The Authority on Payment Solutions

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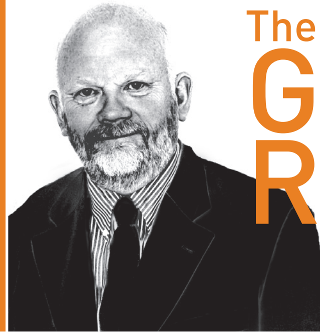


The Goldfinch Report

GFG GROUP

PAYMENT SOLUTIONS YOU CAN BANK ON

Customer Segmentation: one curve does not fit all

New services such as mobile payments cannot be matched to a traditional lifecycle curve. In this issue of The Goldfinch Report, GFG Group's General Manager for South East Asia, Peter Goldfinch, says events - not age - are the key to determining where an individual is in their life cycle. Peter's credentials have been earned over 23 years experience in electronic payments, including pioneering work on ATMs and EFTPOS, and the introduction of credit and debit cards in Russia.

You can argue if you operate a business in Bangladesh where 75% of the population is under 25 years or in Japan where the reverse is occurring, that customer segmentation is not necessary. Card issuers either have a debit card market or an increasing number of transactors taking advantage of an interest free period.

Most other markets sit in between, with a bias depending on the classification of their economy as either developed or emerging. Emerging economies - with the exception of perhaps China - have a bias towards the youth. China is about to experience the effects of its one child policy on the aging of its population. This will make the Japanese experience look normal.

"THE MOBILE INDUSTRY DOES NOT FULLY UNDERSTAND THE EVENTS THAT DRIVE MOBILE USAGE, AND NEW SERVICES SUCH AS MOBILE PAYMENTS CANNOT BE MATCHED TO A TRADITIONAL LIFECYCLE CURVE."

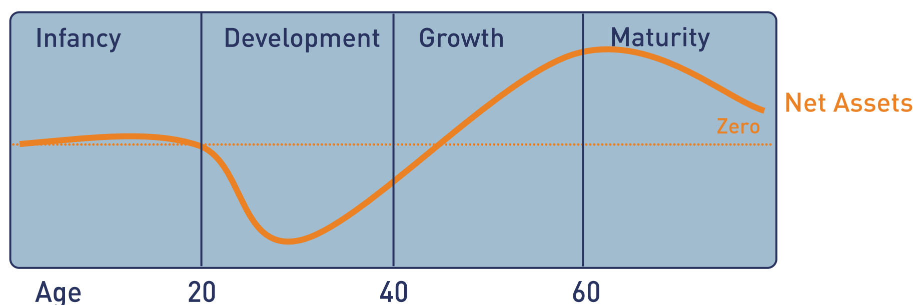
"FINANCIAL INSTITUTIONS OPERATING IN THE DEVELOPED MARKETS NEED TO BE AWARE THAT THE POPULATION IS BECOMING OLDER .... THE PRODUCTS NEED TO ADAPT TO NEW NEEDS."

It is common to segment markets on the life cycle and then cut and dice age segments by income, education, race, employment category, location etc. There is an assumption that age very much drives individuals' needs. This 'life cycle' approach is only valid if people fundamentally conform to predictable patterns of social behavior. If they fail to conform, the life cycle phases will change shape.

Currently there are four recognized financial life cycle phases: Infancy, Development, Growth and Maturity. These phases are structured around individual net asset value. This is based on the hypothesis that net asset value and need for funds are co-related, which seems logical. The 'Household Debt over Life-cycle' study conducted by Tansel Yilmazer and Sharon A DeVaney of Purdue University concluded the likelihood of holding debit compared to total assets decreases with the age of the head of the household. They also confirmed the view that older people have more difficulty paying off their credit card debt, especially if they have not accumulated financial assets.

With the decision to delay families, the rising cost of education and double income families where the income difference between the sexes is closing, the traditional curve may start to change shape.

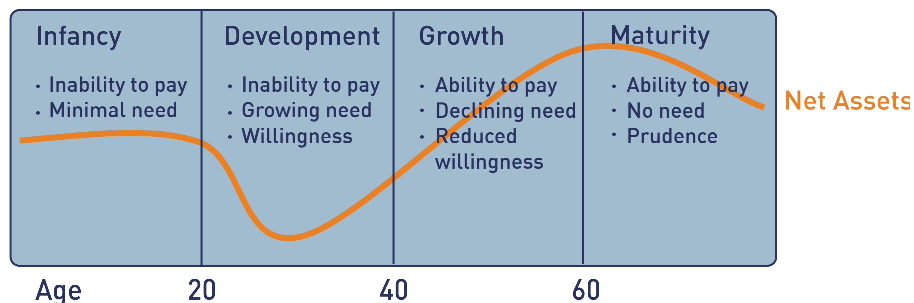
Standard Curve



The education debit and cost of housing will drive the development phase out further, beyond 40. Early retirement will potentially squeeze the growth phase from the other direction. The window to build assets therefore narrowing.

For payment card issuers all this is interesting but card usage and whether you transact or revolve probably has less to do with whether you are 26 or 86 years old, but more to do with the combination of four factors: ability to pay, willingness, need and prudence.

If you qualify the above life cycle phases with these four additional factors you start see a more complex and possibly contradictory view.

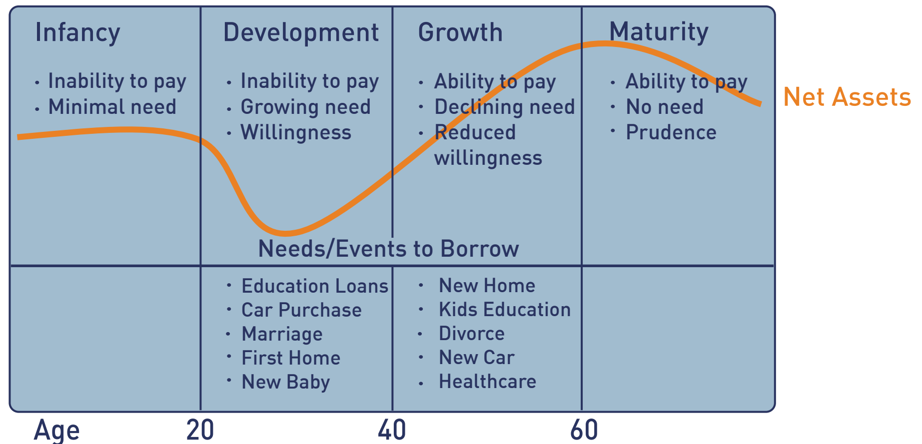


For a financial institution this view very much suggests the target phase is development but the credit risk is going to be higher. The two ends will not deliver a significant amount of business unless 75% of the population is under 25 years or over 50 years. But the infancy segment is important from a business growth prospective. Offering a debit card to this group and then migrating the card to credit as the need develops is a viable strategy.

"MOBILE SERVICE PROVIDERS CAN NOT MAINTAIN AND DEVELOP ARPU GROWTH WITH A CONTINUED FOCUS ON THE YOUTH MARKET."

"EVENTS, NOT AGE, ARE THE KEY TO DETERMINING WHERE AN INDIVIDUAL IS IN THEIR LIFE CYCLE."

But there is a another layer of grandularity required. Need and willingness are factors driven by events. Therefore to understand the timing of when need occurs, financial institutions need to track customer events. These can be classified as either positive or negative, especially if you are a lender.



Events that counter the need are earnings increases, investment returns, inheritance etc. But these come normally later in life and often when the need also is not so strong.

The message is that it's events – not age – that are the key to determining where an individual is in their life cycle. Individuals may be ahead or behind the general curve. As society changes the events will modify and shift so the curve could potentially change and may trend towards flattening on aggregation. Different social/economic segments could be expected to have life cycles where the events are different and occur in a different time sequence. One curve does not fit all.

What does this all mean for a card issuer? As mentioned above, the credit card needs to be introduced as the customer transitions infancy across to development. At a point during the bottoming out of the curve during development there is the opportunity to introduce a new lending facility of an installment nature, with a lower interest rate and an extended maturity date.

A similar transition is needed during the later stages of the growth phase prior to maturity. Here cardholders have typically shifted from being revolvers to transactors. They are inclined to use the card issuer's money at no cost rather than their own. With an aging population and regulator pressure for interchange rates to reduce there will be increasingly less revolvers, generating less revenue to fund the freeloading, reward focused transactors. Innovative card products for this growth phase need to be introduced to incent transactors to use their own funds. This is especially true given that maturity in many markets is becoming the growth phase in customer numbers.

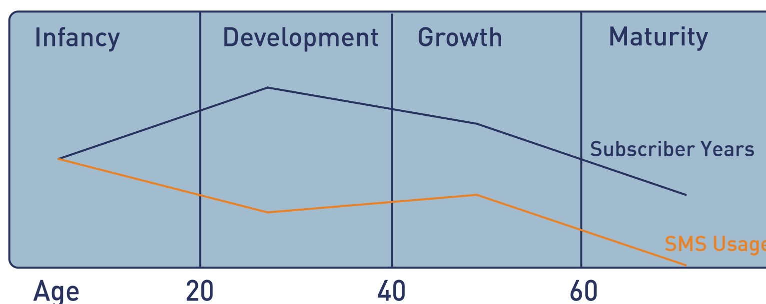
With an aging population and higher demand for health and care services, personal net worth may decline quickly. The curve may prove to have an unpleasant developing tail.

Immature Life Cycle

The point of doubt about these theories on segmentation is the payment methods we use today have yet to span a life time. Obviously cash and cheques have, but credit cards, ATM and EFTPOS networks have not. Credit cards originally were for business E & T expenses and only in the late 1970s did acceptance become more general. Therefore consumers in the maturity and late growth phases were introduced to card payments while in the development and early growth phases.

Young children in many countries are exposed to debit card usage at an extremely early age. Their parents were probably in their late thirties when they started to use a debit card. These younger consumers will not know life without a payment card. So will their behavior upset the life cycle theory? Fundamentally they will be more willing to use a card, be less prudent but as they are better educated they may be more discerning. However the events that drive needs remain the same.

Adoption surveys relating to mobile payments can also be divided into four segments. A study conducted by Niina Mallat of the Helsinki School of Economics (which is now a little dated, but the Finnish market is ahead of the global trend) showed the following trend lines which have been imposed onto the four-phased life cycle chart.



The SMS pattern indicates a drop in usage in the development phase, which then recovers during the growth phases. Those subscribers in the development phase have also been a subscriber for more years than any of the others. So exposure to the technology is not a factor, quite the contrary. The suggestion is that when a subscriber's net assets decline mobile usage also declines.

However it may be more social or life style related. Demands on income may be greater as parental support minimizes, forcing the subscriber to prioritize their spending. Social interaction and behavior may be rationalized to fewer people. Whatever the events are, this will have an impact on suppliers of mobile services. Mobile carriers in particular focus on the youth (infancy phase). Niina Mallat's research suggests this approach is OK, but don't forget subscribers entering the growth phase. Higher income subscribers should generate higher ARPU.

What is not known yet is whether subscribers will reduce their usage as they shift from growth to maturity. The drop as presented can be attributed to the current batch of mature subscribers being late adopters and neglected subscribers. We may need to wait another decade to see if the reason for this drop off is simply these two factors or something more meaningful such as net asset decline. This would not be a surprise.

The mobile industry does not fully understand the events that drive mobile usage, and new services such as mobile payments cannot be matched to the curve with confidence.

In Summary

Financial institutions operating in the developed markets need to be aware that the population is becoming older and the shift is towards the growth/maturity phases of the asset curve. This means a shift in the emphasis of their market and the products need to adapt to new needs.

Mobile service providers who want to offer commerce and payment services need to start to consider the asset curve, and start to understand the relationships between life cycle events and mobile services. Maintaining and developing ARPU growth cannot be achieved with a continued focus on the youth, because their market is maturing.

About Peter

Peter Goldfinch, GFG Group's Simfone Program Manager, is a respected analyst and commentator on global trends in payment technology.

One of the original founders and shareholders in GFG Group, Peter has a background of more than 23 years in the information technology industry, most of which has been involved with consulting and systems development for banking and finance customers in 25 countries.

He has particular expertise and experience in payment systems, including mobile payment systems. His career highlights include pioneering work on the first ATM and EFTPOS networks.

In the mid-1990s, he played a key role in the introduction of credit and debit cards into the Russian market, working with GFG's customer SBRF.

About GFG

32 million consumers in 39 countries use GFG software applications. More than 20 years of payments experience stands behind the company's worldwide leadership in integrated Card and Mobile-based payment products.

Accredited by the World Bank, GFG's solutions are based on a single, integrated architecture comprising two key products:

Simfonie™ A proven, market-leading product which enables a mobile handset to operate as a fully mobile payment device.

Cadencie™ A full-function, real-time, credit, debit and charge card management system.

GFG Group operates from offices in Auckland and Wellington New Zealand, Melbourne Australia, Manila in the Philippines, Singapore and Toronto. The company's core research and development team is based in Auckland, with consultants and technical staff located in the international offices to provide front line 24/7 support for customers in multiple geographies.

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