IVEY BUSINESS REVIEW

DECEMBER 2010 • ISSUE 1, VOLUME 2

IVEYBUSINESSREVIEW.CA

Opportunity Knocks

Deconstructing Cloud Computing

Page 10

Special Section
Banking Without Borders

Page 17

WIND Mobile: The Billion Dollar Bet

Page 29

RAISE THE VALUE OF YOUR OWN STOCK

Richard Ivey School of Business HBA and the CMA® designation

HBA students who have all of the CMA required subjects and an overall GPA of 75% or greater can **qualify for exemption from the CMA Entrance Examination**, and go directly to the two year part-time CMA Strategic Leadership Program (SLP) while completing 24 months of practical experience.

For more on the requirements for exemption from the CMA Entrance Exam, visit:
www.cmaontario.org/uwo

Graduates send your university transcripts to CMA Ontario for a free evaluation:
www.cmaontario.org/transcript

Create possibilities for your career with the CMA designation.

For more information, contact:
Deborah Clarke, MBA, CMA
Regional Director, Marketing and Communications
Southwestern Ontario
1.877.318.2422
dclarke@cmaontario.org

Create Possibilities.™

becomeacma.com

Certified Management Accountants™

www.cmaontario.org/facebook

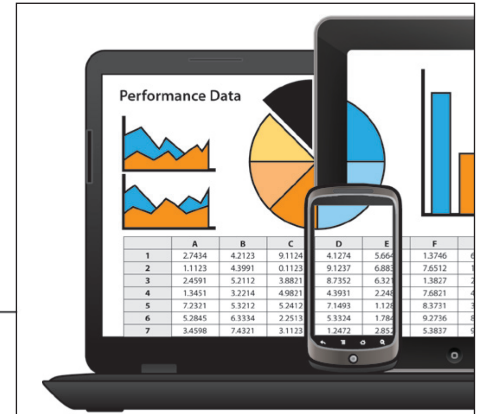
becomeacma

© 2010 Certified Management Accountants of Ontario. All rights reserved. ®/™ Registered Trade-Marks/Trade-Marks are owned by The Society of Management Accountants of Canada. Used under license.

04 Groupoff
Malini Jhaver & Stacey Yue

07 What to do with 500 Million Friends
Alex Angelov & Alex Wong

10 Deconstructing the Cloud
Alex Cook & Shiv Daryani



14 Chevrolet Volt: Shorting Out GM's Recovery Strategy
Eric Ng & Martin Wong

Special Section Banking Without Borders

18 Microfinance: Sizing-Up by Sizing-Down
Navid Nathoo

20 SMEs: Underserved and Overlooked
Ross Strike

23 Mobilizing the Money Under India's Mattress
Asif Dhanani & Abid Ladhani

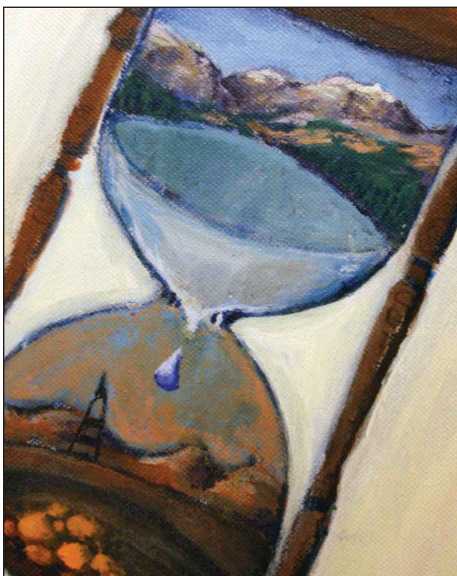
BlackBerry's Identity Crisis 26
Dale Wang

The Billion Dollar Bet 29
Ranji Bissessar & Alex Yeung

Entering the Fray: Canadian ETFs 32
Julie Mou & Caitlin Neal

The Fifth Protocol 35
Megan Lem

Mine vs. Lake 37
Cameron Bossert & Michael Egden



The Editorial Board

The Ivey Business Review is managed, written and run exclusively by undergraduate HBA students at the Richard Ivey School of Business. Each member of the Editorial Board authors one article per year, helps to select each issue's articles and works with two to three different writers per issue to develop, guide and refine their articles.

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.

Join the IBR Team

Starting again in January 2011, the Ivey Business Review will be looking to add to the Editorial Board. If you are interested in joining the IBR team, please submit an application to our website or contact Will Meneray or Joseph Ghobrial. Alumni interested in joining our advisory board should contact Matthew Ball. Contact information available at www.iveybusinessreview.ca.

Faculty Advisor
Ariff Kachra, Ph.D.

Editor-in-Chief
Will Meneray

Associate Editors
Joseph Ghobrial
Jack Hansen

Design Director
Jon Aziz

Editorial Board
Jon Aziz
Cameron Bossert
Jennifer Gautier
Safir Jamal
Zahra Jamani
Lauren Lee

Design Team
Erik Dohnberg
Jenny Du
LingLing Liu
Joy Xi
Willie Zhao
Joyce Zheng

Advisory Board
Matthew Ball
Lorne Creighton
Jordan Mayes
Anshul Ruparell
Calvin White

Additional information, including sources used, available at www.iveybusinessreview.ca

Editorial Note

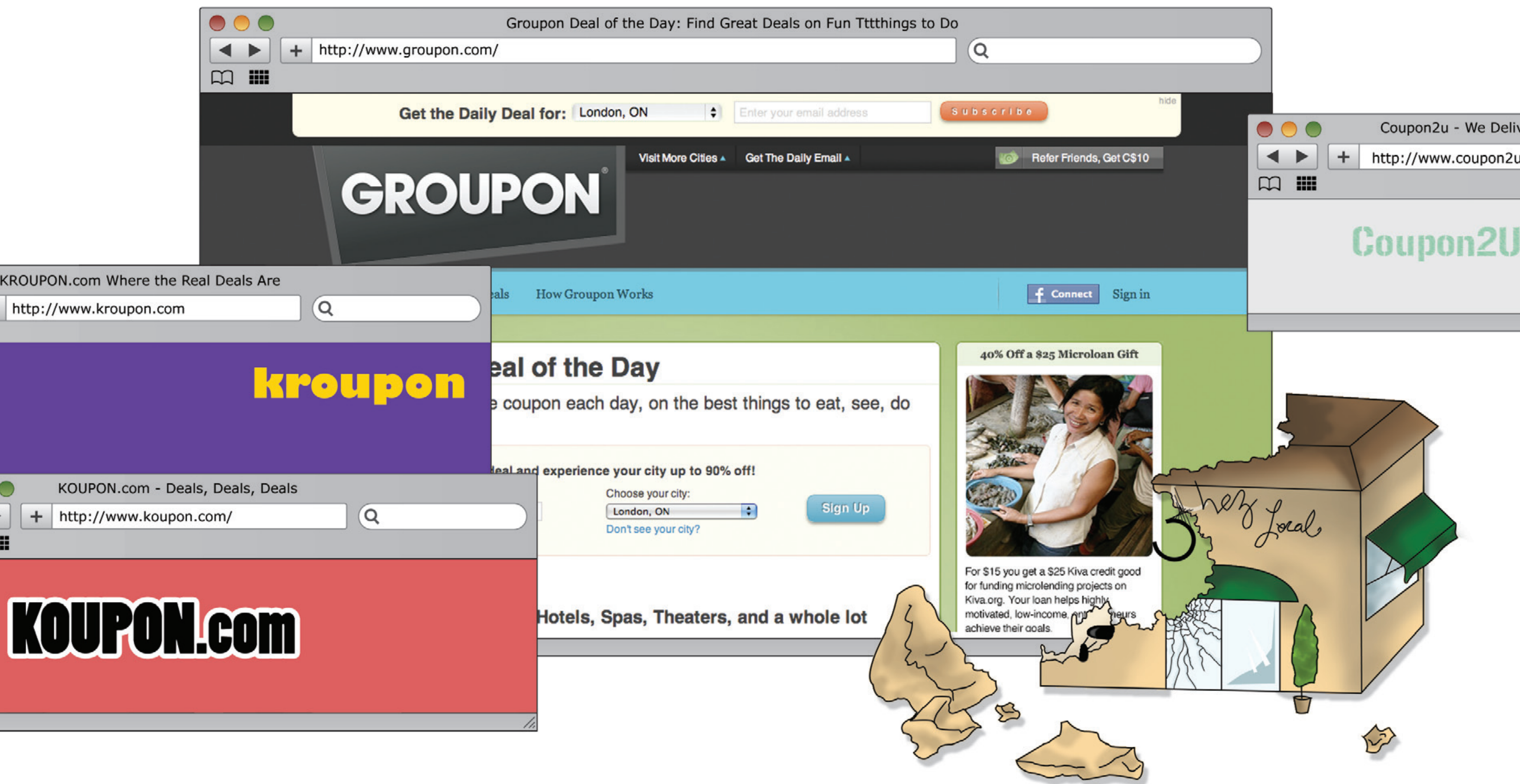
Opportunity is not something that merely happens. It is not gifted to you. It is not stumbled upon or found by accident. Opportunity is earned. It comes from years of searching, criticizing and re-evaluating. There is no clear formula or well-defined process. Often, the rewards may not even be initially recognizable.

If the economic upheaval of the past three years has taught us anything, it is that no one can afford to get comfortable. Those who stagnate will perish, whether from competitors at home or abroad. Those who constantly adapt and evolve, however, will find new markets, new capabilities and ultimately, new ways to succeed.

In this issue, we explore how the ability to change is no longer a competitive advantage but a requirement for survival. Ultimately, the hours spent in tough self-reflection are amongst the best investments your firm will ever make. When the door to new opportunity opens, you must be ready to enter.

We hope you enjoy it,

The Editorial Board



Groupoff

Should the fastest-growing internet company stick it out or take the money and run?

Written by Malini Jhaver and Stacey Yue

At $3 billion, you'd pay...

- **$10,000,000 per city**
- **$1,000,000 per employee**
- **$214 per customer**
- **6 times 2010E sales**

It took Apple eight years to reach $1 billion (U.S.) in sales. Yahoo took six years, while Amazon and Google both took five. But the fastest-growing company in web history is on pace to hit the billion dollar sales mark in just over two years - a remarkable feat for a company of less than 3,000 employees. Meet Groupon.

Every day, Groupon emails a steep discount of 50% - 90% for a product or service to its 14 million subscribers, featuring a local deal in each of its 300 cities across 29 countries. Groupon partners with local businesses in each of its markets, from Copenhagen to New York City, to offer discounts on items ranging from meals to yoga classes. These high-value deals are exclusive to Groupon subscribers, meaning they are never offered through any other channels. To capitalize on these opportunities, subscribers have 24 hours to purchase the deal online, at which point they receive a voucher for the vendor's offer.

For example, a voucher worth $140 at a local spa would be featured on Groupon as a daily deal, selling for only $70. In purchasing the deal, the subscriber receives a 50% discount, paying $70 for a voucher equivalent to $140 in services. Groupon generates revenue

by keeping a hefty 50% cut of the sales; for every voucher sold, Groupon pockets $35, while the spa retains $35. With businesses providing products or services worth more than four times the value of the revenue they receive, one wonders what the incentive is for vendors to partner with Groupon.

Making sense of the Groupon phenomenon

By offering such enticing deals through this novel channel, the spa hopes to gain new customers from its exposure amongst Groupon's large subscriber base. Groupon's subscribers also win, as they receive an exclusive deal. The Chicago-based company may be the biggest winner of all, raking in a generous commission that contributes to its projected 2010E revenues of $500 million. Groupon's market-leader status in the flash sales industry – time-limited email discounts offered exclusively to subscribers – suggests that its business aligns well with shifting social trends at the opportune time. The business model incorporates social networking as the cornerstone of its purchase process, whereby subscribers recommend membership and specific deals to friends.

The company's CEO, Andrew Mason, believes that Groupon has yet to exhaust its growth potential. Still a privately held company, Groupon has appeared on investors' radar, as evidenced by the $135 million (U.S.) it raised in an April financing round from Digital Sky Technologies. The level of interest shown by this Russian venture capital firm, renowned for financing internet giants such as Facebook and Zynga, might be indicative of Groupon's potential. Google seems to agree, as it reportedly showed interest in acquiring Groupon for a price upward of $3 billion (U.S.). With plans to continue geographic expansion and increase the number of vendor partners, Groupon will require significant financing to execute on its lofty goals. This leaves Mason and his team to decide where the money will come from: should Groupon accept Google's acquisition offer and sell out, or remain independent in the flash sales game and raise another round of financing itself? The answer to this question lies in understanding the company's value.

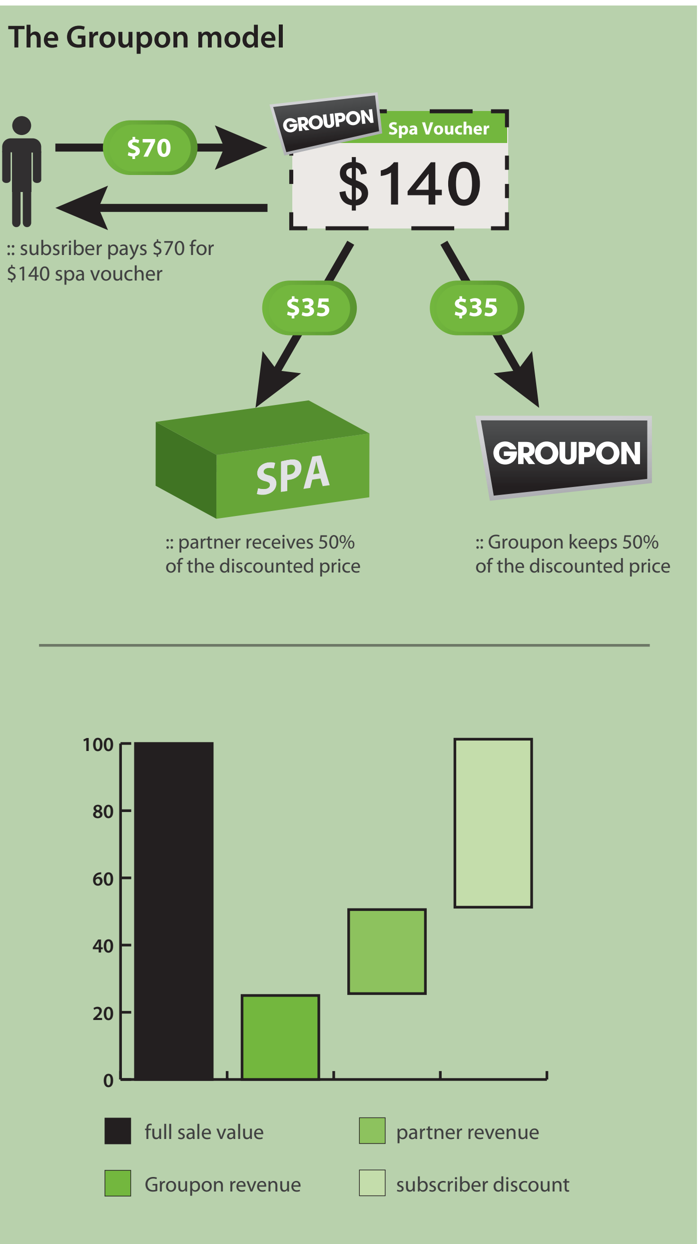
Where does Groupon's value lie?

In an industry marked by low barriers to entry, Groupon's market leadership and expertise form a tenuous competitive advantage. New entrants can easily mimic Groupon's deal-a-day model, as seen by the hundreds of imitators worldwide. Large players with the brand recognition and financial backing to challenge Groupon are launching their own flash sales initiatives, such as Amazon, AOL and Facebook. As competition intensifies in this market, Groupon's leadership position will likely erode.

Unable to defend against new entrants, Groupon may rely on its subscribers as the source of its value. The company boasts the largest subscriber base, currently at 14 million, easily ahead of rival LivingSocial in second place at 10 million. Despite this gap, Groupon's four million subscriber cushion does not provide a sustainable advantage. As competitors raise funds to grow and acquire niche deal-a-day sites, their subscriber base also rises rapidly to erode Groupon's market leadership. In this scenario, the value of the Groupon brand would be diminished, leaving the company with little bargaining power among its vendor partners. Given that Groupon's current subscriber advantage is slowly slipping away, its value as an acquisition target may not remain high for very long.

While it may be easy for competitors to enter the flash sales industry due to low barriers to entry and high perceived value in subscriber numbers, Groupon may still possess an overlooked weapon. As the dominant player, a large part of Groupon's credibility is derived from its vendor partners. In fact, vendor demand for Groupon partnerships is so strong that the company can afford to be selective, turning down seven small businesses for every one that it features. In addition, 95% of past vendors claim they would participate again. This demand suggests that Groupon's true value does not lie in its industry, subscriber base or brand, but rather in the existing vendor relationships.

Considering the $3 billion (U.S.) offer, one must question how much Groupon's valuable vendor relationships and established sales efforts are truly worth. For this price, Google would be paying approximately $214 (U.S.) per subscriber or $10 million (U.S.) per city to secure Groupon's relationships and presence. Given that these relationships are with small local businesses, it seems absurd to believe that Google could not enter the flash sales market itself for less, especially when considering the recognition



and reach of Google's brand. Google could easily leverage its existing sales relationships with small business search and map clients to challenge Groupon, for much less than $3 billion (U.S.). Perhaps Google is willing to overpay simply to ensure it does not lose out to another bidder, such as Yahoo!, who was proposing an acquisition only weeks before Google's offer. Moreover, Google may recognize Groupon as a way to decrease its reliance on search advertising revenue by expanding Groupon's reach to its own 177 million Gmail users. Regardless of Google's agenda, Groupon should consider this offer very seriously by weighing the terms against its internal assessment of its future, standalone prospects.

Reality check

Realizing that its true value lies in its vendor relationships, Groupon's decision to sell or stay the course must consider how it will retain its small business partners. Competitors may soon present more compelling offers, including lower commission rates to benefit vendors or even targeted deals specified to consumers' interests. Groupon typically commands a 50% cut of voucher sales, while competitors such as LivingSocial take only 30%. This undercutting of Groupon's price may threaten the company's advantage in its vendor relationships, as competitors offer small businesses better value.

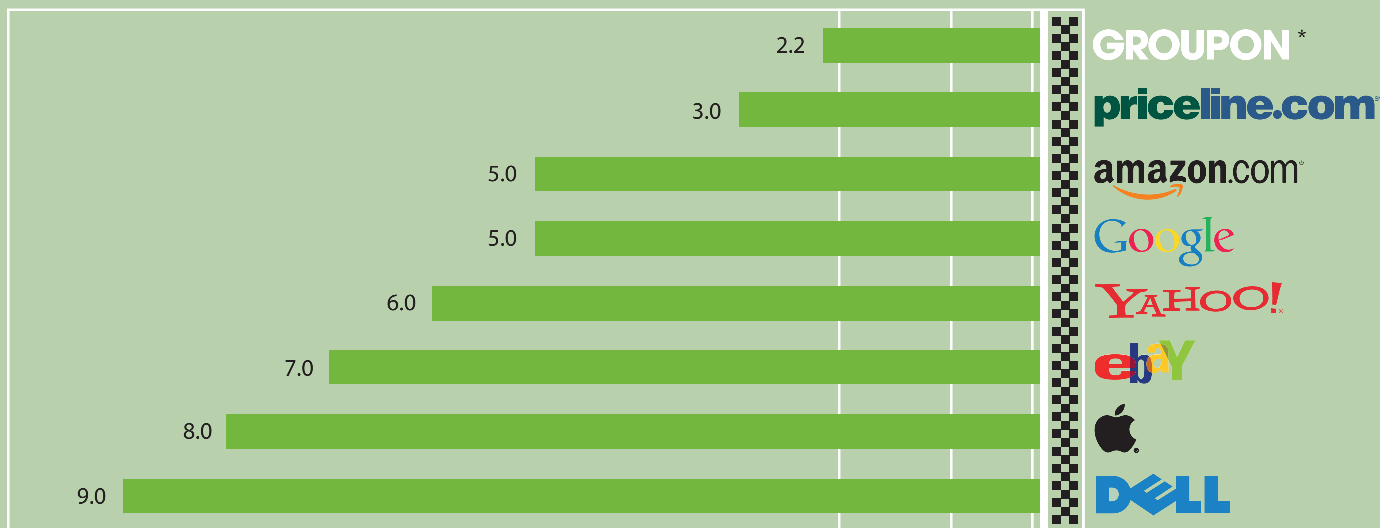
Competition is not the only challenge Groupon must be cognizant of going forward. Vendors may also begin to lose interest in Groupon as they realize the deal-a-day service is not necessarily suitable for their business. Launching a Groupon offer may in fact be disastrous for a small business when one considers Groupon's hefty cut and the potentially massive flood of customers. While some small businesses may be willing to take a loss to gain new customers, others are unable to handle such volume. Groupon has inadvertently created a new problem for its small business partners: what happens when you have *too much* demand?

Recently, a Boston helicopter city tour operator partnered with Groupon, only to receive an overwhelming number of purchases; it had expected to sell 200 - 500 vouchers, but had to beg Groupon to shut down the deal by 11:00 a.m. after selling 2,600 vouchers. To accommodate the unanticipated influx of customers seeking to redeem this voucher, the helicopter company has had to honour its obligation at the discounted ticket price, severely compromising on margins. As the risks of partnering with Groupon are publicized, the Groupon bubble may slowly begin to deflate.

One must also question how valuable Groupon consumers are to a small business. Partnering businesses seek exposure with the ultimate goal of converting trial consumers into repeat customers. However, these buyers are typically bargain-hunters, who would likely never purchase a business' product or service without the Groupon offer. These individuals are thus more likely to wait for the next voucher for a similar product than to become a repeat customer. As vendors fail to realize their goal of developing repeat business, they may reconsider their support for Groupon.

Groupon's market-leading position suddenly appears far more precarious based on these threats to its business model. The company should sell before these flaws become apparent; otherwise, it will be too late to exit the game. The question, however, is whether this two year-old is ready to sell.

It may be more a matter of opportunity than of readiness. Groupon must understand the length of its selling window - the earlier it can sell, the better. Its current hype and level of success are not sustainable. Akin to what happened during the tech bubble of the late 1990s, analysts are applauding Groupon for all the wrong reasons. They overlook future prospects in the myopia of the company's newsworthy growth story. Remembering that the tech bubble also seemed invincible at one point in time, Groupon may well be the bubble of today - a newborn company destined to crash. The time to sell is now, while the company is in the spotlight and Google's or another investor's ears are open. It is only a matter of time before the Groupon bubble bursts, leaving the company with a clear answer: take the money and run.



What to do with 500 Million Friends

Written by Alex Angelov and Alex Wong

Share

What is Facebook?

If this question was posed to the average person, they would answer, "A social network that allows users to interact with friends and family." If you then asked, "How does Facebook operate as a business?" the same respondent would struggle to provide an appropriate answer. What began as a dorm-room project at Harvard, over six years ago, has snowballed into an anomaly amongst modern day corporations. Founded by Mark Zuckerberg, Facebook has over 500 million members in over 180 countries. As Facebook continues to stun the business world with unprecedented growth, investors are anxious to buy into the company. It is speculated that Facebook will offer an IPO in the near future, making it important for prospective investors to understand the drivers of Facebook's value. With current revenues of over $1 billion (U.S.), the company has achieved far greater success compared to any other social network. There has been great debate surrounding Facebook's worth as valuations range from $10 billion to $30 billion. Much of this debate stems from ambiguity and confusion surrounding Facebook's business model and revenue streams.

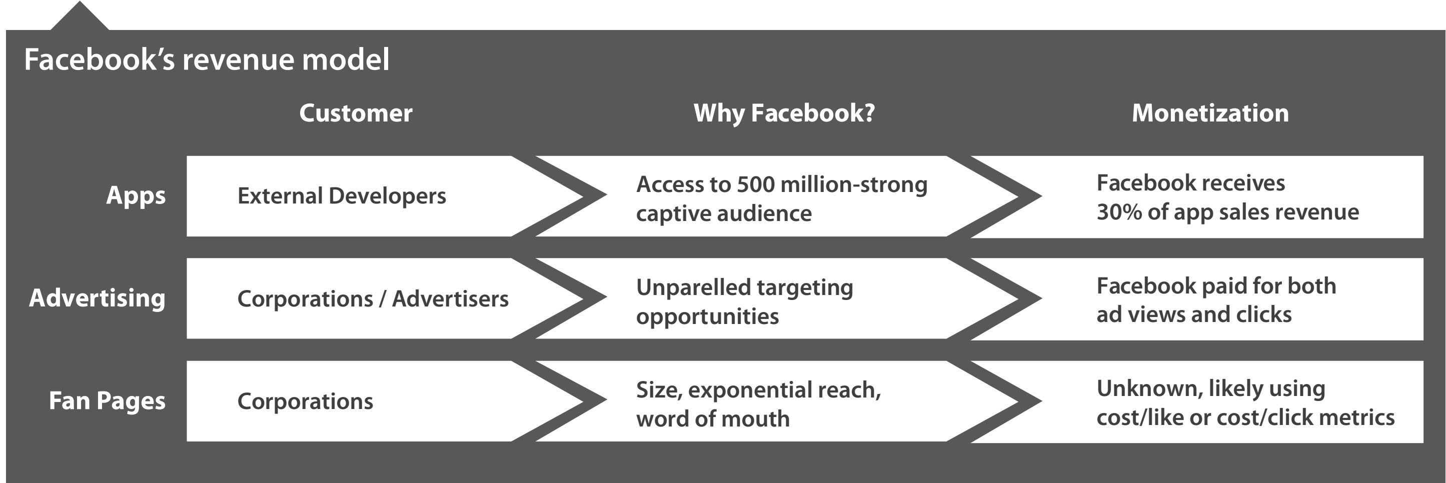
"... no other business can instantly identify the reach of an advertisement targeting 22-year-old males in California who enjoy working out, Laguna Beach and Justin Timberlake."

What drives Facebook's value?

Facebook's value is derived from three streams of revenue: online apps, banner ads and corporate fan pages. Applications on Facebook are free for use but encourage users to purchase add-ons to enhance the app experience. Banner ads operate similarly to traditional social media websites, in which companies pay to have users see their advertisements on a cost per click (CPC) or cost per impression (CPM) basis. The main driver of Facebook's value is its newest revenue stream: sales through corporate fan pages. Corporations may submit a fan page for users to 'Like' a brand or product, which initiates a word-of-mouth effect that allows a brand message to grow exponentially.

Facebook began offering apps to members as a method for increasing the amount of time a user spends on the website. The company does not partake in application design; instead, Facebook allows third parties to operate on the site and charges them a 30% commission on app revenue. This practice reduces the risk of unsuccessful applications and development expenditures. For example, Zynga, a third-party specialist, has launched extremely successful games, including Farmville, Mafia Wars and Cafe World. The massive success of app companies has spurred rapid industry growth, as demonstrated by over 15,000 unique applications currently offered. Facebook maintains the power in these relationships, as developers of these applications must use Facebook to succeed.

Facebook's advertising revenues are primarily driven by its ability to provide unmatched flexibility to advertisers. Although corporations use traditional banner ads, Facebook's deep user database creates the ability to advertise only to specific consumer subsets. For example, no other business can instantly identify the reach of an advertisement targeting 22-year-old males in California who enjoy working out, Laguna Beach and Justin Timberlake.



Facebook's revenue model

	Customer	Why Facebook?	Monetization
Apps	External Developers	Access to 500 million-strong captive audience	Facebook receives 30% of app sales revenue
Advertising	Corporations / Advertisers	Unparelled targeting opportunities	Facebook paid for both ad views and clicks
Fan Pages	Corporations	Size, exponential reach, word of mouth	Unknown, likely using cost/like or cost/click metrics

Further flexibility is provided by offering choices between CPC and CPM and by adjusting prices based on daily demand and supply. However, this revenue stream has plenty of room for improvement. Clients experience a very low clickthrough rate at 0.1%, compared to others such as Google's 10%. Facebook offsets this low clickthrough rate by offering clients an opportunity to improve brand recognition, as 23% of time online is spent on social networks.

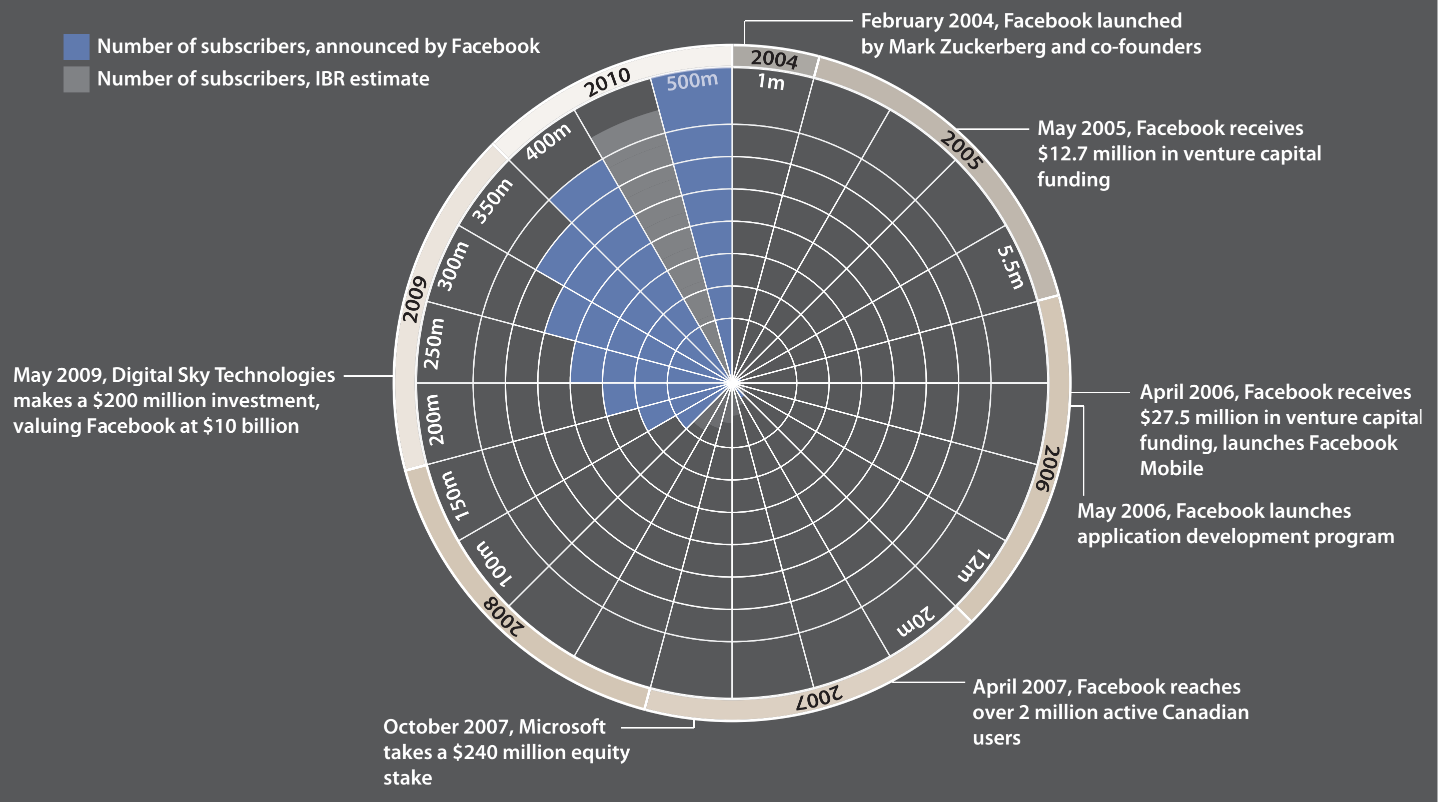
Fan page revenues are a more recent addition to Facebook's business model. Initially, these pages were free, but Facebook has recently begun to monetize them. Since Facebook is privately held, the details of such contracts are not publicly available but a number of theories exist as to how corporations are charged. Instead of a set monthly fee, it is more likely that Facebook charges a performance-based fee in addition to a monthly payment. In this model, Facebook could charge based on views, fans, or 'Likes' once a page reaches a certain viewership level.

Corporations stand to gain from fan pages since they use social reinforcement and can expand exponentially. When users 'Like' a brand, their friends are informed of their decision, either on their profile or home pages, creating an 'earned media' effect. Since each 'Like' is shown to multiple users, it can quickly propagate through the huge Facebook community; Nike has 3 million 'Likes', Coca-Cola 20 million and Starbucks 18 million. Companies can also use their pages to advertise at low cost in an interactive test market. For example, Nike posted a pilot commercial to their page during the 2010 World Cup, receiving feedback and gaining exposure while avoiding expensive advertising rates. Facebook is continuing to use its 'Like' button and now allows companies to feature the button on external web pages, resulting in even more fan page growth.

What kind of company would you compare Facebook to?

To value Facebook, analysts and potential investors would traditionally categorize the company and attempt to compare it to industry competitors. However, Facebook's varying revenue streams indicate that the company cannot be simply categorized. Since it is clearly much more than a social network, prospective investors may instead associate Facebook with other websites such as YouTube and Google. However, Facebook differs from these mediums as well through its detailed user database. This resource implies that Facebook is also a market research firm that can help companies by collecting and analyzing data about consumer buying patterns and habits. Thus, Facebook has transformed from a social network that was unable to leverage its user base into a successful advertising medium with the data analysis capabilities of a market research firm.

> "Facebook has transformed from a social network that was unable to leverage its user base into a successful advertising medium with the data analysis capabilities of a market research firm. "



The future of Facebook

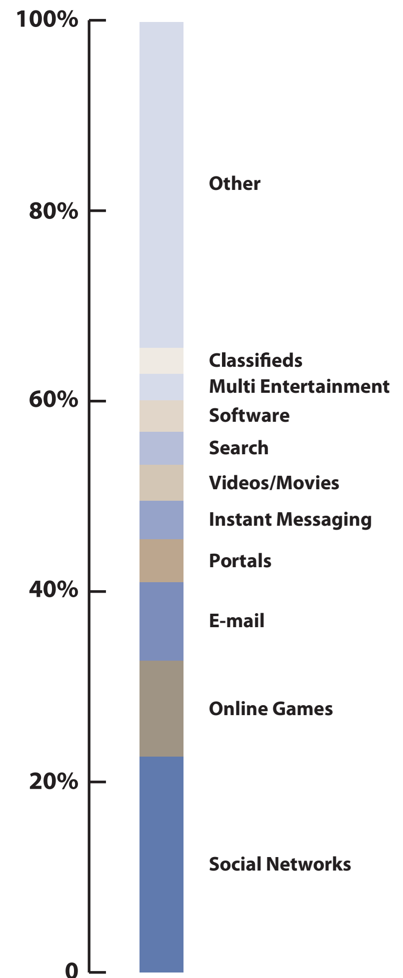
With a billion dollars in revenue and a new direction, is Facebook really worth $30 billion? Not yet. But the potential for such a valuation is real. As Facebook seeks to unlock its promise, it is crucial that the company continue to carefully manage its growth, while leveraging its scale and unrivalled user information. Currently, the company allows clients to use its database as a targeting tool. They should take the targeting approach one step further by using the database to help firms develop successful marketing strategies. Facebook should hire market research specialists to effectively leverage its massive database for internal and client use.

By helping corporations strategically use its data, Facebook will enhance customer insight and make itself increasingly irreplaceable to its clients. This strategy, however, may see increased challenges with regard to privacy issues and regulations. The way in which Facebook collects data compromises the ability to profit from user information, as the average consumer is not expecting to have their information sold.

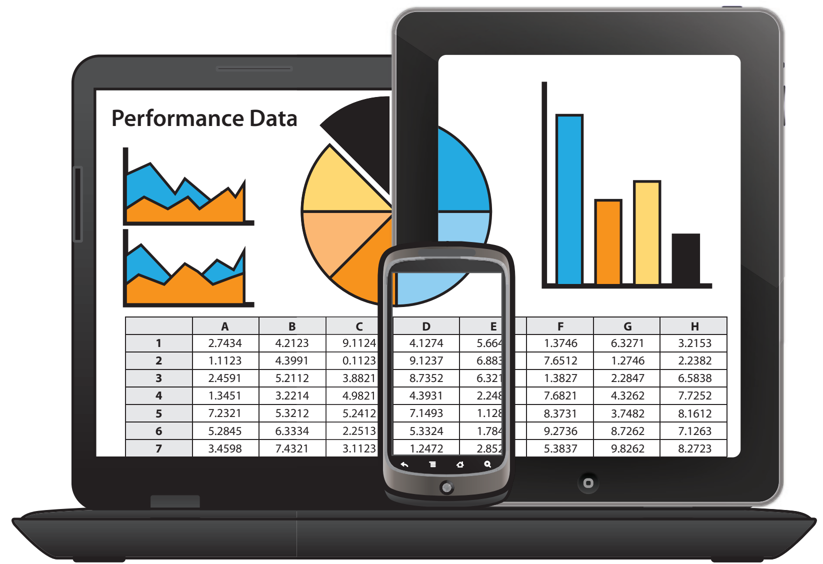
To avoid these constraints, Facebook could only sell overarching trends and patterns. Facebook profile pages contain a plethora of valuable information. Access to 500 million of these pages is a powerful resource which most businesses could only dream. Facebook must make sure to leverage this data fully.

After fully monetizing the aforementioned revenue streams, Facebook can integrate other internet-based services into the current business model. On November 15th, 2010, after acquiring the domain name fb.com, Facebook announced its plan to integrate e-mail into its platform to compete directly with the likes of Google, Microsoft, and Yahoo. Facebook may also eventually compete with other high-traffic websites through the introduction of video conferencing and video hosting. Platform expansion will allow Facebook to achieve revenue growth in each of its advertisement streams.

As users spend more time on Facebook by checking their email or video conferencing with friends, the reach and effectiveness of Facebook's advertisements will increase in value accordingly. The possibilities are endless for Facebook. Looking outside the Internet realm, Facebook could establish itself as a technological conglomerate and compete in the mobile phone industry. Given the company's technical expertise, Facebook could even one day join the Mac/Windows rivalry and create operating software of its own. Some of these endeavours may seem far-fetched, but few people saw Google achieving the success it has experienced. After all, it started as a simple search engine. Facebook started as a social network.



Deconstructing the Cloud



Written by Alex Cook and Shiv Daryani

The future of technology is in cloud computing, yet surprisingly few people know how this phenomenon is radically changing the way businesses interact with technology. In its most basic form, cloud computing refers to computing power delivered over the internet. The cloud gives users the ability to access and share software and data remotely over the internet rather than using local hardware or software. Although many managers are aware of the cloud's benefits to operations, they have been hesitant to make the leap because of fears surrounding data control and security. However, businesses must transition to the cloud to keep up with a rapidly-evolving technology landscape.

Leveraging cloud computing will provide enormous productivity and efficiency gains. Suppliers of technological services in particular stand to gain through properly understanding the system and its implications. Corporate leaders must overcome their fears and embrace the cloud to remain competitive.

Why will businesses shift to the cloud?

Cloud computing can help computer-using corporations in three primary ways: reduced IT costs, increased flexibility / scalability and better worker productivity. Although different companies will benefit more from certain aspects, virtually all corporations stand to gain from the switch in some manner.

Cloud computing can reduce both technology investment and operational costs. Instead of purchasing mainframes for storing and accessing data in-house, businesses can outsource to a cloud provider with a warehouse of mainframes that acts as a remote computing platform. According to McKinsey & Company, many companies use only 6% of server capacity and 50% of overall on-premise capacity, so a centralization of computing resources will improve the utilization and efficiency of hardware. As companies shift to cloud computing, more of the IT budget will be spent on third-party outsourcing with a net reduction to total IT expenditures. A shift to the cloud also benefits businesses because specialized third-party engineers run the systems. These engineers are cloud infrastructure experts, who are better able to maximize service performance than isolated, internal teams.

"According to McKinsey & Company, many companies use only 6% of server capacity and 50% of overall on-premise capacity, so a centralization of computing resources will improve the utilization and efficiency of hardware."

Shifting to cloud computing will also help businesses increase the flexibility and scalability of their services. By paying on a per-use basis, corporations will be better able to handle fluctuations in computing power requirements. The cloud will be easier to grow, as there will be no incremental IT capital expenditures but simply increased usage fees that are directly proportional to services used with minimal wastage.

Devices as small as a smartphone can be utilized more effectively through cloud computing, as users can now access innovative software solutions on the cloud from anywhere. The International Data Corporation (IDC), the premier market intelligence provider for the consumer technology market, predicts that 75% of the US workforce will be mobile by 2011. Fundamentally, workers will be more productive as they begin to take advantage of mobile cloud capabilities, such as universal access to customer relationship management applications. Although the benefit is difficult to quantify, more productive mobile workers will translate into increased revenues.

Security and control concerns

The two biggest obstacles preventing rapid business adoption of cloud computing are security and control concerns. Forrester Research estimates that 50% of businesses cite security concerns as the primary reason for not using the cloud. Of that 50%, 65%

say data protection and access controls are the underlying issues. Many business professionals are wary of moving their entire computing operations to cloud not only because they do not understand how it works, but also because they have limited control over it. What most businesses do not realize is that they have already given up significant control and are heavy cloud users. The BlackBerry Enterprise Server is a form of cloud computing, as are Microsoft Exchange and other email providers. Many corporations' most sensitive information is currently being passed through the cloud. Providers of cloud services can help overcome these fears by increasing their focus on security. For example, HP purchased Arcsight, a company specializing in enterprise threat and risk management. Vendors must demonstrate and emphasize security capabilities to alleviate concerns.

The impact on traditional corporations

The ramifications of cloud computing differ by style and size of business. For large, established companies, the effect will be more operational than strategic. Since competitors will also be shifting to the cloud, the only possible outcome is slightly reduced IT costs and increased worker productivity. Conversely, entrepreneurs and small businesses stand to gain the most from cloud computing. Increased scalability and cost reductions can help reduce the operational requirements of increasing sales, enabling quicker implementation of new business ideas.

> "50% of businesses cite security concerns as the primary reason for not using the cloud."

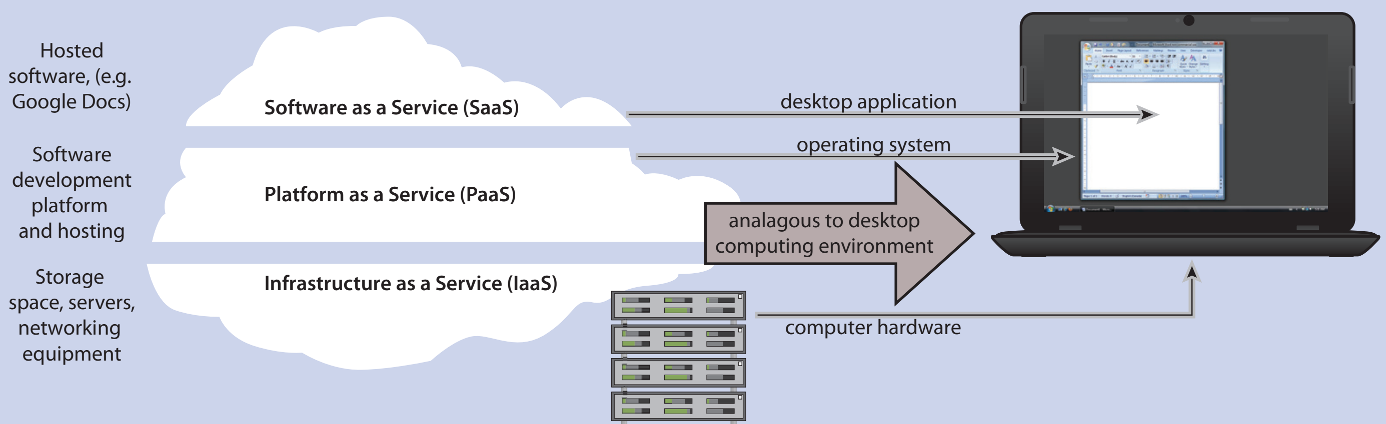
Large companies will not gain a long-term competitive advantage from cloud computing yet adoption will be necessary to remain competitive. In this way, the use of cloud computing is essentially a zero sum game; technological advancement does not create a sustainable competitive advantage when everyone has the potential to access it. Businesses that adopt cloud computing will realize gains but no single company in particular benefits more than others. Just as the business world as a whole became more productive with the invention of computers, businesses will be more collectively productive after transitioning to the cloud.

For entrepreneurs and small companies, cloud computing can significantly aid growth through its flexibility and scalability. The technological gap between large and small companies will be reduced as mass cloud computing is integrated. The cloud also has the potential to be one of the key drivers for technological innovation, as it lowers barriers to entry for those who traditionally could not afford to develop technological solutions. If a company has a brilliant idea for a software application, the transition from idea to implementation is more realistic with less onerous capital expenditures. For example, an independent trader who develops a unique trading model will not need to invest in the computing infrastructure to create and run the algorithm. Instead, she can rent the capacity for data storage, software development and software deployment on a per usage basis and compete on a much bigger scale than would be possible with local resources.

The impact on providers

The rise of the cloud will also fundamentally change the economics of the hardware industry. As companies use cloud services more, they will purchase less on-premise enterprise hardware. Instead of selling mainframes and datacenter components to every company that uses computers, a small number of cloud providers will make purchases to power their clouds. With the consolidation of computing power, utilization will increase and serve to lower aggregate demand for these products. As a result, enterprise hardware prices will decline significantly and yield lower margins for producers. This outcome is one of the reasons that companies like IBM and HP are diversifying their core businesses away from traditional hardware strengths. At the same time, hardware manufacturers have the opportunity to save costs with more uniform product lines, as the demands of cloud providers will likely be the same. Enterprise IT firms will gain from decreased customization but lose on pricing.

The supply of cloud computing software will come primarily from large corporations. Although traditional IT solutions have often



been provided by smaller firms, businesses with sensitive information – that is, most businesses – will shift to larger firms with trustworthy track records. Large firms can also hasten product update cycles since any software changes can be simultaneously transferred to all consumers.

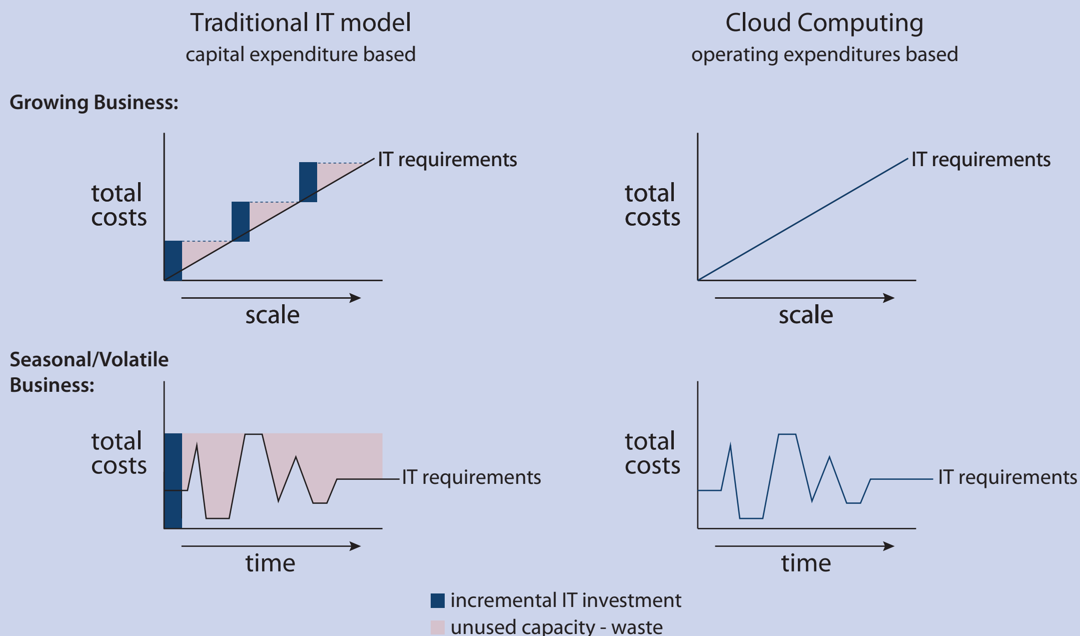
Portal to the cloud

As cloud computing advances, the web browser will become the single most important application on a computer and the power of an operating system will become irrelevant. In effect, hardware, via the internet, will only act as a portal to the cloud. The changing focus of technology is most clearly seen in smartphones and tablets, which are essentially portals to their application clouds. The importance of a lean, fast operating system is abundantly clear on these devices. Microsoft has produced tablets for multiple years, but has been unsuccessful because of their more cumbersome operating systems.

In computers, Google is in a strong position to capitalize on this shift through their new Chrome OS operating system. The operating system is essentially a web browser that enables users to access and save programs such as Google Docs, a replacement for desktop word processors and spreadsheet applications, online. The result is a lean operating system built for speed. Microsoft's incumbent Windows operating system is at an appreciable disadvantage: Windows 7 uses 20GB of hard drive space – significantly more than Chrome OS uses. Microsoft is not well positioned to deliver computing products that take advantage of the cloud computing shift. If Microsoft does not respect this shift and offer a product to compete with Chrome, it could very well be the end of Windows.

Traditional hardware and software companies must make an aggressive shift to cloud-based product offerings to meet consumer and business demands that will fundamentally change over the next five years. Without this shift, companies risk becoming another footnote in the long history of failed tech firms.

Cost advantages of cloud computing



Cloud computing allows organizations to pay only for the infrastructure they actually require at any given time.

Truth.

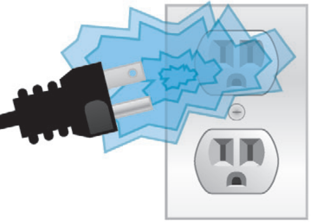
What matters most

Discover the truth at **www.deloitte.ca/careers**

Deloitte.

© Deloitte & Touche LLP and affiliated entities.

CHEVROLET VOLT shorting out GM'S RECOVERY



Written by Eric Ng and Martin Wong

The story of the Chevrolet Volt began in 2007 when the Tesla Roadster, a high performance electric vehicle (EV) hit the road. The Roadster was popular among electric car enthusiasts and there seemed to be a revival of interest for EVs. Amidst internal opposition from GM's own engineers, then-Vice Chairman Bob Lutz revived the company's efforts in the technology. Three years later, with over $1 billion (U.S.) invested in research and development, the Chevrolet Volt is debuting to mixed response.

GM filed for Chapter 11 on June 1, 2009 and took a $60 billion (U.S.) bailout package from the American and Canadian governments to stay afloat. The bailout was by no means a popular decision: a Rasmussen Reports study found that 67% of American voters were opposed to the bailout. Although the government anticipated it would lose money, GM has been largely unencumbered by financial obligations – it is in as good a position as ever to repay its taxpayer saviours. GM's CEO acknowledged the great responsibility that the company holds to repay governments: "We know who stood by us in our most difficult time." GM has an absolute responsibility to reward policy makers and taxpayers for providing a politically unpopular lifeline. Anything short of full repayment would be unacceptable to the electorate.

GM recently completed an IPO at $33 (U.S.) per share. Given the remaining stakes the U.S. and Canadian governments hold, the breakeven point for the bailout package is estimated at $53 (U.S.) per share for the remainder. With administrations and GM both eager for governments to shed their stakes, a run in the stock price to $53 (U.S.) would require visible, significant profitability growth in the near term. GM's window to properly thank taxpayers is rapidly closing: Reuters reported that "the [government's exit] strategy… would get the government out of GM entirely before the end of the next presidential term." GM's primary focus for the next four years should be developing a track record of profitability.

The Volt is meant to spearhead a streamlined portfolio as an integral driver of GM's turnaround strategy. With $60 billion (U.S.) of U.S. and Canadian taxpayer dollars on the line, and the timeframe to fully repay governments narrowing, the Chevrolet Volt is GM's high conviction bet on a very uncertain future. The real concern is moral hazard; it has always been easy to bet someone else's chips.

GM lags in the EV market

There are currently three primary competitors in the American EV market:

Tesla's Roadster is a pure electric sports car aimed toward affluent, performance-oriented customers, but has only sold 1,000 units since its 2007 introduction. It has, however, given Tesla valuable customer insight that the company hopes to apply with its second, IPO-funded Tesla S sedan. The S is scheduled to launch in 2012. Tesla itself is focused entirely on EVs and its success with the Roadster has made the company the EV figurehead.

The Nissan Leaf is a pure electric vehicle designed primarily for urban driving. The car is targeted at environmentally-conscious, middle-aged owners, many of whom are looking to move from a hybrid to an EV. It comes as the fruit of Nissan's 17 years of research and development of EVs. The Leaf will be launching in December 2010 and already has 17,000 pre-orders.

The Chevrolet Volt is an extended range hybrid positioned as a replacement for a family's primary vehicle. The Volt aims to penetrate the segments of high income early adopters and environmentally-motivated tech enthusiasts. The Volt, like the Leaf, will launch in December 2010. GM expects to sell 10,000 Volts during its first year of production. It is interesting to note that GM developed its first EV in 1996, but halted production after 1,000 cars and declared it unprofitable.

> "GM has an absolute responsibility to reward policy makers and taxpayers for providing a politically unpopular lifeline."

Although the Volt has similar performance and charge times to the Leaf, the Volt is more expensive with its key differentiator being a gas-supplemented total driving range. The hybrid nature of the Volt makes its green perception less impactful than pure electrics.

GM is the laggard in the electric vehicle market. GM abandoned its development advantage in 1996, which allowed Tesla to define the electric vehicle market in 2007. The Volt's forecasted sales are already lower than the Leaf's pre-order backlog. Tesla has been selling EVs for two years and Nissan has 14 more years of R&D experience than GM. In the end, GM has even failed to deliver on its vision of an electric vehicle – the Volt is a hybrid rather than the pure EV GM has been touting.

Volt will see challenges in a small, uncertain EV market

Studies on the Toyota Prius present a compelling opportunity for market intelligence. Given that the Volt is essentially a hybrid, buyers' motivations are likely common between the two products. The Prius commands nearly half of the hybrid market and thus gives a good cross-section of the Volt's potential consumers.

The Volt, with its hefty price tag of $41,000 ($33,500 after federal tax credits), will likely encounter significant barriers to adoption by the 75% of U.S. families with income below $100,000. Buying the Volt for the gas savings is strongly undermined by studies like Daniel Indiviglio's that concluded Volt owners need to drive approximately 200,000 miles for the premium to pay off compared to a Toyota Corolla. With the U.S. Environmental Protection Agency's average annual passenger vehicle mileage of 12,000 miles, the breakeven period is 17 years – well beyond the eight year expected battery life.

Indiviglio's study also shows that higher income customers value the 'green' image of the Prius quite highly. For high income customers, the opportunity cost of going green with the Prius' environmental image was minimized by a lower price tag of $23,000 (U.S.). Alternatively, the $41,000 (U.S.) spent on the Volt could be spent on a more prestigious BMW 335. High income customers may shy away from buying green when the same amount of money buys them status.

As of 2010, the consumer buying behaviour for EVs seems unfavourable for the Volt. The price is too high for low-income customers to reap savings on gas and too high for high-income customers to justify the purchase when they can afford luxury vehicles. The Volt only delivers average performance and the infrastructure to support the EV market is too limited to provide a true opportunity for the Volt to contribute to GM's ability to repay taxpayers.

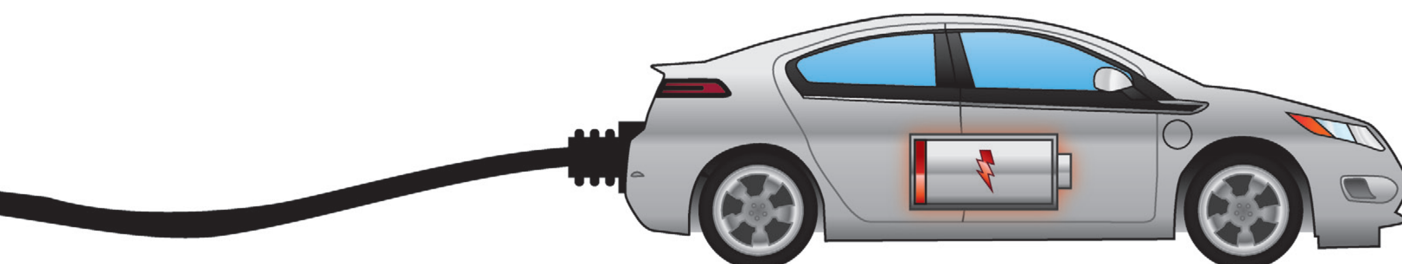
Current market forecasts leave GM far from recouping investment

With $1 billion invested and an estimated margin of 14%, GM will need to sell approximately 178,000 Volts to recoup its initial investment. With industry projections placing EV sales in the United States at 100,000 in 2020, the EV market is certainly not big enough for GM to deliver good ROI, even before considering competitors. Other automotive manufacturers are focusing on hybrid vehicles for the foreseeable future. GM is positioning itself quite aggressively, given its relatively precarious financial position, to capitalize on an undeveloped and uncertain EV market.

GM still has options to capture EV upside

In a best case scenario, if the EV market does emerge larger than current forecasts, GM still needs substantial R&D investment against competitors like Nissan that have already spent 16 years developing EV technology and EV-specialized companies like Tesla. The scale of financing required to develop GM's Voltec technology is demonstrated by GM's 2009 request to the U.S. Department of Energy for an additional $2.6 billion (U.S.) to develop two Volt variants. Given that GM just emerged from bankruptcy, this request is uninspiring given returns on such investments are immensely uncertain.

Another point of concern is GM's past inability to develop a profitable portfolio of cars. Blunders like the Pontiac Aztec raise doubt of GM's R&D record: a 2007 Booz & Company report highlighted pre-bankrupt GM as the second largest R&D spender globally, spending $8 billion and doubling Nissan's R&D budget. Despite heavy spending, GM discontinued half of its car brands during the recent Chapter 11 reorganization – brands it could not



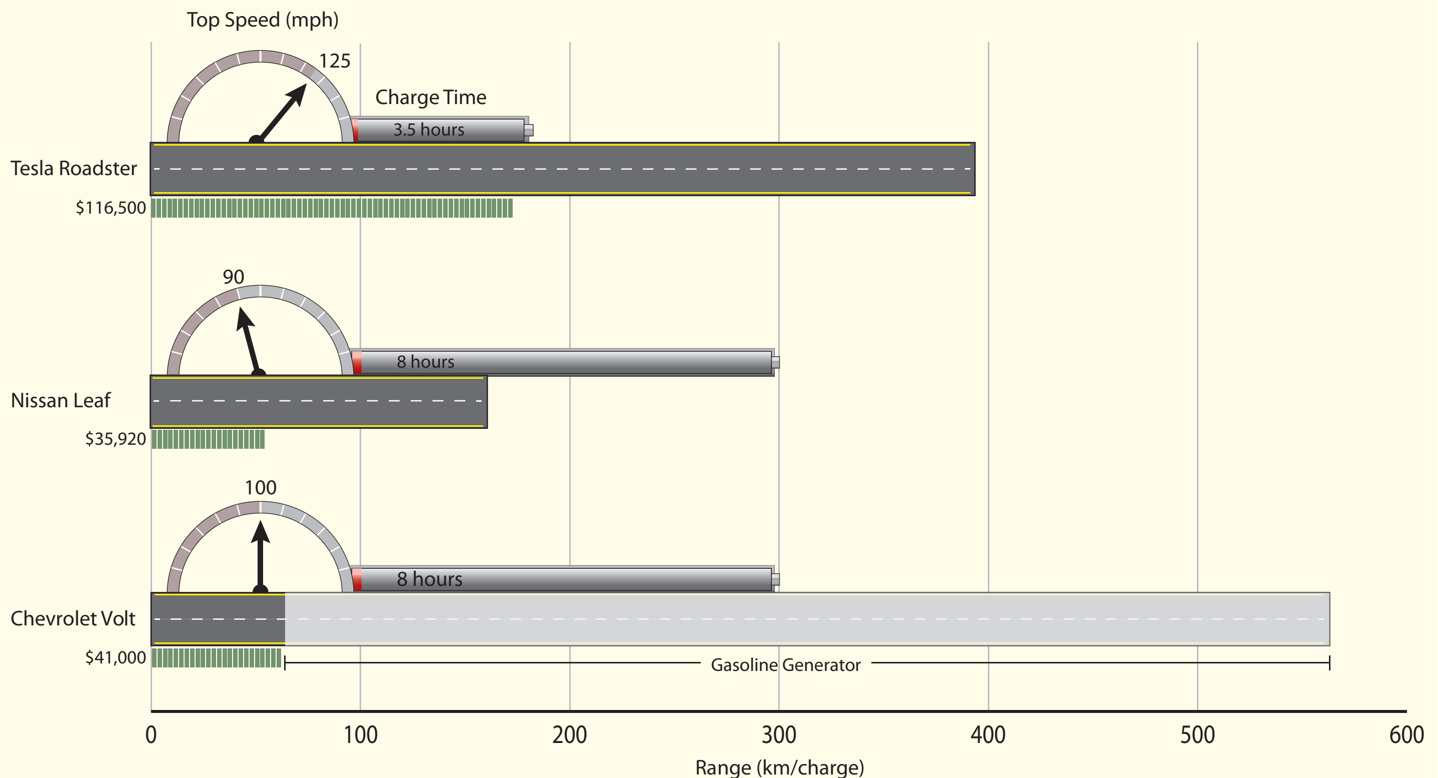
justify continued investment in after misguidedly developing them for years. Simply put, R&D catch-up becomes a disastrous game when the investments do not yield feasible cars.

When market leaders like Tesla are still working toward profit, it would be prudent of GM to focus on introducing cars like the wildly popular Chevy Cruze to establish financial stability. Without this focus, GM's ability to financially compete in the 2020 EV market and drive the equity appreciation to fully pay back taxpayers is highly questionable. By 2020, GM can re-evaluate a strong entry into the EV market after determining if the market is large enough to justify entry.

> "By 2020, GM can re-evaluate a strong entry into the EV market after determining if the market is large enough to justify entry."

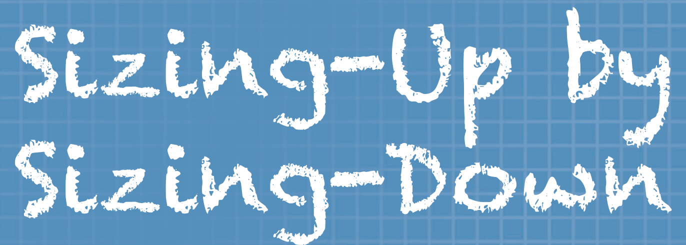
GM's best course of action, should it determine that the EV market does merit entry, is a strategic acquisition of an EV-focused automotive technology company. Such a partnership would allow GM to bring its mass-production expertise and retail network to technologies that have been conceptualized but not necessarily produced. Acquisition would also allow GM to focus management efforts and capital allocation on areas that can be profitable for GM as it tries to shed the 'Government Motors' moniker that has come to weigh on company morale and investor outlook. Toyota recently announced such a partnership with Tesla in May 2010. Given the current barriers to adoption, including present infrastructure limitations, pricing and market estimates, GM is better off allowing the market to develop while building investor confidence in its competency.

The Volt looks to stick taxpayers with the bill on an all-too-early foray into EV technology. Current market forecasts are too small for GM to recoup its investment in the foreseeable future and the uncertainty of these estimates will lead investors to ultimately discount EVs from valuations. Owners will see negligible EV benefit in the stock price for the next four years when the government hopes to sell its stake. GM's long-term gaze on a market with uncertain prospects is risking the company's entire portfolio of brands as resources are diverted from cars that can realize real returns and truly champion GM's turnaround strategy.



BANKING WITHOUT BORDERS

The fact that 51% of the world's population is under-banked presents an opportunity for lenders facing saturated domestic markets. Having fared the best of global competitors in the recent recession, Canadian lenders are well positioned to lead a global expansion. This section offers a blueprint on how Canadian banks should take advantage of this opportunity to best position themselves for the future.



Sizing-Up by Sizing-Down

The hidden treasures of microfinance

Written by Navid Nathoo

Canadian banks have dismissed the treasure of microfinance for its perceived dangers. Banks have failed to recognize that microfinance has changed since its infancy and is no longer plagued by insurmountable barriers and risks. Canadian banks must reconsider this once dangerous treasure; the time may finally be ripe to pursue this valuable opportunity.

Lost treasure

In the past, microfinance was seen as too risky for Canadian banks. Political instability in developing countries created significant economic uncertainties and civil unrest in other countries was a concern to businesses and their employees. Poor infrastructure and the absence of modern technology further compounded risk factors. However, the economies in many developing countries have since become more stable, resulting in new infrastructure and technologies. What were once seen as over-populated and failing countries, are now perceived as leaders in areas such as information technology and manufacturing. In addition, democracy has been spreading rapidly, forcing many goverments to act in their population's best interests. As political situations further stabilize in many international regions, finding an attractive area for microfinance businesses is becoming less problematic.

The largest barrier to entering the microfinance industry has ultimately been the question of profitability. Two forms of risk accompany microfinancing. The first is high default rates. Since microfinancing is not secured by collateral, many banks judged that the business would be subject to higher risk. However, according to the Microfinance Information Exchange (MIX), a leading business information provider that offers data analysis on microfinance lenders, the average charge-off ratio (write-offs to total loans) for over 1000 Microfinance Institutions (MFIs) has been 1.06% - 2.46% since 1997. In areas such as Egypt, Syria and Tunisia, the average charge-off ratio is as low as 0.55%. By contrast, in the first quarter of 2010, the U.S. Federal Deposit Insurance Corporation reported that the average U.S. bank with assets over $10 billion had a charge-off ratio of 3.50%, while Canadian charge-offs have ranged between 0.5% - 2% in the past 20 years. MIX and similar databases prove that, on average, default rates are relatively low in MFIs across the world.

The second risk preventing banks from entering the microfinance industry is the potential to make worthwhile profits. In 1992, Grameen Bank, a leader in microfinance, incurred a loss of approximately $80,000. During this time, microfinance was largely viewed as a form of charity, not a business. Internationally, banks shunned microfinance as being unprofitable. However, during the next decade, Grameen Bank, along with the microfinance industry in general, developed and improved business models. As a result, Grameen Bank was rewarded in 2009 with a profit of $5.3 million or a 5.64% return on equity, down from a 21.21% return on equity in 2008. Canada's TD Bank, meanwhile, reported a third quarter 2010 return on equity of 13.6%, according to research by Canaccord Genuity. Globally, MFIs are becoming more profitable than ever. Microfinance is not charity; it is a business that is both socially supportive and privately profitable.

Uncovering hidden treasure

The most important question now is the scale of microfinance's profitability. The total gross loan portfolio for MFIs was $65 billion across 91.3 million borrowers, according to 2009 industry statistics. Microfinance total gross loans have grown drastically, at 38.5% annually, from $1.2 billion in 1997. But, before pursuing microfinance, banks must calculate their profits rather than looking at the industry in aggregate. Typically, banks do not profit until at least their fourth year of operation. However, once a bank is established, it will likely experience rapid growth. Growth rates are continuously rising and statistics show that this is just the beginning of microfinance's potential. The average five-year start-up profit growth rate of successful MFIs is approximately 200% and the growth rate for established MFIs is as high as 20% - 40% annually. While profits may be delayed by a few years of investment, banks clearly have a significant opportunity to gain value from the growth of microfinance.

The value of loyalty

As international banks grow and mature in their respective countries, expansion initiatives will focus on developing countries. Canadian banks must seize the opportunity quickly before competition grows. By acting promptly, banks will be able to build loyalty without the threat of incoming institutions. Studies have shown there is a close correlation between loyalty, market share and revenue. Net Promoter® Score (NPS) is a tool used to monitor loyalty rates in Canadian businesses. The NPS for banks measures the likelihood that clients will refer their banks to others as the key indicator of loyalty to banks. The tool has consistently shown that banks with a higher NPS grow their revenue over time. Conversely, banks with a low NPS showed flat revenue growth. Overall, NPS studies indicate that customer satisfaction is directly correlated to revenue growth.

Exploring the total value of a borrower's worth to the bank is the best way to quantify the benefit of loyalty. In Bangladesh, the average starting loan is approximately $60. Many MFIs, such as Grameen Bank, allow borrowers to increase their loan amount based on repayment and character criteria. For example, if a borrowers attend all weekly meetings and repay interest and principal, they are granted an increase in loan principal of roughly 50% annually. Therefore, the loan amount can compound to $300 in five years and $2,300 in ten years – an increase of over 3,700%. A borrower will generate total interest payments of approximately $390 in five years and $3000 in ten years. Assuming the family is loyal to the bank, the lifetime present value of a borrower is approximately $31,000. Accordingly, Canadian banks could develop an economic moat by developing loyalty in all of their borrowers to capture their full lifetime value.

A lot of a little

Based on a $31,000 lifetime present value, many banks will underestimate the value of a microfinance borrower against the per person value of a developed country borrower. With over 80% of the world living under $10 per day, the high demand for microfinance is apparent. As previously stated, the current number of microfinance borrowers is already more than twice Canada's population and growing rapidly. With little competition and low barriers to entry at this time, Canadian banks will be able to access an immense pool of borrowers. High volume of transactions will compensate for low individual loan value. By pursuing a large, underserved market, Canadian banks can achieve a scale of profits to justify engaging in microfinance.

The building blocks

Canadian banks must rely on grassroots marketing and potential word-of -mouth advertising, to attract borrowers. This form of advertising is the most effective in developing countries and is being employed by many organizations such as Raising the Village, which targets segments of East Africa. The cost of this form of marketing is much lower than traditional media advertising. Organizations can also take effective tactical approaches to social marketing by sponsoring local events. Without the comparatively higher expenses of Canadian marketing initiatives, acquisition costs per borrower will be significantly lower than those in Canada.

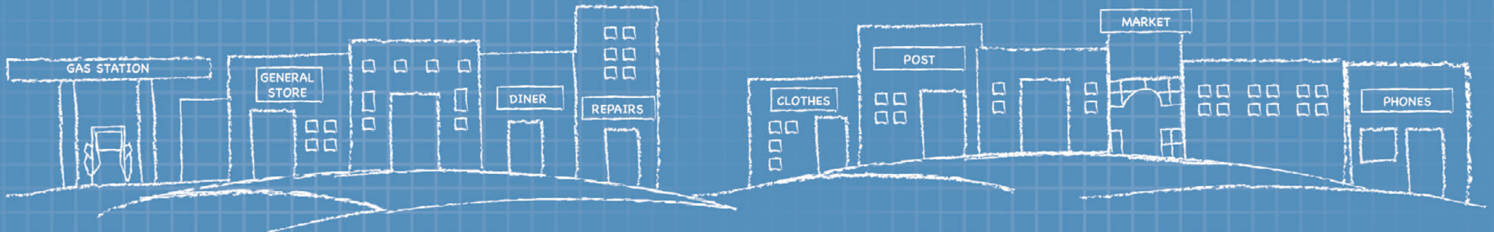
Without loyalty, banks will face great difficulty competing in the microfinance industry. According to an article on customer retention, loyalty to MFIs is based on client satisfaction. Satisfaction is created through the benefits of the product, the quality of customer service, the image of the MFI and emotional involvement of the borrower. This study also found that 85% of the customers in the sample renewed their loans. However, this number has room to increase if the MFIs or banks are thorough in dedicating their efforts to loyalty and gaining borrower trust from the outset.

The most influential loyalty driver is customer service, which loan officers provide on a micro level. To successfully build loyalty, Canadian banks must hire local loan officers whom the borrowers can identify with and trust. Developing loyalty by adapting to regional cultures will ultimately facilitate a sustainable and growing future for banks in developing countries.

Only the brave will prevail

The microfinance industry has built a strong foundation over the last two decades and will soon be viewed as the next step for many banks looking to grow internationally. Canadian banks should capitalize on this forthcoming opportunity of a large market with high profitability potential and weak competition. By gaining loyalty and establishing themselves early on, Canadian banks will be able to create the sustainable competitive advantage they need to grow rapidly. What was once perceived as a high-risk treasure is now available for the taking. Now is the time for Canadian banks to venture forth into international growth.

Underserved and Overlooked



How SMEs present a valid opportunity for banking abroad

Written by Ross Strike

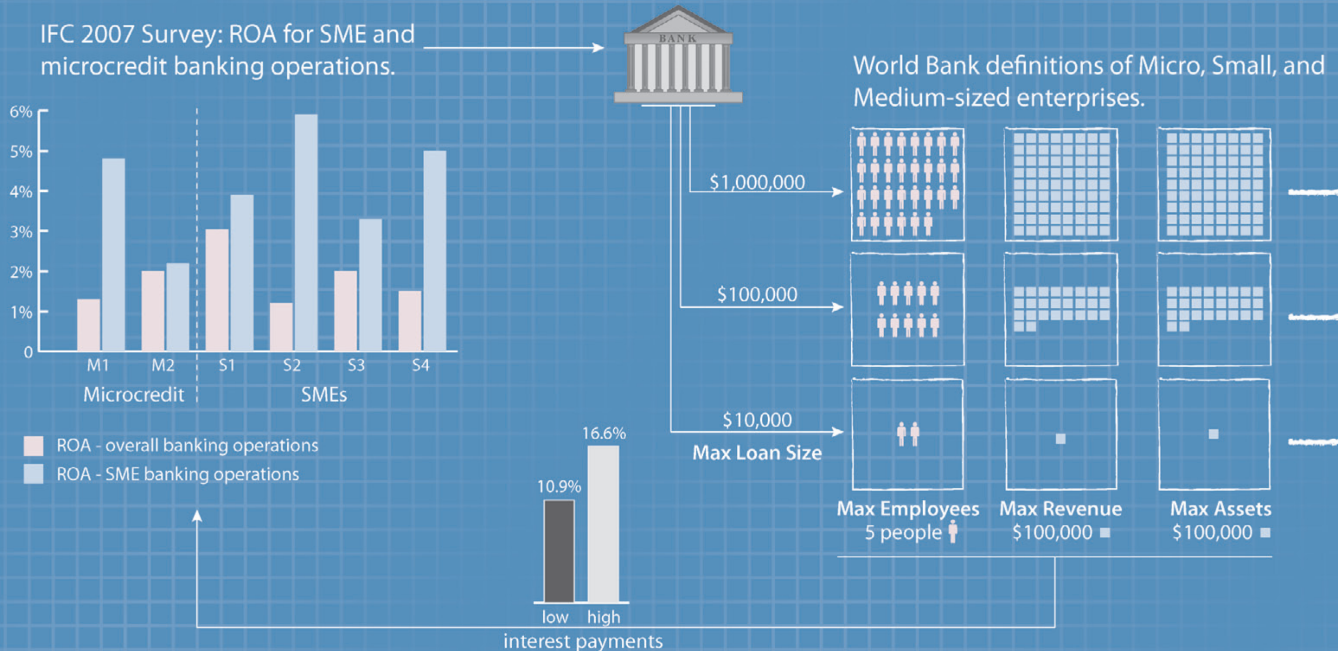
The window to gain a foothold in emerging markets is closing and most large international banks, especially Canadian banks, find themselves lacking adequate exposure. With competition intensifying for corporate and high net worth clients, banks must look to regions in earlier stages of development and market segments where they can leverage their core competencies.

One segment of high potential is small-to-medium enterprises (SMEs), firms that occupy the middle ground between informal microenterprises and large, corporate businesses. While the exact classification varies, the World Bank defines SMEs as employing between 10 and 300 employees, having between $100,000 and $15 million (U.S.) in assets and requiring loans of $10,000 - $1 million (U.S.). Historically viewed as a market too difficult to serve, SMEs have become a strategic target of banks around the world. However, opportunities for entry are quickly disappearing and banks must effectively position themselves in the next several years or risk losing the opportunity to enter emerging markets.

Serving SME clients profitably

It is a common misconception that small local banks, relying on soft relationship lending techniques, dominate this segment. In reality, large domestic and foreign banks have been shifting away from corporate clients and increasing their focus on SMEs in many countries. Recent years have also seen an influx of microfinance

Emerging market lending landscape



institutions moving upstream to serve the bottom-end of the SME segment.

Forays of either type of financial institution into the SME segment, however, have been limited and the segment remains severely under-banked. Often, firms in this 'missing middle' have financial requirements too large for microfinance, but too small to be effectively served by corporate banking models.

The segment remains underserved because, historically, banks have had difficulty catering to SMEs profitably. It was widely assumed that effective risk management was only possible through the relationship lending method, which requires intensive contact with borrowers and thus is difficult to scale. Unable to achieve the necessary scale, most banks viewed the dual challenge of higher credit risk and cost of service as insurmountable.

> "The proportion of businesses classified as SMEs will rise dramatically in coming years as emerging economies mature and many informal micro-enterprises transform into legitimate businesses."

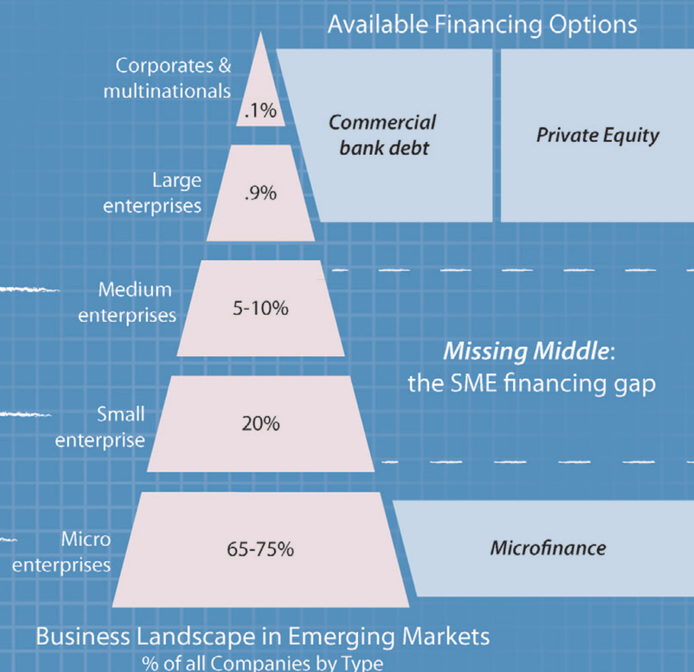
Today, many SME banking operations use sophisticated high-volume approaches, include statistical inputs in credit risk assessment and provide an array of cost-effective services. Standard Chartered serves SME clients in 30 countries and currently has deposits of $29 billion (U.S.) growing at nearly 30% annually; earnings generated from the segment soared by over 400% from 2004 to 2008. Standard Chartered has demonstrated that large banks can overcome the challenges of information asymmetry, limited collateral and high transaction costs to serve SMEs profitably.

The future is bright

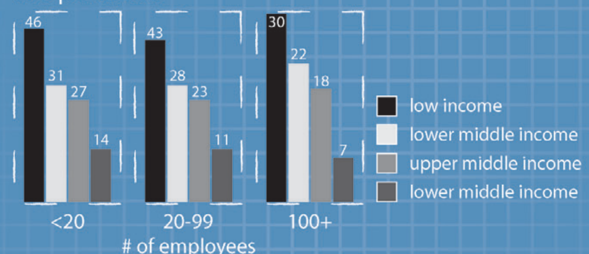
The sheer size of the SME segment is staggering. In India alone, the number of these enterprises is estimated at more than 450 million. SMEs typically represent only 25% - 30% of firms in emerging markets – a significantly lower percentage than one would find in advanced economies. Nevertheless, the proportion of firms that qualify as SMEs will rise dramatically in coming years as emerging economies mature and informal micro-enterprises transform into larger businesses. The business formalization process mostly explains why the segment is expected to grow at approximately twice the rate of GDP in most markets.

Banking relationships with SMEs are highly profitable. Leading banks report a return on assets of 3% - 6% for their SME operations, compared to the 1% - 3% average bank-wide return. High return on assets is driven by the range of services beyond credit that SMEs require. They are less financially sophisticated than big businesses and often lack business planning and cash flow management expertise. Estimates place sales of non-credit products at 60% of all SME revenues. Non-credit products include deposit, savings and transactional products, in addition to advisory services. Scale, growth potential and high profitability make the SME segment an opportunity that international banks cannot afford to ignore.

While Canadian banks have demonstrated world-class stability, strategically, they have been less than visionary. With weak revenues expected in advanced economies over the next decade, greater international exposure is necessary to achieve consistent top-line growth. None of the big five Canadian banks have attempted to build a significant presence in emerging markets. Scotiabank, 'Canada's most international bank,' has had some success in international revenue diversification; their Caribbean operations and global network are a strong start, but expansion beyond major cities and corporate clients will be necessary to align with global growth trends. Although time is running out, Canadian



Business Landscape in Emerging Markets
% of all Companies by Type



banks can still gain a foothold in emerging markets by focusing on serving SME clients.

Developing local capabilities

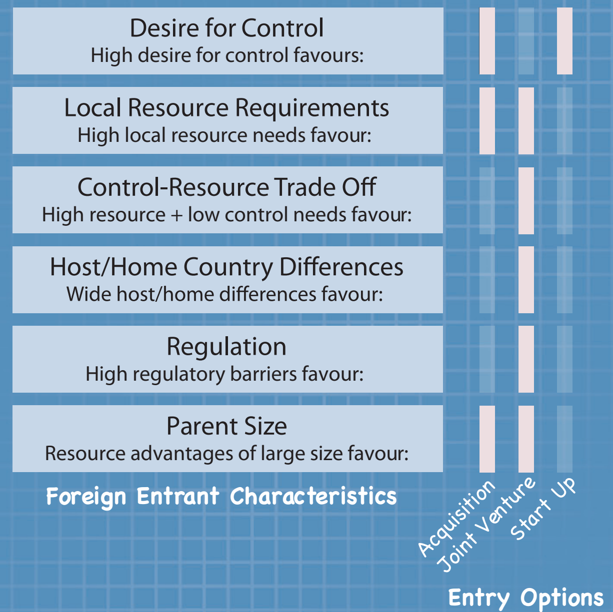
Canadian banks have the financial resources and risk management capabilities to efficiently serve the segment, but lack local knowledge and relationships. Of course, success in the segment will depend heavily on leveraging their current strengths. Due to the their size, large banks already possess several advantages: state of the art business models, customized statistical credit scoring and technological sophistication. These capabilities can be adapted to emerging markets and build the foundation for success.

The missing ingredient is local 'know-how.' Although some Canadian banks have international networks that currently focus on high net-worth and corporate clients, most lack the on-ground connections and knowledge to move into the SME segment. Through acquisition or a joint venture with a local bank, it is possible to overcome this obstacle. A partner offers invaluable local knowledge and relationships that are important in overcoming cultural and regulatory challenges to focus on product management.

To gain access to the Indian insurance market, HSBC formed a joint venture with two Indian state-owned banks. The partnership gave HSBC access to approximately 52 million customers through a network of over 4,600 branches. HSBC concentrates on product management and developing infrastructure, while the domestic banks take care of the resource-intensive distribution aspects. Even though this arrangement is currently beneficial to all parties, HSBC will find it difficult to maintain control in the future, since it only holds a 26% stake. This situation is the major concern with joint ventures - the value of foreign banks' technical expertise will inevitably diminish as local partners learn technical best practices. Clearly, forming a joint venture carries both benefits and risks.

Canadian banks can succeed in emerging markets by focusing on underserved clients. Small and medium enterprises represent such an opportunity, but the window to establish a foothold will not remain open much longer. Without purposeful strategic penetration into emerging SME markets, Canadian banks are abandoning one of the greatest 'white spaces' in the financial services industry.

Foreign entry models

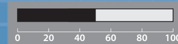


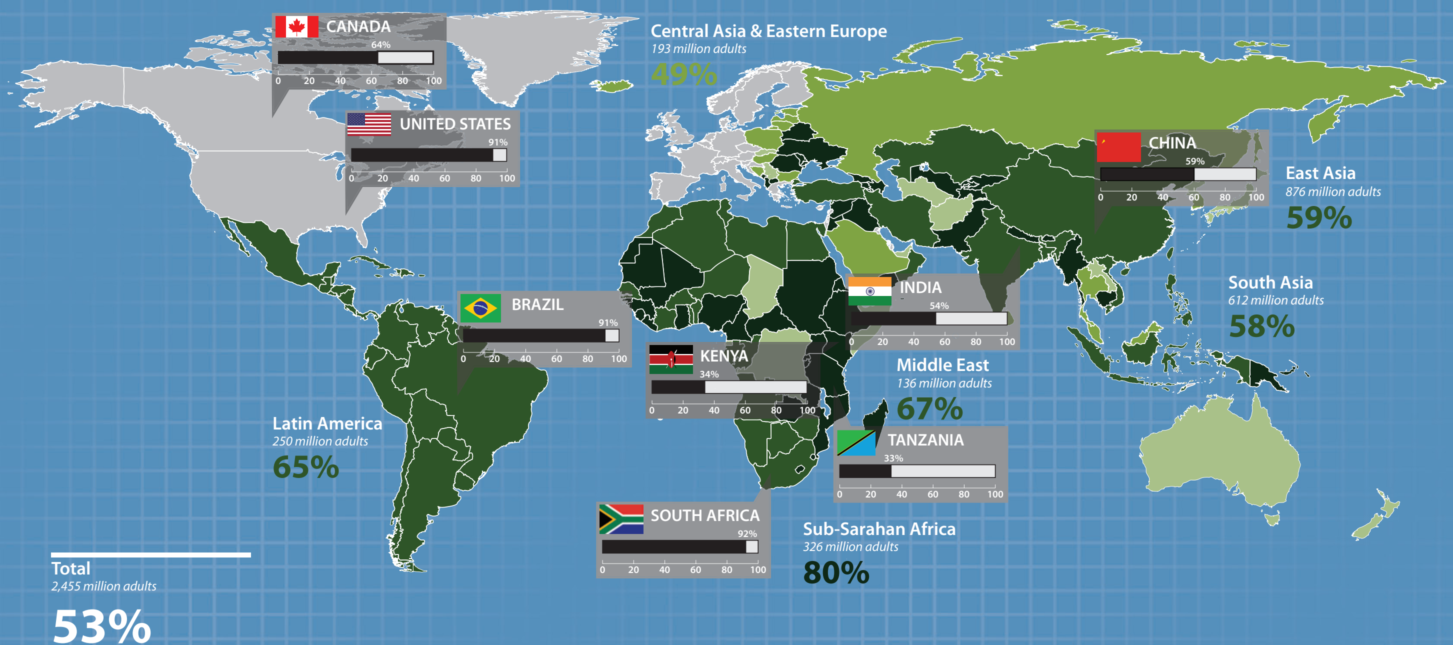
Banking availability and mobile penetration

Percentage of total adult population who do not use formal or semiformal banking services

0-25% 26-50% 51-75% 76-100%

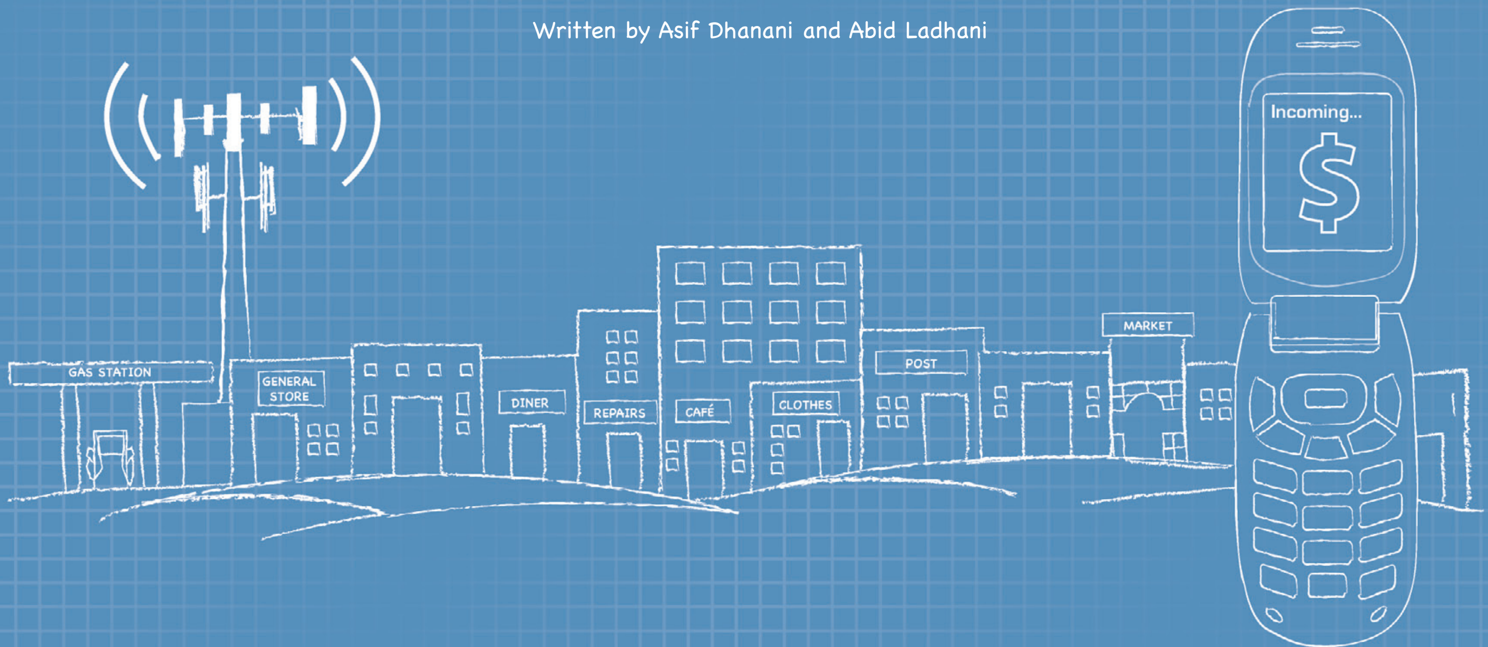
Mobile Phone Penetration Rate by Country





Mobilizing the Money Under India's Mattress

Written by Asif Dhanani and Abid Ladhani



Can a Kenyan farmer access a more innovative way of banking than the average Canadian? Access to mobile banking services is increasingly sought after, especially in emerging markets. These services use mobile phones to perform traditional banking functions, including accessing savings accounts and performing transactions. It may come as a surprise to some that many of the functions traditionally carried out at an ATM or by a local branch teller can be simplified into a single text message.

The bank in your pocket

In the developing world, it is estimated that for every 10,000 people, there is only one ATM and one bank branch, but an astonishing 5,100 mobile phones. The popularity of low-cost mobile devices, coupled with the inaccessibility of traditional banking, presents a notable opportunity for financial service providers: the ability to leverage existing telecommunications infrastructure and introduce banking services to an entirely new consumer segment.

Currently, only 18% of wireless users worldwide use mobile banking services. The sector is expected to grow rapidly in the near future, with a projected customer base of 1.1 billion people by 2015 - representing 16% of the world's population. Considering that in 2009 there were only 55 million mobile banking users, it is clear that service adoption continues to ride its growth wave.

The African market is of particular importance to mobile banking growth. In 2006, Africa's mobile banking penetration was 22% of all cell phone users, yet that number rose dramatically to 40% by 2008. In addition, this penetration rate is expected to reach 70% by 2012, largely fuelled by adoption in South Africa and Kenya. Nevertheless, Africa is not the only land of opportunity in this space. The number of mobile financial service users among BRIC countries (Brazil, Russia, India, China) is also expected to grow, from 32 million in 2010 to 290 million in 2015 – a market approximately 10 times the size of Canada's population. Putting this enormous potential into perspective, mobile banking is an opportunity to closely consider.

The remoteness of rural clients makes their access to conventional financial services limited, given that banks are hesitant to establish rural branch networks. It is more cost-effective for banks to forego branches in favour of mobile telephone networks. This approach also delivers several benefits to the rural population. According to the McKinsey Quarterly, over 50% of the unbanked population in India has considered opening a bank account, but only half have done so. Those who have not opened an account cite distance as a major barrier, thus highlighting the opportunity for mobile services to bridge the proximity gap. Mobile banking provides clients with superior convenience and reduces the cost of securely depositing savings. It is easy to understand how these benefits have enticed millions of new users around the world, proving that, in effect, mobile banking moves cash from under one's mattress into the palm of one's hand.

There are, however, a number of risks associated with mobile banking. The lack of developed regulation is a serious concern that forces banks to address this uncertainty and potential criminal activity themselves. Furthermore, a new set of overzealous regulatory limits could stifle growth if banks cannot collaborate successfully with policymakers. Despite these concerns, innovations in security are abundant and such technology can mitigate the risks around mobile banking.

Valuing the mobile banking opportunity

Adoption growth aside, it is interesting to note that none of the major Canadian financial institutions have attempted to enter the mobile banking market in emerging economies. While many financial institutions offer mobile banking services to Canadian clients as a simple convenience, the benefit of these services is much greater for developing market consumers. Just ask some of the key mobile banking players in emerging economies, such as Kenya's M-PESA, South Africa's WIZZIT and the Philippines' SmartMoney. Although these operators have been successful in their respective markets, they lack the enormous financial resources that Canadian banks possess - a necessary foundation for scaled market entry.

Entering the financial services sector in emerging markets requires a large upfront investment. This cash outlay is typically used to build a costly branch network. By contrast, the mobile banking model reduces the cost of serving clients by 50% - 70%. Assuming there are 360 million mobile banking users in the developing world by 2012, this opportunity could generate $5 billion in direct annual revenue from transaction fees alone. Moreover, there is potential for approximately $3 billion in indirect revenue from reduced churn rates and higher average revenue per user (ARPU), among other things. With a model that is both cost-effective and profitable, the next step would be identifying the right market to pursue.

Entering where it makes sense

Favourable opportunities lie within each of the four BRIC economies. However, by looking at population growth rates - which are essential for long-term success - it is not surprising that the largest market opportunities exist in China and India.

Under China's state capitalism, the banking system is subject to government mandates and policy priorities; the world's most populous country is a challenge for foreign banks to enter. India, on the other hand, is regulated by its reserve bank and has been more welcoming to a foreign presence. Furthermore, India's population growth rate is set to overtake China's as early as 2013, making the opportunity even more attractive.

So, what can a Canadian bank offer?

Profitability in mobile banking depends on volume. Canadian banks are in a prime position to enter the market, as their balance sheets are well capitalized to launch the program on a large scale.

Coming out of the recession, the Canadian banks' conservative strategies have positioned them ahead of other global financial institutions. As such, the big five have an opportunity to enter the mobile banking market with little competition from other developed countries' banks. Furthermore, due to their comparatively small size against the global top ten, Canadian banks are more likely to benefit from mobile banking returns, as their relative agility enables them to react quickly to changes in a foreign environment.

The only competition that Canadian banks are likely to face in this sector is from small, local banks that are still in the early stages of mobile banking service development. As Canadian banks have already developed mobile banking technology for use in Canada, they can focus directly on implementation. This advantage makes them an attractive partner for local wireless operators, as Canadian banks can enter quickly with an established service offering.

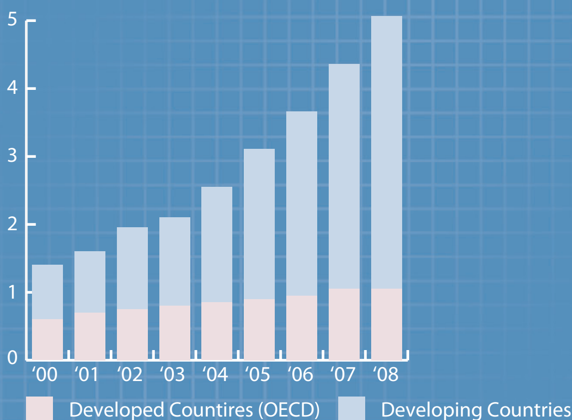
How they should enter

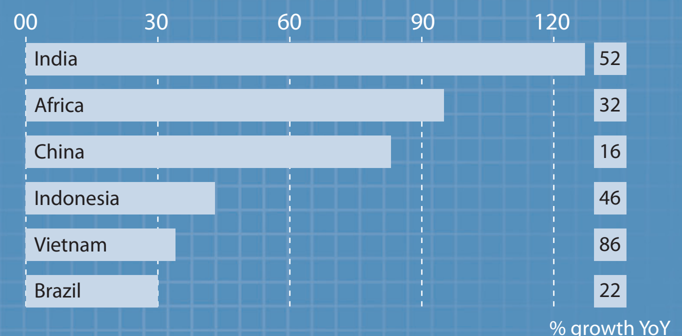
To build a significant presence in India, Canadian banks must first identify potential wireless operators to partner with. Currently, there are 15 mobile carriers in India, of which the two largest players, AirTel and Reliance, boast 140 million and 109 million subscribers, respectively. Interestingly, surveys show that brand recognition for wireless carriers is twice as high in India than for banks. This emphasizes the importance of Canadian banks identifying the right partner to gain traction among Indian consumers.

Additionally, partnering with a carrier will ease the potential regulatory pressures involved with entering a developing economy, as mobile operators are Indian firms held to separate regulatory constraints. By splitting transaction fee revenues between the companies, each party has something to gain. Banks can benefit from diversified operations in new markets, while carriers can develop new touchpoints for consumers to develop loyalty.

Now is the time

Canadian banks have a glimpse at an untapped global market. There is potential to both profit and become the forerunner in a colossal new arena. As markets evolve and mature, companies need to embrace innovative expansion strategies to reach new consumers in unconventional ways. For Canadian banks, now is the time to view mobile device screens as windows to the pockets of emerging market consumers.





i will trade on my terms

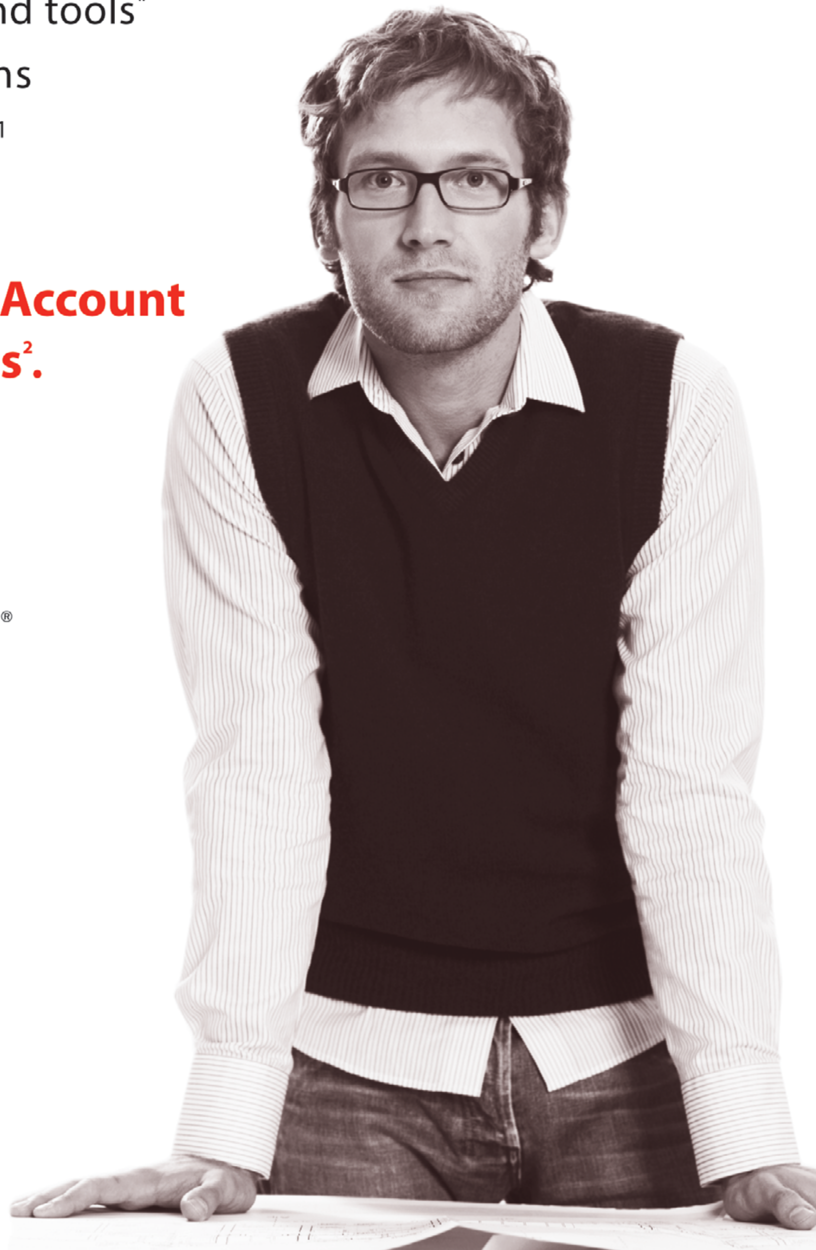
Become the investor you want to be with:

- Free seminars, research and tools*
- Intuitive trading platforms
- Commissions from $6.99[1]

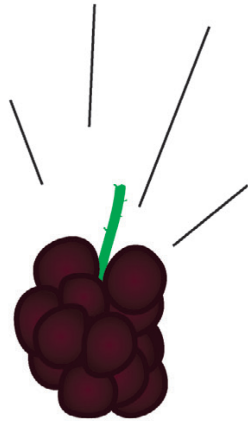
Open a Scotia iTRADE® Account and Get 100 Free Trades[2].

SCOTIA iTRADE®

www.scotiaitrade.com



[1]Conditions apply. For details, including how to qualify, visit www.scotiaitrade.com. Fees for U.S. transactions are charged in U.S. dollars. Market and ECN fees for trades executed using the Scotia iTRADE Pro™ platform not included. [2]For details, including how to qualify, minimum deposit and maximum commission rebate, visit www.scotiaitrade.com. *Unless otherwise expressly stated by Scotia iTRADE, research and seminars ("Content") are provided by third parties and Scotia Capital Inc. neither endorses nor is liable for the Content. Scotia Capital research is provided by Scotia Capital Inc. Neither Scotia iTRADE, Scotia Capital Inc. nor any of its affiliates accepts any liability whatsoever for any investment loss arising from any use of the Content, or for any third parties or third party products or services. Content is not, and is not to be construed as an offer to sell or a solicitation of an offer to buy securities. Scotia iTRADE® (Order-Execution Only Accounts) is a division of Scotia Capital Inc. ("SCI"). SCI is a member of the Investment Industry Regulatory Organization of Canada and the Canadian Investor Protection Fund. System response and account access times may vary due to a variety of factors, including trading volumes, market conditions, system performance, and other factors. Scotia iTRADE does not provide investment advice or recommendations and investors are responsible for their own investment decisions. ®Registered trademark of The Bank of Nova Scotia. Used under license.



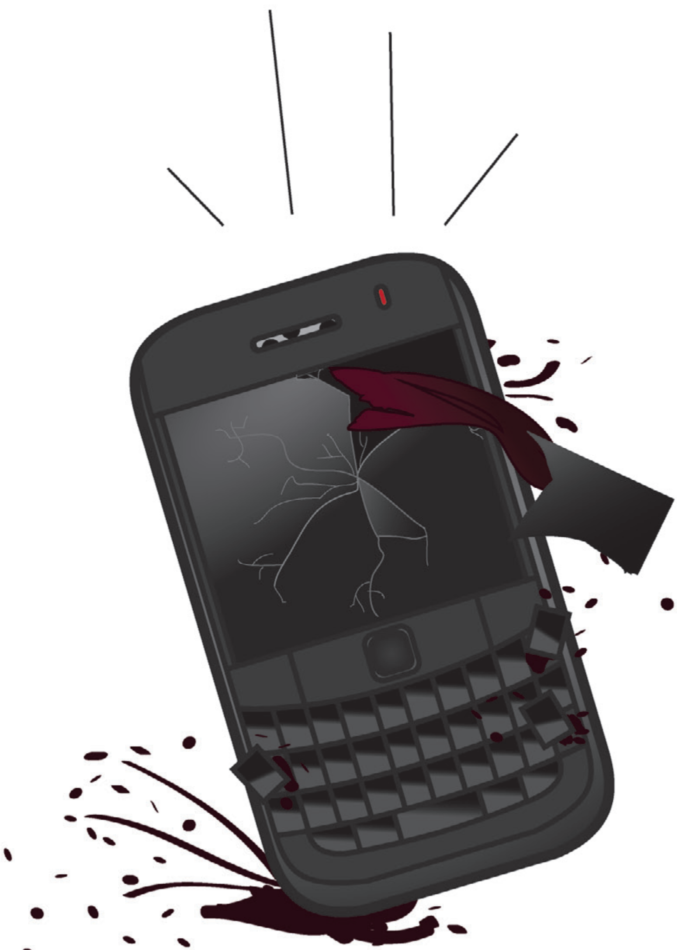
BlackBerry's Identity Crisis

It has *something* to offer, but the question is to whom

Written by Dale Wang

Being bold

At the mention of Research in Motion (RIM), Canadians immediately think of technological innovation and the BlackBerry. More recently, however, RIM's lustre is beginning to fade; fewer consumers are aware of the new Torch and the unreleased Playbook compared to the iPad, whose midnight lines are legendary. This represents a fundamental shift for RIM: going from an innovative market leader to second-rate trend follower. The reality is that since the creation of the BlackBerry interface, which outpaced competitors at the time, RIM has been largely unable to hold its leading position. RIM has only maintained its competitive edge in data security, with an air-tight content delivery system that no competitor has been able to replicate. Now, even this core capability, on which so much of RIM's value proposition to enterprises is built, is eroding.



Hitting curve balls

Since the inception of BlackBerry, RIM has focused on the enterprise segment due to the company's lead in data security and privacy. Data encryption at all stages of transmission, using unique device-specific keys that even RIM cannot monitor, make BlackBerry devices nearly impenetrable. Ironically, it is this advantage that makes the devices 'too secure' and has some governments demanding access to the encrypted messages.

Citing security concerns that mobile devices will be used to coordinate terrorist attacks and that data is not stored domestically, both the Indian and UAE governments have threatened to ban

RIM's encrypted data services. While governments already have access to services with lower levels of encryption, such as text messaging and voice, their primary goal is now to access BlackBerry Messenger (BBM) and corporate email - services with the highest levels of encryption that handle some of industry's most sensitive information.

While the conflict with the UAE government was ultimately resolved, the dispute with India is ongoing and presents a large threat to RIM's core business. Offering the Indian government the requested levels of access would require a complete change in the engineering of BlackBerry products. The local encryption that occurs on each device would end, permanently eliminating RIM's current source of competitive advantage. Not only would data privacy be threatened by governments monitoring transmissions between devices, but engineering changes would put data security under fire – the devices would be vulnerable to third-party hacking or other intrusions.

While India represents one of RIM's fastest growing markets, the government's concerns may be just the tip of the iceberg. In the U.S., BlackBerry's largest market, government officials are beginning to ask Congress to pass legislation that allows for monitoring and unscrambling of encrypted messages in all wireless communications. If such laws are passed, other developed markets, including Canada, may feel compelled to follow suit.

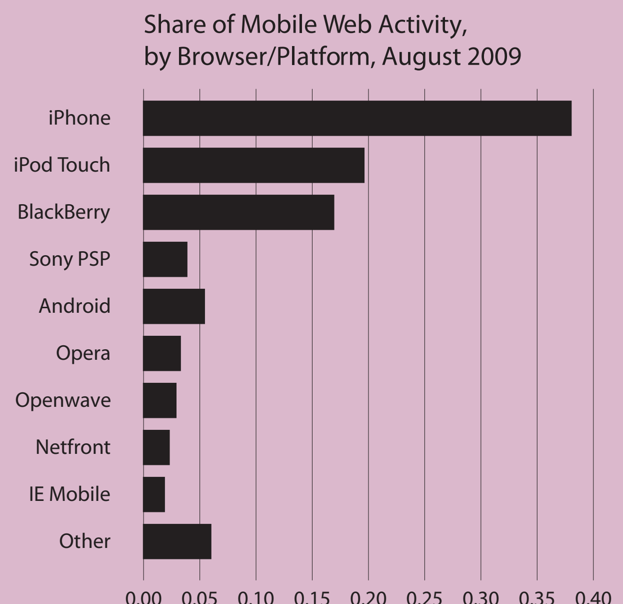
It is unclear whether governments monitoring mobile communication in the name of national security is a temporary trend or of permanent nature. What is evident, however, is that RIM's value to enterprises is dissolving. For businesses, this diminished security advantage has prompted re-evaluation of their mobile platform policies. Data security used to represent an insurmountable hurdle to adoption for other devices. While individual employees could always request a different phone, security features used to trump any alternatives. This is no longer the case. This shift in device restriction, which gives individual employees more say in the device purchase, could cripple BlackBerry enterprise sales. BlackBerry devices lag significantly behind competitors across nearly all performance metrics, particularly in mobile browsing, video and applications.

The evidence that this trend is gaining traction is abundant. For example, major financial institutions such as Bank of America and Citibank, the former backbone of RIM's client base, are currently testing Apple iPhones as BlackBerry replacements. Without a significant change in strategy, RIM could potentially lose its enterprise clients.

If RIM continues to cling to data privacy as its primary source of competitive advantage, it will find itself in a losing battle. It may be able to redesign its system over time and rebuild an unrivalled data privacy offering but by then RIM may have already lost its enterprise clients. For RIM to stay afloat in the enterprise market, the company requires a change in strategy that emphasizes new service offerings while rebuilding a more flexible privacy infrastructure. Perhaps surprisingly, key insights into this new enterprise strategy could come from the consumer side of RIM's business.

Into the storm

To develop its new strategy for the future, RIM must first identify its sources of competitive advantage. Given the increased scrutiny around encryption and possible subjection to government requests going forward, data privacy and security are evolving in a way that



they can no longer serve as RIM's only competitive edge. It is time for RIM to identify different aspects of its business that will give it a true advantage. Upon examination, it appears that BBM offers the best internal source of competitive advantage. A fast and efficient platform for inter-device mobile messaging, it is easy to see why consumers were initially drawn to BBM - the proprietary instant messaging application included on all BlackBerry devices. The real draw, however, is the underlying network effects for users.

RIM's critical mass of users paved the way for a tipping point: the BBM user base has reached a level high enough that some non-users simply cannot afford to stay away. The costs of not participating - being disconnected - are significant enough for some to prompt a change in behaviour and ultimately justify a BlackBerry purchase. At the same time, is this advantage truly sustainable? In its current state, BBM may be enough to attract consumers and retain them as BlackBerry users but it remains to be seen for how long this will last. Other players in the industry, especially Apple and Google, with strong software backgrounds, could certainly replicate BBM over time.

Upon replacement, BlackBerry's former 'critical mass' is irrelevant. Just like with data security for enterprise users, the barriers created by an enormous BBM network certainly still exist but they are no longer big enough to overcome the downfalls in the device itself. Relying on BBM as the primary means of differentiation is another fruitless endeavour.

Passing the torch

Since BBM is not a sustainable advantage, the question becomes where RIM can go from here. Knowing that its connectivity messaging feature is its strongest weapon against competitors, BlackBerry's prospects rely on RIM finding a way to make this advantage permanent. Yet before it can conceive how to do so, the bigger question to address is one of market focus. Where does RIM want to play: in the consumer or enterprise arena? The company must stop trying to find the fine balance between these two segments and pick its fight.

Its choice may be dictated by capability more than preference. Market trends indicate that the consumer segment is characterized by increasing appetites for mobile browsing, video, multimedia and specialty applications – all areas in which RIM trails Apple. It may be unwise to pursue an innovation-driven market when one has struggled to earn a label of innovation in the past. Instead, RIM would do well to look at its own capabilities, recognizing that its competency lies not in producing revolutionary devices, but rather in effectively understanding how people want to communicate and connect with one another. It is on this understanding that the BlackBerry platform was built and succeeded in facilitating interaction and the seamless transfer of information. Sticking to its strengths, the company must return to its heritage and refocus its attention on the enterprise user.

What's in its playbook?

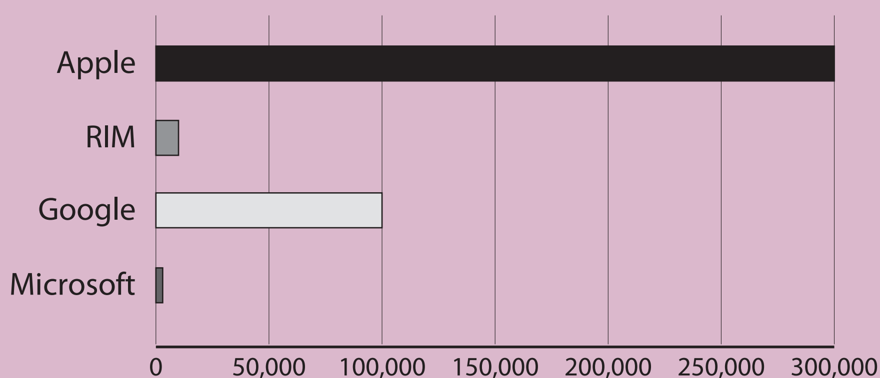
Without an impenetrable data privacy value proposition, the key to RIM's new position in the enterprise segment is converting its consumer BBM success into an offering relevant for business users. Leveraging BBM's ease of use, efficiency and connectivity benefits are central to rebuilding competitiveness. For RIM to succeed, its products must become so embedded in the business operating process that it becomes impossible for a business to turn to different devices; the switching costs need to be higher. The type of advantages that BlackBerrys need to offer must overcome the numerous deficiencies of the devices themselves.

There are many ways that BBM functionalities can be further developed to suit an enterprise setting. BBM could allow mobile employees to create and edit documents, while collaborating in real-time in a similar fashion to Google Docs. RIM's declining but still industry leading data security would make it a credible and important feature. A barcode-scanning feature that can act as an instant business card also presents an opportunity to help the device permeate all facets of inter-office communication, linking BBM contacts to full address book entries.

Overall, the most important feature is not any specific recommendation, but being attuned to RIM's enterprise customers and flexible in adjusting to their needs. RIM's sales force would need to transform into a consultant-like integration service provider to improve business productivity and communication. Ultimately, the toughest lesson is that RIM must stop conceptualizing its role as being a device manufacturer and instead think of itself as a software producer to be competitive. The company's core competencies do not align with the device segment and RIM constantly plays catch-up to more innovative players. All of these integration offerings that will build a defensible position in the enterprise market will stem from software in the end.

The change in corporate DNA needs to be dramatic. Most of the major competitors benefited from being a software company at their core and later translating that in to device manufacturing as time went on. This path is easier. RIM's, on the other hand, will be a struggle, following a path yet to be charted on this scale in the industry. It is a path entirely without precedent, but nonetheless, a necessary journey to maintain BlackBerry's dominance in the enterprise market.

The need for application development



Source: Company press releases as at November 25th 2010 (Windows Phone 7), October 20th, 2010 (Apple iOS, Android OS), September 30th 2010 (Blackberry).

The Billion Dollar Bet

Examining WIND's sure thing

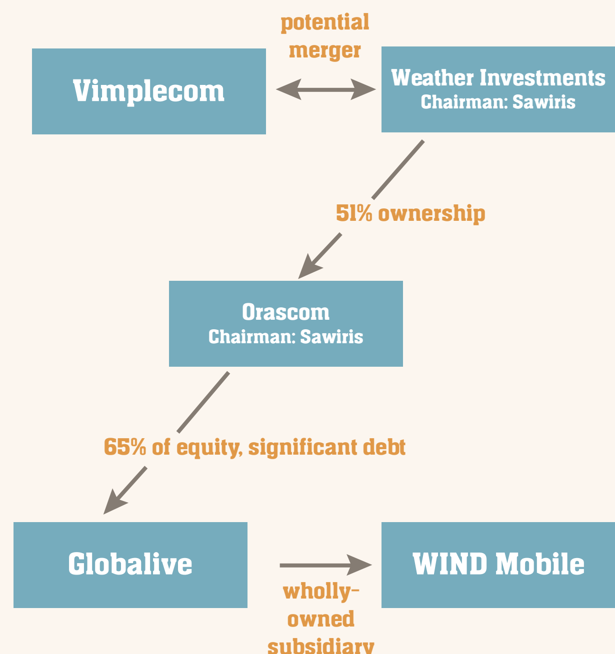
Written by Ranji Bissessar and Alex Yeung

"We will make pain and they will suffer," declared Naguib Sawiris in an October interview, when asked to discuss efforts of Canada's incumbent wireless providers to eliminate its newfound competition. Through Orascom Telecom Holdings, Mr. Sawiris is the lead backer of Wind Mobile, one of Canada's newest wireless carriers. Despite Wind's determination and aggressive marketing, it appears to have had less success entering the market than Orascom had originally anticipated.

Wind began in 2008, after the Canadian Radio-television & Telecommunications Commission (CRTC) sold unallocated wireless spectrum to shake up Canada's $20-billion mobile telecommunications industry. The need for competition, as Mr. Sawiris is quick to announce, was clear. The industry was tightly controlled by three players: Rogers Communications, Bell Canada and Telus Corporation. Prices, determined by the average revenue per user per month (ARPU), were among the highest in the world. Wireless penetration languished at 75%, compared to 100%+ in similar countries. Three companies with little prior telecom experience bought spectrum at a 2008 auction – Wind, Mobilicity and Public Mobile. Since entering the market, these new players have attempted to undercut the incumbents by offering low-priced, unlimited usage plans in major metropolitan areas. Wind, which is officially controlled by Canada's Globalive Communications Corporation, spent $442 million purchasing spectrum – close to twice as much as Mobilicity and nine times that of Public. Since then, Globalive has made significant investments in network installation, creating a high risk-high reward situation.

Although Orascom is the 12th largest mobile network provider in the world by subscribers, its decision to enter Canada by investing in Globalive was surprising to many. The Cairo-based company operates in nine developing countries, where average ARPU is less than $5, compared to Canada's $60. Canada represented the company's first attempt to build a network in a developed economy. Furthermore, its corporate activities and Mr. Sawiris's comments have indicated a desire to focus on global scale and consolidation. This thesis is reinforced by the October announcement of a potential merger between Weather Investments (which controls Orascom) and Vimplecom, a the Russian telecom that would create the fifth largest carrier in the world by subscribers. The combined entity would have a market capitalization of $25 billion (U.S.), allowing it to achieve significant pricing power and minimize costs to compete with world-leading telecoms.

Given these considerations, it initially appears that Orascom made the wrong decision in entering the relatively small, capital-intensive Canadian market. However, Orascom's strategy has not been defined by a desire to build in the developing world. It is actually governed by a willingness to pursue opportunistic investments. Mr. Sawiris has displayed an appetite for taking early risks and benefiting handsomely, as exhibited in Iraq. This pattern seems likely to continue in Canada, as Orascom's entry has come at an opportune time. Even if Wind continues to underperform their projected growth rates, decreased regulatory hurdles to foreign investment may offer Mr. Sawiris an alternate opportunity to cash out through a sale. In effect, Orascom has guaranteed itself a reasonable return through their investment strategy.



Entry strategy and rationale

Mr. Sawiris saw the Canadian market as one not only ripe for disruption, but also one where Orascom could act as a king-maker for a new entrant. The company's global footprint, experiece as a low-cost provider, access to capital and bargaining power would allow Wind to get to market faster than other new entrants. These advantages were shown in the company's December 2009 fanfare-driven launch that preceded competitor's by three months.

Orascom had good reason to enter the Canadian market. Based on the premise of building a large consumer base as quickly as possible, Wind presented a compelling business case. The company estimated they could reach 1.5 million subscribers within three years. If Mr. Sawiris decided to exit his investment in 2022 at a 6.5x EBITDA multiple, the same as the wireless divisions of the incumbents, he would earn a reasonable 13% annual return.

Although these projections were optimistic, foreign interest in the Canadian mobile market provided a floor for Orascom's return. Canada's underserved market and proximity to the United States make it an attractive market for American firms who possess the scale, brand and developed-market expertise to excel here. As these firms look to purchase spectrum or assets in Canada, Wind will be well positioned to sell to them. Orascom's formula has worked before and appears poised to work again.

Lacklustre performance?

In July 2010, Wind Mobile crossed the 100,000 subscriber mark, accounting for an impressive 15% of all new wireless subscribers in Canada since its launch only seven months earlier. Despite this, analysts expect Wind to obtain only 250,000 subscribers by the end of 2010 – significantly less than the company's rumoured internal target of 380,000. Furthermore, Wind's subscriptions have come at a far higher cost than anticipated. The company recently instituted a two-for-one promotion on BlackBerrys and has provided a $150 switching incentive to an estimated 35% of customers.

Orascom's lofty expectations can be partly attributed to the company's inexperience building in mature markets. Throughout 2010, Bell, Rogers and Telus have strongly emphasized the value of 'bundling' – the consolidation of various telecom services in order to receive discounts, simplified billing and integrated services. By doing so, they are able to raise switching costs for consumers, combating the entrant's lower prices. Bell and Rogers have also enacted aggressive counterattacks. In July, Rogers launched a new flanker brand, 'Chat-r Wireless', whose positioning is almost identical to those of Wind, Mobilicity and Public Mobile. Shortly after, Bell relaunched its 'Solo' brand to compete directly with the new entrants and Chat-r. Each launch was accompanied by an exhaustive marketing campaign extolling the brand's superior network quality and coverage.

Ultimately, given the level of success Wind has still had in rapidly growing their network, their failure is one of projection rather than execution. The original estimates were too optimistic about the willingness on the part of consumers to switch carriers. Furthermore, Wind failed to anticipate the successful responses of the incumbents, likely due to Orascom's inexperience in penetrating a developed market. At current rates, Wind can be optimistically projected to reach 1 million customers in 2014. Following these trends, and using at 5.5x EV/EBITDA multiple to account for underperformance, Orascom's predicted 15 year annual return would be a paltry 3%.

Cashing out

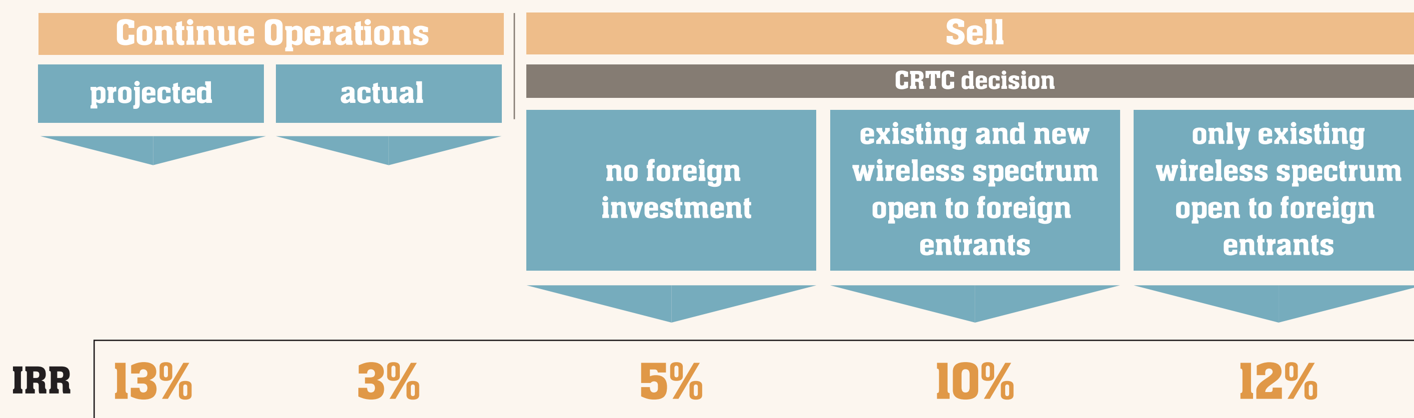
Given Wind's recent underperformance, Mr Sawiris is now faced with a decision around his Canadian intentions. He can either sell Wind to achieve an immediate return, or continue growing Wind to integrate with Orascom's global presence.

Orascom should continue operating in Canada if the management believes their initial projections are still attainable. Mr. Sawiris could potentially have Wind purchase Mobilicity or Public Mobile, maximizing operational results by adding subscribers while simultaneously eliminating a competitor. Mr. Sawris has even stated, "We believe that Wind should be the consolidator of all the smaller players here." Continued operations could also be considered consistent with a global consolidation strategy.

Ultimately, a combined Orascom-Vimpelcom entity would see strategic benefits to divesting its Canadian operations. If scale is the ultimate goal, investing billions of dollars in Canada makes less sense than deploying it in other larger, faster-growing markets. Orascom has never built up a business against large, well-capitalized competitors, but has been extremely successful at penetrating developing markets. Given the lack of strategic and experiential fit, Mr. Sawiris should seek to divest his Canadian units.

How can Wind sell?

Following the realization that Canada is not core to Orascom's strategy, the question becomes how can Orascom profitably divest



these assets? The options depend largely on how the CRTC treats foreign investment at the next wireless spectrum auction in 2014. After making an exception around foreign-ownership rules at Wind's entrance, it remains unclear how the government will act. There are three potential scenarios, each of which will have a different effect on Wind's valuation. The government can forbid foreign investment, allow foreign investment, or limit foreign investment to purchases of existing spectrum.

If the CRTC completely forbids foreign investment, the most unlikely scenario, Orascom could be financially hurt. In this case, they could choose to continue operations as previously described, but could also sell to a Canadian player. Although the CRTC might forbid an incumbent's purchase of Wind for competitive reasons, both new entrants stand to gain significantly from purchasing Wind if they can access the financing to do so. Even if Wind was forced to take a 15% loss on its cumulative spectrum and capital investments, it could still achieve a 5% annualized return due to operating profits.

If the CRTC allows full foreign investment, any corporation would be allowed to purchase spectrum in the 2014 auction. In this case, international players would be interested in purchasing Wind for its spectrum and hard assets. Although these foreign companies could purchase spectrum and develop it themselves, Wind could still command a premium for the time and energy it has already devoted to the market. While incumbents would have incentives to purchase Wind to delay foreign entry, it is unlikely that they would be willing to pay a large premium since international companies could still eventually enter. It seems likely that foreign companies would pay at least a 7.5% premium to Wind's telecommunications assets to enter more quickly, creating an 10% per annum return for Orascom.

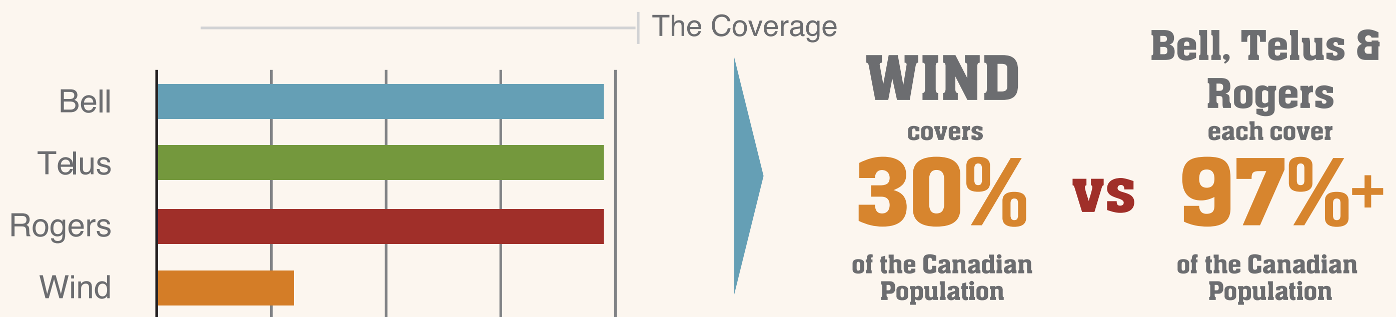
If the government makes an exception and allows a foreign firm to buy Wind's ownership stake, but international companies cannot bid on the wireless spectrum, Wind's value would be maximized. The company would be an attractive option for foreign companies, since other international competitors could not enter at the same time. Incumbents could also realize value by preventing a foreign takeover. If Verizon were to purchase Wind, for example, they could use their expertise and recognizable brand to hurt the incumbents. In this scenario, an incumbent would have strong incentives to purchase Wind, since the possibility of foreign entrance would be eliminated(assuming the CRTC allows the purchase). The additional bidders and increased exclusivity would increase the premium to 15% of Wind's total telecommunication assets, creating a 12% annualized return for Orascom.

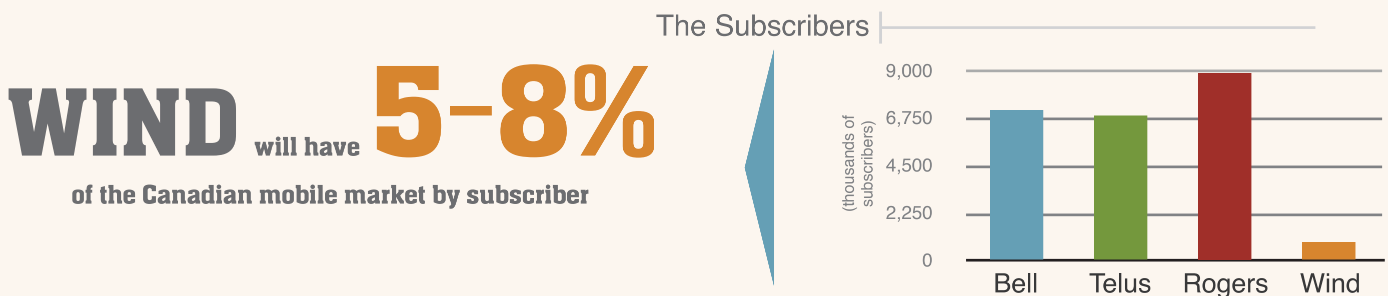
The sure thing

Since its inception, Wind has declared itself as Canada's fourth national carrier. The company has fought to build its brand image and subscriber base, and to destabilize Canada's stagnant oligopoly. Though they have been somewhat successful in accumulating subscribers, their growth rate has significantly underperformed internal expectations, resulting in an erosion of operational economics. When considered in conjunction with the lack of strategic fit and difficulty of the Canadian operations, it becomes clear that Orascom should sell to the highest possible bidder in 2014 and redeploy its capital to areas where it possess an actual advantage

Nonetheless, Orascom's entry into Canada was almost a no-lose move by Mr. Sawiris. If it had succeeded in penetrating the mobile markets, it would have made a very good return and gained access to a lucrative, underserved market. Alternatively, Orascom was betting that if it was able to enter, the CRTC was likely to open the next auction to foreign investors, providing Mr. Sawiris with the ability to sell to foreign/incumbent players and still make a good return, even if Wind's results did not meet expectations. By making this well-timed investment, Orascom turned a risky market entry into a sure thing. Whether the incumbents will suffer remains to be seen.

Coverage and subscriber comparisons





ENTERING THE FRAY

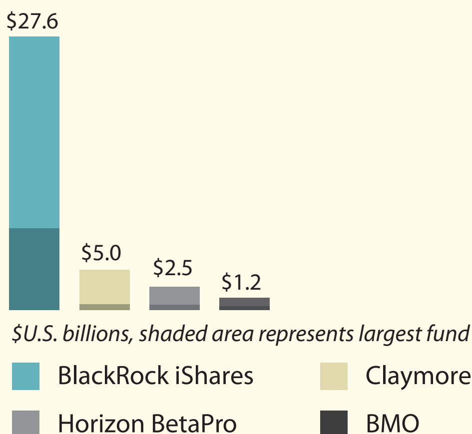
The changing face of the Canadian Exchange Traded Fund landscape

Written by Julie Mou and Caitlin Neal

The Canadian ETF landscape

Although sometimes overlooked, Exchange-Traded Funds (ETFs) are quickly becoming a major component of Canadian investors' toolboxes. ETFs are baskets of securities that aim to track the performance of an index. These funds provide investors with access to a wide variety of local and international securities. The core advantages of these products are relatively low cost, trading availability and liquidity. Because ETFs are not actively managed, they stand to gain significantly as Canadians continue their recent shift towards passive investment products.

The Canadian ETF market currently has four players: BlackRock's iShares, Claymore Investments, Horizon BetaPro and Bank of Montreal Asset Management (BMO). iShares started the industry in 1989 and has an extensive product suite, with exclusive rights to the S&P 500, S&P/TSX 60 and Global Gold indices in Canada. Claymore's entrance in 2006 introduced a way for investors to diversify through their Core Portfolios, an ETF that holds other ETFs. Horizon BetaPro offers more complex products, including inverse and leveraged ETFs, that give risk-seeking investors opportunities to take commodity and futures positions. Another recent entrant, BMO, offers junior commodity ETF and the most complete fixed income suite in the industry.



Assets under management (AUM) in ETFs are projected to grow significantly in Canada, from $36 billion currently to $105 billion by 2016. Although iShares currently dominates the industry with a 76% market share, current competitors and new players will undoubtedly aim to capture some of this growth. The key question becomes, will iShares continue to dominate, or can someone else take its share?

> "Since only one company is allowed to license any particular index, possession of an in-demand index creates a virtual monopoly over the product."

Why is the market growing?

The Canadian ETF market is growing largely through a shift of assets away from Mutual Funds (MFs), driven by investor concerns around performance, cost and transparency. Historically, only one third of MF managers have outperformed their benchmark index. Since ETFs are designed to replicate the performance of the indices, ETFs actually outperform MFs. Additionally, ETFs charge lower annual fees than MFs to give investors better net returns. For example, the iShares TSX 60 Fund charges 0.17% of assets per year, while the RBC Canadian Dividend Fund charges 0.70%. Since ETF asset holdings are passive, investors can understand their portfolio – a trait that likely helped in the aftermath of the recent recession. In combination, these effects have caused significant changes in capital flows. While global mutual fund AUM has fallen by $221 billion from January to July 2010, ETF AUM increased by $82 billion. It seems likely that these trends will continue: it is not in investors' best interest to pay higher fees for worse performance. This broad trend will, however, be slowed by the best interests of advisors, banks and money managers, who profit significantly more from MFs than they ever could in ETFs.

Despite the disincentive from lower fees, some investment advisors are switching from their traditionally MF-dependent ways. They are now using ETFs in their core portfolios and leaving the majority of individual stock picking to their satellite portfolio. One final reason for the shift from MFs is that over 50% of ETFs track indices that mutual funds cannot due to the choice of narrowly-segmented portfolios. Although this leads to potential tracking error of the ETFs (due to the less liquid markets), this option is still viewed favourably by some investors.

How to succeed in the ETF market

The first mover advantage in ETFs is extremely important. Since only one company is allowed to license any particular index, possession of an in-demand index creates a virtual monopoly over the product. Blackrock's iShares TSX 60 Fund has $11 billion in total assets, while BMO's Titans 60 Index (effectively an attempt to replicate the same index) has $550 million. Since investors are looking for access to the 'TSX-60', iShares possesses an extremely strong economic barrier. In fact, 80% of Canadian ETF AUM lies in only 18 of 111 funds.

> "Even though ETFs are a lower margin product, mutual fund providers would rather make lower returns on current customers than risk losing them altogether."

Monetary returns in the industry are driven primarily by scale. Due to their competitive positioning with MFs, ETFs cannot afford to raise their extremely low fees. Their cost structures are also fixed, as funds use quantitative modelling; it costs barely anything to add another ETF unit. These two factors indicate that scale is the dominant driver of profits and that AUM is the most important industry metric.

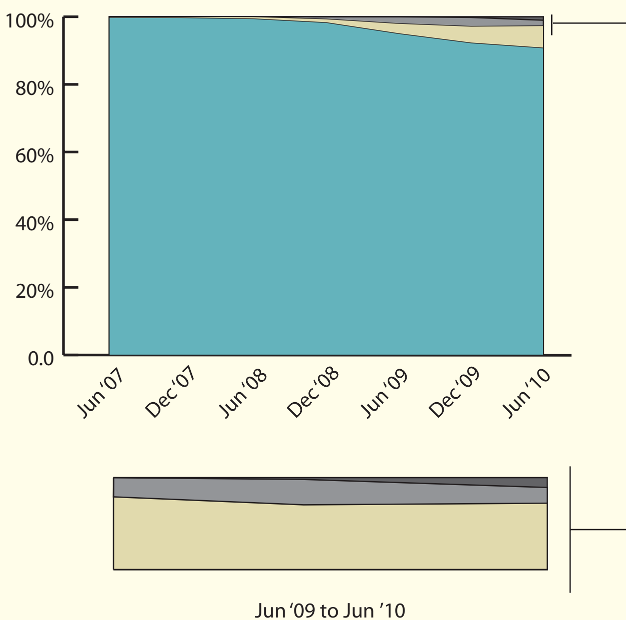
The last two drivers of success are talent and brand-awareness. The actual quantitative modelling and stock selection processes are very complex and require extensive knowledge and experience. Companies must also rely on brand awareness to drive investor demand for their products. Due to the inferior economics of ETFs for advisors and brokerages, it is extremely unlikely that they will recommend ETFs without specific demand from the investor.

Opportunities to grow

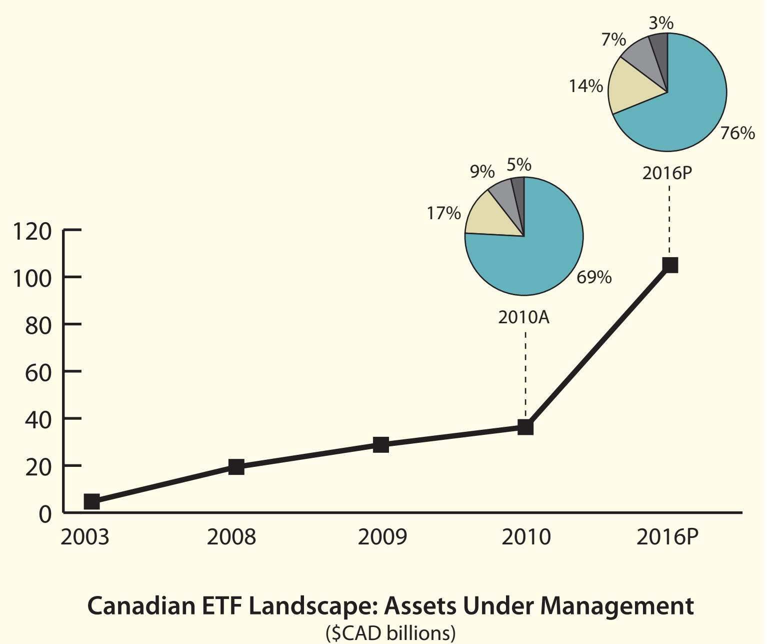
Since volume increases grow profitability, ETF companies can either expand their client base or their product differentiation. According to a report commissioned by Deloitte, financial advisors and retail clients are the ones migrating to ETFs, with 50% - 60% of AUM in the ETF market originating from these channels. To increase demand amongst retail investors, it is crucial for ETF companies to highlight the advantages of the security over mutual funds and other actively-managed solutions. Despite new sales from retail channels, an abundance of wealth still exists in the institutional client base. By targeting more of these clients, companies will also be able to tap into a significant market. Canadian pension funds alone manage $1 trillion in assets; thus, even a 10% ETF market share would create approximately $5 billion of run-rate management expense rate (MER) revenue. Claymore is currently pursuing an additional channel opportunity, paying advisors trailer fees to offer their funds as MF sales do. Although this practice reduces some of the advantages of ETFs, it does create new opportunities.

A key success factor in this market is not to blindly diversify product offerings, but to focus on proactively identifying the largest client interests. For instance, iShares recently launched their DEX HYBrid bond (XHB), a niche product that tracks the DEX HYBrid bond index by holding Canadian high-yield debentures. At its inception in September 2010, the fund held $6 million AUM. By the next

Relative Market Share: Top 18 ETFs grouped by family



Absolute Market Share



Canadian ETF Landscape: Assets Under Management
($CAD billions)

BlackRock iShares | Claymore | Horizon BetaPro | BMO

month, the AUM grew over 500%, with steady growth since. It is insufficient for companies to solely increase product lines without consideration of the needs of its consumers. In 2000, Barclay's Global Investments only held 12% of ETF market share despite offering 80% of all the ETFs in the American market, showing that offering products that are in demand is more important than simply licensing the most indices.

Although the majority of viable Canadian ETF positions have been filled by one of the four competitors, there are still some diversification paths that can be taken. By adding biotechnology and pharmaceutical ETFs, the Canadian market could more closely mirror the U.S.; although, the small size of these Canadian sectors could induce significant tracking error. Other product offerings that companies should exploit include target dated funds and currency-hedged ETFs. Target dated funds allow individuals to choose a retirement date and their asset mix shifts as they move closer to the date. Although currency-hedged ETFs would likely find a large following in Canada (particularly for U.S. equities), they increase the risk to the ETF provider, and could be difficult or unprofitable to provide.

"Although the majority of viable Canadian ETF positions have been filled by one of the four competitors, there are still some diversification paths that can be taken."

How will the market progress? Who will win?

As ETFs continue to gain share against MFs, large Canadian mutual fund players will begin to shift their focus towards the market. Even though ETFs are a lower margin product, MF providers would rather make lower returns on current customers than risk losing them altogether. To do so, they can either purchase existing players or develop their own ETF offerings. Purchasing makes more sense for three reasons: it removes a competitor, obtains exclusive licensed products and eliminates talent acquisition costs. Financial services firms will be able to pay premiums for independent players since ETF platforms are worth more to companies with more distribution and cross-selling capabilities.

Given its dominant market position, iShares will be the primary acquisition target for all financial service providers. BlackRock, however, does not have a compelling reason to sell iShares outside of an attractive takeover price. If BlackRock does decide to sell, RBC is the most logical purchaser of iShares' Canadian assets, since they have the most Canadian MF assets, and therefore have the most to lose from the shift towards passive products. Although other financial players will undoubtedly bid for the business, it is probably worth more to RBC than any competitors.

It is unlikely that MF providers would purchase a smaller ETF provider until after iShares has been sold, or it is clear BlackRock will not sell. Following this occurrence or realization, the large financial companies should buy smaller players to use as the base for their internal ETF platforms. This move would be smaller and less impactful since consumers would likely still prefer to invest in the largest ETF players. However, the value of keeping clients within the bank's systems are large given cross-sales opportunities within financial services firms, making these acquisitions worthwhile.

As a current ETF market player, it makes sense to initially resist the purchasing attempts of these MF providers, since valuations will only increase as ETF penetration increases. As ETF market share and profit grows, the MF players will be willing to pay increasing premiums to staunch AUM losses , creating a more attractive exit opportunity. The small providers should therefore continue to grow their Canadian businesses in an attempt to become even more financially attractive to potential acquirers.

The Fifth Protocol

Opening the floodgates to cross-border mortgage financing?

Written by Megan Lem

With American vendors like Walmart littering the Canadian landscape, few industries remain dominated by home-grown offerings. Yet Canadians still source their mortgage loans from Canadian banks, trust companies, caisse populaires and other institutional domestic lenders. In part, this tendency to 'buy American' but 'borrow Canadian' is explained by the historic withholding tax on most Canadian-sourced interest payments payable to U.S. lenders. In an ultra competitive market, where a mere few basis points in interest can determine lender selection, this was a strong price deterrent. More recently, however, changes to the Canada - U.S. Tax Treaty eliminated the withholding taxes that had been imposed on these interest payments. What remains to be seen is whether these changes in the cross-border tax regime will usher a true shift in Canadian mortgage markets or if Canada's powerful domestic mortgage lenders can maintain their historic dominance.

Why was the withholding tax repealed?

In 2008, to address the barriers to entry posed by the withholding tax, the governments of Canada and the U.S. entered into The Fifth Protocol amendment to the Canada - U.S. Tax Treaty to eliminate withholding taxes. According to the federal government, by permitting Canadians to borrow from U.S. lenders without withholding and remitting Canadian tax on interest payments, the Fifth Protocol would ultimately reduce borrowing costs by increasing competition and making cross-border investment more efficient. Even those who do not ultimately borrow from U.S. mortgage lenders would benefit from an increase in choices.

But where are the Americans?

Despite these factors, there is still a surprising absence of American mortgage lenders in the Canadian marketplace. A Canada Mortgage and Housing Corporation survey of residential mortgage credit in Canada suggests that there was virtually no U.S. mortgage lending presence in Canada's residential market at year end 2009. Although the same survey shows that the large Canadian Chartered Banks lost almost 10% of their market share year-over-year, this reduction was not caused by U.S. mortgage lenders. In fact, U.S. mortgage lenders did not even warrant a distinct category in the survey.

In contrast, when Australia eliminated its similar withholding taxes in 2006, foreign-sourced mortgage financing poured into the country. Likewise, Canadian asset-based lending (ABL) borrowers, who borrow against receivables and inventory, saw a material surge in offerings for such loans from U.S. ABL lenders following the repeal of the tax. So why is there apparent reluctance on the part of U.S. mortgage lenders to come to Canada even though Canada has now been free of the withholding tax for over two years?

The perceived lack of U.S. mortgage lender response to the withholding tax repeal does not necessarily mean that there is not a shift already underway in the Canadian mortgage market. The Fifth

Protocol was enacted as the world economy entered a recession, significantly limiting capital available for new loans. Until North America experiences a genuine and sustained recovery, sufficient for U.S. mortgage lenders to return to their pre-recession volumes, the expected financing increases will not occur.

Where do opportunities exist?

When the economy recovers, U.S. mortgage lenders will find that conditions within the Canadian mortgage credit market represent an incredible opportunity. Mortgage brokerages, a crucial distribution channel for non-bank mortgage lenders, are thriving in Canada and are predicted to soon make up one third of the market. The origination of mortgage loans through this channel gives U.S. mortgage lenders the ability to pursue marketing and consumer servicing capabilities in Canada without having to build a prohibitively expensive branch system.

The concentrated nature of the retail banking industry in Canada has historically presented additional barriers to entry. Consumers, for example, have traditionally shown a 75% propensity to stay with the same bank as their parents. Current trends towards self-serve distribution channels (such as online and telephone banking) are reducing the strength of this advantage. This trend disproportionately favours independent mortgage lenders who do not want to maintain branch networks or even a permanent presence in Canada, but instead can compete more nimbly online.

Perhaps most importantly, the Fifth Protocol is only the beginning of a series of financial reforms with the potential to dramatically change the balance of power in the mortgage market. Legislative reform currently underway will clarify Canadian rules under the Interest Act that allow certain borrowers to break closed mortgages after five years without penalty. While the proposed legislative reform does not eliminate the five-year rule for Canadian individuals, the greater certainty in the rules relating to non-individuals will help alleviate U.S. mortgage lenders' concerns.

Legislative reforms are also being proposed to further amend the Interest Act to standardize and ultimately reduce the break fee chargeable by mortgage lenders to borrowers. Reducing these switching costs will encourage more frequent re-financing by Canadian borrowers. This increased churn will create more opportunities for U.S. lenders to enter the Canadian market and significantly challenge the incumbent Canadian mortgage lenders.

Can Canadian mortgage lenders fight back?

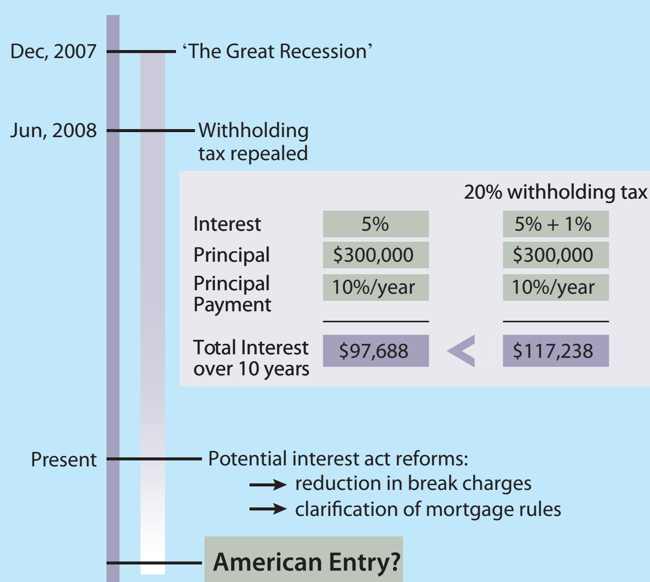
Of course, nationalists could argue that the Canadian mortgage market will never be Americanized in the same way that much of the Canadian retail landscape already has been. Some observers have speculated that Canadian patriotic fervour will keep Canadians loyal to their domestic mortgage lenders. While this may be the case – Tim Hortons' dominant market share has often been partly attributed to nationalist sentiment – that does not mean that an American firm like Starbucks cannot also attain significant market share in Canada.

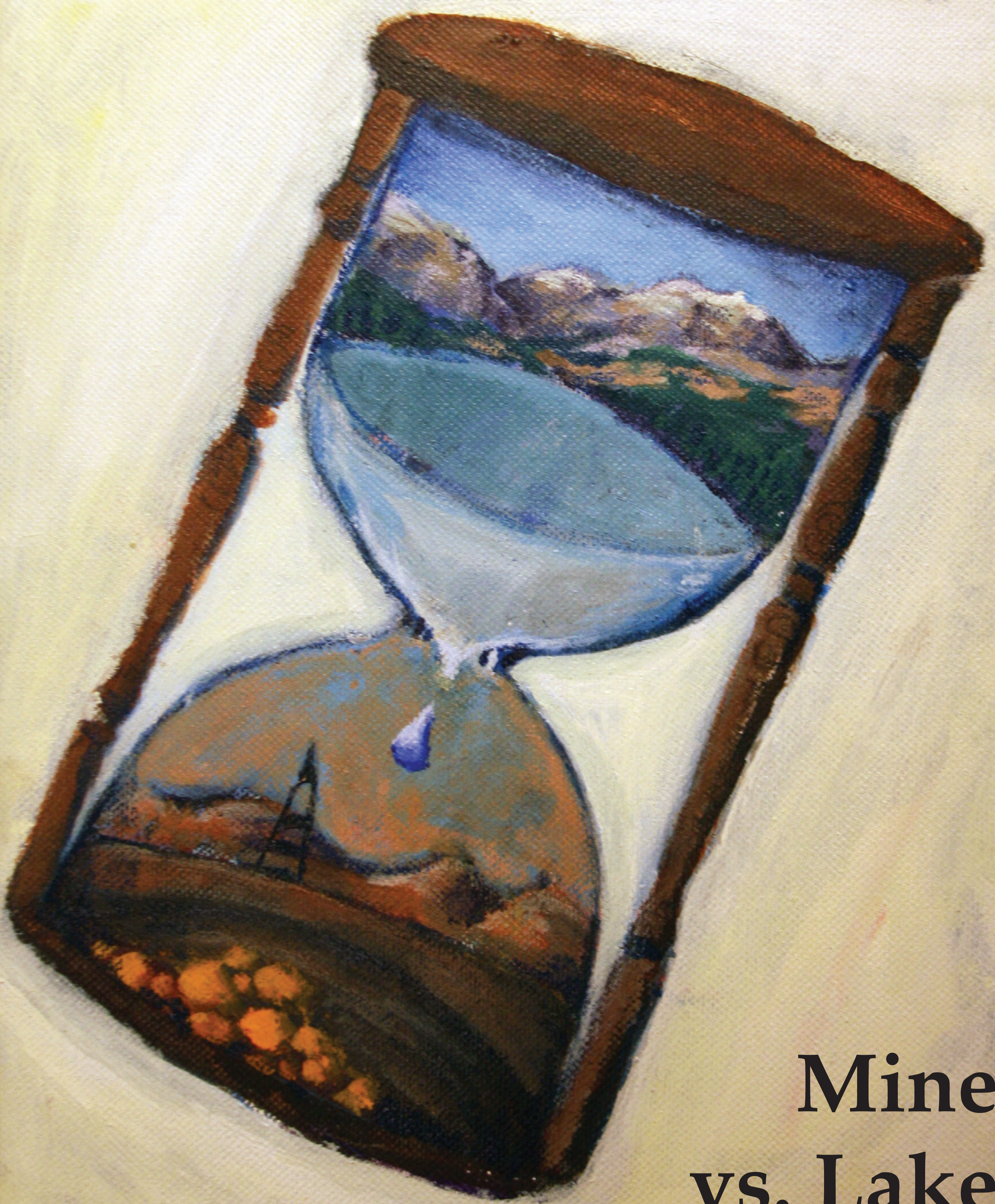
Alternatively, domestic proponents will argue that Canadian mortgage lenders provide greater service and convenience through their huge branch networks and, with aggressive marketing, could maintain market share even if U.S. competitors come north. Banks are already aggressively wooing mortgage financing business. According to an industry website, "...big banks have launched a Blitzkrieg offensive...The Big 5's mortgage divisions are morphing from Gomer Pyle to John Rambo...Bankers are running through the jungle with M-60's, whereas in kinder and gentler times (pre-2009), they sat camouflaged in the weeds with sniper rifles." While the service and convenience of a vast branch network and permanent establishments in the country may sway some borrowers, these factors do not drive consumer decisions since after the loan is extended, all other dealings are remote and automatic. It is difficult to see how convenience can offset the better pricing available from U.S. mortgage lenders, especially amongst Generation X borrowers.

Finally, some pundits feel that consumer momentum alone will ensure that U.S. mortgage lenders will never achieve significant market share in Canada. While one or more of these countervailing arguments might have some traction, at best their collective operation will only slow down the American invasion of the Canadian mortgage market. Remember that similar arguments were touted to explain why Walmart would never succeed in Canada, yet, at last count, Walmart had over 220 Canadian locations.

A brave new world of mortgage lending in Canada?

Frankly, the most certain way that U.S. mortgage lenders will be kept out of Canada is, ironically, for the world to suffer a further recession. A double-dip recession now will simply repeat market forces that have kept U.S. mortgage lenders out of Canada to date. Failing a further recession in the United States, it should merely be a matter of when and not if U.S. mortgage lenders will make significant inroads into the Canadian domestic market. The mortgage market in Canada is and very rate sensitive and it is unrealistic to think that patriotism, improved service and convenience, or consumer inertia will overcome real dollar cost savings made available by U.S. mortgage lenders.





Mine vs. Lake

The path to prosperity is littered with mines

Written by Cameron Bossert & Michael Egden

Mine vs. Lake

Taseko Mines is a Canadian miner and refiner of copper and gold. One of the company's upcoming projects, dubbed 'Prosperity', is very financially promising. The project has the backing of the B.C. Government with the final decision in the hands of Parliament.

Taseko Mines must literally drain an entire mountain lake for the project. The proposal has been met with threats of violence against Taseko and the government. People have been quoted saying they are willing to give up their lives if it means stopping the project.

Lake

Net Present Benefit

The Prosperity mine will generate immense benefits over 33 years, though the ecosystem of Fish Lake will generate benefits indefinitely. The NPV calculation used by advocates to justify mine development is a fundamentally flawed approach. An NPV calculation returns the value that can be extracted by one party from the asset over its entire lifespan, discounted to show its value today. The benefits generated by Fish Lake as -is will be realized over an immense timespan by many different groups of people. Therefore, calculating a sum that the asset is worth to one party at a specific point in time is not useful for comparing value.

The costs in the NPV calculation are merely internal costs faced by Taseko. The external cost of irreversible environmental damage is not included, nor is the idea of long-term economic sustainability: after 33 years, the mine is gone, as is the economic benefit. The financial 'wow' factor of Prosperity is hollow and shortsighted; making decisions with this framework is clearly unsustainable.

Eco vs. Econ

There are many other options that local governments can pursue without such a major environmental impact. On July 15, 2008, Volkswagen America announced that it would invest $1 billion (U.S.) in a new manufacturing facility in Chattanooga, Tennessee. This followed years of lobbying pressure put forth by local governments elated by Volkswagen's decision. Volkswagen's investment is comparable to that of Prosperity's capital expenditures, but the Volkswagen plant will provide 2,000 jobs to Prosperity's 375. Considering the multiplier effect of these jobs, the social returns on an investment like Volkswagen's are much more attractive.

While Williams Lake should not lobby specifically for a Volkswagen plant, the point is that the government should be pursuing more sustainable options that add similar, if not greater, economic value. It is not difficult to predict the economic outcome of the region once the gold and copper deposit has been fully exploited. An economy built on a sustainable foundation is the optimal long-run solution; an economy whose roots lie in a mine is fleeting at best.

Canada vs. The World

Canada is inarguably facing global competitiveness, productivity and innovation issues. By placing a focus on improving the mining industry itself and by diverting resources to this sector, Canada lines itself up for continued reliance on its most unsustainable and polluting industry. If the Canadian economy is to improve via productivity and innovation, a competitive mining industry - though lucrative in the short-term – is not the answer.

Productivity improvements should have a dual focus. First, emphasis should be on improving the productivity of Canada's most sustainable industries. Second, productivity should not be pursued at the expense of important qualitative factors like pollution and native rights. Prosperity, in its current state, gives Canada a chance to realign its focus on productivity improvements. Rejecting its current development is an important first step for Canada to become truly innovative and productive, not productive at face value.

Mine

Net Present Benefit

Prosperity is an undeniable opportunity: it is believed to be among the largest undeveloped copper-gold deposits in Canada. The mine has a pre-tax net present value of over $3 billion, and will keep cash coming in for over 33 years. To put the scale of this project into perspective, imagine 12 CN Towers made entirely of copper, with a Boeing 747 made of gold flying overhead. Those are the weights of the metals considered 'recoverable' at current commodity prices.

On the other hand, the project would make use of a single lake. Canada has no shortage of lakes, to be sure: the number is estimated between two and three million covering nearly 900,000 km2 – an area the size of Venezuela. Canada has more lakes than it can count with any precision. Prosperity, however, is among the largest copper-gold projects left in Canada – one of the last titanic deposits. Surely the value of a rare mine vastly outweighs the value of one of a bounty of lakes.

Eco vs. Econ

The Williams' Lake economy is weak, to put it mildly. Unemployment in the region was 12% in 2009, following the devastation of the forestry industry by the mountain pine beetle. The 12% unemployment rate is double the provincial average, and puts Williams' Lake in interesting international company: Colombia, Puerto Rico, Iran, Ghana, Guyana and India all have unemployment rates of 12% or lower. Life in Williams' Lake is not ideal right now.

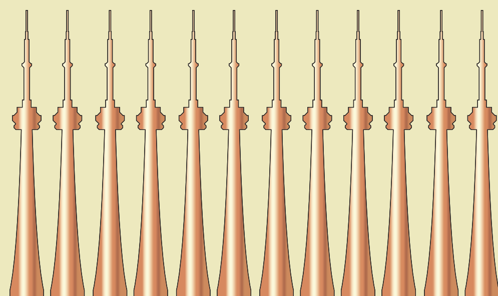
The Canadian Parliament should see the tremendous economic benefit that Prosperity can bring. The mine will create 375 jobs directly, with indirect jobs estimated at 325 person-years. The project is estimated to contribute $340 million to provincial GDP annually. Not only that, it will contribute revenue of $400 million and $43 million directly to the provincial and local governments, respectively, over the life of the mine. A considerable amount of money is being reinvested directly in the affected area. To top it off, Taseko has agreed to build and stock a substitute lake to offset the use of the current one. Prosperity will provide significant economic benefit to a community that is in dire need of revival.

Canada vs. The World

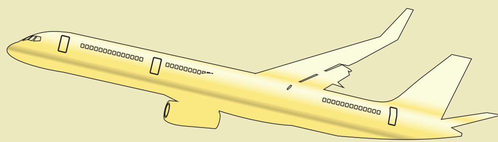
Prosperity is not just a beacon of hope for Williams' Lake and B.C.: it is a substantial opportunity for Canada to maintain global competitiveness. Canada is a resource nation, competing with the natural endowments other nations so desperately desire. Unfortunately, the great Canadian mining giants – Inco, Falconbridge, Alcan – have been sold off to the highest foreign bidder. Canada has been increasingly unable to benefit from its own national competitive advantage.

Mining capital is skittish at the best of times, and the Canadian government has proven less-than-predictable in its attitude toward mining and foreign direct investment. Prosperity is the chance for the federal government to finally take a strong, positive stance on the future of this country. Prosperity should be the first step in supporting Canadian competitiveness and making amends for the loss of iconic Canadian companies.

Recoverable metals at Prosperity

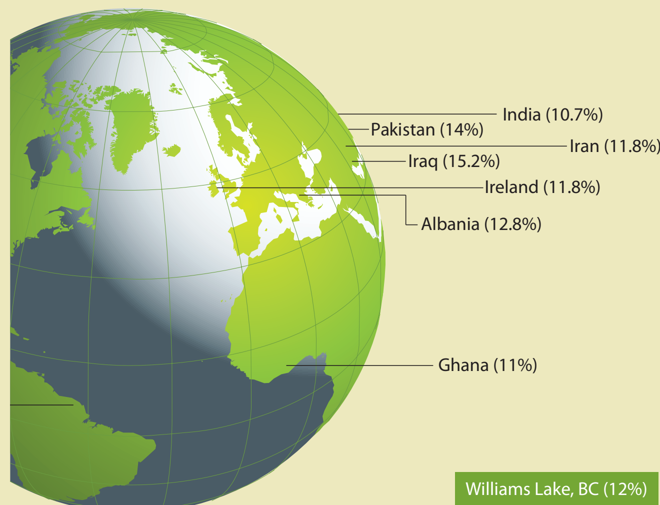


1,632,933 tonnes of copper



2,602 tonnes of gold

Select global unemployment rates



Conversation – not confrontation – presents opportunities

Regardless of the outcome (the federal government has since denied the project proposal as it stands), consideration of business sustainability, in virtually every case, is not a conversation. Neither side of the argument seem to care what the other has to say. One of the pillars of communication and influence is to 'know your audience.' Both sides of the argument fail conclusively by this test.

Net Present Benefit pits the economic benefits of the project against the longevity of the benefit. While true that an ecosystem will be severely damaged, the reality is that Taseko, government, and investors would prefer to get as much money now as possible to be reinvested in other future endeavours – the so-called 'time value of money.' The argument for sustainability has ignored this fundamental decision-making concept in arguing for an unquantifiable benefit over an indefinite timeframe. The hollow promise of benefits and threat of 'external costs' are far too vague and intangible to make a compelling case.

Eco vs. Econ highlights the substantial economic benefits that Prosperity will bring to a struggling region. The response, however, argues that the benefits are not enough: not enough money, not enough jobs, not enough sustainability. It also fails to acknowledge that there is no alternative to Prosperity. Prosperity, in fact, provides more money, more jobs, and more sustainability for the region than the status quo: the argument that Williams' Lake will benefit more from other industries is undermined by the fact that other industries are not trying to enter the region.

Decision Criteria

- Potential to enhance profit (on a net present value basis)
- Low risk to upkeep
- Measurable progress toward goals of the solution
- Source of continuous improvement
- Potential to gain competitive advantage either via favourable government regulation or enhancement of position in the competitive landscape

Canada vs. The World presents an irreconcilable argument: with Canada a resource nation, there is no question that the economy can benefit, in the short-term, from exploitation of resources. The real question that sustainability poses is if Canada should stake its future on an industry with a finite life – this is a 'take it or leave it' imperative with no room to compromise. Canada needs to reap the benefits of a strong natural resources sector, especially if it wants fund development in more sustainable industries like Clean Tech.

There is a fundamental misunderstanding that sustainability means not exploiting resources and preserving the world entirely as it was found: this, given present technology, is not realistic and precludes any hope of reconciling social benefits and business incentives. That said, there is certainly potential for eco-efficiency improvements in how the world exploits natural resources. Many companies have begun moving this way in response to market pressures, but there is both muting and lag as pressure from the end consumer moves up the supply chain. If proponents of sustainability truly want to foster more sustainable business, then they must realize that cultural forces are not always enough, and that there must be a valid business case for the change. There is room for sustainability advocates to collaborate with big business rather than point the finger of blame. Decision-makers inherently respond more favourably to problems that carry proposals for specific solutions. Sustainability efforts could benefit from a general approach to building a business case.

The future of sustainability must be about more than who is correct. Those that argue for sustainability must recognize economic realities, and speak to business in their own language by building a specific, tangible business case for change. Businesses must likewise identify the concerns of communities and work with them – not to appease them, but to gain buy-in and unearth opportunities to enhance the business venture. Respectful collaboration is the effective approach that has largely been ignored. The average citizen, and even more so business, has little interest in the sensationalism currently used by activists. If society is to operate sustainably, sustainability must take business and guide them on a walk, not line up as David against Goliath in a fruitless tug-of-war.

IVEY

BUSINESS

REVIEW