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Latest Mobile Commerce Innovations

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AGENDA

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INTRODUCTION

- Mobile connectivity has played a key role in increasing Internet access within developing countries with Mobile technologies enabling services that were once inaccessible to individuals, such as **MOBILE BANKING**, **HEALTH**, and **EDUCATION.**

- Social networking - One of the most tangible reasons for social networking's popularity is the economic benefit of using free networks for local and external communications.

- Given the high cost of telecommunications and the relatively large diasporas among developing countries, social networks allow people to stay in contact without the consequence of high telephone bills.

- Innovative business models have emerged to overcome the Internet ecosystem constraints of developing countries.
  - E.g., the Internet has enabled entrepreneurs in developing countries to address mobile health and e-government services offered to rural populations to innovative payment structures created to address a lack of local credit structure.

INTRODUCTION

- Global M-commerce, will drive an estimated $516 billion in sales over the next three years, accounting for more than 70 percent of all mobile Internet revenue with ALL mobile Internet revenue will top $700 billion annually by 2017.

- U.S. mobile commerce sales are exploding, soaring **19-FOLD** from 2010 to 2013. Over that time, the U.S. mobile commerce market climbed to $42.8 billion last year from $2.2 billion in 2010 and it is projected that mobile commerce will top $50 billion in the U.S. this year based on the $12.2 billion in sales generated in the first quarter.

- More than one-third of **VISITS TO ONLINE STORES** came from mobile devices by the end of the first quarter, up from 3.4 percent at the beginning of 2010. **EMAIL MARKETING** generated more than 25% of sales on mobile phones, compared to 21& on desktops and 23 percent on tablets.

- The iPad accounts for the largest share of tablet-generated e-commerce orders, but Samsung tablets increased to 15.3 percent of e-commerce orders in the first quarter of 2014, compared with only 2 percent in 2012.
  - Examples include **BUYING GROCERIES** and using **DIGITAL WALLETS TO PRE-ORDER FOOD ON THE WAY TO A TAKE-OUT RESTAURANT**, "so it's ready to go as you arrive, no questions asked and no cash required.

  (http://www.fiercemobileit.com/story/us-mobile-commerce-sales-soar-19-fold/2014-07-14)

INTRODUCTION

- Australian mobile commerce customers soared 448 percent over the last three years, This phenomenal growth in e-commerce "Down Under" has been spurred by soaring smartphone sales--six in ten Australians own a smartphone--greater mobile internet use, an explosion in the number of **BANKING** and **SHOPPING APPS** and **EXPANDED MOBILE BROADBAND NETWORK COVERAGE.**

- While use of transactional m-commerce has grown across all age groups, the most significant increase--31 percentage points--was recorded for people aged **25-34**

- Mobile banking and online shopping have more than doubled over three years. At the end of last year, 35 percent of mobile phone internet users banked or paid bills online, while 22 per cent shopped online

- **TRANSFERRING FUNDS** was the most common m-commerce activity, undertaken by 77 per cent of m-commerce users in December 2013.

- Improved m-commerce platforms can enhance consumer experience. Developments have enabled consumers to access information on products and services quickly and easily online by making m-commerce transactions appear **SEAMLESS**

(http://www.fiercemobileit.com/story/aussies-embracing-mobile-commerce/2014-06-30`

INTERNET'S TRANSFORMATIVE POTENTIAL

- By 2013 only 16 percent of Africans were online, but that percentage is rising rapidly as mobile networks are built out and the cost of Internet-capable devices continues to fall. More than 720 million Africans had mobile phones, some 167 million already used the Internet, and 52 million were on Facebook.

- The mobile phone has revolutionized the way individuals interact and the way SMEs, farmers, and informal traders operate. As a result, research shows that mobile revenue is equivalent to 3.7 percent of GDP in Africa; more than triple its share in developed economies, where it was an incremental innovation.
  - In Africa, by 2025, Internet will generate economic growth and social transformation in 6 sectors: financial services, education, health, retail, agriculture, and government.
  - Technology-related productivity gains in these sectors could reach $148 billion to $318 billion by 2025, and large populations stand to benefit as a result.

- To sustain this momentum, however, governments and the private sector will need to ensure that the foundations are in place to support demand and continue this wave of innovation. Increasing access, developing a workforce with ICT skills, and improving digital literacy in the broader population will be critical for the future growth of the Internet in Africa.

(http://www.mckinsey.com/insights/high_tech_telecoms_internet/lions_go_digital_the_internets_transformative_potential_in_africa)

INTERNET'S TRANSFORMATIVE POTENTIAL

- Financial services.
  - The Internet will reduce transaction costs and bring financial services to people who may live far from the nearest bank branch or ATM.
  - With digital technology, more than 60 percent of Africans could have access to banking services by 2025, with more than 90 percent using mobile wallets for daily transactions and remittances.
- Education
  - Many schools that currently lack sufficient textbooks could soon access the world's best educational content on affordable tablets or e-books; teachers, too, will benefit from more effective training.
  - The technology-related productivity gains in education could reach $30 billion to almost $70 billion—enabling governments to achieve more with their education budgets and providing millions of students with the foundation for a better future.
- Health
  - Today, Africa has only 1.1 doctors and 2.7 nurses per 1,000 people, and many people travel long distances for care.
  - The Internet is enabling greater use of remote diagnosis, treatment, and education.
  - Technology-related benefits in health care could range from $84 billion to $188 billion by 2025—and the broader social and economic impact of improved health outcomes will be far greater.

INTERNET'S TRANSFORMATIVE POTENTIAL

- Retail.
  - E-commerce will open up a new shopping experience for Africa's growing middle class. By 2025, it could account for 10 percent of retail sales in the continent's largest economies, which will translate into some $75 billion in annual revenue.
  - Broadly, customers could scan items as they shop using their smartphones, and pay at the till all without having to unload their bags.
    - A step forward in using mobile to improve the customer journey and drive efficiencies for retailers in-store.
- Agriculture.
  - Farmers can access expertise and information on everything from weather, crop selection, and pest control to management and finance.
  - It can also improve access to markets, generating better prices for produce.
- Government.
  - The Internet is a powerful tool to improve transparency, streamline service delivery, and automate revenue collection, delivering productivity gains of $10 billion to $25 billion.
  - M-Government can expand governments capacity to produce benefits and deliver outcomes for government, citizens, businesses and to impact overall national economic growth through:
    - delivering convenient and transparent services for their citizens; achieving cost savings for the government; achieving cost savings for citizens and businesses and generating revenue

M-FINANCIAL SERVICES

- Banks are picking up the mobile pace, particularly when it comes to money movement, balance inquiry and transaction history search.
  - customers can access electronic statements, upload other documents, report a card lost or stolen entirely in-app, access many personalization features and view simple money management visualizations across smartphones and tablets
- Mobile money innovations, like M-PESA, have transformed the personal finance landscape in places like Kenya and Tanzania, where people are more likely to have a mobile money account than a bank account. At the same time, one of the stickiest problems holding back economic growth in these countries is that small businesses are not able to access the capital they need to grow and create jobs.
  - Introducing mobile small business lending platforms in countries where personal mobile finance is the norm could throw the doors wide open to a new wave of growth and development.
- Mobile banking is becoming critical to regular banks as they look for alternative banking channels more seriously than before.
  - Likely trend: de-emphasizing of the old branch model as increasingly getting more expensive to build and maintain the traditional distribution mass market channels.
  - Industry data in Kenya shows cash deposits, cash withdrawals and account balance enquiries accounted for 97% of total transactions undertaken through agent banking between 2010-2013

M-RETAIL SERVICES

- In today's increasingly mobile world, smartphone penetration and usage is increasing across nearly every demographic and unless smartphones suddenly evaporate from the planet, it's clear mobile commerce is here to stay.

- Mobile devices are becoming an integral part of the shopping experience and retailers need to plan ahead for success by considering things like placing QR codes on products or offering free Wi-Fi in stores

- Retailers need to identify and target this growing consumer base if they want to stay relevant among their competitors

- Not only are consumers visiting retail store websites on their smartphones more frequently than before, they're completing more purchases from mobile devices as well.

- Besides reducing transaction costs and increase customer loyalty, retailers need to respond to the new era of mobility of face being isolated and left behind as the behaviour of their customers change.

- Retailers can provide discounts and rewards to customers, link payments to loyalty schemes and offer saved shopping lists and other features

- They can also provide even a basic mobile website for their brand, much less a mobile app with information like directions, store hours, and in-stock inventory.

M-RETAIL SERVICES

- M-commerce platforms can enable shopping malls, real estate developers and hotel chains to purchase materials, facilities and equipment online using mobile devices. They can consolidate volume from smaller buyers, reducing purchasing costs.

- Property management companies can build online communities that connect residents of a particular development, for example. These can be used for regular administrative and maintenance work or to offer value-added services, although privacy and security concerns remain an issue.

- More broadly, the Internet is reshaping demand within retail industry:
  - E-tailing is decreasing the need for retail space and increasing demand for modern warehouse properties with state-of-the-art logistics;
  - Some malls are becoming more entertainment- and experience-oriented.
  - New platforms that connect travelers with home-owners who will rent out accommodations could put pressure on the hotel industry
  - Customers scan items as they shop using their smartphone, and pay at the till all without having to unload their bags. This is a giant step forward in using mobile to improve the customer journey and drive efficiencies for retailers in-store
  - Home buyers can have a property companion app to help them find and buy a home

M-HEALTH SERVICES

- Clinical decision support systems, for example, assist practitioners with diagnosis and provide alerts if there is a danger of an adverse drug reaction.

- Electronic health records and Web-enabled tracking systems can help with the implementation of standardized disease treatment protocols, while doctors can turn to learning portals to stay on top of the latest research.

- Consumers can navigate the health-care system through mobile platforms that rate and review hospitals and physicians.

- Mobile Online appointment systems could eliminate lengthy waits at top hospitals, while online consultancy platforms allow users to pose questions directly to physicians.

- Pharmaceutical companies and medical device makers can use big data to expand research collaborations and streamline clinical trials.

- Electronic codes can be introduced to tighten supply chain supervision of drugs, eliminating counterfeits and preventing abuse while providing support for repetitive administrative tasks such as prescription refills.

- M-commerce could eventually expand the market for over-the-counter treatments, while online strategies could also improve marketing effectiveness.

SERVICESM-AGRICULTURE

- More than 2/3 of people in developing countries depend on agriculture for incomes and investing in agriculture now could help lift tens of millions of people out of poverty.

- The potential for agriculture to drive inclusive economic growth, improve food security, and create opportunities for millions is enormous.

- Mobile Monitoring and Management applications can be classified into:
    - Environmental monitoring - Weather and Geo-referenced environmental monitoring
    - Precision agriculture - Spatial data collection, Precision irrigation, and Supplying data to farmers
    - Machine and process control—M2M - Vehicle and Machinery management, Robotic and Process control
    - Facility automation - Greenhouse control and Animal-feeding facilities
    - RFID - Animal identification and health monitoring, Food packaging, Transportation and Food inspection

- Mobile telephony:
    - Delivers timely information for market prices analysis, facilitates trade and informs business decisions;
    - Reduces transaction time, travel, and costs by bridging distances and allows more effective time use
    - Strengthens communications which promote social networks and communities' progress in health, safety, employment, recreation, and other areas;
    - Increases levels of community participation, facilitating an informed decision-making process, particularly greater participation from rural women

M-AGRICULTURE SERVICES

- Some benefits of mobile agriculture in developing countries include:
  - Mobile money transfer systems that provide farmers with the ability to exchange, save and borrow small amounts of capital as well as take out short-term insurance policies
  - Mobile information services providing detailed and localized weather forecasts, crop prices and resource management information; and
  - Helpline services giving real-time guidance on issues such as pest control and the challenges linked to climate change, including water scarcity.
  - Monitoring protocols and systems for monitoring and managing farms and farm workers
    - implementation of an electronic mobile poultry production documentation system that uses a mobile device to capture information on poultry operations collected at a remote chicken farm and transmits it to a back-end server in the main office. "The back-end server then analyses all information received from the front-end and based on a built-in business process and business rules, intelligently updates various stakeholders of any breach of bio-security measures that requires immediate attention
- Precision farming is potential area for growth; sensors can collect and process real-time data about moisture and nutrient levels in the fields and automatically deliver fertilizer and treatments as needed.
- The more rapid growth of M-Agriculture in developing countries is the fact that in these countries, mobile phones may be the only computing and communications technology that is available

M-AGRICULTURE SERVICES

- Applications in M-Agriculture based on common uses of mobile devices in agriculture include:
  - Monitoring pesticide and herbicide applications
  - Animal tracking and identification
  - Monitor water or flood levels
  - Indicating warning for frost events
  - Monitoring crop health, rainfall, temperature and other meteorological data
  - Tracking shipments of perishable crops and crop inputs
  - Monitoring equipment movement and performance
  - Web cameras to view hazardous or remote areas
  - Odor, gas and other environmental indicators for livestock housing facilities
  - Integrating GPS data into geographic information systems
  - Precision agriculture applications in data collection and reporting
  - Food safety and security through continuous tracking capabilities from production (knowing what pesticides or other treatments have been used) to packing to shipping of products
  - Agro-security by reducing theft of farm products, vandalism of property, and detection of bio-chemicals

CONCLUSION

- M-Commerce is a key enabler that will connect the formal and informal economies to create an all-inclusive ecosystem in developing countries.

- The biggest opportunity for mobile money market is to move beyond person-to-person (P2P) payments, which have comprised the majority of all transactions to date.

  – Mobile operators and mobile financial services companies must work together to integrate mobile payments into everyday life. And then helping consumers understand how these services can enrich their lives.

- Creating a sustainable m-commerce ecosystem in developing countries will mean ensuring an interoperable and standardized ecosystem between mobile and financial service sectors that enables all stakeholders in the financial value chain to effectively monetize the mobile arena.

  – It doesn't matter how many mobile or financial services you can choose from if these services are unable to talk to each other.

  – Providing customers with reliable and carrier-grade mobile financial platforms is key to ensure they have a positive experience with these platforms and want to devote their time and money to m-commerce.

CONCLUSION

- One way of improving the consumer experience to form global and local ecosystems of all players – banks, other industry players, money transfer organizations and telecom providers – to offer a range of services that really create value for consumers.
  - Governments and regulators must promote and encourage the creation of ecosystems with established players cross the value chain that share the vision and see the business benefits.
- The government must put in place frameworks to overcome the mistrust, and assure mobile users that people's privacy is protected and their information will not be breached and/or sold to third parties.
- As we role out M-Commerce serves, need to incorporate the following five principles:
  - Interoperability
  - Security
  - Openness
  - Flexibility
  - Scalability

Thank you!