M-payments surging ahead: distinct opportunities in developed and emerging markets

Mr. Karim Taga
Managing Director Austria
taga.karim@adlittle.com

Arthur D. Little Austria GmbH
Schottengasse 1
A-1010 Wien
Tel.: (43) 1.515.41-0
Fax: (43) 1.515.41-23
www.adl.com
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This year’s edition of our Global M-Payment Report specifically looks at the differences of the developments in developed and emerging markets: There are distinct opportunities!

Arthur D. Little’s Global M-Payment Report Series

- **2004**: “Making m-payments a reality”
  - In the short- and medium-term m-payments will focus on services like m-parking or m-ticketing
  - Vast differences among development on individual markets expected
  - New payment mechanisms besides SMS expected to play a more important role

- **2005**: “M-payments making inroads”
  - Services like m-parking or m-ticketing continue to dominate m-payments
  - Disintegration of Simpay leading to solutions on a national level
  - SMS based payment technology prevails with growing interest in RFID

- **2006**: “M-payments making inroads-long report”
  - Credit card companies and banks are becoming interested in m-payments
  - Financial and telecom industry players need partnerships for market success

- **2009**: “M-payments surging ahead”
  - M-payments in developed countries applicable in niche markets
  - Leveraging existing customer base and motivating retailers promote service adoption
  - Massive NFC adoption in the majority of developed countries in 2011 at the earliest
  - Immediate opportunities for m-payments in emerging countries

Source: Arthur D. Little
More than 70 interviewed industry experts, representing 35 countries on 6 continents contributed to the fourth edition of Arthur D. Little’s Global M-payment Report series.
## Agenda

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We expect total m-payment transaction volume to reach almost USD 250 billion in 2012 growing at 68% p.a. – Proximity payments will grow faster, reaching a share of 51% in 2012.
From a regional perspective, we expect developed markets to grow slower than emerging markets: Developed markets will capture a global market share of 35% in 2012.

Source: Arthur D. Little analysis
The developments in both developed and emerging countries are influenced by economic, technological, social and cultural factors, leading to distinct opportunities for market players.
M-payments in developed countries have been recognized mainly only as potential cost saver and market differentiator applicable to niche segments, with the exception of East Asia.

<table>
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<th>Differences within developed markets</th>
<th>Applicability and benefits from m-payment</th>
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<tr>
<td>East Asia</td>
<td><strong>East Asian market is still leading with regards to diversity of services and technologies applied</strong></td>
</tr>
<tr>
<td>Rest of developed markets</td>
<td>- Services ranging from m-ticketing to in-shop m-payment</td>
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<td>- Technologies ranging from SMS, over IrFM to NFC</td>
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<td></td>
<td><strong>In other developed countries m-payment services are still massively applicable only to niche segments</strong></td>
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<td></td>
<td>- Air time top-up</td>
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<td>- M-parking</td>
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<td>- P2P transfers - remittance</td>
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<td><strong>Value chain players have different benefits from entering the m-payment market</strong></td>
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<td>- <strong>MNOs</strong> → new revenue channel</td>
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<td></td>
<td>- <strong>Banks</strong> → market differentiator</td>
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<td></td>
<td>- <strong>Parking management companies (merchants)</strong> → cost saver</td>
</tr>
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<td></td>
<td>- <strong>End-user</strong> → a mean for convenient, simple and fast transactions</td>
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Source: Arthur D. Little analysis
There is a current hype about the upcoming Near Field Communication (NFC) technology and it does provide benefits for involved value chain players – However,…

Cash vs. NFC mobile based coffee purchasing

- Getting cash out of purse and wallet
- Waiting for the change
- Getting receipt
- Ordering coffee
- Tapping on the NFC reader with mobile and getting a receipt promptly

Reduction of ordering & processing time

25 seconds

5 seconds

Source: Arthur D. Little analysis
...although research institutes expect high growth rates, we do not expect to see a massive NFC adoption in a majority of developed countries until 2011, at the earliest – Why?

Mobile phones shipped worldwide and penetration of NFC enabled phones 2008 - 2012

Units (m)

- 2008: 1,046
- 2009e: 1,131
- 2010e: 1,094
- 2011e: 968
- 2012e: 977

CAGR 9.2%

Penetration rate

Source: Bear Stearns, Interviews, Arthur D. Little analysis
Adoption hurdles are threefold: delayed hardware standardization, limited availability of NFC-enabled handsets and no viable business case for industry players.

<table>
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<th>Delayed hardware standardization</th>
<th>Limited availability of NFC-enabled handsets</th>
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<tr>
<td>Delayed hardware standardization and lack of cross-border interoperability has hindered commercial deployment of NFC technology</td>
<td>Currently only few NFC enabled mobile phones are available</td>
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<tr>
<td>Development of SWP (single-wire-protocol) as a standardized protocol is a major achievement for the future positioning of NFC technology</td>
<td>Equipment vendors do not have plans to launch variety of mobile phone models until 2010</td>
</tr>
<tr>
<td>SWP enables mobile phones to communicate based on the same standard as the mobile phone’s software is circumvented</td>
<td>Depending on the success of SWP, handset suppliers are expected to adopt the new standard, which will positively affect NFC rollout</td>
</tr>
</tbody>
</table>

- No viable business model for industry players has been developed as MNOs see only limited revenue potential and high costs involved
- Further, a common business approach of MNOs and financial service players still needs to be developed requiring mediation
- Even with numerous trials being launched, commercial success is still widely missing

Source: Arthur D. Little analysis
To develop and successfully implement m-payment services, market players need to consider the following key success factors in developed markets:

<table>
<thead>
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<th>Key success factors</th>
<th>Importance Score</th>
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<tr>
<td>Communication/acceptance of benefits</td>
<td>4.4</td>
</tr>
<tr>
<td>Critical mass of users*</td>
<td>4.3</td>
</tr>
<tr>
<td>Standardization</td>
<td>3.9</td>
</tr>
<tr>
<td>Critical mass of applications</td>
<td>3.6</td>
</tr>
<tr>
<td>Clear roles of players</td>
<td>3.5</td>
</tr>
<tr>
<td>Legal environment</td>
<td>2.9</td>
</tr>
<tr>
<td>Bank account penetration</td>
<td>2.1</td>
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</table>

*Users include retailers and consumers

Source: Arthur D. Little analysis
In order to achieve a critical mass of users and to speed up market adoption, it is critical to leverage the existing customer relationships and to motivate retailers.

### Enablers of mass market adoption

<table>
<thead>
<tr>
<th>Retailers</th>
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<tr>
<td>Burger King</td>
</tr>
<tr>
<td>Starbucks</td>
</tr>
<tr>
<td>Aldi</td>
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<tr>
<td>OMV</td>
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</tbody>
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### Keys to market adoption

- **Leveraged existing customer base**
  - Automatic service activation for all users (e.g. Vodafone and O2 in Germany)
  - Marketing activities enable effective communication of customer benefits
  - Service bundles simplify new service adoption

- **Existence of critical mass of retailers**
  - Offering incentives (POS subsidies, coverage of marketing costs)
  - Organizing trainings for retailers

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Source: Arthur D. Little Analysis
The m-payment and m-banking industry has been growing steadily: Most countries have already entered the developing phase of the market maturity curve.

**M-payment / m-banking country ranking**

<table>
<thead>
<tr>
<th>Market maturity stage</th>
<th>Embryonic</th>
<th>Early stage</th>
<th>Developing</th>
<th>Advanced</th>
<th>Mature</th>
</tr>
</thead>
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<tr>
<td>Relative m-payment maturity</td>
<td>Japan, Austria, Singapore, South Korea</td>
<td>Malaysia, Taiwan, Norway, Spain, Slovenia</td>
<td>Finland, Sweden, France, Belgium, Italy, Portugal, Croatia, India, Philippines, China</td>
<td>Czech Republic, South Africa</td>
<td>Mexico, Kenya, Nigeria</td>
</tr>
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Source: Arthur D. Little analysis
1 Introduction
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Due to a different starting point in respect to economic, technological, social and cultural factors, m-payments are developing differently in emerging and developed markets.

### Trends in developed countries
- M-payments are **unlikely to substitute existing payment systems**, as massive adoption is limited to
  - convenience enhancing applications and
  - niche segments, where an increase in the current satisfaction level is easier to achieve
- Improved regulations and movements towards a liberal ecosystem will **push market developments into going “cross-border”**
- Despite current hype, we **do not expect to a massive NFC adoption** in a majority of developed countries until **2011 at the earliest**

### Trends in emerging countries
- M-payment services will become the **first widespread cashless payment** system, enabling cost-effective and secure transactions
- End-users’ benefits will mainly be created through **low-value but high-frequency transaction services**
- **Remittance** will be the strong **growth driver** for m-payment transaction volume and cross-border cooperation
- New **Know-Your-Customer (KYC) norms** will be developed, forcing market players to find the balance between convenience of use and security concerns

Arthur D. Little expects the m-payment transaction volume to reach USD 250 bn. in 2012
- Developed countries will grow at 56% p.a. representing 35% of the total transaction volume in 2012
- Emerging countries will grow at 76% p.a. representing 65% of the total transaction volume in 2012

Source: Arthur D. Little analysis
In order to secure m-payment success, value chain players need to leverage existing know-how and need to assure market awareness.

1. Mobile operators
   - In emerging markets: Focus on low-value, high-frequency transaction services, especially on remittances
   - In developed markets: Focus on reaching the required critical mass in terms of retailing partners

2. Financial institutions
   - Leverage position in developed markets to shape m-banking and m-payment development
   - M-banking and related m-payment services can be used as a differentiating factor towards competition

3. Independent service providers
   - Leverage role as a mediator and increase partnerships with competing value chain players
   - Leverage experience in broadly acquiring merchants in different market segments

4. Equipment suppliers
   - Participate actively in NFC trials in order to improve readiness for massive market growth
   - Participation in NFC trials will also guarantee first mover advantage

5. Merchants
   - Evaluate m-payment channel as a means to increase consumer convenience, mobility and accessibility of their services and goods

6. Industry associations
   - Try to bring key industry representatives on one table to accelerate adoption
   - Otherwise focus on the dominant player or identify niche areas for establishment of first cross-industry relations

Source: Arthur D. Little analysis
Have we caught your interest? Please feel free to have a look at the executive summary or order the full report free of charge – Visit www.adl.com/mpayment