Taking Ontario Mobile

http://www.takingontariomobile.ca/

Research-based recommendations for how mobile technologies are part of the financially responsible solution to providing better access to services for Ontarians

Ontario

meic

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Mobility is Transformative

- Mobility is about the individual, not the device.
- Ontarians require and desire ubiquitous connectivity, personalized and context-aware services and content that link them to their daily activities and interests, regardless of time and place.

T.O.M. Research Initiative

- Independent third party report led by OCAD University with MEIC - cross-sectoral, multi-institution partnership
- Design and strategic foresight fundamental to mobile success.
- MEIC, U. Guelph, Ryerson U., UT, York U, TRRA, Copernicus Consulting, industry researchers.
- Analysis of challenges, opportunities, barriers and best practices in five priority sectors: Learning, Health, Government Services, Entertainment, Commerce.
- Blueprint for establishing Ontario as a leading mobile jurisdiction, building on existing foundation.
- 'Mobile Ontario' policy framework: industry, academia, health care, government.

T.O.M.: Methodology

- Primary and secondary research – comprehensive literature reviews
- Jurisdictional comparison
- Expert round tables – government and industry
- Survey of Ontario residents
- Expert interviews
- Scenarios

Mobile Capacity

1) Ontario is a centre of activity for the mobile industry. It boasts a cluster of application developers that are succeeding on both the national level and globally, which has attracted global firms to Ontario, such as Google and Zynga.

2) Ontario is well positioned to be a leader in mobile commerce given its strengths in mobile technology, its large financial centre, and its large retail market.

Mobile Capacity

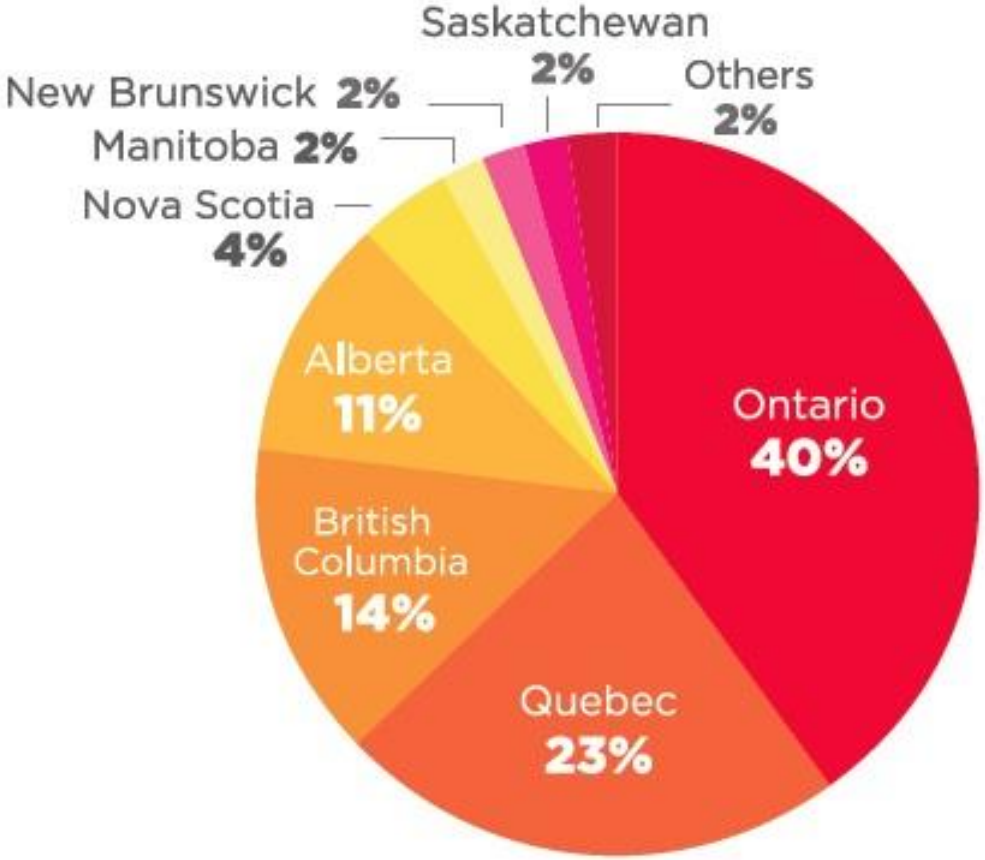
3) Ontario leads in mobile related training at universities and colleges from engineering to design – BC, AB, Quebec also bring capability.

4) Ontario is a world leader in the development of mobile health applications and devices for the global market.

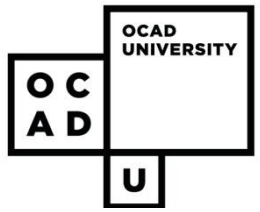
5) Canada is a leader in mobile academic research. Ontario researchers produce 50 per cent of our country's mobile research publications with over 3400 in the last ten years.

6) Ontario has history of successful collaboration between universities, government and industry.

Distribution of Mobile Telecommunications Companies in Canada



Industry



POLAR MOBILE

WIND

ALLEGRO MOBILE SOLUTIONS

RIM

MITEL Mobile

fivemobile

redline communications

mythum

kik

mobilicity

SEREGON

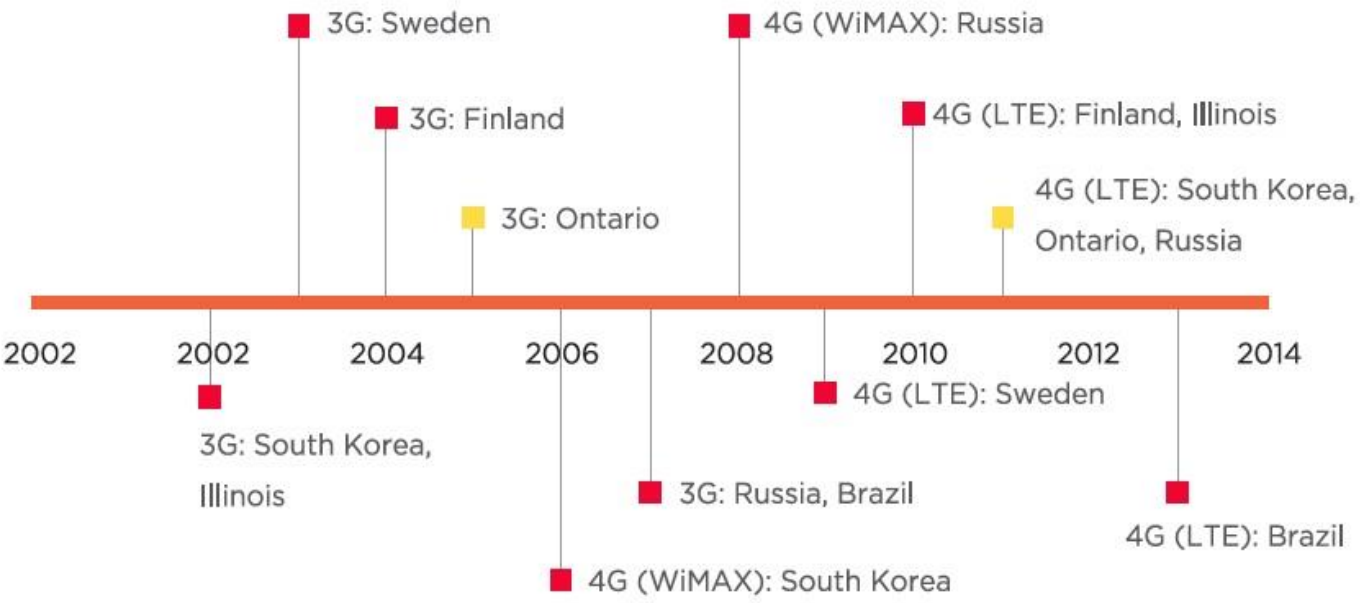
ROGERS WIRELESS

XTREME LABS

Diversinet

IMPACTMOBILE Own The Street

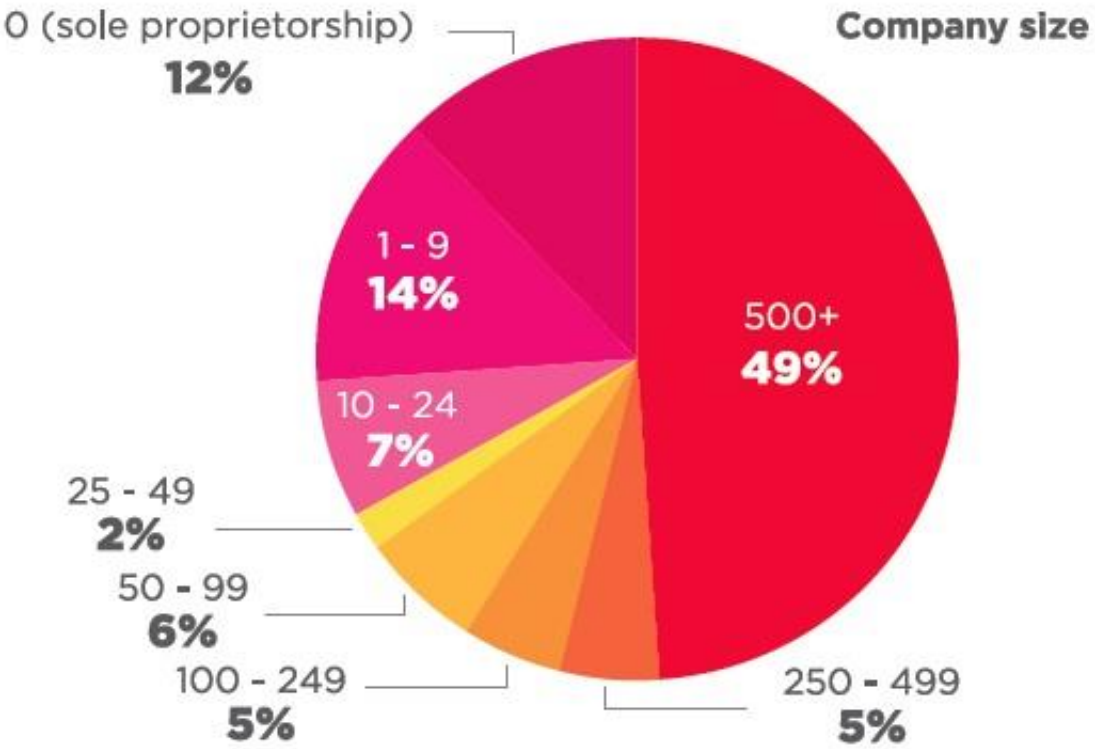
Infrastructure Development



Mobile Innovation: Ontario's Growing Mobile Content, Services, and Applications Industry 2012
edited by Kathleen Webb
meic

Key Findings: Mobile SME SWOT Analysis

Profile of Companies Surveyed (non mobile sector)



Priority use of mobility

- Large companies prioritize productivity gains, while small and medium enterprises (SMEs) are more interested in the innovation that mobility can bring to their products.
- Industries have seen the advent of mobile technologies and believe that their trade associations are aware of the importance of the "mobile turn".
- Industries do not know how to find developers. Need match-making.

Actions to Promote Mobile Industries

- Address cost of doing business – tariffs
- Trade associations create bridges between mobile sector and industries needing mobile services.
- Dedicate % of federal and new provincial venture funds to mobile.
- Provide funds from spectrum auction profits to support mobile and wireless industry innovation.
- Continue to invest in Canada's mobile research and incubation capacity.
- Government procurement of devices, applications and services.
- Enhance investment in skills training for mobile design and engineering.
- Sustain tax credit environment.

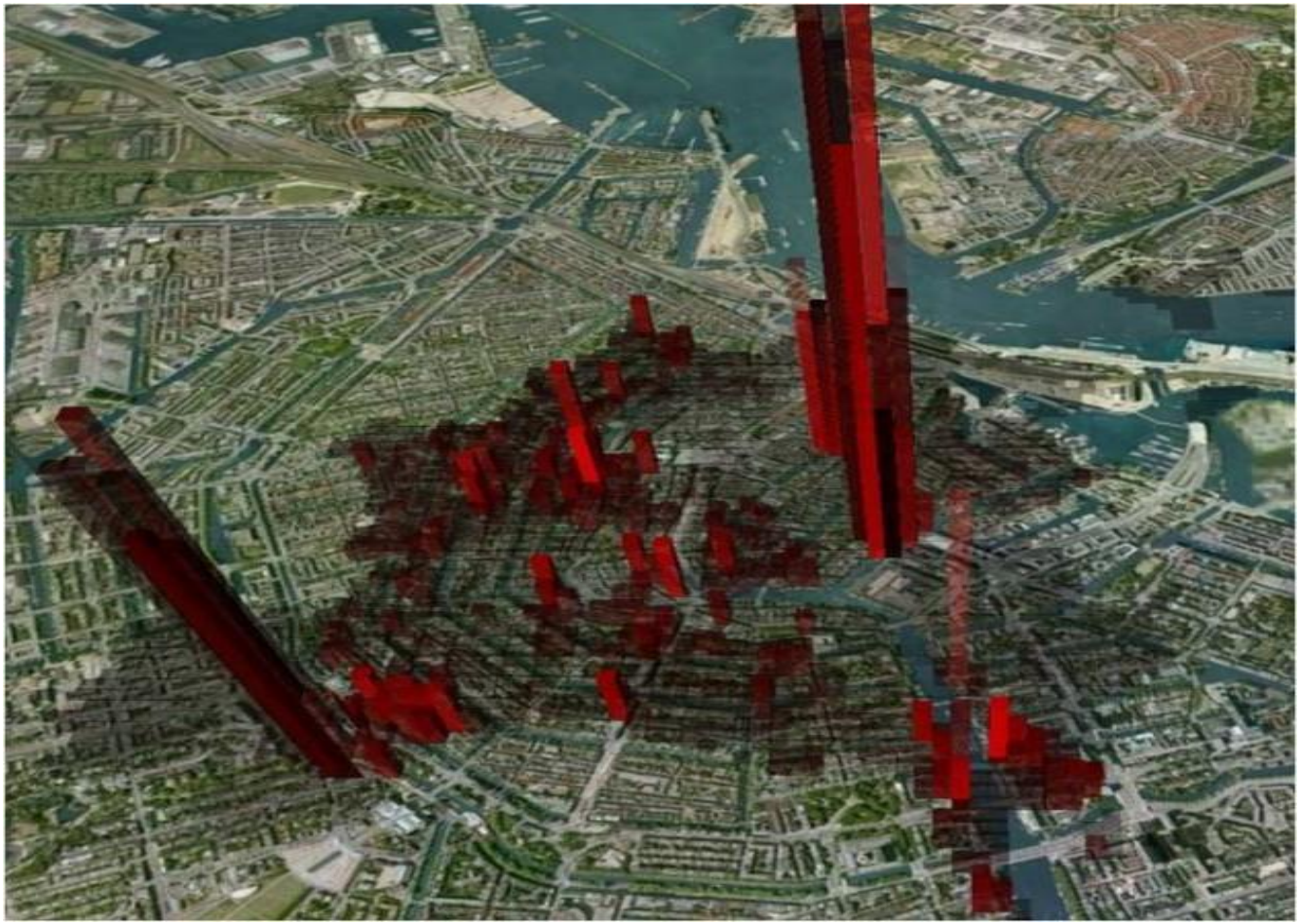
M-Government Delivery Models

- Government to Citizen (Policy Development, Decision Making; Information Services; Transactions)
- Government to Businesses (Information Services; Transactions; Support for Rural Businesses;
- Government to Employees (Tools, Training and Data Access; Improve Field Crew Performance)
- Government to Government (Improved Horizontal Connections between Agencies; Security, Emergency Management)

M-government opportunity

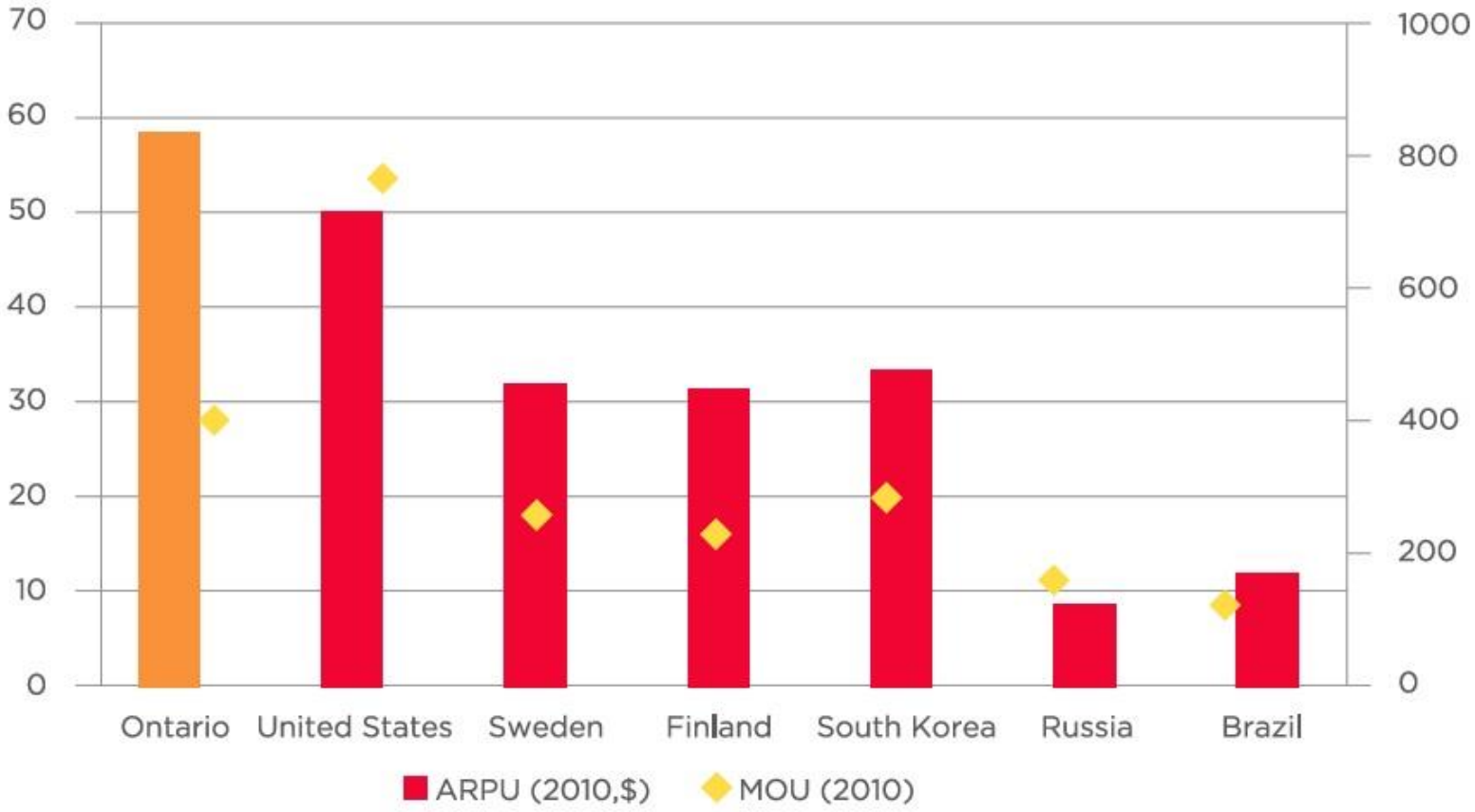
- Reorganization of work process - aligns improved service with cost savings and productivity gains – tablets and smart phones.
- Efficiency through automatic data gathering.
- Improves access to services for remote communities.
- Just in time location aware services.
- Public announcements and security.
- Use mobile interfaces to meet inclusion legislation.
- Creates bottom-up participation & has potential to empower and engage citizens.

Visible Amsterdam (movement of crowds), Euro Beinat



M-government solutions

- Integrate mobility in provincial and federal efficiency planning - move from physical service to mobile service without an e-service stage.
- Work with private sector to ensure residents can access mobile services – address overarching concerns about data rates.
- Consider contracting out components of services.
- Open data repositories that industry can build applications and services on top of.
- Establish enabling policies regarding regulatory questions such as spectrum auctions, privacy, investment in wireless infrastructure and costs of access.


70
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30
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1000
800
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400
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Ontario
United States
Sweden
Finland
South Korea
Russia
Brazil
ARPU (2010,$)
MOU (2010)

Inclusion

- Mobility has proven to be the "jump over technology" for inclusion in the economy, education, health care throughout the developing and advancing world.
- Ontario residents, no matter where they live – rural, Northern, on reserve, in underserviced urban communities – or no matter who they are – seniors, recent immigrants, disabled, Aboriginal people would benefit from access to mobile broadband.

NOKIA
NOKIA

Inclusion solutions

- Federal/provincial/private-sector plan and investment to roll out high-speed mobile networks in rural and Northern areas of Canada/Ontario.
- Continue provincial initiatives like Ontario's Rural Connections Broadband Program – to extend connectivity across the province, add mobile component to program objectives.
- Use "white spaces" in wireless spectrum (portion of spectrum vacated by retirement of analog television) to provide wireless access to rural communities or low-income public-housing communities.

Inclusion Solutions

- Broadband and Wi-Fi community-owned network coverage of Aboriginal communities in the North with ROI through efficiencies in provision of remote healthcare and education.
- Encourage competition in service provision and reduce foreign ownership provisions.
- A tax rebate for mobile users below the poverty line.
- Ensure accessibility standards and inclusive design regulated in mobile industries.

SPLATALOT

CELEBRITY SPLATDOWN CONTEST

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MOBILE app camp 2012

M-entertainment

- New opportunities to build Canada's already powerful entertainment industries through n-screen - adding multiple consumption channels and screen time.
- "SoLoMo": social, local and mobile
- Extension channel for traditional media.
- New markets for advertising industries.
- Developers are industry sector in own right – between content producers and ICT.
- Build Ontario tourism.
- Leverages the "app" software and app-store model which has positioned Canadian players into global market.

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M-entertainment solutions

- Export-support programs created by associations in partnership with government can help companies enter new or emerging markets.
- A significant percentage of future spectrum-auction revenues should be reinvested in the mobile and wireless sector.
- The Canadian Radio-television Telecommunications Commission (CRTC) continue to regulate mergers and acquisitions, with funding designated to the experimental portion of the CMF, with an explicit focus on mobile content and applications.
- Tax measures to retain companies in entertainment sector and encourage venture in Canada.
- Robust and secure m-commerce and m-marketing solutions.

M-commerce

- Purchases and transactions via mobile device – full range of financial services.
- In-store use of mobile devices to deliver information, transforms retail - enhancements and an approximation of the benefits of online shopping.

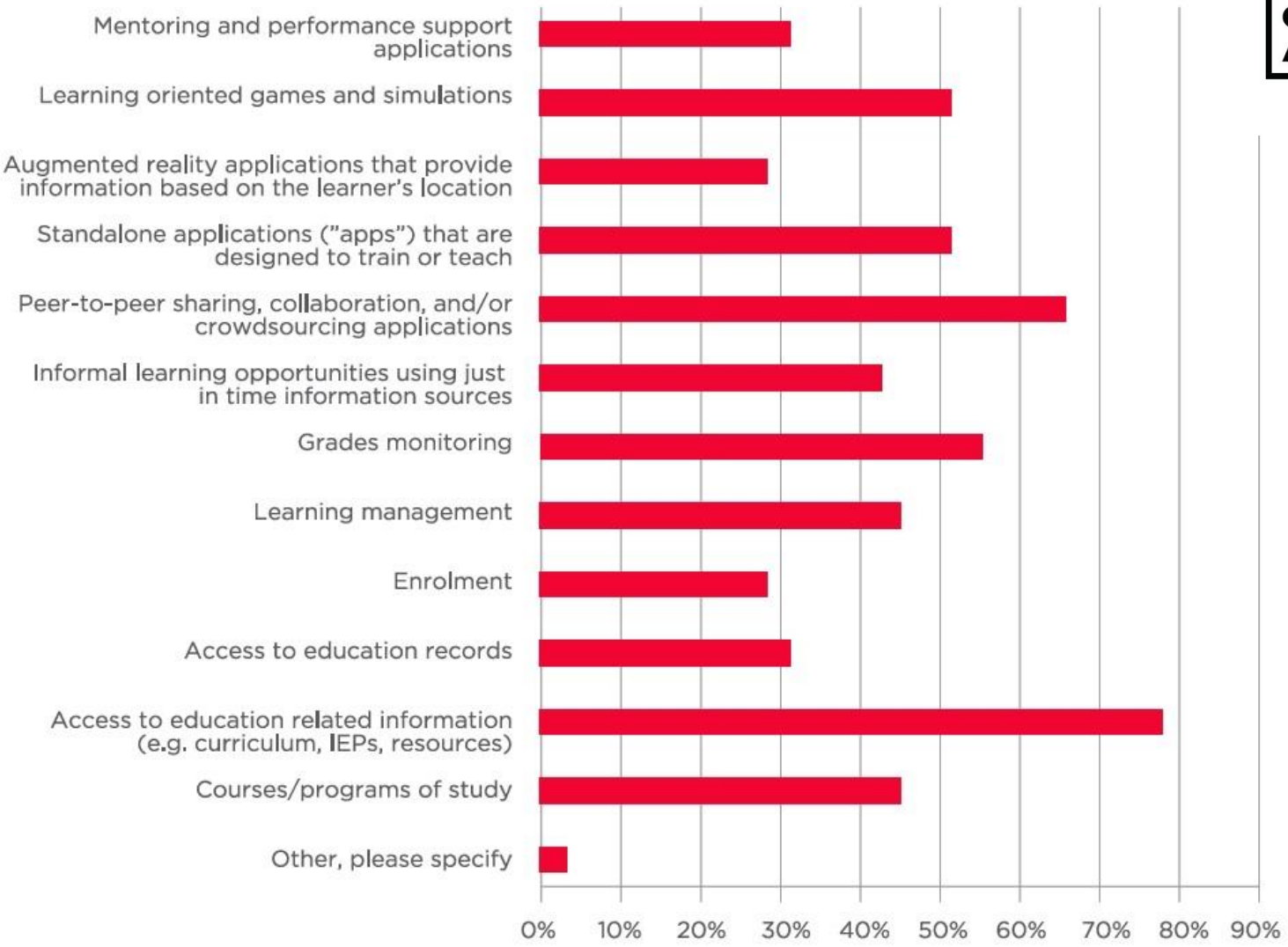
North Blue
Bionic S
C$379.99
Share
Facebook

Cold
Cold
HOMEPLUS

M-commerce solutions

- Enhance security by educating developers and by practicing due diligence.
- Ensure that consumer-protection legislation is in place to protect residents' personal data.
- Banks and brands ally to create m-commerce pilots to help businesses and merchants navigate risk in adopting m-commerce.
- Collaboration between ISPs and financial institutions.
- Government services pilot mobile wallet and mobile quick checkout for licenses, tickets, etc.
- Ensure that training in place for engineers, designers in Canada to meet demand.

PSE - Consumer mobile expectations



M-learning

- Enables 24/7continuous learning in and out of classroom.
- Youth are mobile users.
- Lifelong learning and training.
- Workplace skills development.
- Formal & informal.
- Collaborative and individual.
- Supports remote learners such as Aboriginal communities.
- Personalized content and access.
- Location aware.
- Global opportunity and disruption.

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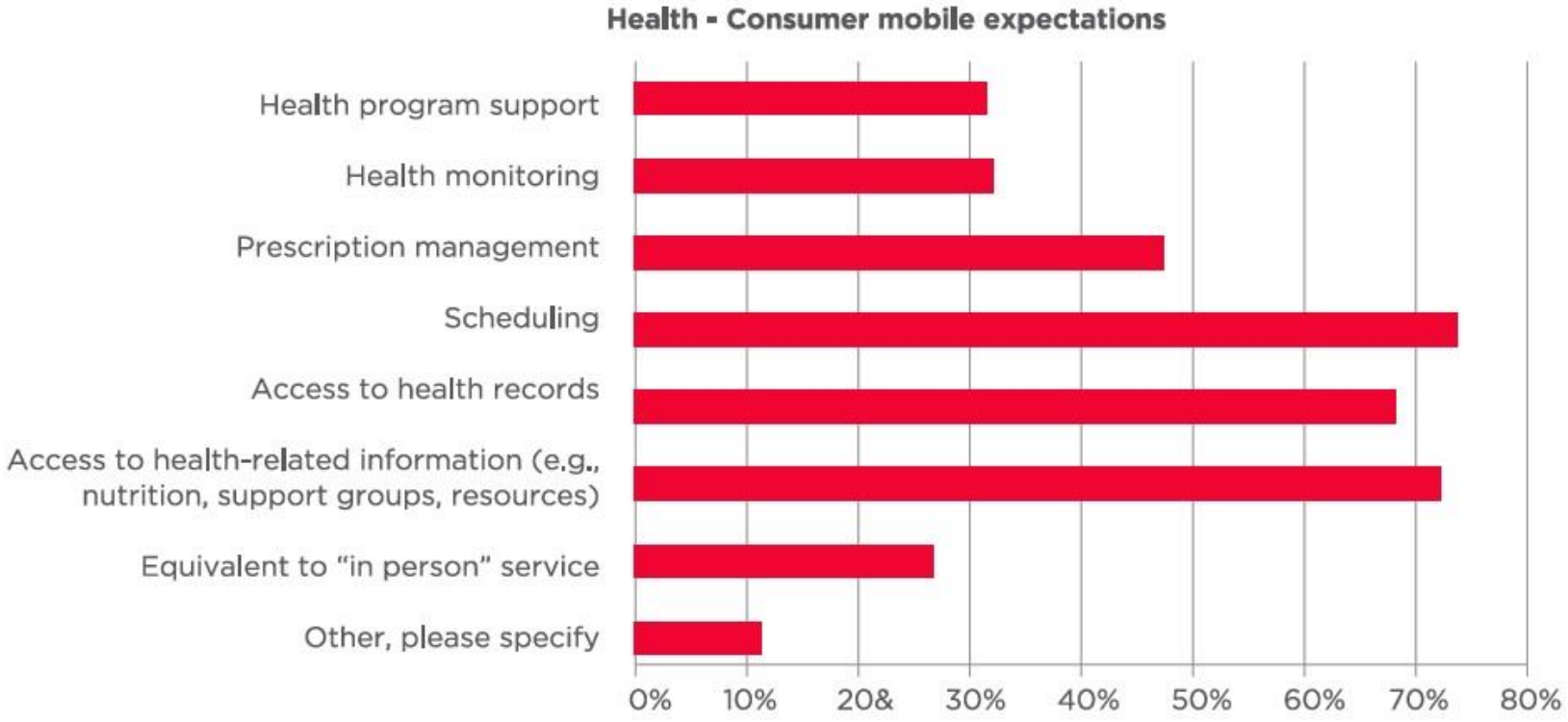
M-learning opportunity

- Regional universities, colleges and m-learning industry can build global reach and presence through the delivery of m+eLearning.
- Enhance retention through services and mentorship.
- Productivity gains for institutions, teachers and learners.
- Create 21st century labour force skills.
- Address cost of fixed capital.
- Curriculum will develop through a consortium of educational publishers and mobile application developers.
- Lifelong learning and just-in-time training.


Health - Consumer mobile expectations
Health program support
Health monitoring
Prescription management
Scheduling
Access to health records
Access to health-related information (e.g., nutrition, support groups, resources)
Equivalent to "in person" service
Other, please specify
0%
10%
20&
30%
40%
50%
60%
70%
80%

M-health

- The use of mobile devices, and sensors to enable personalized healthcare, paperless health documentation, 24/7 access to information, real-time monitoring and intervention, and remote care.
- Ideal platform to enable a move from acute-focussed care to community and preventative care.

M-health opportunities

- Electronic and mobile records that follow the patient.
- Trusted health information in cloud-based system.
- Health cards will be part of the mobile wallet.
- Provide top tier expertise to remote locations.
- Mobile caregivers will respond just in time accessing centralized expertise.
- Geo-location information will enable individuals to pinpoint available services in closest area.
- Integration with cell phones and smart phones of health monitors, sensors and tools and their data.
- Applications will manage “health traffic” to clinics and emergency rooms to help reduce wait times.
- Health and wellness coaching and information for preventative care.

M-Health applications

M-health solutions

- Rollout system wide mobile solutions as successful large scale pilots , for e.g. applications that can help seniors stay independent longer.
- Self-regulating industry model with interoperability standards to ensure that wireless medical devices and other medical devices have the ability to communicate in a common “language”.
- Industry and government work together to establish regulatory policies and best-practice guidelines that will promote the use of mobile applications within the public health system.
- Modify incentive models through OHIP to reward mobile health solutions that promote prevention and community care over acute.

Quick Wins

- Establish Industry Advisory Committee/Cross-ministerial committee to plan implementation.
- Engage with OPS Community Services cluster on app development.
- Create app to post hospital and clinic emergency wait times.
- Brand Ontario as a mobile Centre of Excellence.
- Prioritize mobile deployment as part of PSE SMA (Strategic Mandate Agreements).
- Sustain start-up friendly tax regime.

Overall Recommendations

1. **The Need for an Ontario/Canada Mobile Policy Framework**
2. **A Mobile Canada Requires Ubiquity, Accessibility, Quality Infrastructure and Affordability**
3. **Create Confidence in Mobile Services: Privacy, Security and Consumer Protection**
4. **Increased Quality, Accessibility and Productivity in the Delivery of Health Care**
5. **Increased Quality, Accessibility and Productivity in the Provision of K-12 Education**

Overall Recommendations

6. **Increased Quality, Accessibility and Productivity in the Provision of Post-Secondary Education**
7. **Increased Productivity and Quality in provision of Government Services**
8. **Increased Productivity, Accessibility and Quality Across Canada's Non-Mobile Industries**
9. **Job Development and Retention to Build a Strong Mobile Business Sector**
10. **Citizen Engagement and Inclusion**

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