MOBILE MONEY PRODUCT ADOPTION LIFE CYCLE

There are many reasons why so many mobile moneylaunches have not met the high expectations set by senior management. Often, the main success metric is attaining a certain number of registered users within a specific, usually short, time-frame. The sector eagerly tracks to what extent the mobile money launch is similar to M-PESA's explosive growth. To date, there has been nothing that compares. Many mobile financial service offerings do not attract significant numbers of users in their first months or year.

In some instances, there is a strong uptake by customers at the onset, but the growth stagnates shortly thereafter. This type of growth scenario is the most worrisome, because the surge in customers builds excitement, but is ultimately misleading. As this paper explains, product diffusion and the related technology adoption curve can explain why some mobile money services start strong among a small sample of the population but eventually stagnate. The document also describes what MFSPs can do to "cross the chasm" and increase adoption in the majority of the market.

SERVICES ARE PURCHASED AND USED

Mobile money is a service – not a product – provided to an individual. The distinction is crucial. While Product Development and Service Development have similar methodologies, the latter has three unique characteristics:

1. Services, such as mobile banking, are individualized. One mobile money customer uses the service in a different way than another. This can be compared to a product, such as a soft drink, which is consumed the same way by everyone.

2. Services are intangible. In other words, a service is defined by a set of experiences, reinforcing the need for a development approach that emphasizes customer needs and overall customer experience.

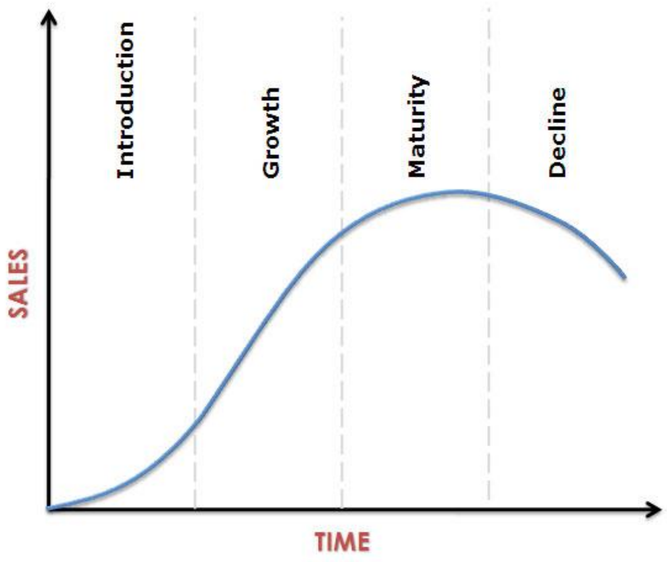
3. Services have two customer-initiated steps: buying and using. C*ustomers* and *users*, which denote these steps respectively, are two distinct terms that are often, and incorrectly, used interchangeably.

Many mobile money businesses fail to distinguish between adoption and usage. While the headlines of these initiatives often sounds impressive - 1 million new accounts opened - the rest of the story offers a far more nuanced picture in terms of overall viability.

Many of the best-known mobile money businesses have usage rates, defined as having one transaction in the prior 60 or 90 days, of no more than 35%. Because service usage is, in most cases, directly tied to revenue streams in these business models such low usage patterns are a challenge for even the most viable MFSPs.

Product Life Cycle refers to the standard "birth and death" of products. For example, a firm introduces a new to the market, which achieves impressive sales during a growth phase, and then eventually has slow to no growth as most consumers already own the product. At that point the firm decides to discontinue the product, or more likely, replaces it with a newer model. The cycle then repeats itself along these four main phases – introduction, growth, maturity, and decline.

Product Life-Cycle Curve



Introduction: At market introduction, significant up-front costs are incurred for development, operations, and marketing. The latter are particularly high at this stage to create demand for the product. Uptake at this stage tends to be slow as the majority of customers are unfamiliar with the product or cautious about its adoption. The P&L for the product is usually negative during this phase.

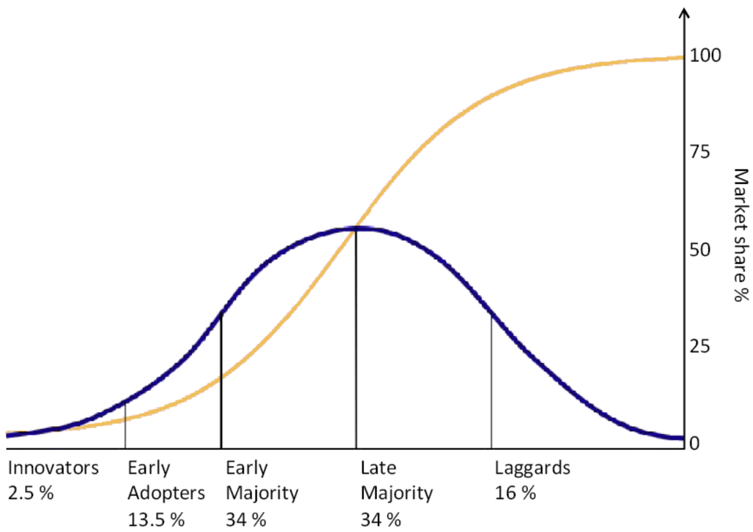
Growth: There is rapid growth in customer numbers during this stage, as customers become more familiar with the product and spread positive reviews to others, boosting overall adoption. This leads to high revenues and profits, which in turn inspires competitors to enter the market. This puts downward pressure on prices, and in many cases the average price for the product might decrease.

Maturity: At this stage, the volume of customers peaks and the number of rivals increases. Pricing becomes more competitive. Incentives, services, or additional benefits are added to distinguish one product over another. The majority of overall profits from the product come from this stage.

Decline: At this point, the market is saturated or the product is no longer of interest to consumers. Alternative or substitute products that provide a superior set of benefits may be introduced to the marketplace. Revenues and profits fall drastically, as the cost of keeping customers outweighs profits. For this reason, most firms discontinue the product or replace it with a superior offering.

Related to the product lifecycle, Product Diffusion is concerned with how a firm's products and services spread over time. Product diffusion theory provides a sense of customer uptake as well as which customer segments will first use the solutions. According to this theory, the cumulative adoption over time is in the shape of an S-curve: a gradual uptake followed by high customer growth. With roughly 50% of the market share captured, growth slows dramatically and levels off as shown in the yellow curve below. However, if new market share, rather than cumulative market share, is graphed captured over time, the S-curve becomes a standardized "normal" or bell curve as depicted by the blue line.

Product Diffusion Curves



An important extension of the theory, and one that is extremely relevant for MFSPs, is the hypothesis that there are five categories of adopters of new product innovation based on when they first adopt. These categories, and their respective market share relative to the total, are Innovators (2.5%), Early Adopters (13.5%), Early Majority (34%), Late Majority (34%), and Laggards (16%).

Innovators: These customers, at just 2.5% of overall market share, are the first and most eager to use a new product or service. They tend to be younger, have college educations, and regular salaries. They usually live in urban areas and are considered a medium or higher economic class. They are also innovative, willing to take risks, and interested in being "first". Innovators are also price insensitive, thus a typical market strategy is to "skim" this segment with higher prices before prices are eventually dropped to cater to mass market preferences.

Early Adopters: This segment is over five times larger than innovators and shares many of the same characteristics. They are also young (though slightly older than Innovators), college-educated, and either salaried or manage their own businesses. Early Adopters are not as risk-taking as Innovators – they tend to think through decisions more than Innovators – but they do place a premium on innovations and are willing to move to a trial phase once some of the initial kinks are out. A distinct feature of Early Adopters is that they maintain strong social networks and have high opinion leadership among the group.

Early Majority: Representing just over one-third of the total market, the Early Majority is considerably more cautious in making buying decisions, preferring to wait until enough people have used a product or service before doing so themselves. The rate of adoption is slower than the two segments above. Socio-demographically, this group tends to be slightly older and have an above-average education and income. They are either urban dwellers or they travel frequently to urban centers.

Late Majority: Equal in size to the Early Majority, the Late Majority tends to adopt an innovation only when the product has become mainstream and more of a commodity. They are price-sensitive and skeptical about benefits touted by innovations. They are middle-aged, less educated, more rural, and more likely self-employed. Many in this group would be considered poor and would have lower literacy levels.

Laggards: This segment is the most risk-averse, adopting a new product or service only if alternatives are clearly inferior - dramatically less convenient, much more expensive, etc. They are traditional in nature and prefer the status quo. They tend to be older, illiterate, poorer than the rest, and live in small, rural areas that do not put them contact with others who have different views.

The adoption curve and customer segments, first proposed in the 1960s, remained well-accepted until the early 1990s, when technologist Geoffrey Moore argued that for information and communications technology (ICT) products, there existed a major ‘chasm’ between the early adopter and early majority segments. Graphically, this was represented by a gap to show that the curve was discontinuous.

ICT companies should not assume that merely because innovators and early adopters purchase an ICT product, that the early majority segment would fall in line. He listed several product innovations, such as desktop video conferencing and programmable VCRs, that have received glaring reviews from innovator and early adopter segments, but are yet to ‘cross the chasm’ into mainstream segments and become mass-market phenomena. Moore’s hypothesis has become extremely well excepted in high technology circles – to such a degree that it is considered the standard rather than the exception.

Known as the Technology Adoption Life Cycle, or TALC, Moore’s description should be extremely important to MFSPs. Since it is an ICT service, the central tenet of Moore’s argument can be applied to the mobile money business. And early results from M-PESA in Kenya and mobile money businesses in other parts of the world support that belief. M-PESA’s earliest customers were successful urban males and the women in rural areas to which they sent money. WIZZIT, an MFSP in South Africa that began in 2004, achieved impressive customer growth in the first three years of operations, but has since posted only modest growth and fell well short of its customer projections. Market research commissioned by CGAP in 2006 indicated that the overwhelming majority of its customers had been male, high-school educated, salaried, and under-40 years of age – clearly not the profile of a typical low-income person in South Africa. It became obvious through the data that despite its early success, WIZZIT’s perceived value proposition was limited to early adopter segments.

With the appreciation that different segments respond to adoption differently, MFSPs have three main mechanisms to increase mobile money adoption and the speed of take-up:

Promotions: Particularly during the introduction of mobile banking, finding ways for prospects to try the service – and to try it several times – is critical to foment regular usage. The reasoning is that many prospective customers are intimidated to try a new service that links technology with financial services, and then even after performing the first transaction, may perceive the process as too complex. This explains why many mobile money businesses today have customers that tried the service only once or twice at the beginning but have since become inactive.

Different segments call for different promotional strategies. For example, introducing a referral program (e.g., sign up 3 friends and receive a reward) early in the adoption lifecycle would target early adopters since their opinion leadership is strong. They may be able to persuade the ‘next’ category of early majority purchasers, whose buying decision tend to be influenced by those how have come before. Similarly, an MFSP may introduce purchase-based rewards (e.g., make $20 in transfers and receive a certain amount of prepaid minutes – or mobile money - free) to incentivize the early majority to actively use the service.

Communications: Complementing promotional efforts are messaging, or communications, tactics. These include raising awareness of the service (what it is) as well as offering financial literacy (why it benefits the user and how to use it). Both of these are cornerstones for increasing adoption and usage.

MFSPs need to consider segmentation strategies and design tailored communication tactics. Assuming a product is designed correctly, the innovator segment usually needs little convincing to adopt it. Thus MFSPs could introduce a mobile money service with considerable hype and excitement, reflecting the enthusiasm and willingness that the segment would have towards the new service.

Conversely, this strategy would repel the late majority: highly skeptic and generally doubtful about ‘flashy’ new services such as mobile money. This group would prefer to be gently informed of the benefits. Their fears would have to be assuaged, perhaps, by a live demonstration of the simplicity of making a mobile money transaction. MFSPs can hire and train staff to help with setting-up accounts and walking customers through various transactions, similar to how banks place dedicated staff outside an ATM to help cardholders become comfortable using the machine.

New Service Development: Although this strategy is not as frequently used as the standard promotional and communication tactics above, MFSPs may consider additional services to help ‘move’ the core mobile money service along the curve. For example, even after two years and millions of customers, the customer base of M-PESA, according to market research published in 2009, was still largely banked. In other words, one could infer that it had not yet conquered the Late Majority segment, which, within the context of mobile money in developing countries, very rarely have formal bank accounts. Safaricom has recently engaged several microfinance institutions to develop ways for customers to repay their loans through the M-PESA system. By addressing core needs of the particular segment, it has made inroads in pushing its mobile money service further along the diffusion curve.

1. Focus on Innovators and Early Adopters

Especially when mobile money services are relatively new in the MFSP's target country, it is wise for the firm to focus its initial efforts on attracting early adopters and innovators. Though their overall size is small, these segments are most likely to try the product and will be instrumental in sharing their enthusiasm with others, if they like the product.

That being said, these segments are, in some ways, the most demanding – their willingness to pay is only in exchange for a service that is truly innovative. These customers are usually well-informed about alternative or substitute products and services, and can have little reservation about switching brands. This means that dominant MFSPs will need to guard their market share carefully, and that rival MFSPs can and should attempt to poach these customers with superior service design, customer experience, and marketing tactics.

2. Use trials to remove doubts of uncertainty and complexity

Due to the fact that mobile money is both a disruptive innovation and one that affects the sensitive issue of money, it is understandable that even as prospective customers may believe its proposed benefits, they also have concerns about safety, security, and reliability of the service. Low-income segments in particular have an even lower threshold to risk. If prospects believe that losing their phone equates to losing their funds, for the middle-class that could be seen as an unfortunate, but ultimately not an impactful, incident, but for the poor it could mean the (perceived) loss of several months' savings.

Fortunately, mobile money has the 'luxury' of being a service that MFSPs can, with relative ease, offer trials to prospective customers. Registration set-up is free in some circumstances. The cost to the firm of making transactions free (by absorbing any SMS costs) is low for technology MFSPs and negligible for MNOs. MFSPs can offer a free, time-bound trial with either the prospective customer's funds or artificial funds where they can, on their own inclination, try and use the service. Though the purpose was to test the new value proposition rather than to increase adoption, M-PESA's pre-launch pilot in late 2006 had a similar design: they capped the registration to no more than 500 customers in 3 districts around the capital city, made all transactions free, and let the pilot run for a few months.

3. Understand where the service is on the adoption curve

One of the biggest mistakes an MFSP can make when launching a new mobile money service is to fail to appreciate where it falls on the technology adoption curve. Especially in the first few months of launch, and regardless if customer uptake is strong or weak, MFSPs should analyze what types of customers are signing up for the service, and which ones are actively using it. Following marketing segmentation logic, the MFSP can then take specific actions to increase adoption or usage depending on the customer segment it is targeting.

In addition to conducting primary market research, MFSPs should draw on its own customer database to analyze socio-demographic and psychographic information about customers. MFSPs can design customer registration forms to collect this information, and can institute MIS systems that capture the data in a form that can be easily analyzed. Once the information is analyzed and the firm understands which customer segments are using the service, it can extrapolate where the service lies on the curve, and to what extent it is penetrating the mass-market.

Case Example: Marketing Tactics for a MNO's Launch of a New Mobile Prepaid Top-Up Service

Background

The CEO of a country's dominant MNO returns home after attending a mobile money conference, and after doing some rough business projections, is convinced that a prepaid top up service would be a winner. While the company starts working on the design and functionality of the new service, the Marketing Managers began to design a marketing plan for the expected launch.

Customer Profiles of Diffusion Segments

Since the company was the first in the country to launch any type of mobile money service, it was difficult to know what type of uptake could be expected. The manager decided to run some focus groups and quantitative surveys to obtain a directional sense of how customers might respond. During the interviews, the research team conducted a live demonstration to show how a prepaid top-up transaction would work as well as how customers would load money into their accounts. The demonstration is conducted to increase the accuracy of questions and answers related to the service.

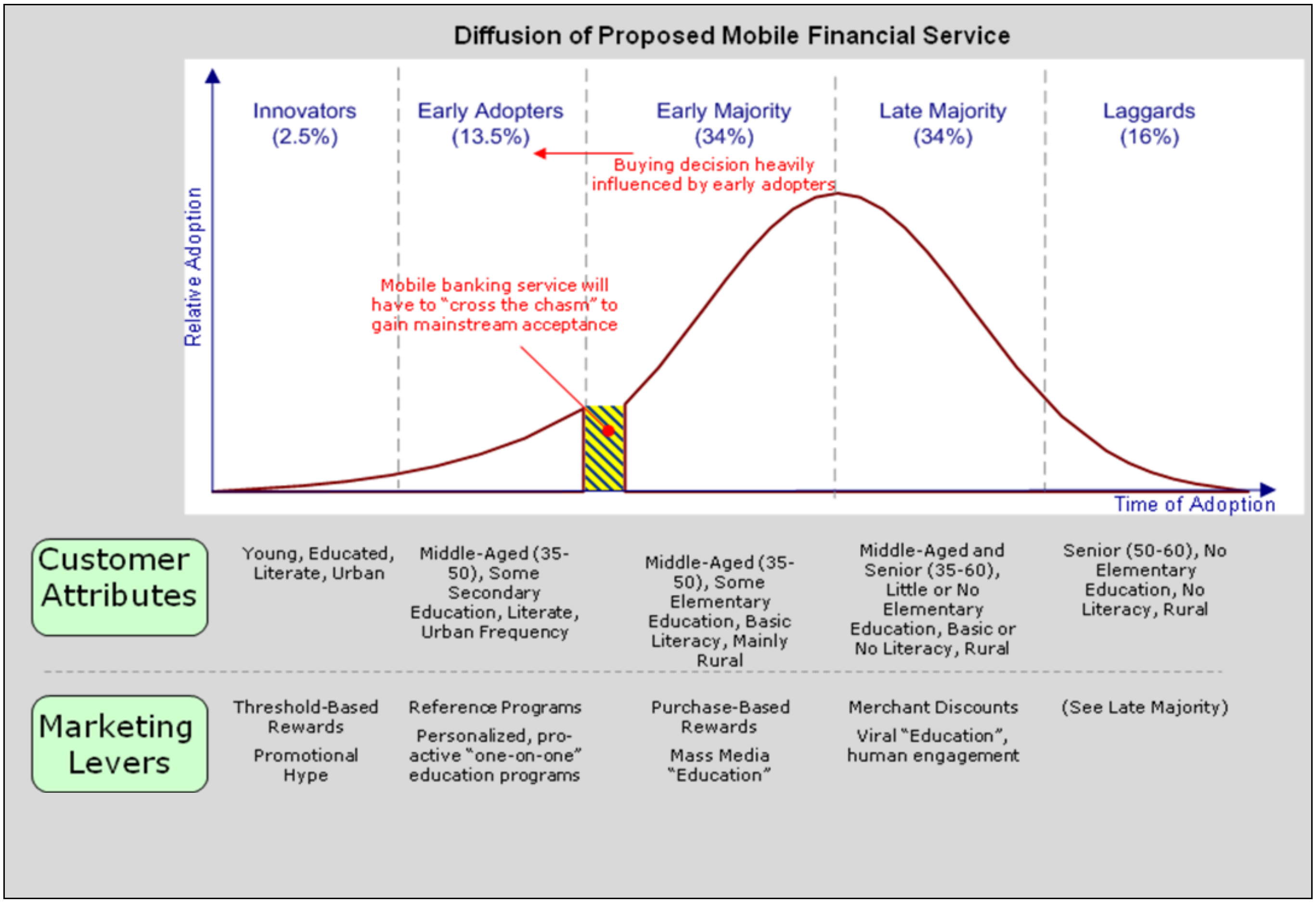
When the manager received the high-level results of the quantitative survey, there were huge variations in customer reactions to the proposed service. While some were clearly excited, others appeared only mildly interested, and many appeared confused or skeptical. Since this result was in line with Product Diffusion theory, the manager wanted to have a better sense of the various customer profiles. Researchers then detailed the socio-demographic attributes of the customer segments, based on their response to the survey question of how likely there would be to use the service. As expected, many of the customer profiles mimicked the classical segments in product diffusion.

Marketing Actions

As a result of the segmentation study, the marketing manager was able to focus marketing efforts more carefully. The Early Majority segment was attractive in some respects. The group was sizeable, mainly between 35 and 50 years old, rural, and had very strong brand loyalty. However, many in this group were not literate and had shown significant hesitation about the service, preferring a 'wait-and-see' approach.

The manager thus decided to focus first on the innovator and early adopter segments, both of which were young and either lived in the biggest city or frequently traveled there for work. The limited marketing budget was spent on gaining approval from these two segments with large posters in the city's more affluent areas and advertising in a popular magazine for young professionals. Opinion leaders, such as doctors, church leaders, and town representatives, were also targeted for one-on-one free trials of the service for a limited time. Their successful update would send a message to the larger market that the service is 'tried, tested, and true'. Doing so was a critical success factor.

When the CEO asked for a brief update on the marketing plan, the manager showed the summary slide of the diffusion curve and segment descriptors, as well as detailed customer attributes and marketing actions.


Diffusion of Proposed Mobile Financial Service
Innovators (2.5%)
Early Adopters (13.5%)
Early Majority (34%)
Late Majority (34%)
Laggards (16%)
Buying decision heavily influenced by early adopters
Mobile banking service will have to "cross the chasm" to gain mainstream acceptance
Relative Adoption
Time of Adoption
Customer Attributes
Young, Educated, Literate, Urban
Middle-Aged (35-50), Some Secondary Education, Literate, Urban Frequency
Middle-Aged (35-50), Some Elementary Education, Basic Literacy, Mainly Rural
Middle-Aged and Senior (35-60), Little or No Elementary Education, Basic or No Literacy, Rural
Senior (50-60), No Elementary Education, No Literacy, Rural
Marketing Levers
Threshold-Based Rewards
Promotional Hype
Reference Programs
Personalized, pro-active "one-on-one" education programs
Purchase-Based Rewards
Mass Media "Education"
Merchant Discounts
Viral "Education", human engagement
(See Late Majority)