing for Subscribers

To remain competitive, the Times' digital price should be reduced to a range of $13 to $17 for unlimited access. Today's online packages range from $15 to $35. WSJ.com charges $13-$18 for digital access, while FT.com charges $25-$36. The Times web rates should hover near the low end of these comparable offerings, as a generalist newspaper cannot command the rates of financial publications given that financial news is considered a necessary day-to-day business expense. Offering excessive free readership also dampens the attainable price for paid subscription as the subscription's incremental benefit is reduced.

Yet at an appropriate price, feasibly $13-$17, it would be competitive with both paper subscriptions and rival websites. Improvements to the site, with enhanced multimedia content, interactivity, and personalization, would increase the value proposition further, incentivizing subscription while appealing to readers interested in content beyond article text alone.

A Look to the Future

The paywall's effect on revenue includes digital subscription revenue, ad revenue from subscribers, and ad revenue from free readers. Today, with 400,000 digital subscribers behind the paywall, free readership deterrence of 20%, and assuming $38 a year in subscriber value-to-advertisers (10% their worth in print, rather than 1.3%), differential revenue from introducing the paywall is approximately $50 million – or $250 million in combined digital advertising ($160 million) and subscriptions ($90 million). Financially, the paywall has already been a worthwhile investment; over 400,000 subscribers were obtained in only six months. Considering the costly Times' paper edition garners roughly 1.4 million readers, acquiring two million online subscribers (5% of NYTimes.com's base of 40 million readers) represents a suitable target over several years.

Improvements to the site, with enhanced multimedia content, interactivity, and personalization, would increase the value proposition further, incentivizing subscription while appealing to readers interested in content beyond article text alone.

Allowing for free readership attrition of even 50%, combined online revenue would be approximately $530 million. At three million subscribers, digital revenue would climb to roughly $730 million, funding all of the Times' current newsroom and operating costs. This excludes the value of the paywall in retaining print buyers: with no free alternative online, paper subscribers are less likely to shed their valuable subscriptions.

Of course there are significant challenges to growing the Times' digital subscriber base. Online competition is increasing relentlessly. The paper remains in ethos a daily American print publication rather than the 24/7 global news website it has substantially, and must increasingly, become. Yet the New York Times' core product is a formidable and tremendous strength. The value of quality information is timeless.

The web may be the greatest change to newspapers since Guttenberg's printing press five centuries ago, yet the Time's core competency of definitive news coverage, analysis, and commentary applies equally to paper, e-paper and LCD.

As one reader exalted in a recent comment online, the paper is "the most marvelously sophisticated publication on earth. There is nothing remotely as good, as diverse, as encyclopedic… You improve our world." The New York Times is not merely a common good but a valuable individual service. Sold properly, people will buy it, even online.

A Match Made in Heaven

How Islamic Banking can create a new source of capital for start-up companies

By Omar Fayoumi and Saad Usmani

Prime Minister Stephen Harper declared 2011 the "Year of the Entrepreneur," stressing the role of entrepreneurs as the lifeblood of the Canadian economy. While small businesses account for a quarter of Canada's GDP and a third of all jobs within the private sector, private sector employment has yet to recover to pre-recession levels.

Venture capital, the traditional lifeblood of a thriving start-up sector, is certainly inadequate. Canada has consistently lagged the U.S. in per capita funding by as much as twenty-fold, constraining the growth of small businesses and consequently, Canada's overall productivity. Only 2.84% of the Canadian population invest funds in start-up ventures, compared with 4.3% in the U.S. If the U.S. market is any indication, investor appetite certainly exists. However, building a stronger venture capital market will require a new business model that is able to overcome the inherent disadvantages of the undersized Canadian economy.

The large amounts of capital and expertise required to successfully invest in start-up businesses create significant barriers for individual investors. Even wealthy investors find it inadvisable to invest in a number of small ventures because of the inherent risks associated with start-ups. Banks can help investors mitigate this risk by offering a product that pools investors' deposits and invests them in a diversified portfolio of businesses on the investors' behalf. In this capacity, the bank would effectively serve as a venture capital or angel-investing fund. Given that approximately 90% of start-ups fail, the pooling feature enables the everyday investor to mitigate the substantial risks in angel-investing by spreading it over several businesses. Providing retail investors with the ability to effectively invest in start-up companies represents an attractive market opportunity for Canadian financial institutions.

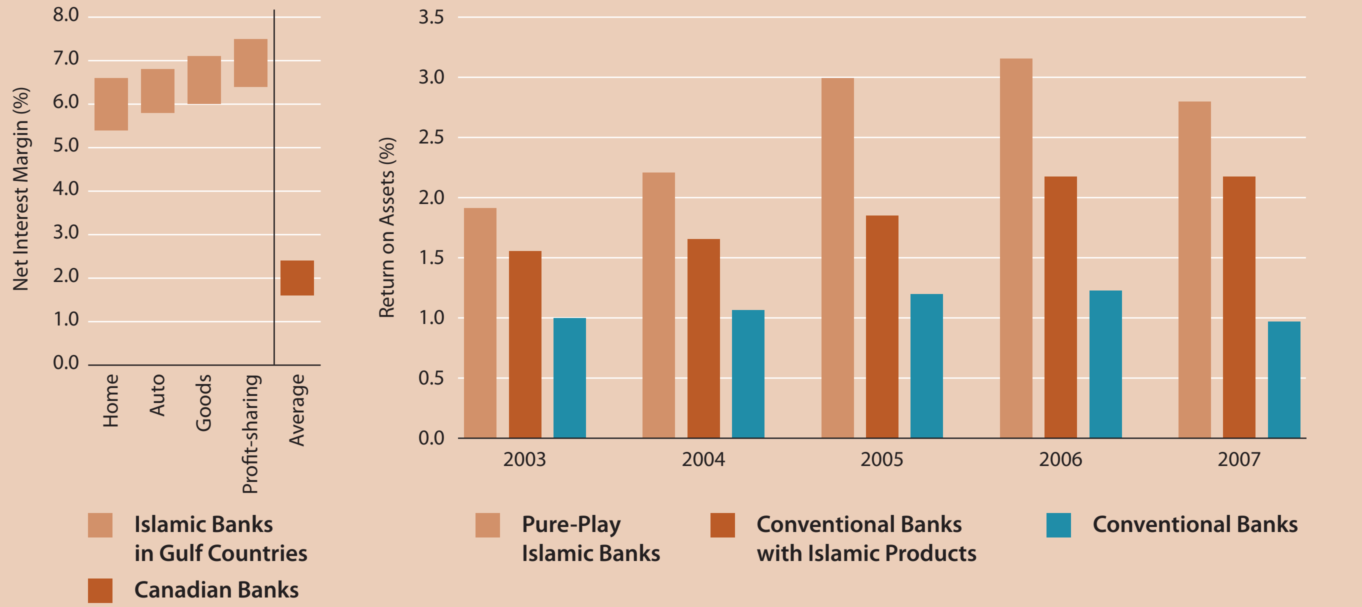
> *Through its unique structure and built-in appeal to an underserved segment of the Canadian market, Islamic Banking can be used as a tool to gain entry into the untapped angel investing market.*

While execution is challenging since equity-based financing requires different due diligence than traditional debt-based financing, the most daunting task is actually attracting the necessary capital. Initial capital in particular is difficult to obtain because funds lack credibility in their early stages, as investors often look at a manager's track record as a critical investment consideration. Without enough capital, a bank would be unable to sufficiently diversify away the risks inherent in early-stage investments and risk-weighted returns to investors would suffer.

This culminates in a chicken-and-egg problem whereby investors will not invest without proven returns and limited risk, but

Comparison of Banking Models

Net Interest Margin and Return on Assets



Source: Oliver Wyman, 2009

returns and the diversification of risk cannot be achieved without a pool of eager initial investors. If banks can solve this problem, they will be able to offer their customers access to an asset class typically reservered for a small minority of institutional investors. The recent persistence of low interest rates, accompanied by the floundering stock market, suggest that a subset of Canadians is likely to be open to the higher-risk, higher-return venture capital option. Who, if anyone, can banks convince to take this leap of faith?

Enter Islamic Finance

Representing 1% of global assets, research conducted by Oliver Wyman suggests that Islamic Finance has experienced 30% annual growth over the past decade and is predicted to reach almost $1.6 trillion in assets this year. Despite stellar growth and proven superior profitability, the potential of Islamic Finance remains untapped – especially in Canada. Through its unique structure, and built-in appeal to an underserved segment of the Canadian population, Islamic Banking can be used as a tool to gain entry into the angel-investing market.

Islamic financing is defined as being an interest-free source of financing, which encourages lenders to invest and share profits between businesses and depositors. Banks transform from creditors to investors with an interest in the profitability of the company. The emphasis, thus, shifts to the venture's productivity instead of the entrepreneur's creditworthiness. Investments are structured using profit-sharing agreements, which represent a partnership between two or more parties in a venture. The parties combine their capital and share the profits based on agreed-upon ratios, and share losses in proportion to their respective investments. Thus, a key tenet of Islamic Finance is equity ownership rather than debt financing. Most importantly, this equity-based form of financing aligns perfectly to the nature of financing typically provided to start-up companies. As a result, a bank can easily structure angel-investing products as Shariah-compliant, as long as it provides no debt financing and avoids investing in non-compliant businesses such as alcohol and pornography.

Fittingly, the million Muslims in Canada are also an underserved market. Due to the lack of Islamic-inspired financial products, they have found less optimal ways to invest their money that also may not align with their religious beliefs. With surveys suggesting 20% of Muslims are willing to switch to Shariah-compliant accounts, and many others have religiously constrained capital, an Islamic Bank has the potential to access these underserved and less price-sensitive depositors.

With surveys suggesting 20% of Muslims are willing to switch to Shariah-compliant accounts, and many others have religiously constrained capital, an Islamic Bank has the potential to access these underserved and less price-sensitive depositors.

As it initiates an angel-investing product, a bank can turn to demand from the Muslim segment to garner the initial critical mass of investors. Achieving growth beyond the Muslim community, however, will be much trickier. To appeal to all investors, the bank cannot restrict itself to being identified as "Islamic," but rather make its adherence to Islamic principles visible and consistent. Positive results on these initial investments will then attract investors outside of the Muslim community. Such results should be publicized and made apparent to the lay investor. Islamic Finance has proven potential to appeal to non-Muslims, as seen in

Malaysia and the U.K. For example, 50% of mortgages issued by HSBC Amanah in Indonesia in its first year were to non-Muslims. Reaching out to Islamic centres, socially responsible investment groups, and entrepreneurship organizations, provides exposure and opportunity to reach potentially interested depositors.

Raising Minarets from Existing Structures

Canadian banks should take advantage of the unique opportunity Islamic Banking offers to enter the lucrative venture capital market by establishing an investment vehicle compliant with Islamic Finance principles. This Islamic-inspired service offering should be made by existing Canadian banks, and not by a newly established stand-alone Islamic Bank. Offering this unique service from an existing Canadian institution will better enable the firm to appeal to a consumer group beyond the Canadian Muslim community in the long run. A pure-play Islamic bank would be limited in its ability to gain traction with non-Muslim consumers relative to large Canadian institutions. Scotiabank, for example, is well-known for its marketing efforts targeting ethnic Canadians and new immigrants. Appealing to the Muslim consumer would be a natural extension of such an approach. As the product begins to establish a track record of positive risk-adjusted returns, the bank can expand its marketing efforts beyond the Muslim community.

Although 2011 was declared the "Year of the Entrepreneur," profits in this area were likely left on the table due to a lack of seed capital. Islamic Finance is an opportunity that may allow one player to jump ahead of the pack in a race that has been neck-and-neck for years.

A Lucrative System

Islamic Banking is lucrative due to the lower price sensitivity amongst religious and socially-conscious depositors, and the high-margin financing activities that stem from profit-sharing contracts. Islamic-inspired banking could provide Canadian banks with a means of increasing their net interest margin (the spread between interest earned and paid by banks—the primary driver of profitability in retail banking), which has been steadily falling since the financial crises. Islamic banks in the Gulf region earn a net interest margin of 5%-7%, compared with 2%-2.5% net interest margins at Canadian banks. However, variance in development levels likely also contributes to this difference. Typical Islamic banks offer a mixture of interest-free mortgages and profit-sharing products, with profit-sharing representing a relatively new development in the Islamic asset management sector. In the future, Canadian banks should consider offering lower-risk Islamic-inspired products such as interest-free mortgages to complement the higher risk offerings, allowing them to reach more risk-averse Islamic investors as well.

Additional challenges for banks hoping to offer this service stem from the difficulty of sourcing and evaluating start-up ventures. A significant amount of work is required to source profitable equity investment opportunities, and significantly more due diligence is required to make an equity investment decision than simply providing a loan. Banks must assess a company's compliance with Islamic principles, management capabilities, and potential profitability, requiring increased cost and time investment. These increased costs are necessary in order to mitigate the high risks associated with venture financing and to ensure positive returns in the long-term.

There have been few bold moves amongst Canadian retail banks in the last decade. Though 2011 was declared the "Year of the Entrepreneur," banks likely left profits on the table due to a lack of seed capital. Islamic Finance is an opportunity that may allow one player to jump ahead of the pack in a race that has been neck-and-neck for years. It is understandable why little, if any, venture capital products are offered by Canadian banks, but the Islamic community's capital may prove to be the catalyst to develop this financial market.

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