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Abstract: This marketing teaching case is focussed on the rapidly emergent industry associated with Apps for mobile devices. After setting the context in respect of the awe-inspiring numbers associated with these markets the case is made that innovative marketing is happening across all parts of the basic marketing framework – the 4Ps. The case presents many specific examples of marketing related decision making and outcomes, focussing on games-Apps such as Rovio’s best-selling Angry Birds game.

Rovio.com

Introduction – The Rising Significance of Software Markets

Why spend time thinking talking and writing about marketing in the software industry? Here are three answers.

Firstly, the argument of size. It should come as no surprise to anyone who spends time using a computer or portable device that the software industry is big business. There are strong brands – Microsoft, Google, Facebook – and a multiplicity of types of software for business or leisure use, often with price tags in three or four figures. Exactly how big is the software industry though? The industry body, the SIIA [Software and Information Industry Association] estimated in conjunction with Datamonitor that the worldwide value of software sales in 2008 was US$304bn and estimates a 2013 value of US$457bn (Datamonitor 2008). Microsoft employees a 100,000 people, a similar number to Exxon Mobil.

Secondly, the argument of cohort. If you are a relatively young person, software and the hardware it runs on has probably been fully integrated into many aspects of your life – you write email using a web-based application – a word we’ll see again shortly – like Googlemail or Yahoo, you use one or more of a console, PC or portable device to play games and make
calls, you relax to music delivered by data files passing through something like iTunes and you sign up for tutorials and submit assignments via a VLE. You are as likely as not to be aware of many different brand names and the people and companies behind them. Software is important to you, it is going to go on being important for the rest of your life. If you aren’t involved with the marketing of software as a career, you are necessarily still going to be involved as a customer.

Thirdly, the argument of culture. Software is now advertised on the high street and TV. There are films about the development of software – The Social Network, Pirates of Silicon Valley – software capability and fallibility is now a common plot device in literature and drama.

**Apps**

Given the vast number of companies and products and uses for software, it simply isn’t possible to cover all issues. Instead, it seems far more sensible to limit ourselves, in form and function. Therefore, this case will focus on the marketing of what are popularly known as ‘Apps’ for mobile devices like Apple’s iPhone. What is an App? The name is an abbreviation for application – a piece of software with a set of capabilities and functions. Microsoft Word is an application, and so is the web browser Chrome. What the abbreviated name refers to though, is a relatively small [in terms of file-size] self-contained piece of software that has a very specific and focused purpose. Most so called smart-phones come with several of these pre-installed. The calendar is an App, the contacts directory is an App, the web-browser is an App and so on. What makes Apps worthy of particular interest is the after-markets – Apps offered for sale by third-parties to smart-phone users. Let’s quickly review some quite dazzling facts and figures.

How many apps – products – are there? No one knows for sure, and the number is growing too rapidly to get a good fix, but Apple have indicated that for their smart-phones and portable devices [iphones, iPads] there are at least 400,000 choices (Apple, 2011). The online store [which itself is a piece of software] only opened in July of 2008. Arithmetic tells us then that in somewhat less than a 1000 days, the Apps added to the list of choices to buy from the store increased by 400 a day, per day, every day!
Just because there are so many products to choose from, it doesn’t mean that people are buying them though, does it? Let’s check that out as well. How many of these applications have been downloaded from the store? Note the word downloaded rather than sold – an issue we’ll come to later. Apple do know that – they know it perfectly. They recently held a sales promotion with a large prize for the person who downloaded the ten billionth App (Apple, 2011). Some context for the figure – 10 billion. That digital music, marketed through software portals like iTunes has revolutionised the marketing and consumption of music is surely beyond question. The rapidity with which the marketplace changed beyond recognition from what it was even a decade ago has been breathtaking. One research group has recently compared the growth in sales of digital music with the growth in sales of Apps (Dedieu, 2011). Music had a four year headstart over Apps, but if Apps haven’t overtaken music yet then inevitably they will do soon. That means, markets, marketing and marketers. The academics are struggling to keep up, but it seems clear that this is an area which clearly deserves more attention (Alpert, 2007).

**Total iTunes Downloads by Medium**

![Total iTunes Downloads by Medium](image)

Asymo.com

If those are the headline figures, do we know anything a bit more specific about how people are using and consuming Apps? Indeed we do. One online collective has examined this issue and has some tentative findings to report (Appsfire, 2011):
1. A typical iPhone user has downloaded about 80 Apps to add to the 20 pre-installed by Apple.
2. Users spend upwards of an eighty minutes a day using these Apps.
3. Just over half of the Apps downloaded were ‘free’

**App Usage by Category**

![App Usage by Category Diagram](image)

**The Business and Culture of Gaming has Come Full Circle**

As can be seen, games form a substantial part of the buying-and-selling of Apps. A particularly interesting thought about App games is the extent to which the business and culture of gaming has come full circle. In the 1980’s – ancient history now – the creation and marketing of computer games was a cottage industry. More accurately, it was a bedroom industry – teenagers and twenty-somethings were able to teach themselves the skills and knowledge through trial and error. Over and above a home computer very little was required and the scale and nature of the product meant that one person could create the whole thing. Codemasters started like that, as did many other firms and now senior individuals in the industry. As technology evolved, and the potential for complexity of design and structure set in, the industry evolved from a semi-professional sector into one requiring significant capital investment in high-end equipment and highly specialised design/coding/creative roles. A big
game on a major platform like Playstation or Xbox that it is hoped will be a big seller is likely to have involved the efforts of several hundred people and an enormous amount of hardware. The recent game – Grand Theft Auto IV - is understood to have cost upwards of $100m to produce. $10m was spent on the audio component of the game alone. In the modern marketplace for PC and console games, the individual or small firm cannot hope to bring a competitive and attractive product to market, and the same is true for most other categories of software.

Apps, and games Apps in particular take us back to the beginning of this cycle. Certainly some of the big players have established business divisions to focus on Apps, but a small firm can bring a product to market using nothing more than a standard-PC and some cheap software. You can read about the nature, culture and success of such SMEs in a paper like O’Dwyer (2009).

**Marketing of a Game-App**

Now we’ve developed some focus and context, we can now turn to some specific marketing related issues for Games-Apps and examine some specific examples of practice.

Where to start? How about channel strategy? If your app is for an Apple device, there is only one choice – the App store as part of iTunes. Apple take 30% of the price the end user pays – and decides whether or not they want to retail the App at all – sometimes a problem if your App contains adult orientated material like sex, violence and profanity. In return for the substantial slice of the pie and they host the App on their servers for download and integrate it into the online catalogue, as well as managing feedback and payment.
If your business is involved with traditional physical goods, the feedback you get from your channels can be delayed, incomplete or inaccurate. This makes good decision making difficult. This isn’t true for Apps. The above graphic shows the sales chart of a game called Flight Control (Firemint, 2011). As you can see, even with millions of copies sold, Firemint knows exactly how many were sold overall, how many in specific national markets and the impact of significant events like a change in price, some publicity or even just a release of an updated version. Within each market they also know their ranking in the sales charts. The pie chart below shows the relative importance of each national market. Unsurprisingly the US is no. 1, and the UK is certainly doing well – but look at the surprise entry at no. 3 – Australia. When you have this level of detail and precision, making good decisions is easier.

After distribution and sales management, perhaps it is time to look at pricing. Further interesting things are happening here as the nature of Apps means that great flexibility is possible. The price of an App can be changed almost instantly, meaning that price can easily be used as a promotional tool or to establish a user base for future exploitation. Apps can even be offered free via the Apple App Store. Why would any company give away its product? There are some good reasons. As just mentioned, the short-to medium term objective might be to establish a reputation or gain publicity and attention. Once achieved the App can have a price change upwards. Electronic Arts used this tactic before Christmas 2010 to considerable benefit. Slashing prices across their range of games, they quickly occupied most of the top ten positions on the charts. After Christmas, when millions of owners had unwrapped their new Apple devices, EA reaped the benefit from their games being front and centre. Some Apps are deliberately released with only a portion of the functionality operable. If the user wants to get the full benefits, then a payment must be made. If this were a car, we
might refer to that as a test-drive. If the App-sample isn’t to the liking of the user, then there is no cognitive dissonance – no money was wasted. This switching on of the functionality of the App isn’t even as simple as an on-off switch – the App creators might have adopted a pricing model called *freemium* - a word you will hear increasingly often in the future. Freemium means the App itself is free or very low cost to download, but once installed the user must make what is called an in-app purchase to unlock portions of functionality. In game terms, this might mean extra levels to play through for a few pennies, or new items for in-game characters to be equipped with. This model is one which is increasingly attractive with App developers as it means they can create a stream of revenue from each user, rather than a one off payment and achieve this without the substantial costs of developing an App from scratch.

**Angry Birds – Product and Promotion**

We’ve taken a very brief look at elements of pricing and place in the context of App marketing. The basic framework of the marketing mix has of course two further elements, product and promotion. Before we finish, let’s consider those – and do so in the context of possibly the most famous Game-App of all time – Angry Birds! An app by Rovio of Finland, it is an inaugural member of Apple’s App Hall of Fame. Angry Birds has sold an astonishing 50 million copies. No app has sold more. Players include David Cameron, Dick Cheney and a pantheon of sports and music stars.

**Angry Birds Screenshot**

Let’s look at part of an interview with the lead designer – Niklas Hed – where the discussion turns to the ethos and process of the games genesis and evolution:
Rovio was perfectly positioned to take advantage. It had learnt a lot from the triumphs and failures of its past games. It also had copious notes from focus groups it had organised over the years, during which Niklas and his colleagues had watched people playing games from behind a glass screen and recorded what the players found difficult, what excited them, what they found boring. The information from these sessions had then been used to produce a blueprint of the “perfect” mobile game. The checklist ran to several thousand words, but, one of the main things they learnt was that each level had to feel achievable.

“It’s important that players don’t feel that the game is punishing them,” Niklas says. “If you fail a level you blame yourself. If the pigs laugh at you, you think: ‘I need to try one more time.’”

They also knew it was important that any game they designed could be played in short bursts – occupying those periods of “downtime”, such as queuing for a coffee or waiting for a bus, that had formerly been devoted to staring into space or, perhaps, reflecting on life.

“You have to be able to play the game right away,” Niklas says. “We didn’t want any loading times.”

It was this principle that led to the introduction of the catapult, the game’s central feature. Players know immediately what to do with it and it makes the game more intuitive.

The game also had to appeal to both video game “virgins” and hard-core enthusiasts. “We knew it had to be simple but it couldn’t be too simple,” Niklas says.

Kendall (2011)

The promotion of the game was based on a very simple strategy. Rovio noted that Apple tended to highlight Apps in the store with strong colourful characters present in the game itself and imagery used in logo design. This meant the characters in the game became front and centre in design – and the name became Angry Birds rather than, say, Catapult. Examining potential partners to publish the game [games studios design and build, publishers market] Rovio plumped for a company called Chillingo (Chillingo, 2011) who had a good relationship with Apple and a track record of successful publicity campaigns. The strategy worked, Apple selected the game as a highlight of the Apps in the store, that generated publicity which led to downloads, which led to almost totally positive reviews – word-of-mouth – between consumers which led to more sales and so on in a virtuous circle that has required next to nothing in terms of traditional advertising expenditure.

Even more interesting than the way the game was promoted is the ways in which the game itself is now so strong as a brand that it is being used to help promote other products and has even led to game related merchandise – covers for phones, plush toys of the birds and the pigs and even a tie-in with an upcoming animated film called Rio. The clincher in respect of Angry Birds now being a ‘transmedia franchise’ (Pulman, 2011)? Angry Birds being included as part of a promotion in a Superbowl advertisement.

Look forward to the animated series!
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