

GOPRO: CAPTURING A NEW AUDIENCE

In light of declining sales, GoPro should expand into retail video analytics | P.14

INTERVIEW P.7

Kevin Chan

IBR speaks with Facebook Canada's Head of Public Policy

ENTERTAINMENT P.26

NHL: Rushin' to the Chinese Market

The Kontinental Hockey League can fuel the NHL's global expansion

INDUSTRIALS P.34

Western Canada's Select Opportunity

Lagging supermajor PetroChina can find growth in the Canadian oil sands

CONSUMER P.44

OpenTable: A Buzzworthy Partnership

Partnering with Bumble can help OpenTable remain a market leader



Editorial Board



Ivey Business Review is an undergraduate business strategy publication conceived, designed, and managed exclusively by students at the Ivey Business School. Its mission is to provide a forum for tomorrow's business leaders to develop, voice, and discuss their thoughts on today's business strategies, threats, and opportunities. Articles are written by undergraduate students in the Ivey HBA program, and have been created specifically for the publication after several months of intense collaboration between student writers and members of the Editorial Board. Additionally, the publication's blog platform allows students and young alumni to further the IBR mission year-round.

Editorial Board

Sean Chen
Serene Chen
Yaasir Dayani
Nameh Dhawan
Raunak Gera
Sooruj Ghangass
Adam Gillman
Kate Hall
Grace Lu
Sherry Lu
Shehryar Mansoor
Jim Zhou

Editor-in-Chief

Sharon Xu

Publisher

Mark Krammer

Creative Directors

Amaara Dhanji
Alvin Tse

Creative Team

Rosie Fan
Angela He
Ria Iyer
Selina Li
Mercy Liu
Matthew Tai
Joey Yu
Steven Zhang

Faculty Advisor

Matthew Sooy

Research Team Head

Rahul Bathija

Research Team

Zuhayr Abbas
Drew Barot
Sanchit Bhandari
Adil Khan
Jun Kim
Selina Li
Shahryar Safdar
Raymond Shi
Nick Tommasini
Vin Venkatesh
Angelie Vivekanand
Edward Wang

Creative Team



Research Team



Subject Matter Expertise
Provided By:



Board of Advisors
Xiaoya Xu, HBA '16
Karen Yu, HBA '16

Special Thanks To:

Henry Choi, HBA '16
Sanveer Dhanju, HBA '18
Tanuj Dutta, HBA '14
Sankalp Hariharan, HBA '18
Ryan Hui, HBA '13
Alif Karmali, HBA '18
Andrew Kanapatski, HBA '15
Remmy Kilonzo, HBA '18
Andrew Leung, HBA '17

Gordon Sun, HBA '18
Ajith Sukumar, HBA '18
Jitesh Vyas, HBA '16
Eva Xu, HBA '18
Michael Zawalsky, HBA '14

Note from the Editorial Board:

“Onwards and Upwards”

As e-commerce sales continue to soar, online giants like Amazon seem to hold an increasingly dominant position as retailers. It comes as a surprise, then, that CEO Jeff Bezos recently acknowledged: “one day, Amazon will fail.” This serves as a reminder that continued success is by no means guaranteed for even the most established industry players; businesses must continually adapt to their surroundings, lest they be eclipsed by competitors and disappear.

In this edition of Ivey Business Review, we bring you our authors' unique and thought-provoking ideas on how eleven companies can adapt to the constantly changing business landscape to ensure their continued success.

International markets hold promise for some. Our article on PetroChina details how the lagging supermajor can find untapped opportunity in Canada's oil sands, while our article on PayPal describes how the company can capture an underserved Latin American market. Another piece details how the National Hockey League can benefit from expansion through Eurasian acquisition.

Technological advances can equally prove valuable. Our cover article details how GoPro can combine camera hardware with machine learning to provide retailers with business insights. We further describe how materials giant LafargeHolcim can take advantage of promising research to replace sand with scrap plastic.

Others must revisit their value proposition to discover how to proceed. Our articles on Patreon, Calm, Hootsuite, Snap, and Michael Kors detail how these companies can look to their past to expand upon their successes.

Finally, some must turn to partnerships: our piece on OpenTable describes how the restaurant reservation service can join forces with dating application Bumble to fuel growth.

While every company's eventual demise may be inevitable, the strategies presented herein are intended to follow Bezos' imperative and “delay that day for as long as possible.” It is our hope that the ideas presented in this publication will inspire you to think proactively and act strategically on your quest to achieve new heights.

Sincerely,

Sharon Xu & Mark Krammer

Editor-in-Chief and Publisher



Sponsors

Organizations that embrace thought leadership position themselves well for the future. Thought leadership runs to the very core of *Ivey Business Review's* mission. We thank our sponsors for their continued support as we execute this critical mission.

Platinum



Gold



Silver





14

GOPRO: CAPTURING A NEW AUDIENCE

07 **Interview with Kevin Chan**
IBR sits down with the Global Director and Head of Public Policy at Facebook Canada

10 **Hootsuite: Swooping into Education**
Marie Liang & Michael Tang

14 **GoPro: Capturing a New Audience**
Gary Wu & Jackie Wang

18 **Snapchat: Snapping Its Losing Streak**
Faizaan Baig & Hirushan Thalayan

22 **Patreon: Connecting Companies and Creators**
Ethan Milne

26 **NHL: Rushin' to the Chinese Market**
Brandon Park-Lee & Alexander George

30 **Michael Kors & Versace: Stitched at the Seam**
Jane Wang & Bohan Jiang

34 **PetroChina: Western Canada's Select Opportunity**
Adam Arif

40 **LafargeHolcim: The Plastic Solution to the Global Sand Wars**
Joseph Scarfone

44 **OpenTable: A Buzzworthy Partnership**
Zoe Yang & Wes Jefferson Ong

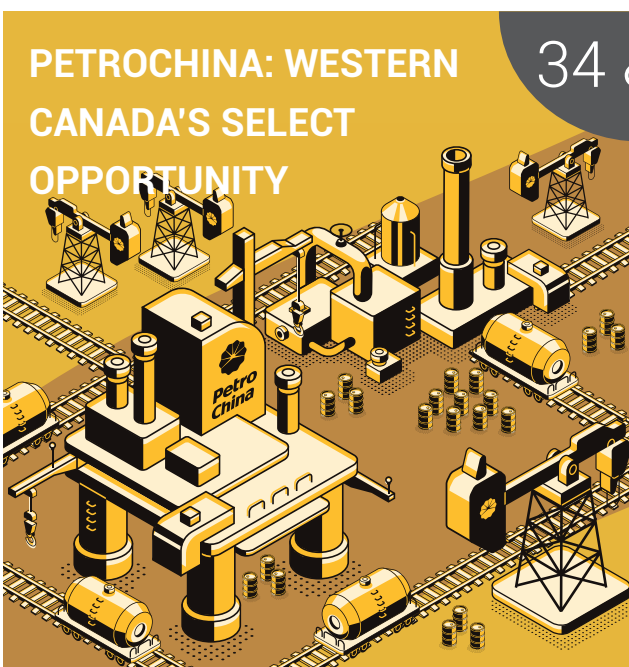
48 **Calm: The Calm Before the Storm**
Stephanie Li & Virginia Ling

52 **PayPal: Cashing in on Latin America**
Rahul Guggali & Kayla Pandza



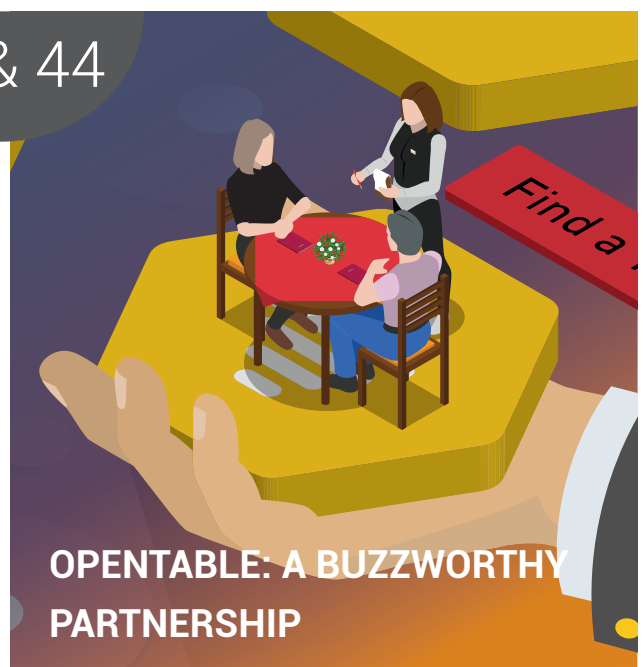
26

NHL: RUSHIN' TO THE CHINESE MARKET



PETROCHINA: WESTERN CANADA'S SELECT OPPORTUNITY

34 & 44



OPENTABLE: A BUZZWORTHY PARTNERSHIP

Interview: Kevin Chan

Facebook Global Director and Head of Public Policy, Canada



IBR: “Public policy” is a broad term. How would you best describe your role and its importance?

KC: Working on public policy at Facebook means collaborating with stakeholders—governments, academics, civil society and regular people—to address frontier internet issues. Over 24 million Canadians connect on Facebook every month, which naturally gives rise to many public policy topics that are also top of mind for us, such as online safety, civic engagement, the digital well-being of families, freedom of expression, election integrity and Indigenous culture and content online.

IBR: Most of us don't think about policy issues affecting the Internet. In your opinion, what are the most pressing issues currently weighing on policymakers' minds?

KC: I can't speak on behalf of policymakers, but I can tell you that at Facebook, we're intently focused on election integrity and minimizing the spread of misinformation online. We have devoted significant time, resources and personnel to address these issues. On a global level, we've doubled our security team to 20,000 employees and we are developing new artificial intelligence technologies to automatically find and disable fake accounts. Here in Canada, we are investing in partnerships like our third-party fact-checking program with *Agence France-Presse* through which professional fact-checkers are able to rate the veracity of news articles on Facebook, and we launched a crisis hotline for political parties and politicians in the event of cyber interference, including suspected hacks. We've made a lot of progress in the past two years to ensure the integrity of our platform. These efforts were a top priority as we navigated municipal and provincial elections across Canada in 2018 and will remain top-of-mind in the lead-up to the 2019 federal election.

IBR: In what ways do you think Facebook is beneficial to society? In what ways is it detrimental?

KC: Facebook helps people around the world stay connected to the people and things they care about. As a platform, Facebook has a positive impact on the economy and society, helping people organize and mobilize, connecting citizens with their elected officials, and driving small business growth. Drawing on a recent example, this past October for Small Business Week in Canada, Facebook was invited by the communities of Port Rowan and Kapuskasing to hold best practices sessions as part of our ongoing Connecting Canada's Rural Communities Tour. We launched this initiative back in June with the

Carcross Tagish First Nation in the Yukon, to shine a spotlight on the incredible ways Canadians are harnessing the power of Facebook to fuel growth for their businesses, build local economies and create meaningful connections across rural communities.

We have been challenged by certain bad actors that have abused our platform with respect to election integrity and misinformation, and we are working hard to address these challenges. In the past, we didn't take a broad enough view of our responsibilities around these issues, and that's been one of our most important learnings in the past two years.

“We have been challenged by certain bad actors that have abused our platform with respect to election integrity and misinformation, and we are working hard to address these challenges.”

IBR: Facebook's integration into billions of users' lives gives it a privileged position in society. How does the company balance the ethical obligations that come with holding such influence?

KC: It truly is a privilege to serve our communities throughout Facebook's family of apps. With this privilege comes great responsibility—a responsibility we take very seriously—to ensure the integrity of our platform and the privacy of people's personal information so people can continue to connect and build community around causes and issues they care about.

IBR: What are your thoughts on how legislators should approach regulation of Facebook and other technology companies?

KC: We are not waiting for legislation or regulation to do the right thing at Facebook. Take our efforts to ensure ad transparency as an example. We launched an ad transparency pilot in Canada in November 2017, which allows any Canadian user to see all the ads that a Facebook Page is running on the platform, regardless of whether that user is in the intended audience. This is a higher level of ad transparency than exists on any other platform, online or offline. We launched this first in Canada, before anywhere else in the world, not because there was

imminent legislation, but because we wanted to bolster our election integrity efforts here. Of course, we would be pleased to work cooperatively with legislators in Canada and around the world on any legislation that impacts the digital economy.

IBR: Not all policymakers are familiar with relevant issues in technology, particularly given the pace of innovation in the field. How do you handle dealing with uninformed lawmakers?

KC: Technology is always changing and evolving, and I dedicate a lot of time towards informing and educating stakeholders, including policymakers, about new products and services, and about how the platform works.

IBR: Europe's enactment of the General Data Protection Regulation (GDPR) has mandated increased transparency surrounding consumer data. Do you envision North America following suit to give consumers more ownership over their data?

KC: Canada has a very robust privacy law in place, called the *Personal Information Protection and Electronic Documents Act* (PIPEDA). PIPEDA is a very interesting example of a third way between the U.S., where there is no national privacy framework, and Europe, where the GDPR is highly prescriptive. By contrast, PIPEDA is technology-neutral and principles-based. It protects people's privacy while fostering innovation, and I think we should be proud of this made-in-Canada approach to privacy protection.

IBR: In your opinion, what constitutes ethical data mining?

KC: People should own their data, and be able to control what they share and with whom, period.

IBR: What is the greatest barrier to Facebook's goal of "building a global community"?

KC: Building a global community is obviously challenging, given the many social, cultural, and economic forces that need to be navigated. From a technical point of view, two thirds of the world's population is not connected to the Internet, which has enormous social and economic costs for people and societies. This is why our connectivity teams are working across dozens of countries to help overcome the global Internet connectivity challenges of accessibility, affordability, and awareness—with the hope that one day, everyone will have high-quality Internet access.

IBR: In addition to your role at Facebook, you are heavily involved with nonprofits and very civically engaged. How does your public policy experience help you in this regard?

KC: I feel very fortunate to be able to pursue my passion for public policy both in my work at Facebook, and with the nonprofits that I am involved with, including the boards of Kids Help Phone, MediaSmarts and the University of Ontario Institute of Technology. In my work and in my personal life I am driven by the opportunity to have a positive impact in the lives of others.

IBR: Many Ivey students have limited experience with public policy. What advice would you give to these future business leaders?

KC: While you may not always see it or feel it, public policy touches every aspect of our lives. This is true for businesses, too. In order to be successful, future business leaders need to not only understand public policy, but take an active role in working with governments and civil society to achieve outcomes that are good for the country and good for the world.

"In order to be successful, future business leaders need to not only understand public policy, but take an active role in working with governments and civil society."

IBR: What is the most valuable lesson you've learned throughout your career?

KC: Take risks in life and in your career. You will grow so much, both personally and professionally, from the wonderful experiences you will have along the way.

HOOTSUITE: SWOOPING INTO EDUCATION

To reduce dependency on social media giants, Hootsuite should build a nest in the education industry

Marie Liang & Michael Tang



The Rise of Hootsuite

Hootsuite is the most widely used social media management platform globally with more than 16 million users as of 2018. With 66 per cent of the American population projected to be using social media by 2022, the company's goal is to revolutionize the way users communicate through online channels. Hootsuite's main offering is an integrated platform that allows marketing professionals to conveniently manage networks like Facebook, Twitter, and Instagram through a single dashboard while simultaneously gathering and presenting analytics essential for managing marketing campaigns. Its clients range from small businesses to large enterprises including Virgin Media Group, Herschel Supply Co., and DAVIDsTEA. On top of its core product, Hootsuite also curates training programs and video seminars on social media marketing and use of the platform. Hootsuite maintains a unique relationship with its main social media partners, who offer paid access to application programming interfaces (APIs). This API access is core to Hootsuite's offering and allows the company to pull user data from social media and display it on Hootsuite dashboards.

The rising popularity of social media has created strong momentum for Hootsuite to grow its business, enabling it to raise more than \$300 million in equity and complete more than 10 strategic acquisitions to date. However, while the symbiotic relationship with social media platforms has been key to Hootsuite's success, a dependence on partners poses a long-term threat.

Ascending Concerns

While social media platforms benefit from third-party API use, revenues from such partnerships are often insignificant. Conversely, Hootsuite's business model is predicated on this access, and interruptions threaten the company's ability to maintain its offering. Furthermore, Hootsuite has little bargaining power against social media partners; many firms would simply not prioritize third-party application support in face of rising consequences and higher associated costs from data breaches.

This dynamic fundamentally threatens Hootsuite's ability to generate stable revenue. Since Hootsuite is reliant on its partners, changes in prices or data access from these partners could make Hootsuite less appealing to its users. As an example, Twitter reportedly began charging Hootsuite close to 10 times its previous price for API access. In response, Hootsuite chose to deprecate the Twitter Inbox and Outbox streams in favour of implementing its own direct message management tool, Hootsuite Inbox.

Data privacy trends are also concerning for Hootsuite.

The recent European Union implementation of the General Data Protection Regulation has increased digital privacy requirements for corporations. As a result, the future for applications like Hootsuite, who rely on a constant flow of data from social media platforms, is uncertain. For example, in the wake of the recent Cambridge Analytica data breach, Facebook terminated thousands of third-party apps' access to personal information.

This presents a significant issue because there is no apparent tactical or operational way to directly reduce this dependency. With the data privacy landscape rapidly changing, large firms like Facebook are unable to guarantee Hootsuite long-term access to all the information it needs. Therefore, Hootsuite needs to reduce this business risk by diversifying into a new revenue stream that does not rely on social media companies. To do so, the firm should capitalize on its online education offering, Hootsuite Academy. While this platform has an existing presence with educators and students, it is underdeveloped and not fully monetized. Investing in this segment can help Hootsuite develop a sustainable revenue stream and protect its business from the volatility of social media partnerships.

"With the data privacy landscape rapidly changing, large firms like Facebook are unable to guarantee Hootsuite long-term access to all the information it needs."

Bird's-Eye View

As of 2017, the U.S. online education industry, which includes mobile learning, massive open online courses, and collaborative learning, was a \$27-billion industry. A key trend within this education market is the rising demand for new graduates possessing practical experience. Studies show that 71 per cent of corporate recruiters find a lack of practical experience to be the biggest challenge when recruiting for candidates. To address this experience gap, many companies in the technology and computer science space are turning to edX, a service that partners with corporations to create dynamic training programs. Given Hootsuite's extensive experience in social media marketing, the company should follow suit and offer a practical educational solution for post-secondary students looking to gain hands-on experience.

Closing in on the Opportunity

Hootsuite Academy is an online education offering that currently educates users on the effective use of the Hootsuite platform and on social media marketing principles. The platform offers a free student program, which gives students access to a basic Hootsuite dashboard and two social media modules. However, in its current form, this program is limited in functionality.

Looking forward, Hootsuite should expand to provide universities with a practical and dynamic social media training product. There is an excellent opportunity to capitalize on demand as evidenced by the 280,000 students that Hootsuite has educated and the 880 schools that use the free student program. Hootsuite should fully monetize its education platform for universities and create a dynamic hands-on simulation to provide maximum value to students. The new educational offering would consist of two components: a marketing simulation application and a concentration of multimedia resources structured as modules for learning marketing theory.

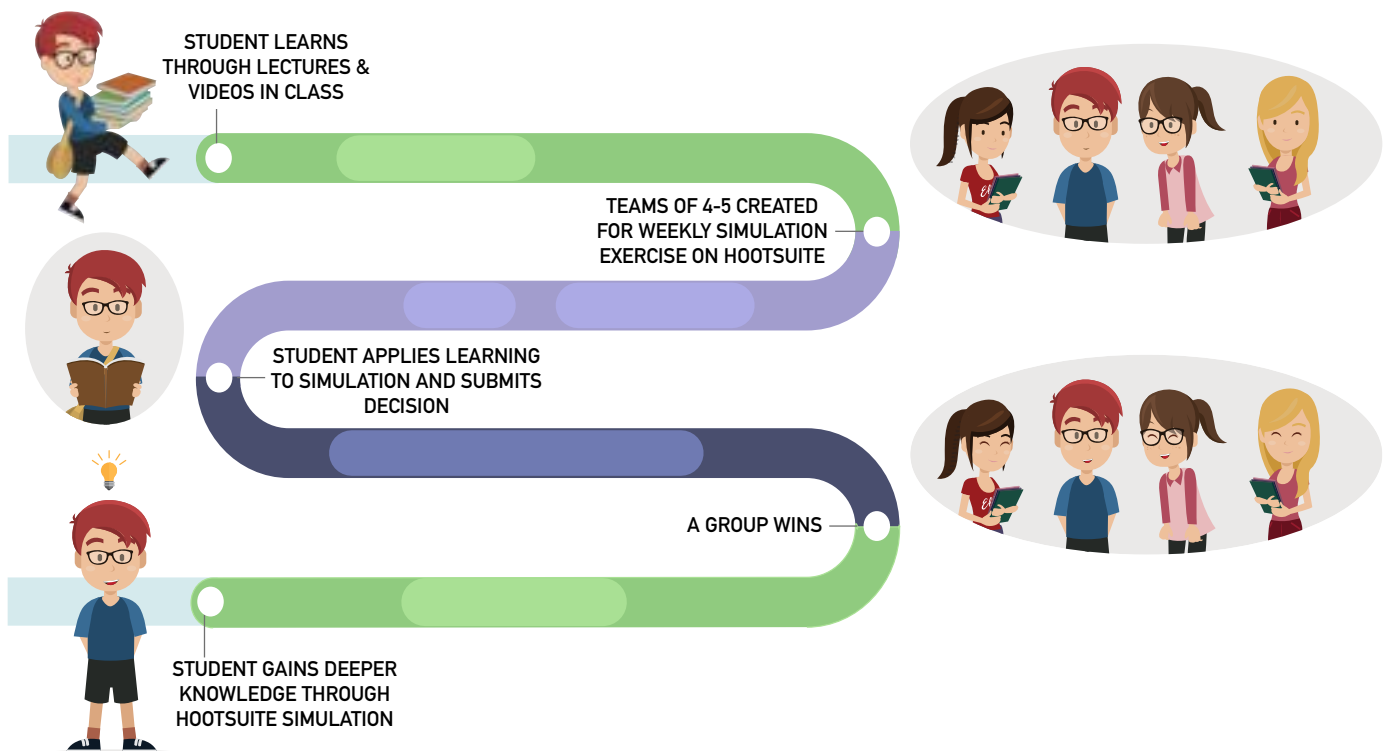
The marketing simulation would provide students with the opportunity to compete against each other in an online game that mirrors real-life decisions made by marketing executives. Simulations are highly effective in promoting the real-life decision making used in economics and finance courses; examples of such tools include the

Fishbanks simulation used by the Massachusetts Institute of Technology and Stock-Trak markets simulation used by the University of Waterloo. Hence, the Hootsuite simulation would provide a practical way for students to navigate and learn social media tools and analytics.

Features of the analytics tool would include detailed social media reports on the reach, engagement, clicks, and page previews that real-world marketers would analyze. Students will be challenged to make decisions in uncertain market conditions and face pressure from “competitors,” their peers in the simulation. Winners will be selected based on how well they analyze the data provided from various social media platforms and how well they react to changes within the environment. To supplement the practical application, Hootsuite could also curate videos to teach relevant theoretical concepts. Features that would be valuable to professors who teach the course include video training for managing the class, access to the simulation platform, comprehensive teaching materials, and user support.

Introducing Hootsuite into the post-secondary education market would allow future professionals to familiarize themselves with the platform, thereby building brand awareness and loyalty early. This would give the company a stronger market position and higher adoption later on. With a large base of marketing professionals on Hootsuite,

HOOTSUITE ACADEMY'S NEW CUSTOMER JOURNEY



A TWO PART SOLUTION



the company becomes much more valuable to large social media platforms such as Facebook and Twitter, who would want a seamless experience for marketers who spend money on advertisements.

A Practical Approach

The key to a successful rollout of this program will depend heavily on the buy-in from post-secondary institutions. Hootsuite's key selling point is its ability to deliver practical learning and leading industry experience to students.

License fees charged to each school will vary based on the expected number of students who will use the simulation. Competitors for Hootsuite's simulation program include MARGA Business Simulations, priced at €2,960 per team (approximately \$3,400) and SimVenture, whose price begins at £4,500 (approximately \$6,500) for an annual higher education license. Based on Hootsuite's comprehensive offering, the company can price its product at approximately \$5,000 per year, given that additional multimedia resources are packaged in with the simulation product. The offering would give institutions a choice to purchase a one-day trial before committing to a full six-week program. As with many online education tools like Top Hat and SABRE, schools could also pass on the cost of the product to their students. Moreover, Hootsuite's existing capabilities in customer support and relationships with educational institutions could be used to provide responsive support for educational clients.

In 2017, the U.S. had 3,895 independent universities and colleges that could purchase a license for the Hootsuite offering. Furthermore, Hootsuite already offers its free program to more than 880 institutions who would serve

as potential customers for this full offering. Altogether, this provides a market opportunity of \$19 million per year for Hootsuite. Success in the higher education space would allow Hootsuite to gain credibility with its platform and position itself well to diversify into other ancillary and high-margin services like executive education, workforce training, and marketing consulting.

Soaring to Success

Hootsuite's business and enterprise solutions have proven immensely successful as social media has become an ever-present part of modern life. In its unique position as a facilitator working with businesses, social media companies, and marketers, Hootsuite developed unique expertise in a growing and dynamic industry. A foray into the educational space would allow Hootsuite to take advantage of its student program and reduce its dependency on partners. Education would allow Hootsuite to deliver on its value proposition of enabling individuals to better use social media while achieving the firm's goal of revolutionizing the way people communicate.

GOPRO: CAPTURING A NEW AUDIENCE

In light of declining sales, GoPro should expand into the B2B market, offering retailers an integrated hardware and analytics solution

Gary Wu and Jackie Wang



Missing the Shot

Founded in 2002, GoPro was the first brand to produce a mainstream camera that was both compact and shock-resistant. In its early days, this was enough to give GoPro a distinct advantage in the market of athletes and thrill seekers wishing to capture their experiences. This no longer holds true. Between 2015 and 2017, GoPro's revenues declined from \$1.6 billion to \$1.2 billion and the company's share price fell nearly 90 per cent.

A key driver behind GoPro's declining sales has been the rapid advancement in smartphone camera technology. For example, the iPhone 4 was released in 2010 with a simple 5-megapixel camera; a mere six years later, the iPhone 7 boasted a 12-megapixel rear-facing camera and a 7-megapixel FaceTime HD camera. The popularity of using smartphone cameras to capture footage was further fueled by the prominent use of social media platforms such as Instagram and Snapchat. Over the past five years, Instagram has quintupled its monthly active user base to more than one billion while Snapchat has quadrupled its number of daily active users to more than 180 million. While smartphones offer users the convenience of instantly editing and sharing footage on social media, GoPro cameras lagged in providing this feature. "We failed to make GoPro contemporary and failed to align GoPro to the smartphone movement," admitted CEO Nick Woodman.

Another factor causing GoPro's sales decline is the availability of cheaper alternatives in the market. For example, AKASO's EK7000 camera has comparable specifications to GoPro's flagship HERO7, but retails for less than half of its price. Desperate to compete, GoPro implemented an \$80-million price slashing strategy during its worst holiday season in December 2017.

A Venture into Video Analytics

GoPro's reliance on hardware as a sole revenue stream is unsustainable. To ensure future success, GoPro should combine its existing camera technology into an enterprise software offering. Footage from its cameras would be analyzed in real time to generate insights useful to businesses. By offering this software on a subscription basis, GoPro can access a source of recurring revenue, providing the company with more sustainable growth prospects than its traditional one-time purchase model.

A potential end market for this service consists of large retailers that want to better collect data on their operations and customer service. Many retailers rely on opt-in surveys and human observation to drive business understanding, but this leaves many insights untapped. Furthermore, it fails to address costly problems, including dissatisfied customers. While 96 per cent of unhappy customers choose not to voice a complaint, 91 per cent

of those same customers will never return to the store, resulting in substantial losses.

GoPro should provide retailers with cameras that can be installed on store shelves and discreetly worn by customer service staff. The footage collected by this in-store camera network would be analyzed in real-time, leading to business improvements through sentiment analysis, audio processing, and inventory management.

Sentiment Analysis

Advances in machine learning now enable the analysis of facial expression and tone of voice to deduce an individual's emotional state. Sentiment analysis from GoPro audio and visual footage would enhance retailers' understanding of customers' emotional response to their shopping experience.

Specific customer reactions can serve to signal when additional assistance should be provided. For example, GoPro footage showing that a customer is distressed following an employee interaction could immediately serve as a trigger to dispatch a manager. Improving customers' in-store experience is a strong value proposition for retailers, as estimates show that a customer is four times more likely to turn to a competitor if they experience a service-related, rather than product-related, problem.

Retailers can use this software to gauge how customers feel about certain products and promotions within the store. Cameras in a particular aisle frequently detecting negative sentiment could indicate that more staff are needed to serve that section of the store or that the aisle's product mix requires adjustment. Retailers could also sell this data to the brands they carry, since the data serves as a powerful market research tool.

Audio Processing

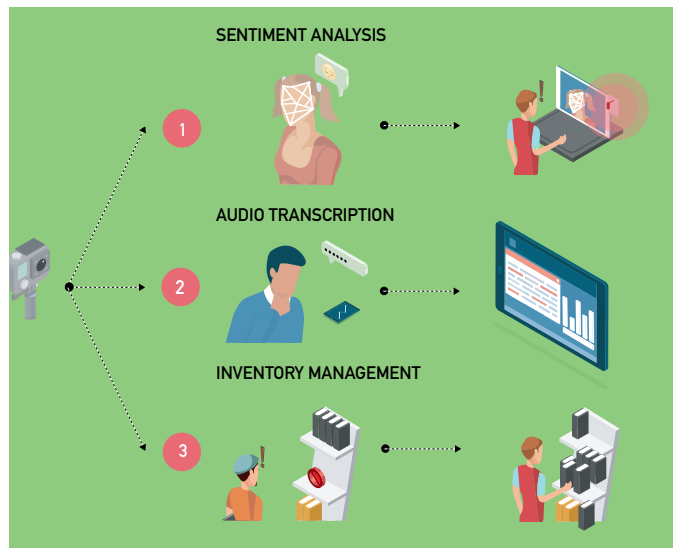
Alongside a customer's tone of voice, the content of their speech could equally yield insight. Specific keywords and phrases uttered by customers could help the retailer understand and address problems. For example, the phrase, "this is ridiculous," has been found to be the most telltale sign that a customer is becoming dissatisfied. GoPro cameras recording the word "ridiculous" a notable number of times in a specific area of the store or at a specific time would indicate that an underlying issue needs to be addressed.

Another promising use case for audio processing lies in assessing the effectiveness of a retailer's marketing efforts. Querying for the frequency of phrases such as, "this is so cheap," or, "the ad said..." can tell the retailer whether its pricing strategies and promotions are appropriate.

Inventory Management

Inventory management is crucial in maximizing profitability, with CNBC reporting that out-of-stocks, overstocks, and returns cost retailers nearly \$1.75 trillion per year. Ineffective inventory management systems were a critical component in Target's failed Canadian expansion attempt, with a \$941-million loss attributed to the markdown of excess inventory. GoPro cameras could use video analytics to monitor inventory and immediately provide an alert when a product's inventory levels are running low or have become fully depleted. The network of cameras in a store would further serve to enable depth perception and enhance the effectiveness of this technology.

USE CASES: HOW IT WORKS



Case Study: Axon

The success of such a strategy can be seen through the case of Axon, whose business now consists of manufacturing tasers and body cameras for law enforcement professionals as well as hosting video footage on its website. Prior to 2009, hardware was Axon's sole source of revenue. The company then decided to launch Evidence.com, a subscription-based software service, to store and manage digital footage recorded by its body cameras. In a recent investor report, J.P. Morgan applied a 7.0 times revenue multiple to Axon's storage and cloud revenues and a 1.0 times multiple to remaining software and sensors revenues. This compares favourably to the current 0.8 times multiple applied to GoPro's total revenues.

This clearly demonstrates the potential benefits if GoPro implements the same recurring revenue strategy for its wearable cameras. Similar to Axon, a subscription-based

service could introduce a new revenue stream for GoPro. This would furthermore increase shareholder value, as incremental GoPro revenues from recurring service sources would likely be valued at a premium to current revenues.

Akin to Axon's first-mover position in the law enforcement market, GoPro can be the leader for the retail segment. GoPro has already built the mass manufacturing capabilities for production, invested considerable capital into software that facilitates management of camera footage, and established a strong brand name. This allows the company to stand out relative to any competitors entering this market.

Acquiring Software Capabilities

Rather than developing these analytics capabilities in-house, GoPro should either partner with or acquire existing companies. Software development and data analytics are not core competencies for GoPro, and hiring talent to develop these competencies internally would prove challenging. As of September 30, 2018, GoPro sits on more than \$143 million of cash and cash equivalents which could be deployed for acquisitions. The company furthermore has previous experience acquiring and integrating businesses.

One company that serves as a viable partner for GoPro's sentiment analysis service is Cogito, a software company whose primary product assesses the tone of employees and customers at call centers. This partnership would prove attractive for Cogito as GoPro would diversify the company's revenues beyond its current business line and serve to validate the effectiveness of its technology. Similar opportunities for visual sentiment analysis and audio transcription could be found in companies such as Affectiva and Trint.

After acquiring the requisite software capabilities, GoPro should conduct a pilot program of its services at several small retail stores. This would help GoPro develop best practices for installation and setup, providing the company with tangible results evidencing the efficacy of its services before growing into large chain retailers.

Pricing Structure

Purchasing the large quantity of GoPro cameras necessary to equip a store is a large upfront expense for retailers. As such, GoPro's standard offering should provide the necessary equipment in exchange for a recurring monthly fee. This fee would scale based upon the required investment, determined from metrics such as number of employees and store square footage.

To appeal to large retailers who have the ability to make substantial upfront investments and may prefer to build a camera network internally, GoPro's value proposition should emphasize its newly acquired expertise in machine learning and data analysis, capabilities these retailers likely lack.

Defending Against Backlash

GoPro and retail stores should take steps to address potential risks that may arise from the proposed business model. Of crucial importance, companies in the U.S. must fully understand the legal implications of recording audio and video, and must fully comply with consent laws. Since retail stores are open to the public, shoppers cannot assume an expectation of privacy, making it lawful to record video. However, the company should mitigate legal risk by placing signs in stores explicitly disclosing to customers that they are being recorded.

Audio recording laws are more restrictive. While most states have one-party audio recording consent laws, permitting employees to record audio when interacting with customers, 11 U.S. states have all-party consent laws. To avoid liability, GoPro should only process audio in those states with one-party consent and when doing so, must ensure that all necessary consent is obtained.

This strategy risks consumer backlash from customers who are unreceptive to being recorded. However, with upwards of 30 million security cameras installed across the U.S. alone, the surveillance of retail customers is inevitable. Modifications to the existing GoPro chest harness design would reduce the size of the camera and make surveillance practices more discreet, helping to alleviate shopper concerns. Retail stores should make clear that customer data is anonymized and not stored once it has been used to generate insights. By emphasizing relatively inoffensive applications of the software, like reducing stockouts and improving customer experience, companies can better preserve their customer relationships. In addition, clear policies about private and sensitive off-limit conversation topics should be implemented for on-camera conversations.

By adopting the following policies, companies can ensure they respect the rights of every customer:

- Customers should have the right to control how a company collects, uses, and discloses their data, and should have the option of withdrawing or limiting data collection consent;
- Retailers should provide an upfront explanation of what data is collected, for how long it is stored, and with which third parties it might be shared;

- Retailers must mandate clear rules on how consumer data is anonymized and protected from hackers, thieves, and other unauthorized parties; and
- Customers should have the ability to see and correct the information being collected and stored.

It is important to note that both GoPro and retailers would still inevitably be subject to some form of public backlash after implementing increased surveillance in stores. However, these steps can minimize the damage to brand image and help put customers' minds at ease.

Another potential source of backlash is from retail employees who are unreceptive to being constantly monitored on the job. While intended to improve employee accountability, this increase in micromanagement has the potential to result in lower morale and productivity. Retailers could counter this effect on their workers by implementing an incentive system rewarding top performers primarily based on customer experience rather than efficiency.

GoPro should take steps to preserve its youthful, adventurous brand among its existing customers. The proposed expansion should be launched as a separate line of cameras specifically for enterprise to establish a professional reputation to appeal to businesses. It is important for the two camera lines to be independent of one another to allow GoPro to build a unique reputation in each industry and prevent possible brand dilution.

Potential Expansions

In the future, GoPro could expand its end markets to include industries such as the sports training industry and the public service sector. In these industries, body cameras and video analytics could improve training processes by providing more nuanced, first-person insights. The expansion into new markets is essential for GoPro to successfully diversify its customer portfolio and increase revenues.

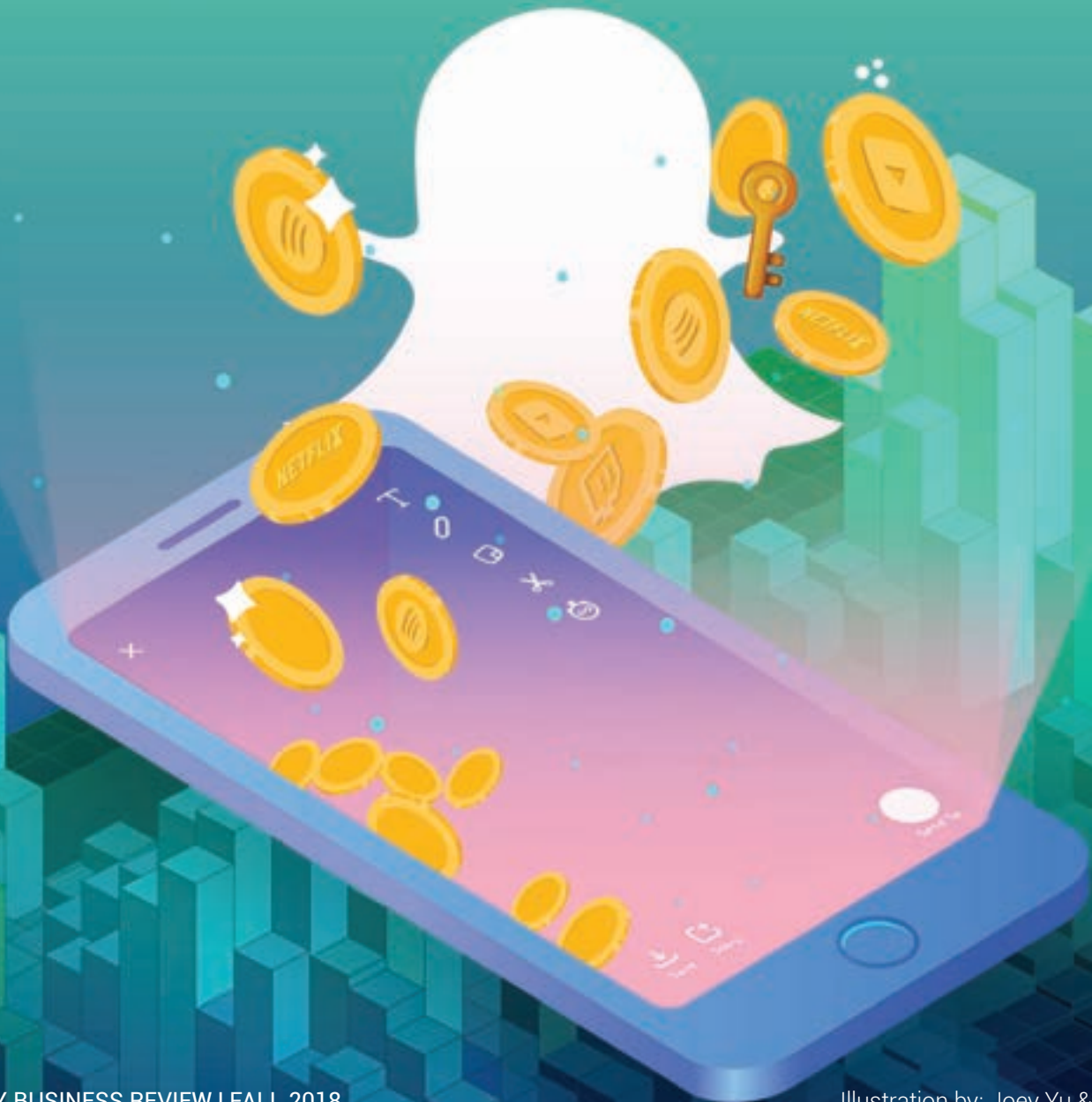
Picture Perfect

To date, GoPro's current niche market of athletes and thrill seekers has been insufficient in sustaining the company. The proposed business-to-business expansion plan would allow GoPro to diversify its consumer base and benefit from recurring revenues, transforming the company into a disruptor of the digital age.

SNAPCHAT: SNAPPING ITS LOSING STREAK

Facing a high burn rate, Snap Inc. should turn to influencers to monetize its strengths

Faizaan Baig & Hirushan Thalayan



SNAPCHAT: SNAPPING ITS LOSING STREAK

Scrolling Through Snapchat's Memories

Snapchat provides a unique user experience by prioritizing connection among its users. Through photo sharing, it encourages individual communication with streaks, "Best Friends," and read receipts. Additionally, snaps sent by one individual to many are received by others as an individual message rather than as a group message, contributing to a feeling of personalization within the app. Since launching in 2011, Snapchat (owned by Snap Inc.) has become the sixth most popular social networking platform with 78 per cent of U.S. young adults aged 18 to 24 using the application.

Despite its popularity among teens and young adults, Snapchat saw a decrease of daily active users (DAU) in the second quarter of 2018, followed by a further decrease of two million DAUs in the subsequent quarter. Snap Inc. CEO, Evan Spiegel, attributed the decline to negative reception of its January 2018 redesign. However, year-over-year DAU growth in 2017 was already 30-per-cent lower than in 2016, suggesting a deeper problem.

Snapchat has been losing users to its main competitor, Instagram. Although Instagram's "Stories" feature only launched in 2016, its user base has grown to double that of Snapchat's. Snapchat's inability to grow its DAUs is especially troublesome because of the company's high cash burn rate, which has left it in a difficult financial position. In 2017, parent company Snap Inc. reported an annual cash burn rate of \$800 million. Considering its cash position of \$1.6 billion, Snapchat has approximately two years of runway before additional financing is required. The markets have acknowledged the challenges facing the company as Snap Inc.'s share price has dropped 60 per cent since the stock's IPO in 2017. Given this poor performance and the company's lack of profitability, raising financing would be difficult and expensive.

Resisting the Status Quo

Spiegel acknowledged the aforementioned issues in an internal memo to employees before outlining two strategic priorities: expanding into developing countries and shifting the company's target market to an older, more lucrative demographic. However, these initiatives are unlikely to be a panacea, as they fail to solve Snap's short-term cash flow concerns.

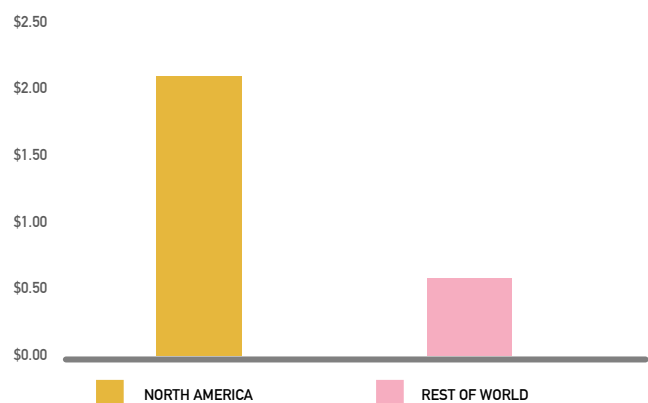
Even if Snap Inc. is successful in expanding to developing markets, the resulting user growth will likely not result in materially higher revenues in the near term. According to the company's Q1 2018 report, the firm generates \$2.10 in average revenue per user (ARPU) in North America, but only \$0.58 in revenue per "Rest of World" (ROW) user. While the DAU growth driven by geographic expansion

could be beneficial to Snap Inc. in the long term, the limited contribution of each individual user limits the strategy's effectiveness in addressing short-term profitability and cash flow concerns.

Expansion into a new demographic is also difficult given the level of investment required for app redesign and the risk of alienating the existing user base. To increase its appeal to an older demographic, Snapchat would require significant design changes to make the application more user-friendly. Furthermore, Spiegel's memo highlights the importance of marketing Snap as a communication mechanism rather than a social media app in implementing this target market change. Such a strategy risks jeopardizing Snap's existing customer base, as evidenced by Facebook's struggles. It is estimated that Facebook will lose two million users under the age of 24 in 2018 and can only sustain user growth due to rapid adoption among older users. The growth in older demographics may be driving younger users away, with 34 per cent of U.S. youth internet users now viewing Facebook as an app for "old people." This suggests that the value of growing Snapchat's presence among older users is not worth the depreciation of its brand among younger users.

Negative user growth combined with Snap Inc.'s cash needs suggest that the company must attend to its existing user base to reach profitability. As it currently stands, Snap Inc. is unlikely to reach the previously expected \$1 billion in advertising revenue until 2020, with only 3.1 per cent of advertisers considering Snapchat an effective advertising platform, a meagre comparison to YouTube's 78.8 per cent. Facebook and Google also dominate with a combined 56.8-per-cent share of the digital advertising market, while Snap Inc. holds only 1.0 per cent. Additionally, Snapchat's ARPU of \$1.21 in Q1 2018 paled in comparison to Facebook's \$5.53, further evidencing that its platform is considered less effective by digital advertisers. Although Snapchat's advertising

AVERAGE REVENUE PER USER (Q1 2018)



Source: Snap Inc., Q1 2018 Earnings Report

SOCIAL MEDIA

revenue is expected to grow, market share is only projected to reach 2.2 per cent by 2020. Therefore, Snap Inc. should consider alternative revenue sources to reduce exposure to competition and drive cash flow.

Major Key: Snapchat's Strengths

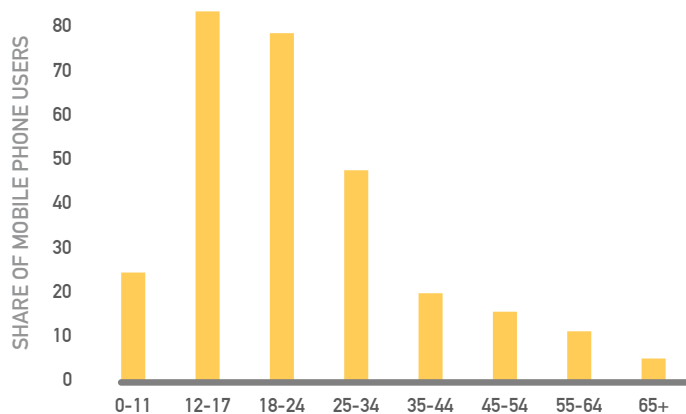
Snapchat's greatest strength is its penetration and user engagement among young users. Considered the leading social network among teens and young adults, Snapchat is used by 78 per cent of U.S. internet users between 18 and 24 years old. Younger users, commonly referred to as Generation Z, represent a coveted market, but one that is difficult to capture. Snap has a loyal base of Generation Z users, who will account for 40 per cent of U.S. consumers by 2020. Growth in an older demographic may not justify the potential loss of such valuable users, who serve as a true advantage for Snapchat.

Snapchat users stayed on the platform for an average of 49.5 minutes per day in June 2018, nearly double the July 2017 figure of 25.2 minutes per day. This serves as proof of Snapchat's ability to make communication feel personal and authentic through its relationship-building features, which encourage users to remain engaged. Given that 90 per cent of individuals under the age of 35 value authenticity in brands, this is a competitive advantage that should be exploited. The personalized communication at scale creates an opportunity to bring users closer to otherwise "larger than life" influencers. The company can use its popularity among youth, high engagement with users, and perceived authenticity to offer consumers a desirable exclusive content subscription service. Such a premium subscription service, connecting users to individual influencers, could feasibly address the company's immediate cash flow concerns.

Solution: The Paid Subscription Model

Social media networks with feature similarities to Snapchat, such as Facebook and Instagram, have yet to

SNAPCHAT 2017 U.S. PENETRATION BY AGE



Source: Statista

make premium content features widely available. However, analysis suggests that consumers would be willing to pay for premium or exclusive social media content. In 2011, 11 per cent of online users paid for premium content, spending an average of \$10 per month. It is now estimated that a fifth of adults in developed countries will have 10 paid online media subscriptions by 2020, with an average spend of \$100 per month. The overall premium subscription model has been increasingly successful in recent years, suggesting that this presents a lucrative opportunity for Snap Inc.

Rationale: Alignment with Snapchat

The paid subscription model aligns with the habits of Snapchat's primary user base. 70 per cent of millennial households own a streaming subscription. That same demographic, along with slightly older millennials and Generation X consumers, shows a greater interest in spending on content on their smartphones instead of on TV. Trends indicate that Snapchat's user base is increasingly willing to subscribe to exclusive content, with 43 per cent of 18- to 29-year-old Americans subscribing to premium internet content providers. Three trends further support this move.

Firstly, YouTube's 2015 launch of YouTube Red (now YouTube Premium) demonstrated consumer interest in the paid premium subscription model and served to diversify the firm's revenues away from advertising. This premium content service generated 1.5 million paying subscribers out of 2.5 million monthly active users in its four launch countries, generating at least \$15 million in revenue per month.

Secondly, celebrity content applications indicate that there is a demand for exclusive influencer content. Whalerock Industries has created apps for celebrities such as Tyler, the Creator; Ellen DeGeneres; and the Kardashian-Jenner sisters. Kylie Jenner's 2015 app, in particular, was downloaded 1.75 million times in its first week, with a 6-per-cent paid subscription conversion rate.

Finally, millennials want to support content creators. The recent success of the Twitch Partners Program shows that the millennial demographic is willing to support influencers. Twitch, an online game streaming platform, allows users to subscribe to individual streamers for exclusive chats, events, and "emotes". The successes of YouTube Red, Whalerock, and Twitch Partners convey that Snapchat Premium has the potential to be a successful revenue generator for Snap Inc.

Integration: How Will It Work?

With the adoption of Snapchat Premium, users would have premium access to content, similar to Spotify Premium

SNAPCHAT: SNAPPING ITS LOSING STREAK

or YouTube Premium. However, the platform would differ in that the user would subscribe to specific influencers, rather than having access to all premium content at once. Influencers could opt to operate independently and rely on subscribers who pay for their content alone, or could form a group with similar content creators. Snapchat could also analyze subscription data through direct user “clustering,” which could be passed on to advertising partners, opening up another revenue stream long term. A premium account would allow fans to develop a closer, more personal connection with their favourite influencers. To execute this strategy, Snap Inc. will have to improve upon the influencer user base that it has struggled to build in the past.

In Austria, Germany, and Switzerland, Snapchat generated only a 6-per-cent share of influencer revenue compared to Instagram’s 34 per cent. The lack of interest in Snapchat as an influencer platform does not seem to be a result of the application’s core functionalities, since Instagram Stories are the most used tactic by Instagram influencer campaigns. The popularity of Instagram Stories suggests that Snapchat could be a platform used by influencers if it made an effort to attract such users, and ensured its design enables their content to be shared easily. To implement a paid subscription model predicated on influencers, Snap Inc. will have to bring influencers onto the platform.

NEW SNAPCHAT INTERFACE



Twitch Influencers

Snap Inc. should make an active effort to bring smaller influencers with loyal fan bases, such as Twitch streamers, onto the platform. A Snapchat Premium service would appeal to dedicated fans of creators looking for more personalized content from their favourite influencers. Twitch streamers would be able to create authentic behind-the-scenes and non-gaming content that could supplement their core streaming product.

Snapchat’s core users are teens and young adults, with 60 per cent of its users under the age of 24 as of 2016. 37 per cent of Twitch users are also within the same age group. Consumers aged 13 to 24 alone hold \$500 billion in annual spending power. In addition, of the 666 million worldwide gaming viewers, Twitch captures 185 million. Each month, average eSports spending per consumer worldwide is \$3.64, a figure expected to grow to \$5.20 by 2020. Considering the lucrative nature of Twitch users and the overlap in demographics, Twitch influencers present a valuable opportunity to Snapchat. Snapchat Premium’s initial consumers would likely be gaming fans but as the service grows and additional influencer partnerships are created, the universe of interested individuals would broaden.

Snap Inc. should offer influencers a margin on the fees generated from subscribers, following Twitch’s model where partnered streamers can earn between 50 and 60 per cent of the \$4.99 subscription cost. The adoption of a similar margin split and individual subscriptions would incentivize influencers to join the program. Alongside this compensation, simplifying the user interface and improving discoverability would prove integral in attracting influencers to the platform. There is also little risk associated with Twitch influencers joining Snapchat’s platform: the two platforms are different in the nature of content delivered, reducing the risk of cross-platform cannibalization.

A Featured Story

While user generation is a concern for Snap, achieving immediate cash flow takes priority. Snap Inc. is currently burning cash at an unsustainable rate and must diversify its revenues to survive. Through this opt-in premium subscription model, Snap Inc. can expect ARPU growth by targeting an attractive segment of its current user base, all while continuing its normal operations. In the long term, Snap Inc. will be able to expand this model to target other attractive segments. This will ultimately help sustain revenue growth and allow Snap Inc. to differentiate itself from fierce competitors like Instagram and Facebook.

PATREON: CONNECTING COMPANIES AND CREATORS

As tech giants encroach on Patreon's territory, the platform should position itself as a one-stop-shop for creator monetization

Ethan Milne



A Hero for the Masses

Founded in 2013 by YouTube musician Jack Conte and his roommate Sam Yam, Patreon is an online platform that facilitates recurring donations to content creators. Patreon's concept was inspired by the increasing dissatisfaction among content creators stemming from the low payouts of platforms like YouTube. Since inception, Patreon has been used to raise funds for creators' videos, podcasts, online publishing, art, and more. From 2016 to 2018, Patreon grew from managing 830,000 monthly contributions to over 4.7 million and since inception, has raised over \$105 million in venture capital funding.

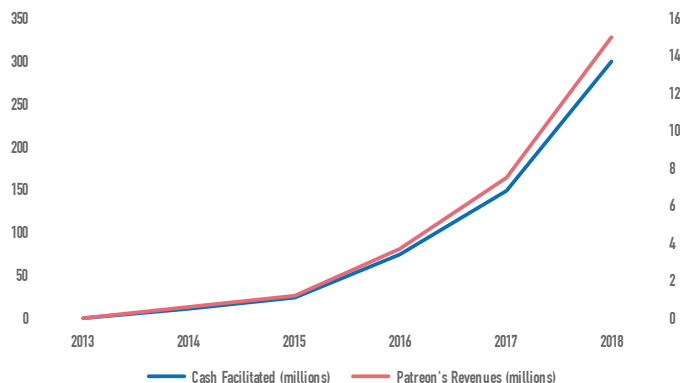
Sponsors, called patrons, elect to pay either a monthly or per-creation fee to their creator(s) of choice in order to access exclusive content. Of this amount, Patreon collects five per cent as revenue, transaction fees on average consume another five per cent, and content creators receive the remainder. This average payout rate of 90 per cent is highly competitive for the industry, significantly exceeding YouTube's AdSense payout rate of 55 per cent. In 2018, Patreon expects to provide creators with \$300 million in aggregate funding, translating to more than \$15 million in revenue for the company.

The Price to Pay

To date, Patreon's success has largely been a result of the company's commitment to users and its corresponding high payout rates. However, creators have begun to voice frustration with the high variability in third-party transaction fees. While averaging five per cent, these fees can range from two per cent to 10 per cent, with small donations subject to a greater transaction fee on a percentage basis. Creators who have the majority of their donations coming from transactions under \$5 will therefore see a much higher relative transaction fee than creators with donations over \$10. Since 47 per cent of creator income comes from donations below \$5, this problem substantially affects Patreon's user base. Indeed, in the company's customer satisfaction surveys, fees are consistently mentioned by creators as an area of concern.

In 2017, Patreon attempted to solve this issue by transferring transaction fees onto donors. For each \$1.00 pledged, patrons paid a net cost of \$1.38. However, patrons proved highly price sensitive and many left the platform after this change was announced. In response, Patreon quickly reversed its decision and while patrons returned to the platform, the dissatisfaction surrounding transaction fees continues to persist. This experience suggests that Patreon would be vulnerable should an integrated rival with a strong financial position decide to compete on price.

PATREON CASH AND REVENUE GROWTH



Source: Patreon.com, Techcrunch, The Guardian

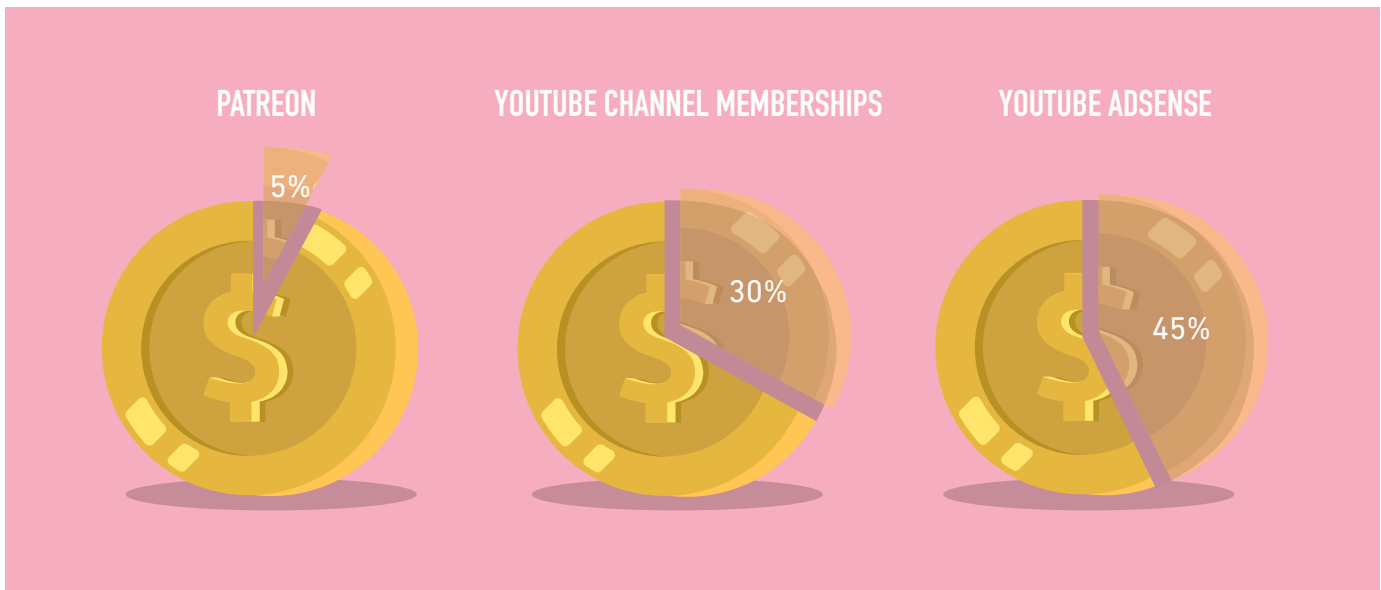
Rising Competition

A competitor with this profile has recently entered the patronage space. On June 21, 2018, video sharing behemoth YouTube announced the channel membership program, a new monetization option for channels with more than 30,000 subscribers. YouTube viewers were given the option to pay \$4.99 every month to support their favourite YouTubers and to access exclusive content. YouTube currently takes a 30-per-cent cut of donations, far exceeding Patreon's five-per-cent cut, but the company absorbs transaction costs and has the resources to weather a financial loss. If YouTube decided to wage a fees war against Patreon, Patreon would almost surely lose.

As a content hosting platform first and foremost, YouTube enjoys an additional advantage in that the vast majority of potential donors tend to be existing YouTube users. Converting viewers to sponsors through the content consumption channel itself may prove a far easier task than requiring viewers to join a completely new platform like Patreon. Given that viewers likely have a credit card linked to the Google platform via Google Play or another one of the company's premium services, the friction to conversion is even lower. Since video content creators make up 27 per cent of Patreon's creator base and 31 per cent of its payouts, YouTube's entry into the patronage space poses a material threat to Patreon's business.

With low barriers to entry, other large content platforms could easily follow YouTube into the patronage space. Podcasters, on platforms like iTunes, account for 12 per cent of Patreon's payouts, and musicians using platforms like Soundcloud or Spotify make up another 4.8 per cent. Artists with audiences on Behance and DeviantArt could equally be drawn away from Patreon. To combat growing complaints about transaction fees and defend against

PERCENTAGE CUT OF REVENUES TAKEN FROM CREATORS



Source: Patreon.com, Youtube.com

content platform competitors, Patreon must evolve its value proposition beyond simply minimizing its service fees.

Creating Connections

Patreon has a simple mission: “fund the creative class.” Giving the most loyal audience members the ability to support their favourite creators through donations is one way of delivering on this mission. However, with a mere 3 per cent of YouTube video creators generating more than \$16,800 a year from advertising revenue, creators are still in need of additional income. According to public data, less than 2 per cent of creators on Patreon are able to earn more than U.S. minimum wage from Patreon alone. The company must make itself more valuable to creators by providing them with the opportunity to access alternate sources of income.

Patreon should expand into offering corporate sponsorship opportunities alongside its individual sponsorship model. Under corporate sponsorship agreements, sponsor companies offer lump sum payments to creators in exchange for content introducing creators’ followers to their products or services. Influencer sponsorships are particularly effective, delivering a return on investment up to 11 times that of traditional forms of marketing. As a result, corporate sponsorships have become a significant revenue source for many creators.

For both creators and sponsors, navigating corporate sponsorships can be an arduous process. Creators must learn to balance the interests of their followers with the requirements of their sponsorship contracts, which can

include stringent restrictions on their content. Sponsors, for their part, must conduct due diligence on the content creator to avoid reputational risk through the influencer association. The process of thoroughly vetting a candidate is no easy process, with 75 per cent of marketers saying that their most significant challenge is finding the right creators for their campaign. Furthermore, the problem is compounded by the fact that a single marketing campaign may have more than a hundred sponsored creators.

There is an existing market for intermediaries that simplify the sponsorship process by managing the relationships between content creators and companies. While the leader in this segment, Grapevine, has a user base comprised of more than 170,000 influencers, this company primarily focuses on the beauty and fashion industry, leaving opportunity for Patreon.

The Patreon Sponsorship Marketplace

On the new Patreon platform, companies would post sponsorship offers where creators could browse and apply for suitable opportunities. Patreon would streamline the sponsorship process by allowing users to easily filter information on creators and company requirements. This would address the problems sponsors face during their approval process and alleviate corporate concerns around brand and content fit. For example, a company looking to advertise a new gaming mouse may require that creators be producing video game-oriented content and have a minimum of 50,000 subscribers. This creator screening process would standardize the search, increasing efficiency and decreasing cost for sponsors.

PATREON: CONNECTING COMPANIES AND CREATORS

Although this would be a similar model to competitors such as GrapeVine, Patreon would differentiate its offering through its unique user base. By definition, patrons are invested in their sponsored creators' work. This investment would be tapped by allowing patrons to vote on their creators' potential sponsors, choosing companies they would most like to see support their benefactors. This system would effectively match sponsors and creators that best complement each other, yielding greater value to sponsoring companies.

"This system would effectively match sponsors and creators that best complement each other, yielding greater value to sponsoring companies."

Giving patrons the ability to influence sponsor selection would add to the value of any sponsorship; patrons' gratification upon seeing a creator acquire a sponsor that they recommended would be a memorable event. Their personal interaction and decision to cast a vote for a specific company would further help create a sense of affinity with the sponsoring brand. Corporate sponsorships on Patreon's platform would establish a brand's personality in a way that traditional advertising simply cannot.

Impact

Launching a corporate sponsorship marketplace would allow Patreon to significantly increase revenues. Assuming a mere three per cent of video creators secure a sponsorship, Patreon can expect 1,000 creators to benefit from the marketplace. With one to five per cent of creators' fans typically becoming patrons and assuming fans account for 15 per cent of total audience, most of Patreon's top creators have an implied audience of between 100,000 and 500,000 individuals. Given the per-video industry average sponsorship payment of \$12,500 and that Patreon's current commission is five per cent, the platform could realize \$7.5 million in incremental annual revenue.

Patreon would need to take into account the potential for backlash from a perception of creators "selling out." This risk is mitigated, however, by the fact that 89 per cent of millennials indicate they are mostly fine with short introductions featuring a sponsor. Assuming that a conservative 15 per cent of users abandon the platform

following the implementation of this sponsorship marketplace, the platform would still gain \$5.2 million in additional revenue, an over 30-per-cent increase in expected 2018 revenue. This conservative estimate does not account for sponsorship of non-video content creators; the ultimate financial impact would likely be higher.

By pursuing corporate sponsorships, Patreon and its creators would similarly benefit from the increase in income. These sponsorships would yield an ancillary benefit by increasing the average amount per transaction, decreasing the relative impact of transaction fees on Patreon's creators. To further reduce uncertainty regarding these fees, Patreon could eventually use proceeds from the corporate sponsorship revenue stream to hedge, or even fully absorb, creators' transaction costs. These favourable terms would make Patreon a more attractive platform for its creators, the main drivers of its revenue, and make its business model more defensible against larger content platforms such as YouTube.

Funding Growth

Over the past five years, Patreon's commitment to putting content creators first has helped the company attract a strong user base of both creators and patrons. Entering the corporate sponsorship space solidifies this commitment by expanding the avenues through which creators can earn income and reducing the volatility inherent in transaction fees. Becoming the one-stop-shop empowering creators and their craft will distinguish Patreon from the growing number of content-focused platforms entering the patronage space.

NHL: RUSHIN' TO THE CHINESE MARKET

Ahead of the 2022 Beijing Winter Olympics, the NHL must rapidly expand into China through the acquisition of five teams in the KHL

Brandon Park-Lee & Alexander George



Strategically Short-Handed

Despite being the top hockey league in the world in terms of both revenue and player talent, the National Hockey League (NHL) has faced an ongoing battle with other major sports leagues, as both local and national TV ratings have fallen in the regular season over the past year. In the 2017 season, despite having the highest viewership in years, the NHL saw average TV ratings of just 2.7 during the Stanley Cup finals. In comparison, that figure stood at 10.0, 33.4, and 8.4 for each of the NBA, NFL, and MLB finals equivalents, respectively. Furthermore, while the NHL has seen an uptick in revenue growth over the past few years, it has only realized a compound annual growth rate of 4.6 per cent between 2014 and 2017, compared to the NBA at 11.4 per cent, the NFL at 5.4 per cent, and the MLB—which has also been facing similar growth issues—at 4.7 per cent over the same period.

In efforts to improve the league's popularity, the NHL has begun expanding geographically. China has been targeted as an anchor of this growth strategy, especially ahead of the 2022 Beijing Winter Olympics. With a population of approximately 1.4 billion, the size of the country makes China a compelling market, and the NBA sets a strong precedent. NBA China is currently valued at \$4 billion, as the league recently signed a five-year, \$700-million digital broadcasting partnership with Tencent. As such, the NBA's Chinese expansion strategy has proven to be a success.

A unique window currently exists, as the Chinese government has provided substantial support through infrastructure investments and government initiatives in order to popularize hockey. Although the NHL's current grassroots strategy shows promise, this growth must be accelerated to capitalize on the Chinese government's current interest, and to use the 2022 Olympics as a launchpad for future growth within the country. To supplement its current strategy, the NHL should purchase majority ownership in five teams in the Kontinental Hockey League (KHL), the premier hockey league in Europe and Asia. Through the purchase of the Kunlun Red Star (KRS), the only Chinese team currently in the KHL, and four other teams that would later be relocated to China, the NHL could drive the popularity of the sport in the most populous nation in the world. While the NHL's current grassroots strategy may be effective, it requires time, something the NHL does not have if it hopes to build off the support of the Chinese government ahead of the 2022 Beijing Olympics.

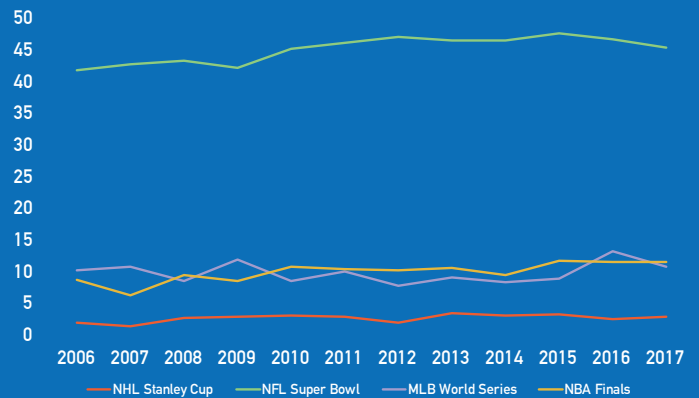
Current NHL Strategy

The NHL is currently implementing a grassroots strategy to grow the popularity of hockey in the Chinese market. The first component has involved exposing the Chinese market to live games by hosting parts of the NHL preseason in

Chinese cities through an eight-year agreement called the NHL China Games. Over its first two years, the agreement has seen some success, drawing a crowd of 10,088 for the first game in 2017 and 22,151 over the two games played in 2018. The 2018 games also featured government officials from the Chinese General Administration of Sport in attendance as part of the government's support for the advancement of hockey within the country. The second component of the grassroots strategy is the establishment of youth hockey development programs, which imitates the NBA's extensive youth basketball programs in the country. Currently, the NHL has partnered with the KRS to develop 20 hockey schools across the country. The government has committed to similar initiatives and the combination of these two factors has led to increased hockey participation from 1,000 people in 2017 to 12,060 in 2018.

The NHL's grassroots strategy has drawn interest to the sport, with 22 million Chinese citizens tuning into Game 1 of the 2017 Stanley Cup Finals. However, to fully capture the commercial potential of the Chinese market and ride the wave of government investment, the NHL's growth strategy must be accelerated.

TV RATINGS OF MAJOR SPORTS LEAGUES



Source: Statista

Power Play

It is recommended that the NHL purchase a majority stake in the Kunlun Red Star and four other teams in the KHL, with the four non-Chinese teams later relocating to Chinese markets. The ownership structure would require at least one local owner to navigate the complex geopolitical landscape in Eastern Europe and China, but ensures NHL owners hold controlling interests to enact the growth strategy. These acquisitions would accelerate the NHL's current Chinese growth strategy, allowing them to take advantage of hockey investment from the Chinese government. Additionally, there are strong reasons to believe current KHL team owners would be willing to

divest a controlling share of their teams at a fair valuation and that such an initiative would garner support from the entire league.

The NHL's current strategy is a slow process that will not allow the league to fully capitalize on the unique window of government interest prior to the 2022 Olympics. Through these five KHL franchises, the NHL could create local fan bases and stoke interest in the sport. This would be in alignment with the Chinese government's current initiatives of improving hockey's popularity and building local infrastructure to support this growth. By driving interest in the sport, the NHL could fully reap the commercial opportunity available in the country and supplement stagnating revenues in its traditional North American market.

A secondary benefit of this plan would be setting up the KHL as a farm system for budding NHL stars. Currently, many players on the cusp of being NHL-ready are forced to return to the Canadian Hockey League (CHL) due to a prior agreement where players drafted out of the CHL are ineligible to play in professional minor leagues like the American Hockey League (AHL) until they are 20 years old. Some players at this stage may have already outgrown the CHL, which can hinder player development. A new agreement should be made to allow sending these types of players to the more competitive KHL, where they would have the opportunity to face higher quality talent, and return to their NHL teams better prepared to play at the highest level. Additionally, in sending young players to play in China, there would be hope that the Chinese fans of these players would want to watch them in the NHL once they leave China, similar to how college football fans follow their favourite former college players in the NFL. This structure would help the NHL grow the sport in China while providing teams a new route for player development.

Although the quality of play in the KHL has given it the reputation as "the world's strongest league outside the NHL," many teams have failed to achieve commercial viability. Teams are largely reliant on private investment and state funding, which has historically contributed over six times the commercial revenues generated from activities such as ticket sales and television contracts. Many teams have struggled to stay financially solvent, with four teams folding since the end of the 2016 season. The NHL's infusion of cash would be welcomed by KHL owners of struggling franchises, bringing stability to the league. Additionally, loaning recently drafted NHL players to the KHL would increase the competition in the league and create more exciting hockey games. This falls in line with the KHL's long-term strategy of raising the talent level in the league to drive attendance and sales on the route to becoming more economically viable.

He Shoots, He Scores

The NHL should look to purchase the least profitable teams, where owners would be more receptive to an inflow of investment. Among existing KHL teams, those with the poorest attendance records are ideal acquisition targets as they would likely produce lower valuations. In the 2017-2018 season, the Admiral Vladivostok, Vityaz Podolsk, Severstal Cherepovets, and Neftekhimik Nizhnekamsk sported the poorest attendance in the league, making them top candidates for relocation. In China, major metropolitan cities like Beijing, Shenzhen, Shanghai, and Harbin provide ample opportunity to grow the sport. Beijing and Shenzhen have been earmarked as the intended locations of the KRS-Gretzky Hockey Schools, Shanghai has had strong participation in existing sports leagues, and Harbin has previously housed a professional hockey team. NHL owners would have the chance to bid on this opportunity, with the top five highest bidders being part of this process. To provide an incentive for these bids, these five NHL owners would own a larger portion of the new "NHL China" with its associated future commercial benefits.

Following the purchase, the KHL franchises, excluding the KRS, should be immediately relocated to grow the popularity of the sport in China prior to the 2022 Olympics. Afterwards, all NHL teams would have the option of loaning their youth players to the NHL-owned KHL teams for player development purposes. This new arrangement would improve the profile of the game and help the NHL fully capitalize on the commercial opportunities within the country. Since all NHL teams will own some portion of NHL China, it is in the owners' best interest to provide certain players to the KHL.

If the KHL is still not receptive to the NHL's attempt to purchase five of its franchises, the NHL could allow Russian players at the twilight of their career the option to be loaned to any of the 25 KHL teams. This would allow Russian players to return home and would likely help reduce the poaching of Russian players like Ilya Kovalchuk and Alexander Radulov. This mutually beneficial cooperation between the leagues would help increase the talent level and audience interest in KHL games. As well, negotiations of North American broadcasting rights on certain KHL games could be introduced, which would provide further benefits to the KHL. This in turn coincides with one of the KHL's core long-term strategies of increasing the level of competitive play in hopes of driving stronger attendance and boosting commercial revenues.

Valuing the KHL

The cost of a 51-per-cent ownership in five KHL teams stands at roughly \$50 million to \$70 million, based on the

RUSSIA-CHINA EXPANSION STRATEGY



valuation of the entire KHL within the range of \$900 million to \$1.4 billion. This is based on an EV/Sales multiple between two to three times, which is a conservative figure despite the average NHL valuation multiple being around four times. This was done to account for intangible differences, such as brand recognition and customer loyalty. While this is a large up-front investment, even the NBA acknowledged the high initial costs when expanding into China with David Stern, the former commissioner of the NBA, stating "internationally, those initial dollars are very costly to come by." Nevertheless, this investment by the NHL represents just one to 1.5 per cent of the \$4.54-billion projected NHL revenue in the 2018-2019 season.

NHL's Breakaway

While the NHL's current Chinese growth strategy has shown promise, it needs to be more aggressive. With the

Beijing Olympics quickly approaching, there is a window of opportunity to use the 2022 Games as a springboard for growth and capitalize on the Chinese government's newfound interest in the sport. By purchasing a majority stake in five teams in the KHL, the NHL would have the ability to provide a high level of hockey to Chinese fans and drive growth in the sport's popularity alongside current grassroots strategies. Through careful implementation, current KHL owners would likely be receptive to these acquisitions as they provide much-needed financial stability and align with the KHL's goal of improving league talent. With this plan in mind, the NHL could catalyze its growth strategy and one day replicate the NBA's Chinese success story.

MICHAEL KORS & VERSACE : **STITCHED AT THE SEAM**

To preserve Versace's prestige, Michael Kors must detach all brand associations and shift its position downmarket

Jane Wang & Bohan Jiang



An Iconic Designer

Founded in 1981 by the eponymous designer, Michael Kors (Kors) is a fashion brand and retailer known for its iconic style and craftsmanship. As a luxury goods and apparel company focused primarily on accessories, such as jewelry and handbags, Kors quickly experienced immense growth and became a multi-billion-dollar brand after going public in 2011. The company's growth momentum took a drastic turn when the company reported a 5.8-per-cent decrease in North American comparable store sales in Q2 2015. Uncertainty around the company culminated in a highly public and somewhat controversial deal, when Kors purchased Versace—a Milan-based couture brand—in early 2018 for \$2.12 billion to diversify its holdings. The company subsequently changed its name to Capri Holdings Ltd. (Capri). To combat the mixed reactions of both consumers and investors, Kors must now extract value from this deal by revising its operating structure and brand positioning.

Prior to 2016, Kors was a well-respected designer fashion brand in the U.S., with celebrities, such as Taylor Swift and Michelle Obama, sporting its products. In response to burgeoning demand, Kors undertook an aggressive retail expansion plan, opening new stores within malls and outlets at an annual growth rate of 27 per cent from 2012 to 2018. This move diverged from other luxury fashion strategies that limited distribution to maintain brand exclusivity. At the time, the expansion appeared to be successful, as Kors' global revenues grew from \$2.18 billion to \$4.49 billion from 2013 to 2017. However, the company's global comparable store sales were simultaneously dropping from a 40.1-per-cent growth rate to an 8.3-per-cent decline. This was partially due to overexposure of Kors' products, as the widened availability of its discounted products through department stores such as Macy's and Bloomingdale's marred brand perception.

As the company's comparable store sales continued to decline through 2017, management attributed poor performance to dwindling consumer traffic, increased mall vacancies due to greater competition, and a shift towards online shopping. Due to these poor results, Kors underwent retail restructuring, resulting in the planned closure of 125 retail stores and renovation of more than 100 additional stores by 2019. Analysts, however, attributed the company's struggling performance to a decline in the brand's prestige and the perception that products have descended to the accessible luxury category along with brands like J.Crew.

Consolidation in Luxury Fashion

The luxury fashion industry has undergone rapid consolidation in Europe this decade, spearheaded by

luxury conglomerate LVMH Moët Hennessy Louis Vuitton SE (LVMH). LVMH grew to become one of the largest players in the industry by revenue, encompassing 70 brands in its portfolio, including notable companies such as Hublot, Christian Dior, and Dom Pérignon. As LVMH's rapid rise in the industry was founded on its M&A strategy, other market participants such as Kering also adopted this strategy in a race to dominate the industry as a global conglomerate. Given Kors' gradually slowing growth and minimal debt levels, management began to evaluate potential acquisitions as an opportunity to continue growing. When Kate Spade was listed for sale, Kors lost its bid to Coach's \$2.4-billion price. After the sale, Kors' organic retail expansion strategy paled in comparison to the merger of its two main competitors.

In late 2017, Kors announced its acquisition of Jimmy Choo, a European luxury footwear brand, signaling two major strategic shifts for Kors. First, purchasing an upscale brand like Jimmy Choo signaled that Kors recognized its own brand could not enter into the high-end fashion market. As Michael Kors CEO John D. Idol stated, "We didn't think our product innovation...was compelling enough [to create] desirability." Second, Jimmy Choo's management team was retained post-acquisition, suggesting that Kors intended to operate a portfolio of distinct autonomous brands.

A year later, the Versace acquisition elicited mixed reactions, partially due to severe operational issues. Versace only generated €15 million in profits off €668 million in revenues in 2017. It was uncertain if operational improvements could be made without damaging the brand's authenticity. More insidiously, the Versace acquisition was unsettling because it raised questions about Capri's commitment to its new strategy of entering the high-end fashion market with a portfolio of distinctly autonomous brands. Following the transaction, management discussed the heritage of the Versace brand and released photos of Donatella Versace with Capri executives. Kors also indicated that she would keep her role as Creative Director and have a significant role as a Capri shareholder. With Kors' recent moves to shrink its retail presence and reduce discounting, it appears as if Capri Holdings is planning to use Jimmy Choo and Versace's prestige to bring the company more upscale.

A Shift in Perception

While prevailing conglomerates in the luxury fashion industry are investing in high-end luxury brands with the goal of forming an integrated portfolio, Capri should instead model itself after the Volkswagen Group. The automotive conglomerate successfully operates both luxury brands such as Bugatti and Lamborghini alongside downmarket brands such as Volkswagen and Skoda while avoiding harmful brand associations.

Within this business model are two key insights. First, Volkswagen recognizes that customers fundamentally are uninterested in the conglomerate's ownership of a brand, but are instead concerned that their personal experience with a brand will be diluted by associations with a less prestigious entity. Second, once a brand's identity has been solidified in a customer's mind, it is difficult to effectively rebrand and improve its stature.

The Kors brand suffered irreparable damage from the firm's previous expansion strategy. The company's omnipresent distribution has led to its products being found in suburban outlet malls and department stores—tarnishing the brand's image of exclusivity. Knowing this, management's attempts at elevating the Kors brand by clawing back discounts and closing stores seem misguided as they are unlikely to repair the stature of the Kors brand to a point where it can raise prices. Rather than attempting to move up-market and homogenize its brands like LVMH, which operates a multitude of similarly positioned luxury brands, Kors should double down on its current affordable luxury status and focus instead on growing sales volume. The goal would be to shift Michael Kors to a position similar to that of affordable luxury jewellery retailer, Pandora.

Having positioned Kors as a downstream brand intended for affordable luxury shoppers, Capri should use the Versace and Jimmy Choo brands to capture the low-volume up-market customers, much in the same way that Volkswagen positions Bugatti and Lamborghini. By establishing completely different marketing messages and isolating interactions with customers based on specific brands, Capri can more effectively segment customers and compete using different strategies in different markets.

Realize Operational Synergies

Another major difference between the Volkswagen strategy and the traditional luxury conglomerate is the role of the parent holding company. LVMH is known for providing its various brands with unprecedented autonomy, allowing brands to be nimble and adapt to rapidly changing industry trends. This siloed strategy cannot be fully implemented with Capri, as all three portfolio companies have unique and significant flaws. Versace, for instance, has consistently struggled with profitability and can benefit from Kors' retailing expertise and back-office synergies to immediately drive up margins. Jimmy Choo, before its acquisition, was a neglected brand with a constantly shifting strategy due to years of revolving owners. Jimmy Choo can benefit from being owned by a large conglomerate committed to growing the company. Finally, Kors needs high fashion brands such as Versace and Jimmy Choo in its portfolio, as Kors' eroded brand value means that the company can no longer sell

products to "true" luxury customers. Although Capri has various avenues to realize synergies, management must be selective with the tactics used to avoid diluting the Versace or Jimmy Choo brands with Kors' reputation.

Capitalize on Real Estate

With the obvious differences in brand perception, there is little room for integration between Kors' and Versace's storefronts. While LVMH thrives by opening its brands close to each other to create a halo effect, Kors would do best by avoiding association between the two labels. Nevertheless, it is important to recognize Kors' expertise in rapid retail expansion. In the short period from 2014 to 2018, Kors expanded its global brick-and-mortar presence from 405 to 1,011 stores, leading to annual revenue growth of 10.6 per cent over this period. Upon acquiring Versace, Kors' CEO John Idol announced that the brand was "terribly underdeveloped," and expressed his intent to expand Versace store locations from 200 to 300 with a focus in Asia. For Versace, which has always struggled with profitability, Capri can create significant value by prioritizing speed and efficiency, and by scaling Versace's retail distribution footprint in the most effective way.

Streamline Back-End Processes

As in most acquisitions, cost savings can be realized by streamlining administrative operations and eliminating post-merger redundancies in the finance, human resources, and IT divisions. However, it is imperative that product research and development for each of Capri's brands be kept separate to maintain individual brand identity. Management must maintain the distinct creative processes standard at large fashion houses, as pattern-makers, tailors, and sewers should retain full control over pattern and prototype design. Retaining designer talent within each brand is crucial in creating products consistent with the brand's quality and aesthetic.

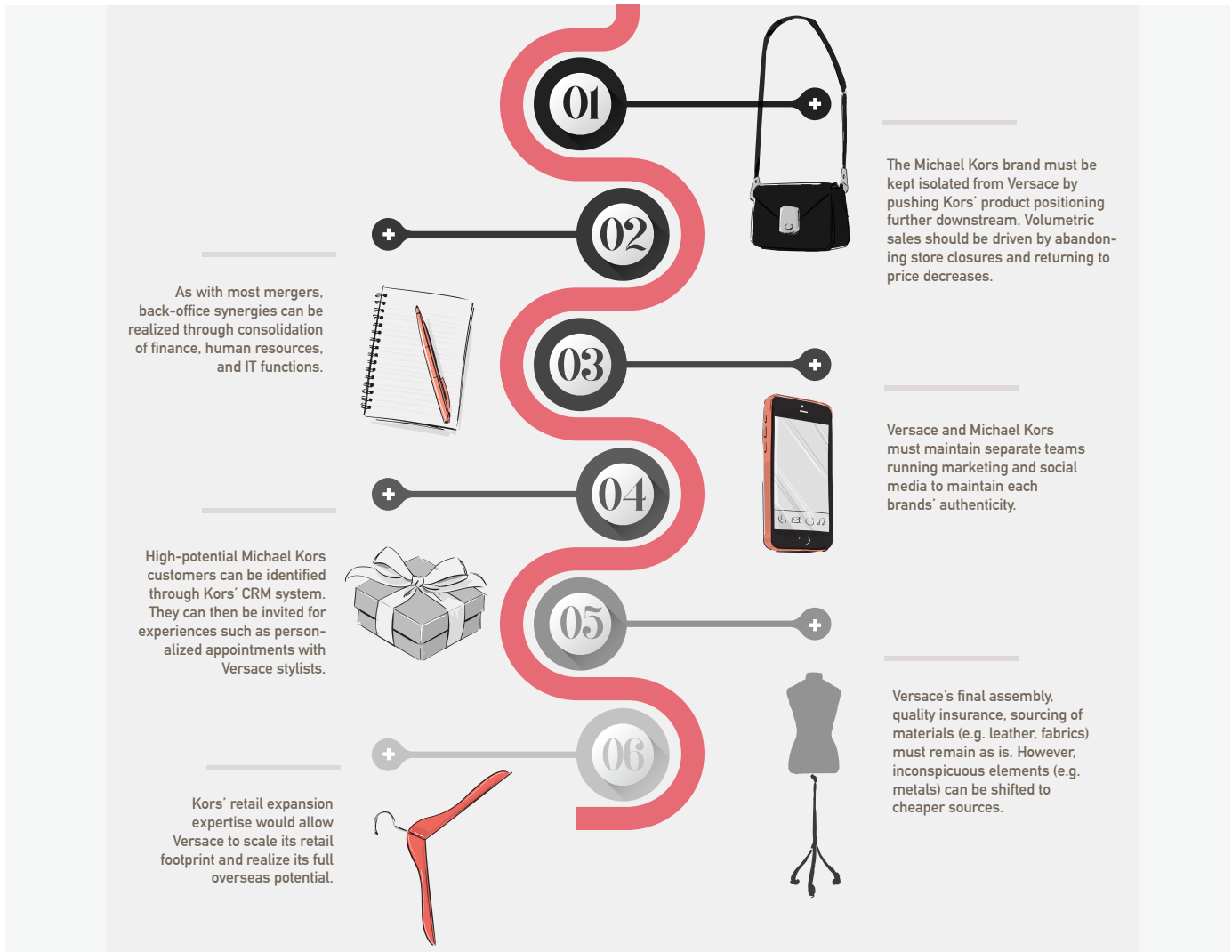
Reevaluate Manufacturing Capabilities

To address negative reactions from Versace fans stemming from speculation that its brand would lose value, the company must emphasize that final assembly and quality control will remain in Italy. Sourcing of materials such as leather should also remain as is. However, there may be opportunity to shift inconspicuous elements to China, the cheapest manufacturing site for Capri. For example, metals for accessories can be shared between all three brands and relevant manufacturing processes can be moved to China to capitalize on cheaper labour.

Share CRM and Digitalization Infrastructure

Historically, Kors has been successful at marketing its brands through social media, as it has the third largest

POST-MERGER INTEGRATION



number of Facebook followers among the leading luxury brands. Although it would seem beneficial to consolidate the social media marketing teams of both brands, Capri should avoid taking this approach. As distinct brands, it is essential that Kors and Versace convey their own tone, imagery, and personalities.

In addition, although Kors and Versace target different customer segments, Capri could benefit from selling Versace products to the most loyal Kors customers. These customers would be identified through Kors' existing CRM infrastructure by tracking amount and frequency of purchases. They could then be reached directly through digital marketing channels including social media advertisements or email promotions. Although it could pose a risk for Versace's brand image if Kors were to directly cross-sell products or upcycle customers, deploying a digital approach allows the company to be more targeted with its advertising.

Down the Runway

To improve Kors' stagnant revenues and fully establish its competitive reputation in the luxury retail market, the newly-established Capri must be ready to forfeit brand equity by pushing the Kors brand downstream, thereby driving volumetric sales to revitalize revenues. By sharing real estate, administrative, manufacturing, and digitalization infrastructures, Capri can realize significant cost-savings synergies with Versace. By keeping the Versace and Kors brands distinct, Capri can fashion a sustainable advantage for its future.

PETROCHINA: WESTERN CANADA'S SELECT OPPORTUNITY

The shift to a cost-cutting focus in the oil industry has left PetroChina vulnerable to losing its supermajor status

Adam Arif



The Rise and Fall of a Supermajor

PetroChina was established in 1999 under the Chinese National Petroleum Company (CNPC) umbrella alongside state-owned Sinopec and Chinese National Offshore Oil Company (CNOOC). During the height of the oil price booms in 2008 and 2014, PetroChina was among the most profitable companies in Asia, reaching the trillion-dollar valuation mark while supported by its duopoly structure with Sinopec in mainland China. However, the unanticipated 2015 oil price collapse abruptly ended a decade of unreserved capital expenditure. In response, the industry adopted a new paradigm by prioritizing cash flow and cutting back capital investments, choosing instead to gradually grow production through existing assets. While effective in the short term, PetroChina's adherence to this trend now threatens its status as an oil supermajor. It is recommended that PetroChina employ a turnaround plan and expand inorganically through asset acquisition in the familiar yet forgotten region of Canada's oil sands.

A Crude Recovery

As a supermajor, PetroChina's key value driver has been its ability to secure future income generating capabilities by steadily expanding production and reserves. However, the company remained congruent to the market trend of systemic underinvestment in development assets to its own peril. While comparable oil supermajors like Sinopec, CNOOC, ExxonMobil, Shell, Total, and BP have successfully driven returns through existing core asset production growth, PetroChina has lagged with its focus on legacy assets, which has compromised value creation and continues to weigh on the company.

As a result, other supermajors have recovered to pre-crisis valuations while PetroChina has remained at levels seen in the oil trough of early 2016. While its peers have maintained flat reserves and raised production by eight per cent, PetroChina's proven oil reserves and production have declined by 12 per cent and nine per cent, respectively, from 2015 to 2018. Overall reserve life has fallen to 14 years from 18 years at the start of the decade. This is largely attributable to the company's mismanaged portfolio allocation. PetroChina's operations are heavily concentrated in Northern China's maturing Daqing asset, comprising 31 per cent of its total productive wells. Since achieving peak output in 1999, operators are now realizing large production declines year-over-year at Daqing. While PetroChina's exploratory oil well count in the Daqing has increased 45 per cent from 2016 to 2017, there have been no accompanying production increases. The company's remaining reserves have a life of just six years and are in low-permeability, deeper reservoirs that have substantially driven up production costs. To make matters worse, CNPC

has indicated an additional \$22-billion investment—equal to three quarters of PetroChina's total 2017 capital expenditure—in China's Western Xinjiang region to recoup production losses from Daqing. This, however, is not a lasting solution; PetroChina's existing Xinjiang operations have suffered a four-per-cent production decline since 2015. Additionally, the region is embroiled in rising ethnic conflict that could jeopardize the success of spending plans.

Given its asset base and current oil prices, PetroChina will be unable to generate sustainable excess returns in the next 10 years. Despite these troubles, the company is well-equipped to deploy a turnaround plan. As of Q3 2018, PetroChina sits on a healthy balance sheet with \$24.1 billion in cash, a rare amount for even a supermajor, and significant capacity to take on debt. An attractive opportunity exists in the Canadian oil sands for PetroChina to deploy a turnaround strategy. PetroChina is one of the few supermajors equipped with both the financial capacity to engage in M&A without external financing and prior experience in developing an oil sands project from scratch.

Canada's Oil Sands Climate

Located in Alberta, the oil sands are Canada's national starlight for oil production. Since 2015, however, the region has been one of the most distressed oil production areas globally due to issues with extraction cost efficiency, environmental regulation, and ongoing limitations in downstream outlets for produced oil and gas. As a result, the West Texas Intermediate to Western Canadian Select spread (WTI-WCS), a measure of the relative discount of Alberta oil to global prices, has widened substantially. For large producers, investment opportunities in the region are priced attractively relative to global markets.

While small-scale producers have suffered from limits on takeaway capacity (including pipelines and refineries), those with midstream and downstream access and ownership have remained defensive against the WTI-WCS spread by capturing its intrinsic value. Furthermore, pipeline capacity is expected to grow by 45 per cent through the early 2020s, meaning that investor pullback may well be short-sighted.

In the recent wave of oil and gas M&A, assets are selling especially cheaply in North America. Acquisitions have been punished by the market as investors reward capital discipline. Thus, companies wishing to expand inorganically are pressured to offer limited acquisition premiums, causing further downward pressure on asset prices in the region. In addition, the equity markets have not been generous to oil and gas producers looking to raise financing. In 2017, exploratory companies' equity offerings fell to less than half of their total value in 2012.

INDUSTRIALS

The Opportunity

The Canadian oil sands present a lucrative opportunity for PetroChina, given the company's ability to deploy substantial capital without external financing. Its size enables it to achieve integration through favourable shipping contracts and transportation ownership that would offset takeaway capacity issues burdening other producers.

PetroChina furthermore has previous experience in Canada, having acquired the complex and undeveloped steam-assisted gravity drainage (SAGD) oil sands assets of MacKay River and Dover. This history offers the company lessons in forming its future corporate strategy. PetroChina's joint venture to develop MacKay River quickly turned into a wholly-owned project after its partner exited the project one year after PetroChina entered in 2011, causing development costs to balloon by 120 per cent more than expected. The experience significantly increased PetroChina's skill in the oil sands and underlines the crucial importance of entering into joint ventures with trusted long-term partners.

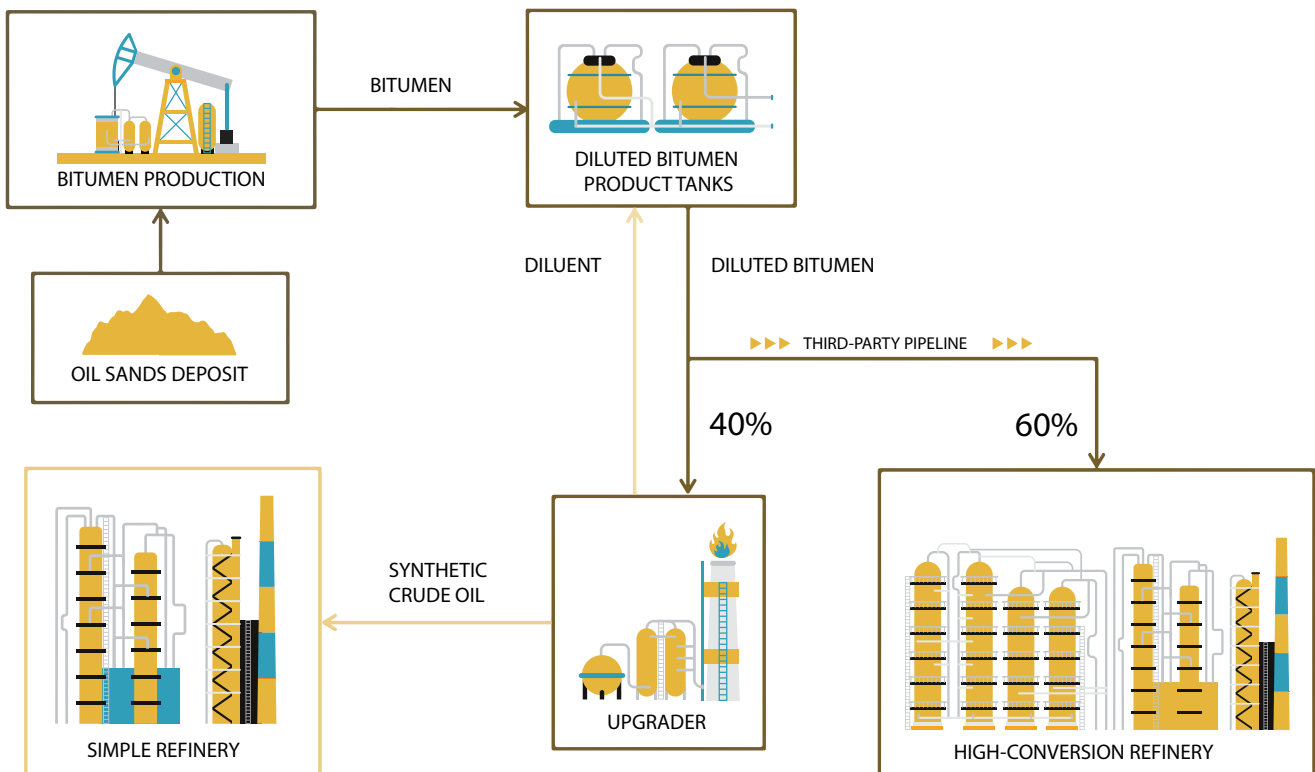
Given PetroChina's main issues of declining production, difficulty replacing reserves, and past experience with

Canadian oil sands, the company should undertake an oil sands asset acquisition program through both joint ventures with domestic companies in underutilized assets, and wholly owning fully productive assets. An oil sands investment would serve as a natural hedge in PetroChina's high decline portfolio. While less profitable, the long cycle timeline and low decline rate guarantees PetroChina future oil supply at low long-term capital costs while the company discovers greenfield projects. For the time being, an immediate fix is required as oil production is falling rapidly each year, forcing the company to miss out on the positive portion of the boom-bust cycle. Thus, PetroChina requires already productive assets to add to its portfolio, complemented by future production potential to aid its long-term position.

Acquisition Strategy

Imperial Oil's Kearn and Syncrude assets stand out as promising asset acquisitions for PetroChina. Both have been plagued with reliability issues; Imperial appears to have employed a short-sighted capital strategy focused on shareholders and its more valuable downstream division. Moreover, Imperial has shifted its upstream focus to in-situ development. Unlike Imperial, PetroChina is able to focus on long-term capital appreciation as a state-

OIL SANDS PROCESS: TRADITIONAL VS. SYNTHETIC



Source: Oil Sands Magazine

PETROCHINA: WESTERN CANADA'S SELECT OPPORTUNITY

owned enterprise, presenting potential for more effective operation of the assets.

The Kearl oil sands asset is a shallow open-pit mining operation separated into two stakes: 29 per cent owned by ExxonMobil and 71 per cent by its Canadian subsidiary, Imperial. The asset has averaged 202,000 barrels per day (bbl/d) of production in 2018 with steady state production expected to reach 240,000 bbl/d in 2020 after investment to improve operations. This production would account for 10 per cent of PetroChina's total oil production, with Kearl's expected 2019 production enough to offset PetroChina's production declines since 2015. Limited additional capital expenditure is required to reach targeted production, as the incremental barrel costs 25 to 30 per cent of ramp-up production cost.

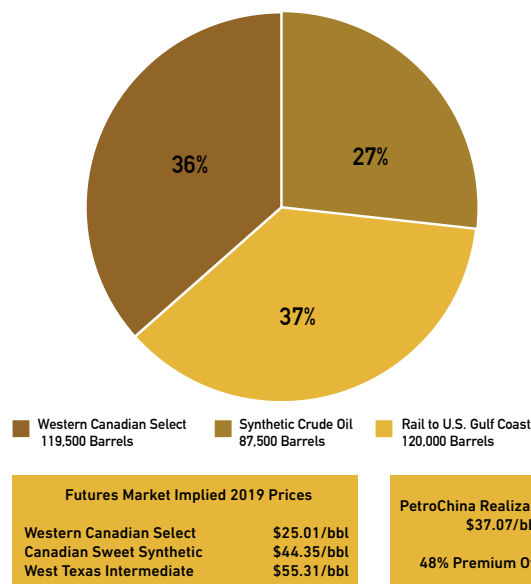
Furthermore, PetroChina would benefit from acquiring Imperial's Edmonton crude-by-rail terminal, which would act as a defence against price differentials and as an insurance policy in the case of transportation constraints persisting post-2020. The rail access would enable the company to move its oil for less than \$11/bbl and sell near WTI prices, increasing revenues by approximately \$40/bbl given the current differential. In addition, PetroChina could improve spot price realizations that have currently been put under pressure by Imperial's willingness to process low-priced production through ExxonMobil's and its own refineries to boost downstream profitability. By ridding the asset of both this relationship and downstream prioritization, PetroChina can realize an estimated 28-per-cent greater price per barrel from the same oil.

ExxonMobil has been vocal about its desire to sell its Canadian business and Kearl could likely be purchased at an attractive price. In addition, there are few buyers with the financial capacity required to maximize the benefit from such a large-scale asset. With strong execution and long-term commitment to the asset, PetroChina could feasibly increase production by 26 per cent and raise operating margin per barrel by 48 per cent through cost cuts, rail utilization and upstream focus. The company should make a strategically timed entry by initially acquiring ExxonMobil's 29-per-cent stake to build expertise in the asset as a joint venture operator, with the ultimate goal of becoming sole owner and operator of the asset.

A Sweet Premium Blend

Imperial's 25-per-cent stake in Syncrude, a synthetic oil sands mining operation and the largest single source asset in Canada, is a complementary acquisition to PetroChina's Canadian portfolio. The asset is majority-owned and operated by Suncor Energy with additional stakes held by Imperial and China's CNOOC/Sinopec. The acquisition would further align CNPC's Canadian oil

POST-ACQUISITION PRODUCTION



Source: CME Group, IBR Analysis

strategy and operations, with all three subsidiaries part of the same consortium. Syncrude is currently operating at 59-per-cent utilization, with potential to raise production through improved operational management in the near future. Imperial's stake generates 45,000 bbl/d, with possible output of 87,500 bbl/d at full utilization. Based on current differentials, PetroChina would benefit from an approximate 40-per-cent higher oil price realization from Syncrude relative to other oil sands due to the quality premium placed on synthetic crude. While prices have been dragged down alongside WCS since October 2018, the forward curve in steep contango signifies a recovery to synthetic crude's historical premium.

This joint venture structure would assist the company in developing its competencies in producing synthetic crude. PetroChina has limited experience with this product, but synthetic crude is becoming increasingly important in the Canadian context. A crucial part of the Syncrude strategy would entail representing CNOOC and Sinopec's stakes in the asset, as it would streamline operations and generate synergies. The asset has been afflicted by outages caused by a lack of urgency and calibration between co-operators, emphasizing the inefficiency of a crowded ownership structure. Consolidating the asset among just two operators, Suncor and PetroChina, would simplify governance, enabling seamless execution on logistical matters and rapid turnaround on future outages. In doing so, PetroChina could reduce operating costs at Syncrude from \$42/bbl to \$24/bbl by 2020 by eliminating inefficiencies in transportation, workforce accommodation, and equipment warehousing, as well as consolidating administrative operations and procurement.

INDUSTRIALS

A fully-owned Kearl and a 25-per-cent stake in Syncrude would provide immediate relief to PetroChina's woes by adding over 327,000 bbl/d of estimated 2019 production and proven reserves of 773 million barrels. PetroChina's daily oil production would effectively increase by 13 per cent, four-per-cent greater than 2015 levels. Proven oil reserves would rise 10 per cent, just three-per-cent shy of 2015 levels. The reserve count does not take into consideration 3.5 billion barrels written off in Kearl in 2016 due to lack of economic viability, which could potentially be reversed in the case of higher oil price realizations. A highly focused PetroChina committed to investing in project development, technology and timely upkeep to preserve long-term asset performance could realize operating profitability improvements of 46 per cent at full utilization. The appeal of these acquisitions lies not just in the immediate impact, but also in the long-term safety net provided by the near-zero decline rates and expected life past 2040 at Kearl and Syncrude. This effectively keeps PetroChina out of the precarious position of constantly cycling capital to grow production.

In addition to acquiring ownership in Imperial's rail terminal alongside Kearl, PetroChina will realize synergies with the help of its CNPC partner to mitigate the risks of takeaway capacity constraints. In September 2018, Sinopec announced an investment in building a Canadian oil refinery to process 167,000 bbl/d of crude oil into fuel products. Becoming a feeder to a local refinery would aid the company in realizing oil prices closer to global levels. PetroChina's existing Grand Rapids Pipeline would continue to aid the company in moving its oil sands production to market, and the potential completion of three export pipelines by the early 2020s would create 1.8 million bbl/d of additional takeaway capacity for oil sands producers.

It is recommended PetroChina offer \$5.3 to \$6.1 billion

in aggregate sum for the package of upstream assets, warranting a 13-per-cent to 30-per-cent premium to the value of Imperial's daily production due to the premium weighting of synthetic oil and the company's ability to increase utilization at both Kearl and Syncrude. Including an additional \$800-million consideration for Imperial's rail terminal, the acquisitions would generate a projected internal rate of return of 17 to 21 per cent on a substantial portion of PetroChina's \$24.1-billion cash balance.

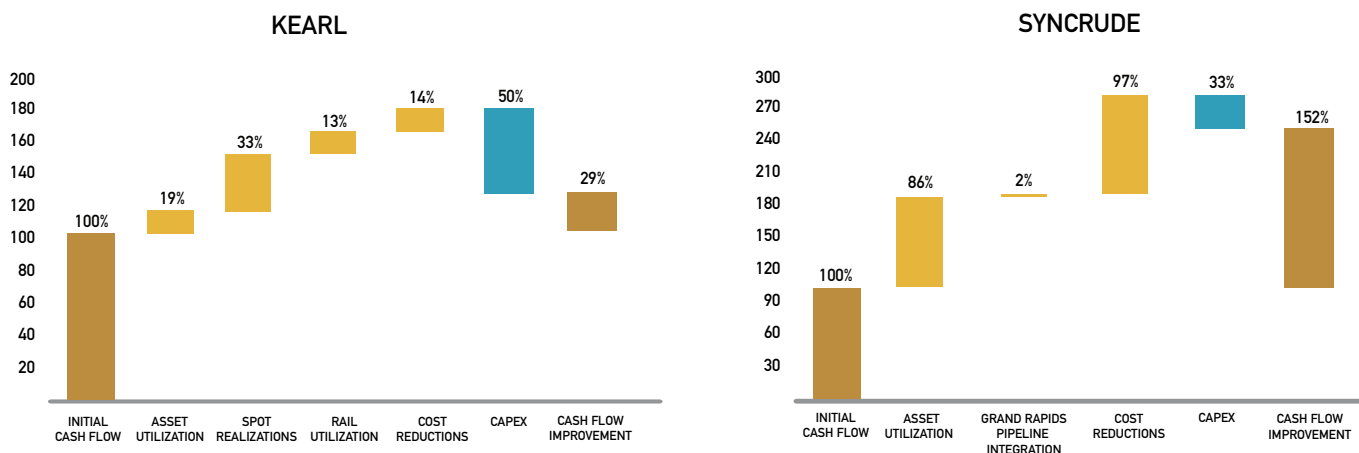
Addressing Political Risk

Although the political climate under the previous Canadian government was hostile to foreign Chinese investment, asset sales back to domestic producers and Sinopec's investment into a Canadian refinery indicate such concerns are no longer an issue. The nature of the advised strategy, being focused on asset acquisitions instead of corporate acquisitions, should mitigate concerns of power transfer to China. Furthermore, PetroChina would be effectively acquiring Kearl and Syncrude from ExxonMobil, another foreign-owned entity, rather than stripping Canadian control in the oil sands.

Proved Plus Probable Success

Effective execution of such an acquisition strategy in Canada would demonstrate to investors a new PetroChina that is willing to see a future outside of its legacy Chinese assets. This strategy would create hope for a more capital-efficient and stable long-term outlook for the supermajor. The warning signs surrounding reserve replacement would be eased without requiring the significant M&A spend that would be necessary in other parts of the world. More importantly, the acquisitions would provide PetroChina with the most crucial commodity of all: time. The reserves and production addition would allow the company runway to gradually wean itself off its addiction to Chinese assets and ensure a healthy survival, with a fresh start in Canada.

POTENTIAL POST-TRANSACTION INDEXED IMPROVEMENTS



Source: IBR Analysis



JOIN A WORK FORCE THAT INNOVATES TOGETHER

Learn how our team of innovators is tackling industries' most challenging problems with leading-edge technology. With operations in 200 cities in more than 120 countries, you won't be part of a company that just looks good on paper, you'll work with colleagues to change the way people live and work. Help us make a difference by showing the world what leading in the new looks like.

NEW APPLIED NOW

LAFARGEHOLCIM: THE PLASTIC SOLUTION TO THE GLOBAL SAND WARS

Recycled waste-plastic inputs in concrete will reinvigorate LafargeHolcim's supply chain and address a tragedy of the commons

Joseph Scarfone

Shifting Sands

You might be surprised to learn that sand is the world's most commercially consumed solid natural resource. The United Nations estimates that sand accounts for 68 to 85 per cent of all solid resources extracted from the Earth and as demand for the material continues to rise, this trend is expected to continue. The natural resource is finite, however, and experts broadly agree that sand's scarcity is quickly becoming a crisis.

Upwards pressure on sand prices is already apparent. Singapore, for example, has seen sand's price climb from €2.5 per metric ton to a staggering €161 per metric ton over the past 40 years. As prices increase, heavy consumers of the raw material face increasing headwinds, with the global construction industry particularly affected. Sand makes up 80 per cent of concrete and 94 per cent of asphalt, in addition to being the base used in construction projects. As demand continues to grow in light of dwindling supply, companies that can reduce their long-term reliance on this resource will enjoy an advantage over those who cannot.

A Supply Chain Built on Sand

LafargeHolcim, based in Switzerland, is the largest cement producer by installed capacity. Its global presence spans over 80 countries, where it maintains a top three position in 80 per cent of its markets. Given the importance of sand to LafargeHolcim's business model, controlling its exposure to this commodity is crucial.



LAFARGEHOLCIM: THE PLASTIC SOLUTION TO THE GLOBAL SAND WARS

LafargeHolcim already faces the challenges inherent in procuring large volumes of a scarce commodity. In 2018, the company was charged with allegedly supporting ISIS through terrorist financing to keep its Syrian operations running. These charges are especially problematic for LafargeHolcim as a substantial portion of its shareholder base consists of parties sensitive to environmental, social and governance (ESG) principles. In 2016, Aslak Skancke, a member of Norway's public pension fund's ethics council, acknowledged it would "be problematic if a company we have investments in paid money to ISIS to maintain its operations"; as of November 2018, the fund continued to hold a stake in LafargeHolcim. To simplify operations, restore its reputation, and regain confidence from its shareholders, LafargeHolcim must find a sustainable solution to its supply chain troubles.

The Global Sand Crisis

Despite apparent widespread availability around the world in areas such as the Sahara Desert, not all sand is created equal. Only sand of a certain grade, known as aggregate grade, is useful for commercial use, and aggregate sand is in short supply. In many regions of the world, traditional sand mines have already been depleted or decommissioned. As these supply sources dwindle, unorthodox methods such as collecting sand from the ocean floor are increasingly used. In addition to harming coral reef ecosystems, this type of aggregate is undesirable as it contains a high salt concentration and requires treatment before it can be used.

In response, illegal supply is playing an increasingly important role in the global sand trade. In India alone, the value of illegal sand mining is conservatively estimated at \$250 million. These markets, however, have been widely implicated in political corruption, violence, and even murder. Given the ESG values held by LafargeHolcim's shareholders, these ethical concerns supersede any possible economic benefit that could be realized.

Demand for sand is equally as complex. The commodity is a critical component of numerous finished goods ranging from glass, to electronics, to artificial islands off the Chinese and Gulf coasts. However, sand is the primary component of concrete, cement, and asphalt, which collectively account for the largest use of the resource. Considering unprecedented urban development in underdeveloped regions across areas such as Asia and Africa, the demand for sand has never been greater. Between 2011 and 2013 alone, China used more sand than the United States used in the entire twentieth century. Sand is integral to construction, which is necessary for global economic development.

Strategic Alternatives

Given finite supply and growing demand, the price of sand seems constrained to rise in the long term. LafargeHolcim already operates a significant number of sand mining sites across the world, but the supply of new sand mines is drying up. It could continue to use increasingly environmentally unfavourable means of extracting sand internally or rely on actors with questionable human rights records, but neither action serves as a long-term solution.

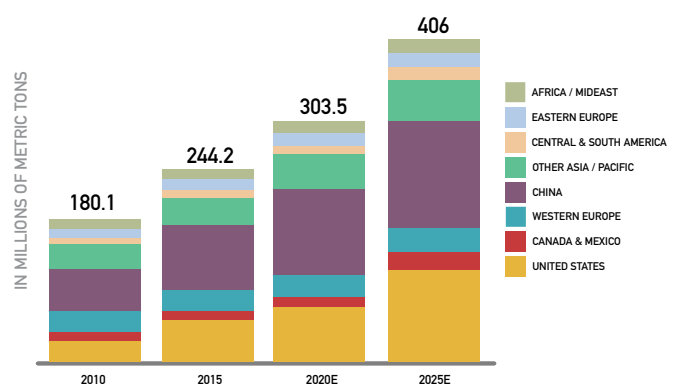
Fortunately for LafargeHolcim, the answer might lie in a different material altogether: new research indicates that there are alternatives to sand acting as an input in aggregate. A University of Bath study published in February 2018 concluded that 10 per cent of sand in concrete can be safely replaced with recycled plastic without substantially compromising structural integrity. This groundbreaking research, awarded the Atlas Award in recognition of its potential societal impact, shows LafargeHolcim a way forward.

Paving the Way for Success

Roads and highways can be built with asphalt or concrete. Since as early as 2001, Dr. Rajagopalan Vasudevan, a chemistry professor in India, has been a leader in advocating for the use of waste plastic as an input in asphalt roads. In addition to reducing the quantity of bitumen required by six to eight per cent, plastic-modified roads have been shown to have an increased lifespan. Using Dr. Vasudevan's methods, Tamil Nadu, a state in India, constructed over 1,000 kilometers of asphalt road by incorporating more than 1,600 metric tons of plastic waste.

The University of Bath concrete study concluded that while its 10-per-cent plastic composite mix showed promise, it could not be used for structural applications, like the construction of a building, without further research.

WORLD INDUSTRIAL SILICA SAND DEMAND



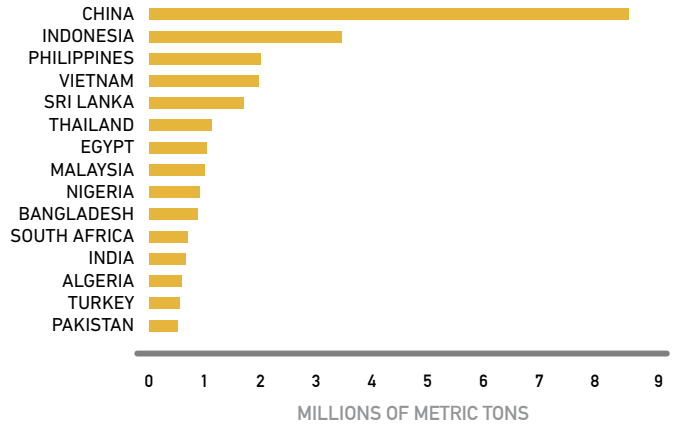
Source: The Freedonia Group

Fortunately for LafargeHolcim, concrete used in roads has very different requirements than the kind used for constructing buildings. The *Ontario Provincial Standards for Roads and Public Works* stipulates that high strength concrete is defined by its compressive strength of 35 MPa, while a Minnesota Department of Transportation study lists roadworthy concrete standards at 3,000 psi (20.7 MPa).

An existing study from University Bourmerdes in Algeria tested the strength of various concrete-plastic mixtures where up to 50 per cent of sand was replaced with plastic waste. While the material's strength fell as more plastic was introduced to the mix, its compressive strength exceeded 35 MPa even as half of the sand was replaced by plastic. Combined with the University of Bath's recent breakthrough in structural strength, LafargeHolcim should take advantage of these academic findings and translate them to real-world applications, substituting plastic for sand in road-building concrete where the sand crisis is most dire.

This advancement in technology comes at an opportune time: earlier this year, India's federal government announced a planned investment of 6.9 trillion rupees (\$97 billion) in 83,677 km of roads over the next five years. An even larger infrastructure network, the Belt and Road Initiative, will be developed over the next decade to connect Asia, Europe, and Africa; Fitch Ratings anticipates that this initiative will entail more than \$900 billion in infrastructure spending. Given the prevalence of sand scarcity around the world, it is unclear how this positive shock in demand will impact the price of sand. LafargeHolcim's ability to offer road

PLASTIC WASTE BY COUNTRY IN 2010



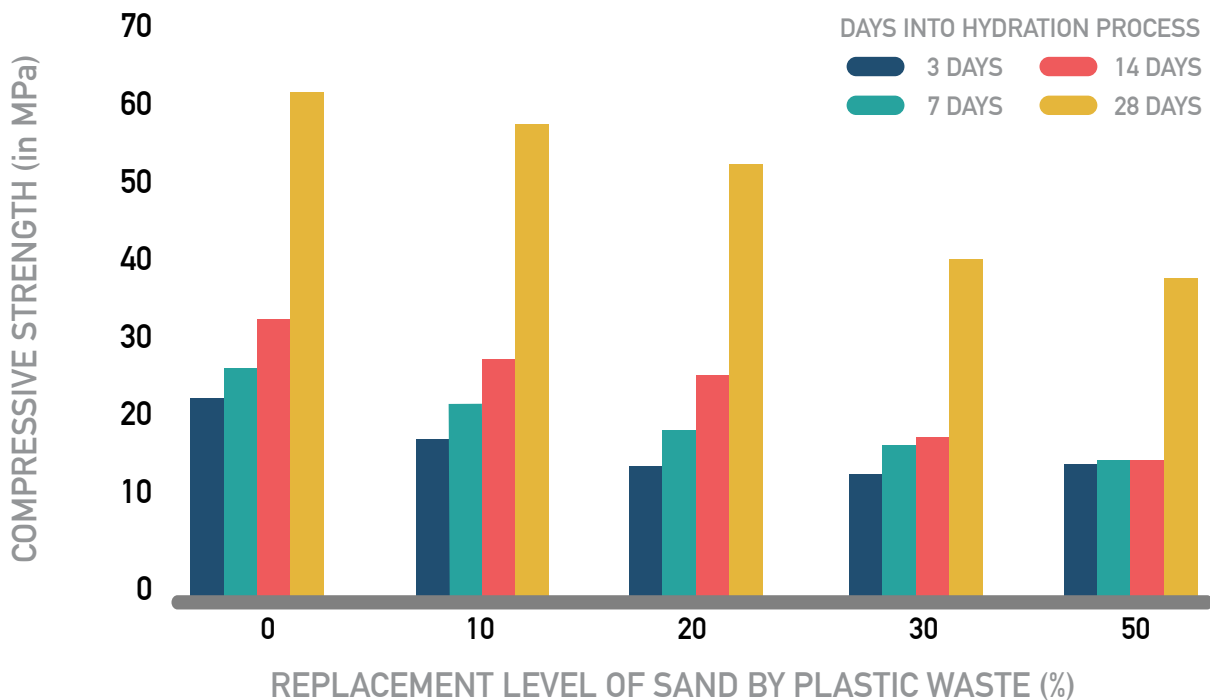
Source: Science Magazine

concrete without a heavy reliance on sand would enable it to outperform its competitors. Additionally, numerous countries participating in the Belt and Road Initiative are among the world's worst generators of plastic waste, meaning that LafargeHolcim's plastic roads could have a positive social impact while making use of scrap materials where they are most plentiful.

The Material Benefits of Plastic

In order to quantify LafargeHolcim's opportunity, India's sand and plastic market dynamics must be understood. While manufactured sand, created by crushing rock and quarry stones, has become more prevalent in the country, supply has failed to keep pace with demand and the illegal

STRENGTH OF PLASTIC-INTEGRATED CONCRETE



Source: Concrete and Building Materials

LAFARGEHOLCIM: THE PLASTIC SOLUTION TO THE GLOBAL SAND WARS

PROCESS FOR PLASTIC ROADS



sand market continues to thrive. As of September 2018, the Times of India estimated sand prices on India's black market at 1,500 to 2,000 rupees per metric ton. This represents an astounding 150 per cent increase within a time period of less than a year, largely catalyzed by increased regulation and a ban on certain mining practices.

The plastic markets in India act as an informal economy creating supplementary incomes for the poor. In much of the country, rural workers individually collect waste plastic to sell to regional aggregators at an estimated price of 14,000 to 15,000 rupees per metric ton of polyethylene terephthalate (PET) plastic. This plastic is then sold at a markup to vendors and recyclers.

These prices suggest that as a raw material, plastic is substantially costlier than sand. Rather than a reason why LafargeHolcim should not pursue the strategy of building plastic-concrete composite roads, the apparent uneconomical nature of this business can be seen as precisely the reason why LafargeHolcim should enter the industry. Absent any competition, the company has the resources to develop scale and establish a more resilient supply chain for recycled plastic, potentially gaining significant cost advantage in the long run. In late 2017, the Director of Vietnam's Department of Construction Materials acknowledged that the country may well run out of sand by 2020; as a country poised to receive significant Belt and Road Initiative infrastructure investment, it is quite possible other concrete manufacturers will be unable to satisfy construction demand. By entering this business when other players are prevented from participating, LafargeHolcim will gain a first mover advantage and streamline its operations, positioning the company to take full advantage of the Belt and Road Initiative.

Furthermore, sand's current price does not reflect its future trajectory. The substantial jump in black market prices over the past year evidences the upward price pressure that is likely to continue. While it is difficult to predict precisely how quickly underlying fundamentals will translate to an increase in price, a foothold in the market would serve LafargeHolcim well and enable the company to capture economic profit once it appears. Keeping in mind that sand has already reached a price of €161 a metric ton (13,000 rupees) in Singapore, the turning point may be closer than anticipated.

Laying the Foundation

For years, Western countries, including the U.S., Germany, and the U.K., have exported plastic waste to China as a means of reducing buildup in domestic landfills. Since a ban was placed on this practice at the beginning of 2018, these countries are now seeking alternative outlets for their waste plastic. If LafargeHolcim can prove its responsible use of plastic, the company could feasibly source waste PET plastic at a substantially lower cost than the market.

To eventually sell its plastic roads in developed markets, LafargeHolcim should lobby governments to adopt more stringent road construction environmental standards. The public and government officials are likely unaware of the social, environmental, and economic costs of sand in their roads. Significant research and development would furthermore be necessary to ensure LafargeHolcim's plastic concrete mix satisfies the rigorous safety standards of developed countries.

Within developing economies, LafargeHolcim should market the benefits of a more effective road network and reduced plastic waste, which align well with governments' development priorities. In the long run, as the price of sand increases, this strategy will position LafargeHolcim to enjoy success surpassing that of its competitors.

Concrete Roads Ahead

As an increasingly scarce natural resource, sand's price is poised to continue rising. In response, LafargeHolcim can combine its resources with new advancements in technology to secure a market-leading position in the nascent plastic road industry. Not only would this prove beneficial for the company, it would also benefit the environment by making use of waste plastic. The consequent positive environmental and social change would reiterate LafargeHolcim's commitment to its shareholders and their ESG values, leading to a brighter future for all involved.

OPENTABLE: A BUZZWORTHY PARTNERSHIP

Faced with rising competition, OpenTable should partner with Bumble to keep its seat at the head of the table

Zoe Yang & Wes Jefferson Ong



OPENTABLE: A BUZZWORTHY PARTNERSHIP

An Entrée into Reservations

Since 1998, OpenTable has been committed to its mission of creating meaningful connections and bringing people together with the restaurants they love. Over the past two decades, the online restaurant reservation service has partnered with more than 47,000 restaurants worldwide. Today, the site now books over 26 million diners each month. Despite the company's success, OpenTable's offering lags behind its competitors. As more companies enter the market and offer cheaper prices, OpenTable must explore new strategies in order to keep its seat at the table.

On the Chopping Block

OpenTable was founded with the goal of making online reservations more convenient for both restaurants and diners. It provides restaurants with a software management system, a nationwide marketing network, and a popular customer destination website. Restaurants on OpenTable have the option of paying either a monthly subscription fee and a commission on each table booked through the platform, or a slightly higher per-booking commission with no monthly cost. As a pioneer in the reservation industry, OpenTable allowed restaurants to streamline their reservation process and adapt to customers' changing preferences as diners shifted towards online reservations.

While the company experienced rapid growth in its early days, signs of weakness have emerged. At its peak in 2016, OpenTable held over twice the combined market share of its three closest competitors, Yelp Reservations, Quandoo, and Bookatable. This figure has since fallen to 1.3. OpenTable's decline can be attributed to new competitors entering the space with aggressive tactics, featuring unique value propositions that cater to changing diner preferences, increased functionality for restaurants, and cheaper pricing models. For example, up-and-coming competitor, Resy, focuses on forming exclusive partnerships with the trendiest restaurants. Another platform, Reserve allows restaurants access to its data on diner preferences. Yelp Reservations charges restaurants a flat monthly subscription and no commission fees on bookings.

OpenTable has already lost notable restaurants to competitors. In September 2018, Union Square Hospitality Group, owned by New York superstar restaurateur Danny Meyer, announced it would move its entire portfolio of restaurants to Resy. This came as no surprise, as Resy and Union Square Café had just completed a successful partnership, with Resy supplying a front-of-house Apple Watch solution that notifies restaurant managers in real-

time when diners exhibit notable behaviour. Competitive tensions continued to climb as Resy announced in November 2018 that it would purchase competitor Reserve to expand its U.S. footprint.

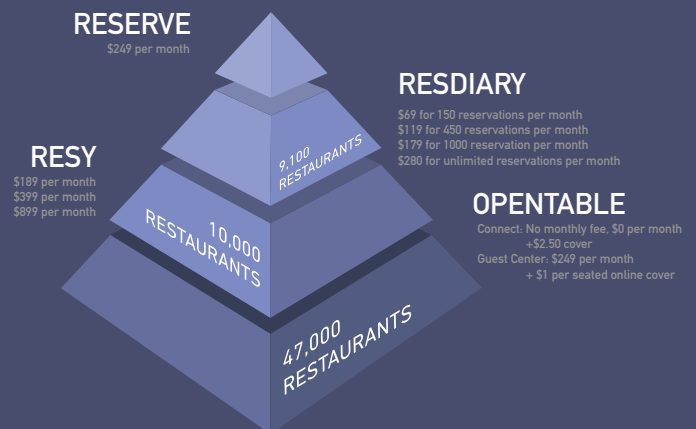
OpenTable's failure to keep up with the increasingly competitive reservations market has been recognized internally. In 2016, its parent company, Priceline, took a \$941-million write-down on the company just two years after completing OpenTable's acquisition. The justification for the write-down was OpenTable's failure to successfully grow outside of North America and bring new restaurant partners onto the platform.

Strategic Alternatives

As the industry heads towards fiercer competition, OpenTable has two options: iterate upon its existing offering or drive out competition with lower prices. Given the size and resources of its parent company, OpenTable could force competitors out by undercutting prices. However, to successfully compete in a price war, companies must operate in an industry with high barriers to entry that prevent competitors from easily re-entering the market. In this case, the issue remains that OpenTable's business model is easily replicable and competitors would simply re-enter once prices rise. To remain competitive, OpenTable should look towards opportunities to improve the user experience and make itself more indispensable to restaurants.

Since restaurants rely on reservation services like OpenTable to drive customer volume, the company can create more value for its restaurant partners by finding a new source of traffic that increases profits. To

COMPETITIVE PRICING TABLE



Source: OpenTable, Resy, ResDiary, Chicago Tribune

distinguish itself from competition, OpenTable should secure partnerships that funnel a sustainable stream of new customers to its restaurant partners. In addition, partnerships can aid OpenTable in adding a new dimension of customer insights to its database that would otherwise be difficult to procure. Ultimately, OpenTable could build a sustainable advantage in the reservations industry by providing unique diner insights to help restaurants gain a better understanding of their customer base, while providing its users with a more personalized experience.

Table for Two?

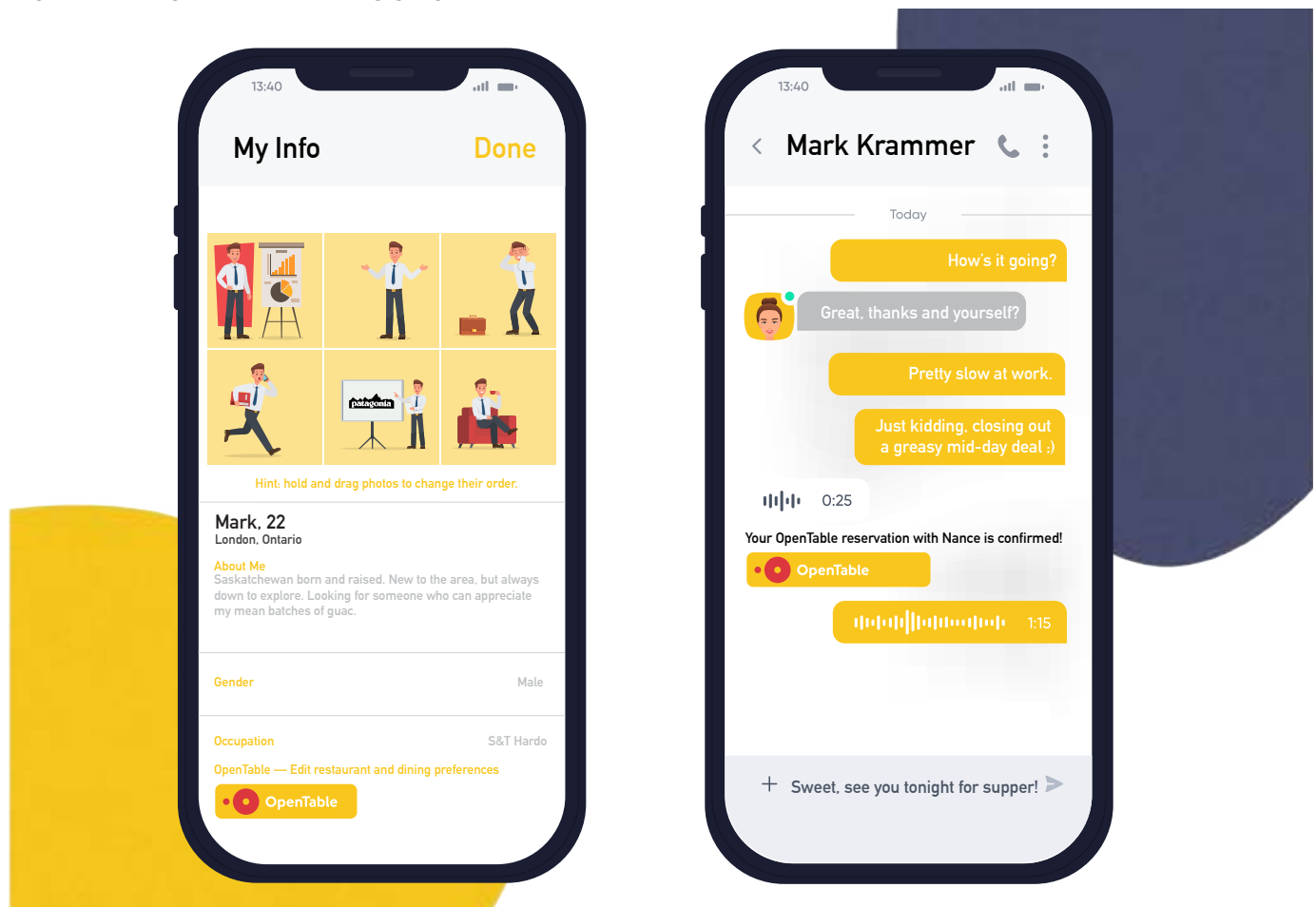
OpenTable should explore the opportunity of partnering with online dating apps since restaurants are one of the most commonly selected meetup venues for dates. Both types of platforms share a common vision of empowering people to create genuine relationships, whether through an app or over a great meal. By embedding itself within a dating application and enabling users to seamlessly book dinner plans, OpenTable can become the primary restaurant reservation platform for the platform's dates. Through this partnership, OpenTable would increase the

number of diners using its platform, thereby retaining more restaurants and attracting new clients.

The dating app Bumble stands out as an ideal partner. In addition to its primary dating service, Bumble Date, the platform offers networking tool Bumble Bizz and friend-finder Bumble BFF. All serve to give users multiple opportunities to meet up with new people and create genuine connections. The company furthermore has a history of being open to partnerships that add value to its users. In 2016, Bumble partnered with Spotify to allow matches to connect based on similar music tastes. In 2018, it established a partnership with Instagram to allow users to easily share photos with potential matches. The integration of a restaurant reservation service would be a similar move adding value for Bumble users.

Restaurant owners have cited exposure to new customers as a primary reason why they choose to partner with online reservation platforms. As users successfully find matches on the app or rejoin the Bumble community, OpenTable would have access to a constantly changing customer base, ensuring a sustainable stream of new

BUMBLE X OPENTABLE MOCKUP



OPENTABLE: A BUZZWORTHY PARTNERSHIP

traffic for its restaurant partners. In addition, Bumble has been experiencing incredible growth over the last two years, with its number of downloads having increased by 570 per cent. Through this integration, every new Bumble user would be exposed to OpenTable, giving the company the opportunity to directly participate in Bumble's rapid growth. As OpenTable looks to enter new geographies, it can use Bumble's existing presence to help appeal to local restaurants.

Integrating the Platforms

The integration of OpenTable into Bumble would allow matches to easily make reservations for meetups. After a match is made on Bumble, an OpenTable feed would appear, allowing users to browse available restaurants, select a spot, and make a booking directly within the app.

This partnership presents an opportunity for both Bumble and OpenTable to improve upon their respective value propositions. Bumble could further iterate on OpenTable's features by allowing users to add cuisine and food preferences to their profiles. This would provide an effective conversation starter; in a sample of over three million dating profiles, users who mentioned specific foods in their profile saw a substantial increase in inbound messages. Bumble could also integrate food preferences into its match algorithm to find more suitable pairs and increase match success rates. In addition, restaurant suggestions within the OpenTable feed could be specifically targeted to the tastes and preferences of the two matched parties, improving reservation conversion rates for restaurant partners.

More Guests at the Table

Securing a partnership with Bumble would not limit benefits to just OpenTable; its restaurant partners would also realize value from the increase in customers. This access to a new stream of users would help OpenTable justify its prices and incentivize restaurant partners to continue using the platform as their main reservation tool.

In October 2018, Bumble had over 40 million users, up from 22 million users in November 2017. Assuming the

company can maintain a similar growth rate, Bumble would expose 37 million new users to the OpenTable feature in the next year. Since two thirds of people dating online report going on at least one date, Bumble could reasonably expect to see at least 64.7 million dates in the next twelve months. Around a third of dates take place at restaurants and if 80 per cent of these matches use the app's OpenTable booking service to reserve a restaurant, this partnership would drive approximately 17.3 million OpenTable bookings. Based upon OpenTable's current market share, 10.3 million of these dates would not have otherwise used the platform.

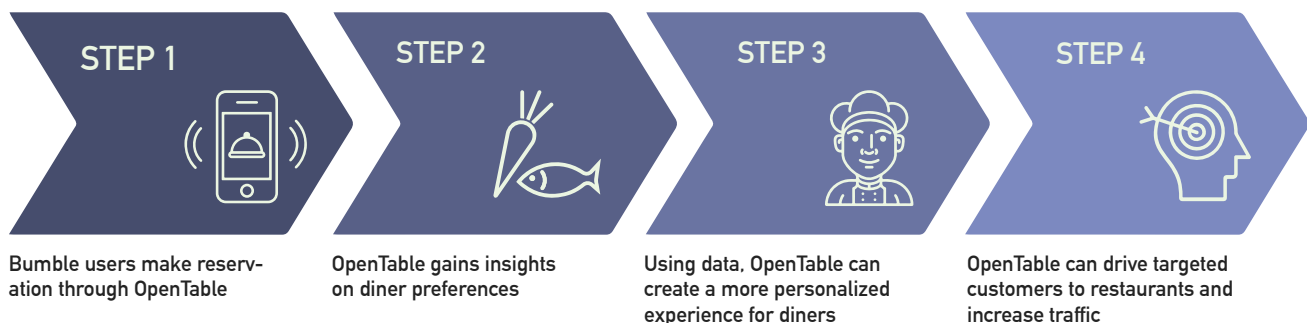
More Buzz on Bumble

In this partnership, OpenTable would share a portion of incremental revenue as an incentive for Bumble to participate. If OpenTable gives Bumble a \$0.50 royalty on confirmed reservations, less than the per-reservation amount it collects from restaurants, Bumble would experience a 4.3-per-cent increase on its \$200 million in annual revenue. In addition to its financial benefits, the OpenTable integration would increase the ease with which users can arrange meetups, consequently improving user engagement and satisfaction.

Serving Success

The restaurant reservation industry is highly fragmented and filled with many homogenous platforms competing over the same customers. Although OpenTable was the pioneer in this market, its product offering now lags behind competitors. This partnership would act as a springboard for OpenTable to start building a comprehensive database of diner insights and preferences. The company could leverage this data to expand its capabilities beyond reservations and start offering diners a more personalized experience on the platform. These customer insights would also give OpenTable the opportunity to provide its restaurant partners with a better understanding of their customers and better target diners who would be likely to visit specific restaurants. Ultimately, OpenTable would be able to re-establish its presence and ensure that it reserves its spot at the head of the table.

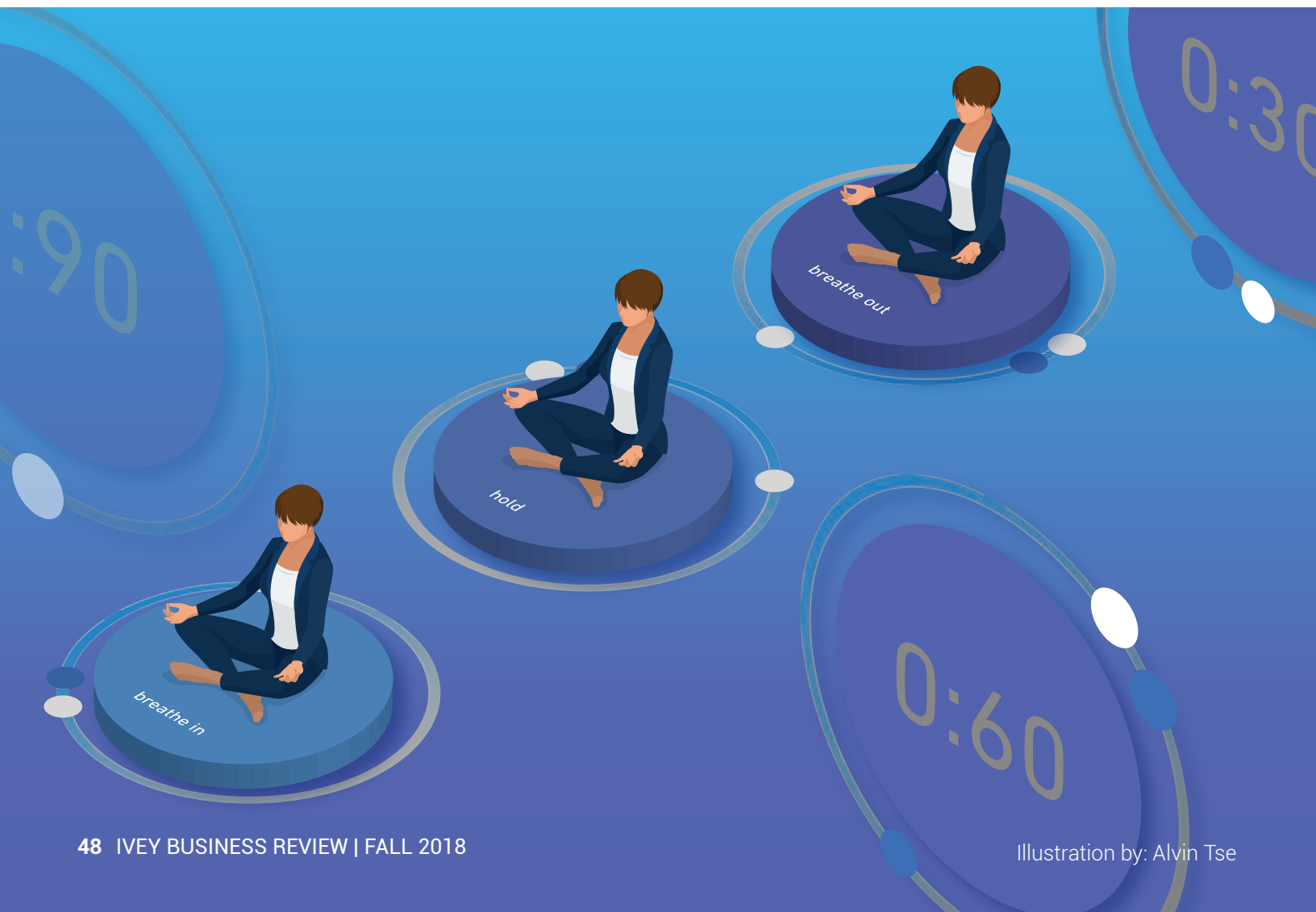
OPENTABLE VALUE CHAIN



CALM: THE CALM BEFORE THE STORM

With fierce competition in the meditation app industry, Calm needs to reach beyond its millennial demographic to weather the oncoming storm

Stephanie Li & Virginia Ling



Taking a Deep Breath In

Grounded in a mission to “make the world happier and healthier”, Calm.com, Inc. (Calm) launched in 2012 to help users sleep better, boost their confidence and reduce stress and anxiety levels through a meditation application. Using recordings and soothing nature sounds, the app provides users with a guided meditation experience that ranges from general mindfulness to specific topics like self-confidence, anxiety, and insomnia. The company has so far performed exceptionally well, but with its core meditation service promoted primarily through a mobile application, Calm limits its upside potential by restricting its reach to the younger generation.

Ranked among the 50 top grossing iOS apps, Calm's offering has proven attractive to its users. The application was awarded 2017 Apple App of the Year and recognized as the Happiest App in the World by the Center for Humane Technology. It has repeatedly been praised for its intuitive interface that features relaxing nature imagery and in-depth meditation modules. With a range of topics from self-esteem to dieting, Calm's expanding portfolio of service offerings are tailored to the needs of each individual. Unlike the one-size-fits-all approach to traditional meditation, Calm provides users with real-life applications such as treating anxiety and improving sleep.

Calm is unique in introducing significant out-of-app aspirations. Co-CEO Michael Acton Smith has stated the importance of taking Calm offline in hopes of becoming a lifestyle brand, striving to become the “Nike of the mind.” It has already started this process through ancillary products such as a book and sleeping mist. Therefore, Calm is poised to create a seamless omni-channel experience and improve its accessibility to more consumers.

The Meditative Wave

With an expected average annual growth rate of 11.4 per cent and a projected market size of \$2.08 billion by 2022, the U.S. meditation industry is one of the fastest growing segments in the wellness industry. Furthermore, 53 per cent of Americans aged 65 and above meditate at least once a week, whereas only 29 per cent and 38 per cent of 18-to-29- and 30-to-49-year-olds do so, respectively. These trends indicate meaningful behavioural differences between demographics and signal an untapped opportunity in the senior demographic.

While tech-enabled meditation is largely seen as more accessible, the abundance of such apps has overcrowded the market and facilitated the perception of mobile meditation as a predominantly middle-class millennial activity. Calm is a good example of this, as the median age of its users is between 30 and 35, limiting its ability to

resonate with other demographics. While mindfulness app downloads are on the rise, jumping 36 per cent from last year, mobile apps restrict distribution to mainly the young and technologically savvy, even if other demographics present a more attractive market opportunity.

Growing Tensions

Calm's reliance on the millennial consumer market poses several problems because this segment is competitive, price-sensitive, and less brand-loyal. These characteristics make Calm vulnerable to established content-sharing platforms such as YouTube and Spotify, which are starting to release meditation content. Meditation sessions on Spotify and YouTube can be accessed for free, an appealing alternative to an annual \$59.99 Calm subscription. It has been proven that millennials are less brand-loyal than their predecessors, and low switching costs to other meditation services means that churn could pose a significant threat to Calm's user base. The average millennial is subscribed to 1.65 paid subscriptions. If competitors can fulfill their many needs with fewer subscriptions, customers would less likely use separate apps. This makes Calm's share of the consumer subscription market vulnerable to the growing availability of emerging meditation services.

In addition to content sharing platforms offering substitute services, there is fierce competition among meditation apps themselves. Calm's biggest competitor, Headspace, is a major threat due to its rapid innovations, widespread partnerships, and outreach to other demographics. Headspace has launched a new subsidiary called HeadspaceHealth, which aims to provide an FDA-approved, clinical-level product for a range of health conditions by 2020. As a medical app, Headspace Health has the potential to target new markets who use smartphones for medical needs. Those who use Headspace Health are more likely to also use the platform for meditation, increasing the urgency for Calm to augment its service offering for other underserved markets.

Headspace has made it a strategic priority to expand through partnerships with other organizations. In response to content sharing platforms entering the market, Headspace has partnered with Spotify, enabling users in certain European countries to purchase a discounted subscription to both services if purchased as a bundle. This partnership creates a sustainable source of revenue for Headspace. Additionally, Headspace partnered with Virgin Atlantic in 2011 to create an in-flight channel, which reaches over 800 million passengers per year on 11 airlines. It took Calm seven years to offer a comparable service, and the lag has allowed Headspace to establish itself as the primary airline brand for meditation. While Headspace is using partnerships to target the working age

demographic, there are still opportunities for Calm to use partnerships to reach new markets.

The Retirement Home Opportunity

Headspace has shown that strategic partnerships are the fastest way to reach different demographics that would otherwise be difficult to access. Within the next few years, seniors will control roughly 70 per cent of all disposable income in the U.S., a clear signal of their enormous spending potential.

Calm should look to diversify beyond the millennial market by targeting seniors. Public retirement homes in the U.S. are funded through Medicaid, which lengthens the penetration process, and increases bureaucratic obstacles. As a result, Calm should begin by partnering with private and semi-private retirement homes in California before expanding into other states.

In addition, Calm should introduce a limited-functionality, easy-to-navigate service tailored to seniors' needs. It could be offered through two pricing mechanisms: a bundled package paid for by the retirement home, and an individual subscription plan purchased by seniors. For the subscription plan, a lower price would be commensurate with the limitations of the offering. This product would be rebranded as "Calm for Seniors."

The bundled package would include Calm for Seniors licensed for one device, such as a communal TV or computer. This package should also include a digital training kit for a nurse or caregiver within the retirement

home, who in turn can lead group meditations offline. This offline component is essential for seniors who have more difficulty navigating new technologies.

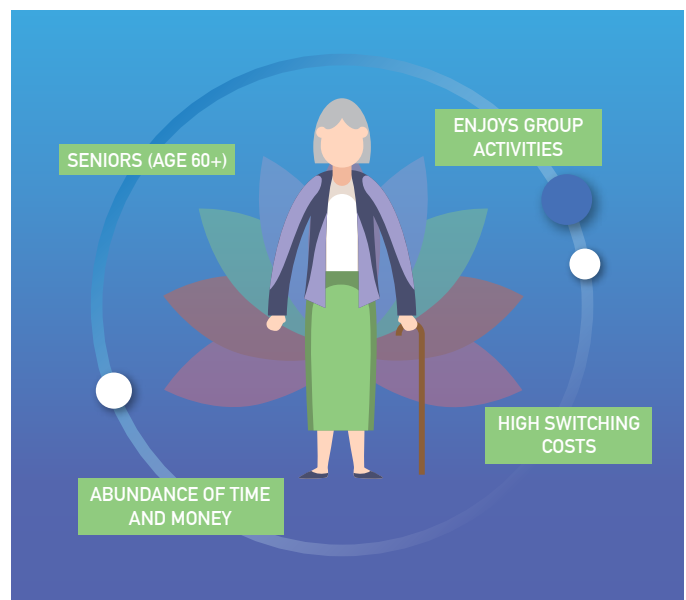
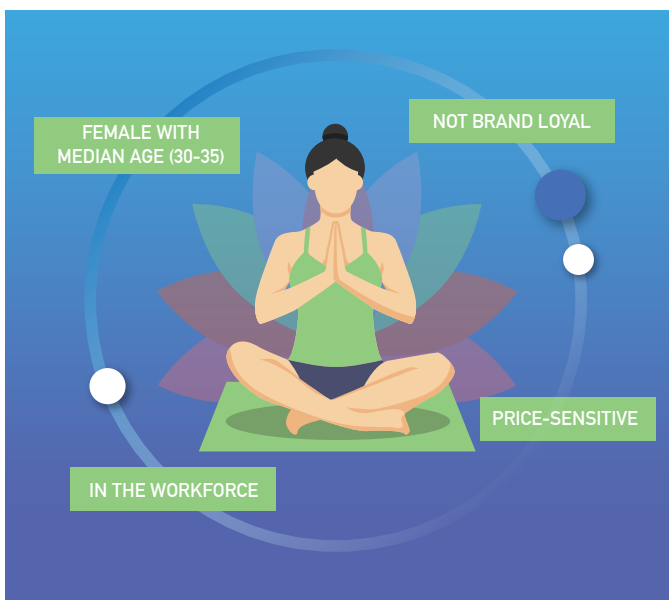
As the state with the largest senior population in the U.S.—with over 5.5 million adults over the age of 65—and the highest number of private and semi-private senior housing facilities, California appears to be the best geography to initiate the product's launch.

Choosing to target private retirement homes has its clear benefits. Seniors aged 65 and over account for 15.6 per cent of the U.S. population, a figure expected to rise to 22.1 per cent by 2050. Additionally, partnering with retirement homes rather than reaching out to individuals makes the recommendation scalable, allowing for rapid growth. The unit economics of a partnership are highly favourable: just one retirement home would result in hundreds of new, active users for Calm, which would lead to a significant boost in overall app engagement. Finally, in contrast to millennials, seniors are less likely to switch brands, and compared to other demographics, have a harder time adopting new technologies. Once seniors are proficient in using Calm, they are unlikely to switch platforms.

Calm's current success can be partially attributed to a user-friendly interface that provides a good introduction to meditation. The application is simple in features and menus, and more relaxing in its look and feel. As a result, Calm's interface could have a wide appeal among seniors who may be less technologically savvy.

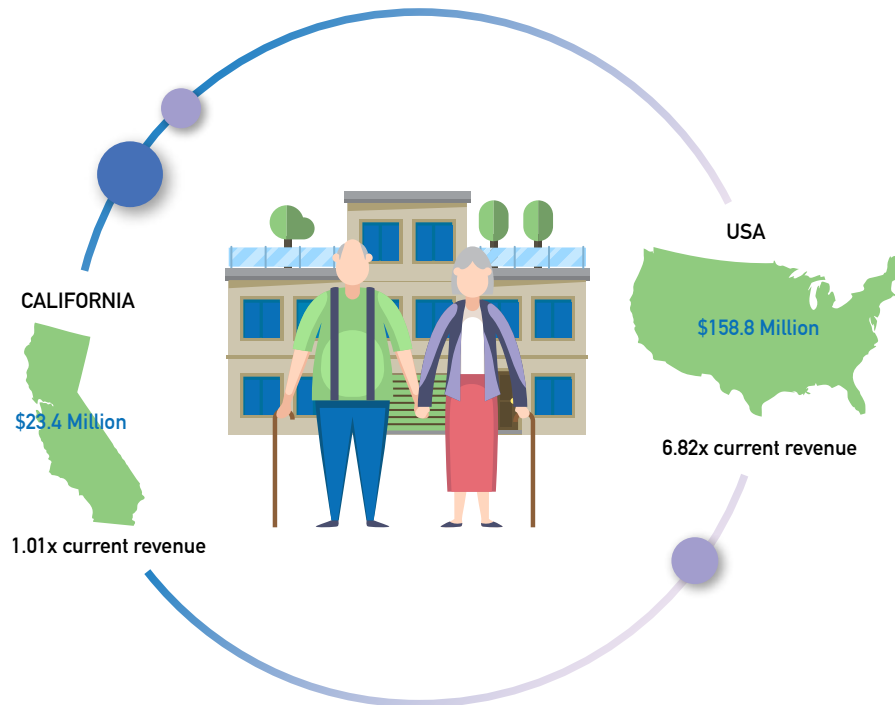
Existing partnerships with schools such as Johns Hopkins

OLD VS. NEW TARGET MARKET



Source: IBR Analysis

RETIREMENT HOME MARKET SIZE



Source: IBR Analysis

and corporations like 3M have demonstrated that Calm can effectively manage strategic relationships. The partnerships have also validated the idea that collaborative initiatives can be used to reach previously inaccessible segments, as the Johns Hopkins partnership brought 4,000 new users onto the app. These partnerships increase barriers to entry for competitors and lend credibility to the app.

The Cost of Wellness

The new bundled price for retirement homes would be \$400 per year, while subscriptions for individual seniors would be \$30 per year. Considering that the average retirement home generates \$11.6 million in annual revenue, this cost is relatively inconsequential. The \$30 annual subscription for seniors is equivalent to Calm's current corporate subscription. With this pricing model, Calm's annual market potential in California from private senior homes would be approximately \$23.4 million, with an additional \$158.8 million from all private or semi-private retirement homes in the United States, several times the company's current revenues of \$22.3 million.

The discounted subscription made available to individual seniors would be priced at 50 per cent of the original price of \$59.99 per year. This version of the app would include tailored meditation techniques for seniors focused on various elements of well-being, a key example being improved sleep habits.

Keep Calm and Carry On

Targeting seniors risks alienating Calm's current millennial user base. Once the older population adopts a product popular with younger generations, that product may quickly lose appeal among the latter. Calm can mitigate this risk through a rebrand specifically for seniors with limited functionality. Limiting the features available would also justify the reduced price while aligning with seniors' potential technological learning curve.

While Calm has achieved success and public awareness to date, it would be prudent to remain proactive regarding its target market. Millennials are price-sensitive and lack brand loyalty, leaving the company vulnerable to other content sharing platforms entering the space. With the potential to tackle a concentrated pool of seniors, the demographic that meditates the most frequently, private retirement homes present an attractive opportunity to approach. This strategy presents a more sustainable user base while supporting the company's goal of spreading the benefits of meditation. Though the company is currently soaring through periods of growth, Calm cannot afford to remain complacent in the calm before the storm.

PAYPAL: CASHING IN ON LATIN AMERICA

As PayPal explores its newfound freedom, the payments processor should look to the underserved Latin American population

Rahul Guggali & Kayla Pandza



PayPal & eBay: The Romance of the Millennium

Founded in 1998, PayPal is a transactions processor that revolutionized the online payments industry, allowing users to make online purchases without credit cards. Immediately following its launch, the service was met with skyrocketing demand and grew from thousands of users to a million within months. Online e-commerce company eBay attempted to directly compete with PayPal through Billpoint, an acquired payments processor, but struggled to gain market share. As a result, PayPal was acquired by eBay in 2002 for \$1.5 billion and the two became mutually dependent. At that time, around a quarter of closed eBay auctions used PayPal, and about two thirds of PayPal's revenues came from eBay and other trading sites.

Despite their strong start, PayPal and eBay split in 2014 primarily due to an increasingly competitive payments landscape and a divergence in strategy. However, they maintained a close partnership with an Operating Agreement, enabling transactions on eBay to continue accounting for a large portion of PayPal's revenues. In January 2018, eBay announced its intent to discontinue this Operating Agreement. Under the terms of this deal, PayPal would continue to offer comprehensive solutions to eBay until July 2020 and the PayPal checkout option would remain available to eBay customers at checkout until July 2023. Taking PayPal's place is Dutch competitor Adyen, who currently handles payments for a host of impressive clientele including Uber, Spotify and Netflix.

When questioned on the rationale for discontinuation, PayPal CEO Dan Schulman announced that the company would now be able to engage with marketplaces that had previously been prohibited under the Operating Agreement. Schulman also suggested that partnerships with global merchants like Amazon were not impossible. As eBay continues to decline in importance, shrinking from 13 per cent of PayPal's business in volume to an expected four per cent by 2020, PayPal should look to other opportunities given its newfound freedom.

Paypal Cash

PayPal Cash is a service in the U.S. that allows customers to deposit and withdraw money from their PayPal accounts at ATMs, cash registers, and service desks. This includes the ability to load their PayPal Cash accounts at partnered brick-and-mortar stores. In October 2018, the payments provider started offering withdrawal services at Walmart, marking the first time customers were given the option of withdrawing cash from their PayPal account through a retail location. This move effectively makes all the traditional features of a chequing account available at retail stores, best serving customers with limited or no access to banking services.

The Latin American Opportunity

Latin America's digital presence is growing rapidly, with 59 per cent of its total population expected to be online by 2020, up from 45 per cent in 2015. In addition, over 73 per cent of the population is expected to access the Internet through a mobile phone by 2020. The number of online shoppers has also seen a drastic increase from 40 million in 2015 to a projected 155 million in 2019. For an e-commerce based service like PayPal, this rapid digitalization offers a significant growth opportunity since certain products like PayPal Cash are accessed most easily through a mobile app. Latin American consumers also have a different relationship with banks compared to consumers in North America and elsewhere in the world. These regional differences in banking and payment preferences will facilitate rapid adoption of PayPal Cash.

Around half of the population in Latin America is unbanked. Contributing factors to the high unbanked population include distance to financial institutions, inadequate credentials to open an account, and distrust in the banking system.

"Around half of the population in Latin America is unbanked. Contributing factors to the high unbanked population include distance to financial institutions, inadequate credentials to open an account, and distrust in the banking system."

Individuals who do have bank accounts can obtain three types of credit cards: local, which only allow domestic transactions; regional, which restrict transactions to neighboring countries where the issuing bank has a presence; and international, which can be used anywhere globally but are the hardest to obtain. Credit card access poses a huge barrier to purchasing international goods for the average consumer. For online purchases, high interest rates and inability to obtain credit have resulted in only about 30 per cent of Brazilians having a credit card. Without proper financial tools, many consumers currently use unconventional methods to pay for online products.

Depending on the region in which the consumer is located, there are many unorthodox payment solutions. For example, in Brazil, 25 per cent of all online transactions are done using boleto bancário, an invoice that can be

FINANCE

issued online and paid for at an ATM or retail store at a later date. Due to the wide variety of regional payment methods, processors find it difficult to handle multiple payments, opening an opportunity for PayPal to use its existing technologies to solve this problem.

PayPal currently offers services in several Latin American countries, including Brazil, Argentina, Mexico, and Colombia. However, online payments using PayPal could only be made using international credit cards thus far, hindering the service's success.

Expansion Strategy

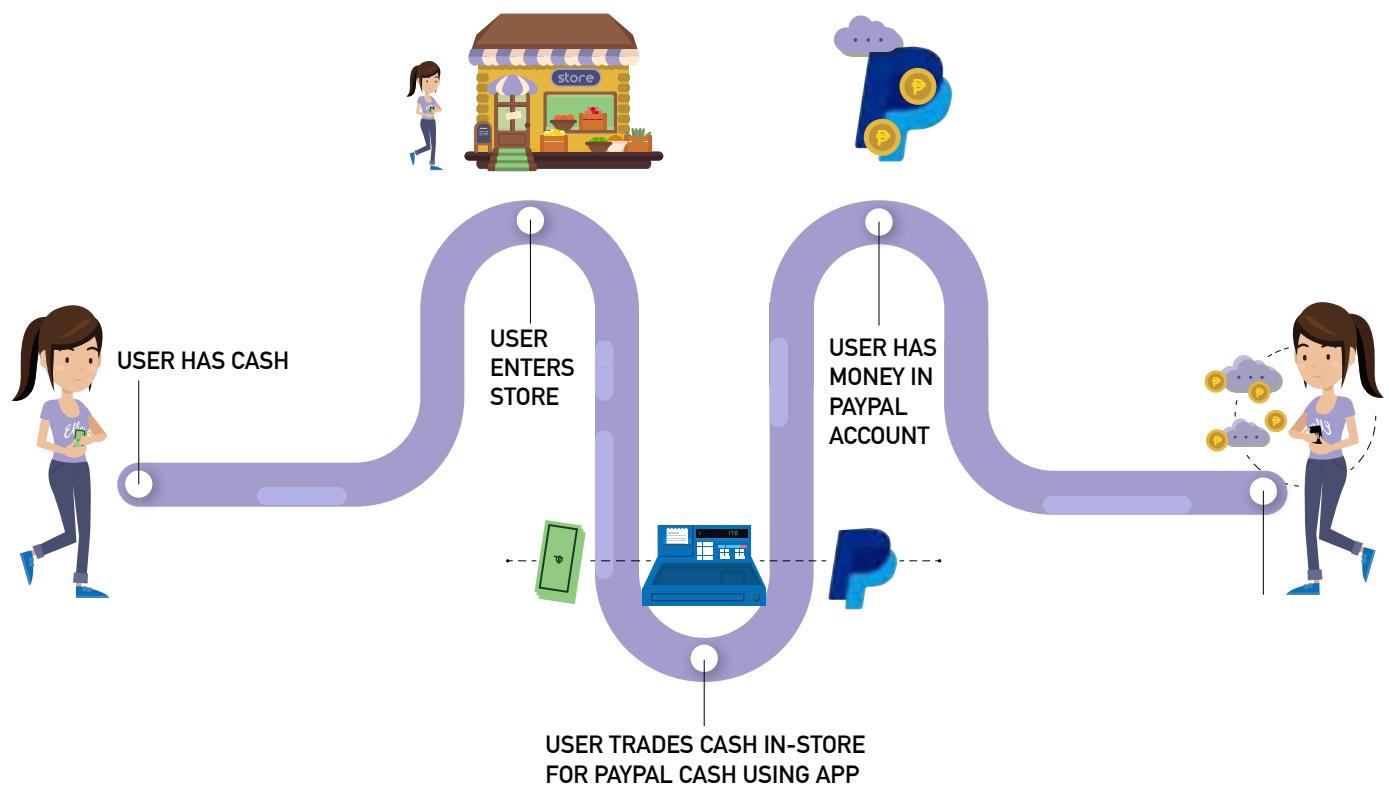
In order to capitalize on the Latin American e-commerce market and the unique regional factors at play, PayPal should bring PayPal Cash to Latin America. On a mobile application, consumers would select the amount of PayPal money they would like to deposit or withdraw and complete the transaction in-person at partner retailers. This would give individuals a method to pay for goods and services online without needing access to a bank account. Given that 87 per cent of PayPal's revenue came from transaction fees in 2017, the firm should focus its operations on the four countries with the highest projected total e-commerce revenues: Mexico, Colombia, Brazil, and Argentina.

PayPal should partner with popular and frequently visited retailers in each country, including Walmart in Mexico, Exito in Colombia, Coto Supermarkets in Argentina, and Carrefour in Brazil. Unbanked customers, many of whom live in urban areas and shop at these retailers, would be able to make deposits and withdrawals to their PayPal accounts at a participating retail outlet. These types of partnerships are not unfamiliar to PayPal, as PayPal Cash has already been implemented in Walmart, 7/11, CVS, and Rite Aid stores in the United States. By introducing PayPal Cash to Latin America, the company would attract a customer base who seeks the security of an e-wallet but lacks the credentials to create their own bank account.

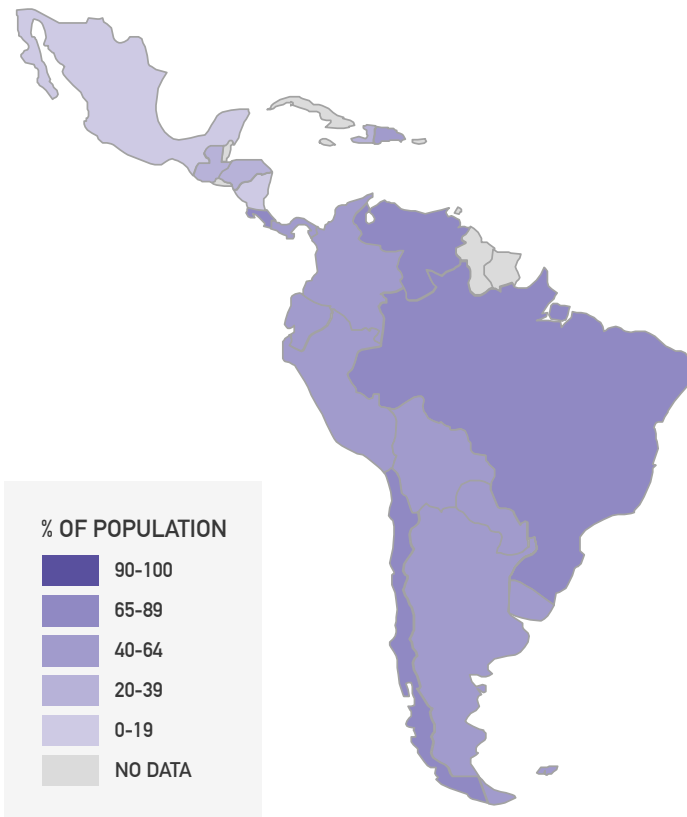
To enable Latin American consumers to shop online, PayPal should also partner with e-commerce retailers to handle payments processing. Large Latin American e-commerce retailers like B2W Digital, which had approximately 16.1 million unique monthly visitors in May 2018, would procure a sizeable customer base for the company. For each purchase, PayPal would charge its normal 2.6 per cent plus a fixed fee to the retailer.

This strategy benefits both the consumer and partner businesses. PayPal Cash allows customers to manage their finances and purchase international goods online without being banked or having to navigate complex payment methods. Conversely, PayPal would allow partner

NEW CUSTOMER JOURNEY



UNBANKED POPULATION CONCENTRATIONS IN LATIN AMERICA



Source: The World Bank Group

firms to accept e-commerce purchases from a large segment of the population that may not have previously purchased online. By facilitating this process, PayPal would be able to capitalize on Latin America's projected 2019 B2C e-commerce market value of \$79.7 billion and embark on profitable partnerships in the region.

Target Market

With over 650 million people in Latin America and significant development in its constituent countries, this is the most compelling growth opportunity available to PayPal. To build a specific target market, PayPal should focus on the unbanked population which makes up approximately half of the Latin American population. This group is a primary area of focus since much of the unbanked population faces difficulty purchasing items online.

A secondary target market is the portion of the banked population with access to only local and regional credit cards. With PayPal, this segment could access a widely supported payment service that could be used to make international e-commerce purchases. Credit card issuers

will also incentivize users to link their card to PayPal as is currently done in North America, further encouraging consumers to make a PayPal account and use it. Consumers benefit from the ability to purchase goods internationally with local credit cards while PayPal benefits from higher transaction volumes.

Banking on Success

As a result of this expansion, PayPal could realize \$550 million in additional revenue in its first year. Over the next five years, this revenue is expected to grow 8 to 10 per cent year over year, largely driven by a rapid increase in e-commerce spending in the four selected countries.

The immediate monetary opportunity aside, the partnerships the company creates from a Latin American expansion can lead to a promising future. Given the prevalence of unbanked populations, a successful foothold in the four countries with PayPal Cash could open the door to a myriad of other banking services in the future. Breaking up with eBay marks the end of a chapter for PayPal, but a sea of new opportunities lies ahead for the company.



www.iveybusinessreview.com