Engagement with mobile applications.
Engagement with mobile applications

Globally one of the biggest trends in the last four years in the mobility and telecommunications sector has been the growth of the mobile applications ecosystem. Numerous mobile handset vendors, mobile operators, over the top players, media houses and brands have embraced the mobile application phenomenon in order to engage with customers via their mobile device.

In terms of South African mobile application consumption, the market is very much at its beginning stages but rapidly growing. With over 10 million smartphones in South Africa, demand and adoption of mobile applications are growing across multiple mobile handset vendors.

In the recently conducted Deloitte TMT Global Mobile Consumer Survey, 84 percent of respondents (figure 1) in South Africa indicated that they had downloaded a mobile application onto their feature (standard phone) or smartphone. The key observation as expected is the high proportion of smartphone device users that have downloaded a mobile application, approximately 92 percent of survey respondents. In terms of standard feature phones, 59 percent of respondents indicated that they had downloaded a mobile application.

The high rate of application downloads amongst smartphone users is largely attributed to availability of applications that are compatible with the handsets operating system as well as the device features themselves with many devices supporting for example, full touch screens.

From a tablet perspective, 77 percent indicated that they had downloaded a mobile application onto their device (see Figure 1). The number is slightly lower than observed with smartphone users. This is possibly due to the market segment purchasing tablets (possibly a slightly older generation) aren’t necessarily adopting specific applications but rather using the apps already pre-installed on the device.

*Figure 1: Interest in downloading apps (by phone, by tablet)*

| Q. Have you ever downloaded apps on your mobile phone/smartphone? |
|---|---|---|
| No | Yes | Don’t know |
| 92% | 15% | 3% |

Sample: 1,969

92% of smartphone owners and 59% of standard phone owners have downloaded apps

Source: Deloitte Global Mobile Consumer Survey South Africa, May - June 2012
Base: Respondents with a mobile phone / smartphone 1969

| Source: Respondents who own or have access to a mobile device (1969), respondents who own or have access to a tablet (540) | Q. Have you ever downloaded apps on your tablet? |
|---|---|---|
| No | Yes | Don’t know |
| 77% | 22% | 11% |

Sample: 540
Reasons for not downloading mobile applications

Although more than 90 percent of smartphone are currently downloading apps, the survey respondents who are categorised as part of the online population, urban and higher disposable income indicated certain key reasons for not downloading certain mobile applications.

Monetization strategies

When analysing the reasons why respondents are not willing to download apps, for South African customers, 40 percent of respondents indicated that the number one reason for not downloading is the unwillingness to spend money on mobile applications.

Figure 1: Reasons for not downloading mobile applications

Q. Which, if any, of the following are reasons why you have not downloaded apps onto your phone? Tick all that apply

Source: Deloitte Global Mobile Consumer Survey South Africa, May-June 2012
Base: Phone owners who do not download apps 289
Engagement with mobile applications

This leaves mobile application developers and publishers in a position to start considering other avenues for creating revenue from mobile applications using strategies to monetize mobile applications delivered to customers. The table below identifies some of the most popular application monetization strategies available to mobile developers and publishers alike.

<table>
<thead>
<tr>
<th>#</th>
<th>Strategy</th>
<th>Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Once off purchase</td>
<td>A customer would purchase the mobile application once-off at a set end-use price where billing is conducted by the app store account, mobile operator billing or credit card.</td>
</tr>
<tr>
<td>2</td>
<td>In-App purchase</td>
<td>A customer purchases the mobile application and once engaged with the application is charged for participating in the application, examples include upgrading certain elements of the game or purchasing new levels.</td>
</tr>
<tr>
<td>3</td>
<td>’Free-mium’ applications</td>
<td>A customer purchases the mobile application where only some of the application features are made available. However certain portions of the application, in particular certain content types are free for view and other content (premium) is charged for. Popular amongst news applications.</td>
</tr>
<tr>
<td>4</td>
<td>Ad-funded applications</td>
<td>A customer purchases the mobile application for free (no once-off purchase), however in order to continue playing or participating with the mobile application, the customer is served mobile advertising within the application.</td>
</tr>
</tbody>
</table>

Table 1: Mobile application monetization strategies

When considering a monetization strategy for an application, the applied strategy needs to be in line with the theme as well as function of the application. Importantly the market in which the application is to be sold is a major consideration especially when it comes to the availability of payment mechanisms.

One of the more attractive strategies is “in-app purchases”. In-app purchases allows for continual commerce and payment opportunities depending nature of the product / service to be purchased. Many application developers have implemented virtual currencies to facilitate this commerce transaction. In South Africa, in-app purchases using virtual currencies are coming more and more popular in particular with instant messaging platforms.

In the developed world, high penetration of credit cards allows for the facilitation of purchasing within an application with ease allowing consumers the ability to buy goods or virtual currencies. In developing markets with low instances of credit cards, the ability to purchase decreases and mobile developers need to find other avenues for facilitating a payment.
Currently the most popular mechanism is utilizing carrier (or mobile operator) billing. Mobile operator billing is primarily facilitated using premium-rated SMS short codes (PR-SMS). A PR-SMS short code is usually 3, 4 or 5 digits in length with specific tariff or end user price (EUP) assigned to it. When the consumer sends an SMS to the short code, should airtime funds be available, the tariff amount will be immediately deducted from the consumers airtime balance. In the case of virtual currencies using PR-SMS, the subscriber will send the PR-SMS and the platform will credit that user with the appropriate amount of virtual currency. The consumer is then free to purchase services using the virtual currency.

For the platform owner, for each PR-SMS that is submitted, a portion of the EUP is paid to them by the mobile operator. The portion of revenues paid varies between mobile operators and countries in which they operate with as low as 20 percent of revenues actually paid going up to approximately 60 percent. This has proven to be a challenge for some platform providers as the true value of the transaction is often not realized. The consumer pays an amount for the service, but the actual money value to the platform owner is much lower.

Apart from PR-SMS, certain mobile operators will avail other billing mechanisms. One is particular is what is commonly called MT (Mobile Terminated) Billing. This interface allows a developer or service provider to deduct a set amount from a customers mobile account without the user having to submit a PR-SMS message. This billing mechanism however does some with certain rules and conditions of use which all service providers should take into account.

Development Platforms

An important consideration for application developers is ensuring that applications are available on as many mobile operating system platforms as possible, which make economic sense. As indicated from the survey, 26 percent of respondents indicated that the application isn’t compatible with their device. This is indicative of mobile application developers developing mobile applications for platforms that only form part of a small cross section of the mobile subscriber base.

Globally mobile application developers have followed the trends set by large mobile handset providers to place their eggs into one or two key mobile application platforms. In developing markets, older mobile development platforms like Java are still popular and this is by virtue of the large installed base of feature phone devices which are still in some markets. With feature phone devices, the J2Me (Java) application development language still proves to be a platform as it is supported by a large section of the feature phone market. An indication of this phenomenon can be seen with instant messaging applications. In South Africa, Mxit is the largest instant messaging platform with approximately 6.5 million active users in the country. A large proportion of the user base still utilizes devices from mobile vendors that are classified as feature phones.
Developer community in South Africa

The mobile application developer community is growing across South Africa with more and more developers deploying mobile applications across the numerous mobile operator platforms.

With smartphones becoming widely available the mobile application craze has struck, with locally developed applications taking off. Large organisations in the banking, retail and media sectors are releasing cross-platform applications and services geared towards the South African consumer.

But with the interest and growth, where does that leave the local garage developer? Concern key challenges are being faced by the developer community in South Africa, including: (1) Small venture capital/angel investment environment, (2) A lack of mobile programming training programmes and courses at tertiary institutions; and (3) The business of application development (monetisation, production and marketing);

But there is light at the end of the proverbial tunnel. Numerous developer-orientated initiatives, events and programmes have launched across the country, creating avenues for garage developers to engage in the industry. The programmes and initiatives listed below are just some of the many opportunities that are being afforded to developers in South Africa.

Examples of these include:

Table 2: Mobile Developer Initiatives in South Africa

<table>
<thead>
<tr>
<th>#</th>
<th>Initiative</th>
<th>Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GTUG (Google Technology User Group)</td>
<td>A group of developers with chapters in Jo’burg and Cape Town meeting once a month. (<a href="http://www.jhb.gtug.co.za">www.jhb.gtug.co.za</a> and <a href="http://www.capetown-gtug.org">www.capetown-gtug.org</a>).</td>
</tr>
<tr>
<td>2</td>
<td>mLAB</td>
<td>A mobile applications laboratory, which incubates innovation and entrepreneurship in mobile apps and content services. The aim is to support the mobile developer and entrepreneur community in southern Africa through a range of services, including training, handset testing, business incubation, mentoring, and holding networking events.</td>
</tr>
<tr>
<td>3</td>
<td>Mobile Monday South Africa</td>
<td>A bi-monthly event providing an open forum for developers to engage with each other as well as others in the mobile industry. Numerous guest speakers and industry experts are invited to present and share their knowledge. With chapters in Joburg, Cape Town and Durban Mobile Monday through their event sponsors allows developers to present their ideas.</td>
</tr>
<tr>
<td>4</td>
<td>Vodacom Developer Programme</td>
<td>Vodacom SA has launched an application developer programme to stimulate the local garage developer community. The Vodacom Developer Programme (VDP) aims to collaborate with various stakeholders in the local app eco-system to build a pool of local developers, provide technical training and drive innovation through incentives.</td>
</tr>
<tr>
<td>5</td>
<td>Immedia</td>
<td>Immedia are a mobile application development house located in Durban who have setup a programme to provide courses and training in mobile application development (<a href="http://www.appdev.co.za">http://www.appdev.co.za</a>)</td>
</tr>
<tr>
<td>6</td>
<td>Rorotika Technologies</td>
<td>Rorotika Technologies offers IT incubation services in the mobile telecommunications arena, supporting visionaries, entrepreneurs and small businesses on the road from innovation to implementation. With in-depth knowledge in numerous disciplines, and extensive telecommunications experience, Rorotika’s services include business analysis, development, QA, SI, documentation, training, operational and marketing support.</td>
</tr>
<tr>
<td>7</td>
<td>Samsung South Africa</td>
<td>Samsung has engaged with the University of Cape Town and the University of Pretoria to promote mobile skills development. Both of these institutions have had final year or post grad students working on mobile development projects.</td>
</tr>
<tr>
<td>8</td>
<td>Blackberry (RIM)</td>
<td>BlackBerry Academic Programme (BAP): RIM is working with 118 universities, colleges and schools across Africa to provide material and content to teach and educate students on mobile application development. There are over 334 registrants in Africa; 104 registrants in South Africa (Aug 2012)</td>
</tr>
</tbody>
</table>
Pricing of mobile applications

The cost of the mobile applications is an important element to keep in mind when distributing mobile applications in South Africa, with 16 percent of respondents indicating that mobile applications were too expensive.

Consumers spend on mobile services especially in the prepaid market segment varies from mobile operator to mobile operator. In the South African market as with most developing world markets, the majority of service revenue generated by subscribers is attributed to peer to peer voice revenue, in the case of one mobile operator in South Africa which in the quarter ending June 2012 generated 61% of service revenues from mobile voice traffic. However, mobile data revenue is growing, contributing 17% of service revenue for the quarter. Consumers are spending more and more on data services, with again one mobile operator’s mobile data revenues increasing 10.1% year-on-year.

Consumers are embracing connected devices and this will translate down into more consumers paying for mobile applications.

When setting a price for a mobile application, a consumer’s mobile wallet of spends needs to be taken into account. Mobile application developers and publishers are fighting for a share of the wallet. In the case of another South African mobile operator, the average revenue per user on prepaid and contract (postpaid) as reported in June 2012 was R92 and R265 respectively. Should a mobile application developer charge, R10 per download, that equates to 11% of total spend for that particular month. The ratio improves somewhat for contract customers at 4% of average monthly spend and that is the segment that most mobile application publishers will focus their attention on. With smartphone users making up a large proportion of the postpaid segment, pricing opportunities become more attractive. This is evident in the responses received from surveyed consumers.
Q. How much do you spend in a typical month?

**Smartphone users**

Mean spend = Rand 37.74

<table>
<thead>
<tr>
<th>Monthly Spend</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0 per month</td>
<td>10%</td>
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<td>$1 to $19 per month</td>
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</tr>
<tr>
<td>$20 to $29 per month</td>
<td>30%</td>
</tr>
<tr>
<td>$30 to $59 per month</td>
<td>40%</td>
</tr>
<tr>
<td>$60 to $149 per month</td>
<td>50%</td>
</tr>
<tr>
<td>$150 per month or more</td>
<td>0%</td>
</tr>
<tr>
<td>Don’t know</td>
<td>0%</td>
</tr>
</tbody>
</table>

Source: Deloitte Global Mobile Consumer Survey South Africa, May - June 2012
Base: Phone owners who download apps and spend money 1364

**Table users**

Mean spend = Rand 170.96

<table>
<thead>
<tr>
<th>Monthly Spend</th>
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<tbody>
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<td>0%</td>
</tr>
</tbody>
</table>

Source: Deloitte Global Mobile Consumer Survey South Africa, May - June 2012
Base: Tablet owners who download apps and spend money 415

Based on a sample of 1,364 respondents, 37 percent indicated that spend on mobile application is zero. Within that segment of users, that is where advertising funded monetization models become attractive. Users, who are not willing to purchase an application but are content to download a free application and during the application experience be exposed to advertising, like mobile display banners.

On the other side of the mobile application coin are tablet and tablet users. South Africa has experienced large uptake when it comes to tablet adoption. During April 2012, one estimate has put total tablet market size in excess of 400,000 devices. Consumers in South Africa have embraced the tablet revolution and in particular spending on tablet applications and the survey results have indicated. Of the surveyed respondents who on average downloaded six applications per month to their tablets.

The possibilities for monetization of mobile applications for developers and publishers are there however, there it’s important to keep pricing levels and possible spend in mind especially when availing applications into developing markets. Consumers are increasing price sensitive and are looking for value when purchasing mobile applications.

Many mobile application publishers will try to charge developed world pricing and when uptake is slow, feel that certain markets are not attractive when in fact; pricing levels should be kept in mind with market conditions regardless if you are targeting the high end smartphone consumers. Even through smartphone users have the highest average revenue per user setting a competitive price for an application is an important part of the distribution strategy for an application developer or publisher.
One of the great advancements in technology has been the improved memory capability of portable devices over the last few years. Increased memory capacity has allowed customers to store so much more content onto their mobile devices. Part of this includes the amount of applications that users can now have on their devices.

Taking storage, compatibility and pricing considerations into play South African customers are downloading more and more mobile and tablet applications. Based on the surveyed customers, a smartphone user in South Africa downloads on average just over four mobile applications a month. In comparison the typical tablet user downloads just over six tablet applications per month.

**Figure 8: How many apps do users download in a typical month**

Q. How much apps do you download in a typical month?

<table>
<thead>
<tr>
<th>Smartphone users</th>
<th>Tablet users</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mean download = 4.3</strong></td>
<td><strong>Mean download = 6.3</strong></td>
</tr>
</tbody>
</table>

Source: Deloitte Global Mobile Consumer Survey South Africa, May - June 2012
Base: Phone owners who download apps 1364
Engagement with mobile applications

It is definitely a bright future for mobile application development, downloading and usage in South Africa. The industry across the board is embracing the mobile application revolution in South Africa. From mobile operators introducing mobile developer programs workshops and award ceremonies to recognize the best in breed applications through to local South African development houses and brands being nominated for international awards, and incubation initiatives driving the mobile development community.

Identifying and incorporating new opportunities for payment and monetization of mobile applications is going to be top of mind for many mobile application developers and publishers in South Africa and particularly in other parts of Africa. The low penetration of credit card payments will necessitate the continued drive to find other forms of performing payments. Platform and community owners more and more will partner up directly with financial services providers to provide easy payment solutions to customers. Integration with mobile money providers is inevitable in particular due to many Mobile Money solutions ease of access on all types of mobile devices.

South African brand adoption of mobile applications is gaining momentum and going to continue into the future. The financial institutions have led the charge with deployment of mobile applications allowing financial transactions and other service to be conducted. Media organizations have also embraced the mobile application revolution with news providers and television stations deploying mobile applications. Moving into 2013, a trend for South African brands to extend their brands into mobile applications will occur. The possibilities around advertising promoted applications or “adver-apps” will become more evident. Those will be brands which will deploy mobile applications aligned to their brands but with a specific purpose to the application. That purpose creates consistent engagement for the consumer with the application and by extension entrenching the brand aligned with the application with the consumer.

More and more applications developed by South Africa’s are finding their way into the mobile applications market place. Over the next couple of years with the initiatives underway will lead to more locally developed applications finding their way onto the world stage. The winner at the end will be South African mobile application users. With more locally relevant applications available, South African mobile application consumer’s adoption of application is going to jump.
1. 10 Million Smartphones in South Africa - http://www.worldwideworx.com/nokia-blackberry/
2. Virtual currencies, Mxit Moola - http://site.mxit.com/pages/moola-country#sa
online-content-ecosystem-in-africa/
nokia-sells-1-5-billion-series-40-phones/
12. mLab mobile applications incubator - http://www.mlab.co.za/about/

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Tel: +27 (0)11 517 4048
Client Service Standards

1. Determine, on each engagement, who our clients are and directly ascertain their expectations for our performance. Clients may include the board of directors, the audit committee, and management, all of whom are representatives of shareholder interests.

2. Analyse our clients’ needs and professional service requirements.

3. Develop client service objectives that will enable us to fulfil our professional responsibilities, satisfy our clients’ needs, and aim to exceed their expectations. Prepare an appropriate client service plan to achieve these client service objectives.

4. Execute the client service plan in a manner that has earned us our reputation for quality and endeavours to ensure that commitments are met, potential problems are anticipated, and surprises are avoided.

5. Establish effective communications, both internal and external, to enhance our clients’ recognition of the value and quality of our service.

6. Provide our clients with insights on the condition of their businesses and with meaningful suggestions for their improvement.

7. Continually broaden and strengthen our relationships with our clients to facilitate effective communication and enhance client confidence, while maintaining professional objectivity.

8. Ensure that any professional, technical, or client service problem is resolved promptly with timely consultation in an environment of mutual respect.

9. Obtain from our clients, either formally or informally, a regular assessment of our performance.

10. Receive fees that reflect the value of services provided and responsibilities assumed, and that are considered fair and reasonable.