



APPLICATIONS

**Bliss Applications Case Study: The app business or how to
be different in a crowded market**

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Business Strategy Case Study

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Abstract

Title: The app business or how to be different in a crowded market

In 2009, smartphones' users were booming in Portugal, especially among the younger generation, a more technology-driven group of consumers. It was in that same year that partners André Gil and Tiago Janela realized the potential of app development as a business.

In 2010 the company was founded, under the name of Bliss Applications. It would eventually become a reference to the Portuguese market, and even to some countries abroad like the U.S, having won several prizes for the innovative character of the applications in terms of design and usability.

Despite the success the company was having, the partners found themselves struggling with the fact that the number of downloads was beyond their expectations, and the overall cost structure was not subject to reductions due to the role marketing played in the company as a business card to users. There was the need to rethink the future business' strategy.

Bliss Applications business context and technological terminology provide a great insight for business classes, especially if aimed for the innovation arena. Through the analysis of the company's case study it is possible to acquire further knowledge of the application development business and smartphones/tablets potential in the future, having in mind that it is a market that has been growing tremendously since 2007.

This dissertation also includes a Literature Review section, which provides specific frameworks and a technology terminology explanation that aim to give ground to a better analysis of the case study.

Furthermore, the dissertation also includes a Teaching Note section, which offers a possible approach to how the case study should be used in class, in order to guarantee a lively discussion and the students' involvement.

Resumo

Título: O negócio das aplicações ou como ser diferente num mercado lotado

Em 2009, os utilizadores de smartphones foram crescendo em Portugal, especialmente na camada da população mais jovem, que é também ela a maior adepta de tecnologia. Foi nesse mesmo ano que os parceiros André Gil e Tiago Janela se aperceberam do potencial do desenvolvimento de aplicações enquanto negócio.

Em 2010 a empresa seria fundada, sob o nome de Bliss Applications. Esta tornar-se-ia numa referência para o mercado português, e até mesmo para alguns países no exterior como os E.U.A., uma vez que ganhou vários prémios pelo carácter inovador das aplicações em termos de design e usabilidade.

Apesar do sucesso da empresa, os parceiros encontravam-se a lutar contra o facto de que o número de downloads registado estaria aquém das suas expectativas, e a estrutura de custos da Bliss não poderia ser sujeita a cortes dado o importante papel do marketing para empresa enquanto cartão de visita aos utilizadores.

Havia a necessidade de repensar o futuro estratégico do negócio.

O contexto do negócio e a terminologia tecnológica da Bliss Applications proporcionam uma visão excelente para aulas de Gestão, especialmente se destinadas a abordar a disciplina de inovação. Através da análise do case study da empresa, é possível adquirir mais conhecimento relativamente à área do desenvolvimento de aplicações e até o potencial dos smartphones/tablets no futuro, dado que é um mercado que tem crescido consideravelmente desde 2007.

Esta dissertação inclui também uma secção de Literature Review, que fornece frameworks específicas e explicação da terminologia tecnológica que visam dar uma estrutura para uma melhor análise do caso.

Além disso, a dissertação inclui também uma secção de Teaching Note, que sugere uma possível abordagem para a forma como o case study poderá ser leccionado, garantindo uma discussão em aula bem como o envolvimento dos alunos.

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Introduction

In January 2010 Bliss Applications was created. A small company, whose core business was focused on the development of applications for smartphones, tablets and the web for end users. During its first year of existence it was able to launch several apps: Done Deal, Going Out, Tap Soccer and Spin My Party, which relate to different categories – utilities, lifestyle and games. Bliss Applications showed how capable it was of doing any kind of application.

The first year seemed to be going fine, as comments were exceptionally positive and the team was receiving prizes for their creative ideas; nevertheless, the numbers were not telling the same story. The number of downloads was below the expected for the first year, and for the apps to be advertised, marketing costs alternatives represented a big burden for the company's cost structure.

This dissertation will consist of a case study on a Portuguese company in the digital arena that found itself to be struggling at some point, due to the uncertainty of team members regarding the strategic positioning of the business. Followed by the case study, a Literature Review section will provide conceptual grounding and a Teaching Note that suggests a possible analysis to the instructor.

The main objective of this dissertation is to provide inside knowledge of a market that is still very new to the general public. Due to the specificity of the terminology, many

may find it hard to understand. Nevertheless, such terms are very important to be learnt since they are being adopted across the Web and even within the market. Moreover, gadgets withhold great power nowadays, as their usability has provided everyone's life to be much simplified, it would not be far fetched believing that in the near future gadgets will act as powerful tools for most people's jobs.

Nevertheless, it is indisputable that people use gadgets as extensions of their own personality, as a way to feel part of an elite that not many have access to.

Given the potential of such market in upcoming years, this dissertation aims to create awareness regarding the topic, by seeing up close how a company experienced this market. Moreover, looking at why has this market been so attractive in the recent years and what are the counterparts one should be aware of.

As an overall, this dissertation serves as a guide for someone interested in creating a business around this activity too.

The Literature Review section aims to provide the appropriate theoretical basis for the case described. Namely regarding the market environment, the relationship with competitors, the importance of competitive advantage as a differentiation factor, the market's terminology, the funnel idea for creating a concept for an app, and even outsourcing capabilities.

The Teaching Note section provides a guideline for the instructor to use the case study in a business class. It includes an overview of the suggested topics to be discussed, which ground can be found in the Literature Review section, and a thorough analysis of Bliss Applications' situation.

2

Case Study

Bliss Applications

The app business or how to be different in a crowded market

Established in an office that is nearly two steps away from the beach is Bliss Applications. The mirrored building would almost seem imperceptible even to those who usually pass by the well-known Marginal road that links Lisbon to Cascais. Yet, even though the building is big, this one-year-old company does take but a little space on its own.

At the office, seven people work there, they use Macs as their working tool of choice and the place is filled with cool music. One would think, this is the kind of place that anyone would love to work in – the aesthetics of the whole room inspire cutting edge products. Cement walls give the feel of an old factory or a loft that has been rebuilt with clean and minimalistic furniture; all flowing in a color scheme where orange was king.

André Gil was one of the partners of the company and one of the responsible agents for the launching of this project that started in 2010. Although not the first movers in the Portuguese market, this firm is probably the first one with a business 100% focused on developing applications suitable for mobile phones (Apple, Android and Windows), tablets and web.

By October 2011, Bliss was rethinking its business. As the year was coming to an end, the company was willing to make changes in order to improve its strategic and operational procedures, given the application business was growing at an astounding speed.

1. The company and the app business

Bliss Applications was created in the beginning of February 2010, but it was one year earlier that this project gained momentum. Back then, André Gil and his partner Tiago Janela were still co-workers at By in the Media business.

Both Bliss and By are part of a large group of companies, the WY Group. It includes companies such as By, White, Nossa, BEMS Portugal, MASSIVE, Digital Intelligence ES, Digital Intelligence PT, Bliss Applications, tribeCRM, that Inc. and Volta, which core businesses revolve around producing digital, marketing and advertising content for the media industry. In some circumstances these companies can have complementary activities, whereas in others they can be perceived as rivals, as their core business is very similar.

In early 2010, the two entrepreneurs, who are enthusiasts for new technologies, started to plan and define a strategy for a successful entry in the growing applications market.

André Gil, the general manager responsible for managing projects and accounts; and Tiago Janela, the senior programmer, responsible for solving the most technical jigsaws and of the main developers for iOS, put the team together. There were also four developers, two specifically for iOS, one specifically for Android and a junior one, responsible for serving both operational systems and managing the Server and the Backoffice¹; and, one designer, whose main job is to create the design layout of apps, websites, press releases, etc.

¹ These areas are restricted for the developers only; hence users are not able to access it. Besides, it is where the team is able to manage all the contents created – its intellectual property.

By the middle of 2011, Bliss Applications had a business volume of €300.000.

It was in January 2007, that Apple Inc. released the first iPhone. The era of smartphones was to begin, with applications as a world of opportunities to be explored.

Nowadays, there are nearly thousands of apps able to serve any kind of task one may think of. Apple's marketing campaign "There's an app for that" had an astonishing effect around the world and, as a matter of fact, applications were being able to satisfy the most far-fetched needs of smartphone owners.

The iPhone 3G was released in the marketplace for 22 countries, in July 2008. It was the first version where apps were introduced and there were only 500 of them at the time. Since mid 2011, the 3 GS and 4 versions of iPhone were made available in stores, as well as the iPad 1 and 2 and the Web Desktop applications; there are more than 500.000 and counting to this very date. If one adds the number of existing Android Apps, this too reinforces the relevance of the app world; by October 2011 almost 300.000 Android applications are available².

When considering applications as a business, developers can face two big brands dictating the way they should behave in the market.

One is Apple and its App Store. Programmers in the business may regard its iOS operating system to be very closed, as apps are only compatible with Apple devices. For apps to be available in the store, it is up to Apple to decide. It is one of the negative aspects regarding App Store, as developers can never be sure when their app will be approved³. But despite the uncertainty of time required for the check-up system to approve the app, it is very rigorous in analyzing its content and tracking the existence of bugs.

Two, is Android and its Android Market. Unlike Apple, this Google's subsidiary is well-reputed for being a very open market, since many mobile manufacturers are its software partners – HTC, Motorola, Samsung, Sony Ericsson, etc. Besides, on Android devices developers see their apps being approved automatically. Still, there is room for many complications as bugs may not be corrected or take long to be

² App Brain a website dedicated to Android applications:
<http://www.appbrain.com/stats/number-of-android-apps>

³ On average, it takes 15 days for a new app to be approved and 1 week for an update to be approved

detected. In addition, in this open environment many users have been unable to download apps, as in some cases they would not be compatible with the given device and the Android Market didn't provide clear information about the problem.

Since its release, smartphones have become a great part of people's lives, in such a radical manner that these were being used in place of computers.

At this point, companies started to consider application development as a potential business. In the U.S, thousands of companies were established with the sole purpose of developing web applications.

In Portugal, only very recently and at a slower rate, the marketplace saw this sort of start-ups developing. André Gil mentioned App Generation, M-Insight and EZ4U as the more relevant competitors at the moment.

2. Product Portfolio

What was in it for little more than one-year-old Bliss to be able to face not only its national competitors, but also the global ones?

Believing that when a product is designed with a web-oriented strategy the sky is the limit, Bliss decided to go beyond Portugal and create applications that could be purchased anywhere in the world. As the market for smartphones isn't yet much developed in Portugal and, given that chances for a specific application to be successful within borders can be low; the optimal solution would be to expand since the very beginning, at a worldwide scale. Nevertheless, the company did take into consideration that some applications would be more suitable to the Portuguese market and others to the American, for example. This choice of how large the target will be does not bring any added costs to the company.

The company had decided at a very early point how it wanted to position itself strategically in terms of products launched: aiming for applications targeted directly for consumers. The subject theme could be just about anything, like entertainment or simply informational.

The app creation process would vary considerably from app to app. Nevertheless, it was considered essential by the team to spend considerable amount of time on research. This meant that an idea was already on the way, but needed to be polished

and adjusted to the intended target. Researching tools were planned to be inexpensive given the limited financial resources of the company; therefore, Internet played an important role for that matter.

The company would follow a working methodology known as SCRUM (exhibit 1) to make sure that the team was flowing as much information as possible, regarding their tasks and at what stage they were – this involved constant feedback among team members.

During the year 2010, Bliss Applications launched its entire portfolio of applications, comprised by:

- **Done Deal**

The company brought up to the market in February 2010 its first iPhone app, *Done Deal* (exhibit 2 – fig. 1), available for free in the App Store. Labeled as a Lifestyle app, it targeted employees who are searching for the best day and time for making business – finalizing contracts and taking other important decisions. Its algorithm is based on astrological movements that can reveal better chances for luck. Visually, it's very easy to understand, having three types of results: red, green and yellow semaphores meaning negative, positive and neutral periods of influence. It is available in English, Portuguese and Spanish languages.

From the consumers' point of view, comments in the App Store regarding this app haven't been positive. Users point out the simplicity of the app, "it doesn't do much... it just shows a semaphore". Another user says it simply doesn't work. Overall, this wasn't a very much successful product, André Gil confessed. In fact he considered it to be just a sort of an experiment and not an actual product Bliss should be proud of, as it was made for By, the company both André and Tiago were working for previously.

- **Vamos Sair/Going Out**

The company moved on towards its very first success when it launched the *Vamos Sair* app, released on March 2010 (exhibit 2 – fig. 2). Here the app user can access what he/she can do in any given Portuguese city for fun: restaurants, dancing, music, exhibits, theatre, etc. It was tagged at €0.79 in the App Store.

Very quickly, it became one of the most downloadable payable apps in Portugal on the first month of its existence. By October 2011, it is still number 1 on the Lifestyle apps category, and it is still a regular at the App Store's top. Ken Yarmosh, author of the book "App Savvy" affirms that, when an app is considered as *Featured* this is a groundbreaking event for the company who created it. Not only it displays a great deal of visibility, but it's also a powerful mechanism that leads random users to download it.

The main reason for this success has to do with the longevity of its usefulness; constant updates maintain the curiosity of users. Benchmarking the success of the first version, Bliss also developed an English (*Going Out*) and a Spanish version of this application for foreigners who would come visit Portugal.

This application received the prize Applications Mobile, Portugal's Club of Creatives (bronze trophy) (exhibit 3 – fig. 1) among others.

- **Tap Soccer**

Another interesting example of Bliss's apps is *Tap Soccer* (exhibit 2 – fig. 3). Developed in the midst of the World Cup that was about to happen in South Africa in 2010; the company developed a game which goal was to fit in the mood of football enthusiasts, who were looking for "killer time" apps. It had two versions: a Lite version (free) and a Pro (full) version, tagged at €0.79.

André Gil said that the simplest ideas make the best applications. And this game was all about being easy and addicting: in an endless football field with no goals, the sole aim is to pass on the ball within the team. Just by tapping the player one is able to pass the ball and gain points. The longer these passes are, the more you can score at the end of the game.

It was launched a few months after *Vamos Sair*, on June 2010, and at the time it achieved a relevant success, reaching number 1 in Portugal's top paid apps.

This application was considered to be one of the three best games in June 2010 by App Modo – mobile applications blog (exhibit 3 – fig. 2).

- **Spin My Party**

Another very relevant project developed by this company was *Spin My Party*. It was also released on June 2010 (exhibit 2 – fig. 4), shortly after “Tap Soccer”. This application was targeted for an international audience, in particular Americans, and it was available in two apps: one compatible only with iPhone and iPod Touch devices, with a charge price of €1.59, and another one that was available for both iPhone and iPad devices (called a Universal kind of app) at €2.99. The reason why the company decided to launch two separate apps, and not just one, has its upsides and downsides. In one way, the company is able to maximize its profit with iPad users who would use *Spin My Party* just in special occasions. But, it is tricky to manage two versions of one given app – solving bugs and releasing updates will involve more time and effort.

As a subject theme, this game only needs a challenge to be settled, as well as the various outcomes of the given challenge and the players that are participating – an idea based on the wheel of fortune. It proved to be an amazing success in the US, as many comments on the App Store confirm this: “Totally saved the day at the bachelor party!” and “This app is great for parties and when you’re bored with friends, excellent.” André Gil said that, still to this date, Bliss continues to receive very positive comments on the app, coming all the way from the US and asking for new updates and even spin-offs of that original version.

The app was signaled by Apple itself on the German and Austrian stores, as well as on the website *The iPad Show* and in a couple of American applications’ review websites, like *App Vee* (on which it got a 5/5 grade) and *App Advice*.

What worked so well about this specific project was the fact that it was customizable; anyone was able to design a game about anything.

Spin My Party received great recognition: won the trophy for Best Game “Meios e Publicidade” – Awards 2011, won the silver trophy for the Games category, from Portugal’s Club of Creatives and was a featured app on Germany and Austria Apple stores (exhibit 3 – fig. 3).

The general manager believed that it was thanks to both *Spin My Party* and *Tap Soccer* that the company was able to learn and grow in what comes to knowing how to use marketing as an added value, since these were the first apps created with an

international target in mind. For that purpose, Facebook ads, as well as appreciations from reviewers, allowed for the app to be successful and to be featured in the App Store.

3. Bliss' Cost Structure

Which are the costs involved for a company that makes applications as a living? For one, labor is one of the main costs, in this case the time the developer(s) take(s) in order to create an app; the other one is marketing, or the effort of advertising apps to consumers.

On average, André pointed that for an app to be created, it took approximately 2 months, once the overall concept is discussed and defined within the team.

Concerning marketing costs, the company faces a wide variety of promotion options for its apps. The best-case scenario would be for Apple itself to promote them automatically in the App Store as featured apps, but such possibility depends on a combination of great work from the developers, thorough marketing campaigns and luck.

Developers can instead look for other promotional tools that they can control more easily. These are some of the options Bliss Applications used:

- **Facebook Ads** – This social network platform offers more than the opportunity of finding and staying connected with friends. Companies can take great advantage from the social effect it provides⁴. In this case, the paying method can work in two ways for the company: one being CPM (cost per impression) which basically means that the cost of 1,000 impressions enables users to view the ad 1,000 times; two, being CPC (cost per click), a more common approach where the company pays for the number of clicks the ad received. There is no exact cost for placing the ads or the limit amount to spend in this promotional mechanism, as it largely depends on the performance of the ad itself.
- **Reviews** – Another possible promotional option is to ask for a well-renowned newsperson in the app world to write a review about the developer's latest

⁴ In Facebook's homepage, users are able to see brands' ads and which friends of theirs have liked their page. This way, friends can act as promotional agents.

product. Nevertheless, it may be a tricky decision; reviews can be either good or bad as it relies heavily on the evaluation of the journalist. Prices can vary depending on the concerned journalist, ranging between €800-€5,000.

- **Other ads and press releases** – Some small companies sell developers the opportunity of marketing their app through news releases. By taking advantage of a specific topic they are looking to write about, they find a way to create a linkage with the app's theme. This option tends to be very inexpensive for developers, around €300⁵.
- **Twitter** – This social network has deserved a great deal of attention, on the behalf of developers around the globe, for being a great tool for finding users. In a stage where the app has not been launched, the aim is to create enough buzz around to draw attention of the so-called early adopters. Despite being a costless promotional tool, in Portugal Twitter is still not very useful due to its very small online community.
- **iAd** – This advertising platform stands out from the above mentioned options, as it does not serve developers in the task of communicating their app, but as an extra source of revenue.
This platform is yet another Apple product. Although it is still only available in four countries (UK, France, Germany and Japan) its growing perspective leads the market to believe that this option will be spread across countries, Portugal included. For the developers to start profiting from iAd, they are encouraged to just choose where the ad banner will be placed within a given app. The great thing about this platform is the fact that it is built within the iOS operational system, meaning that this transformation is nearly automatic.
At the end, developers receive a 60% stake of the generated revenues. Despite its simplicity of use, iAd has been considered not to be worthwhile for apps that do not have a powerful brand behind them.
- **Free Downloads for Users** – Allowing users to download the app for free is a great way to persuade them to try its concept. This strategy is mainly used soon after the release of the app and wishes to target the early adopters, who

⁵ André Gil would often receive these requests via email and LinkedIn

are intended to spread their enthusiasm with normal users. Usually, the developers allow for 1 or 2 days for free download.

- **Promo Codes** – Alike the tool seen above, the developers also create a promo tool designed for reviewers where they can also try the app for free. By providing them with a code, bloggers, reviewers, etc. are encouraged to try the app and to give their personal opinion about it.

Apart from these tools, there are still others worth of mentioning such as e-mail marketing, that is very useful for attracting users that fit the average user profile. Nevertheless, the downside is that it may lead the company into a bad strategic position in the app market, as e-mail marketing may be very irritating for most users. Another important aspect to consider, when regarding Internet marketing tools, is the dimension of the app users that the company wants to target as it will determine which options to choose from. If the developers are looking for national users as a target, then Facebook should be a very effective tool, whereas if the developers are looking for international users willing to download their apps, reviews of a well-reputed journalist can be very successful.

Overtime, André Gil learnt that there were some tools more effective than others. In that sense, Spin My Party allowed for a deeper learning experience that resulted in better practices of marketing tools for Tap Soccer, which was confirmed by the improvement in the reached results.

The platforms that the company usually resorts to are Facebook and, not so frequently, paid reviews in specialized blogs.

4. Not all roses for the app development business

In spite of the company's capacity to deliver very good quality products to the market and the consumers' reaction being so positive, Bliss's success was still not being translated into growth. At this point, Bliss had developed four paid applications, which results were supposed to enable it to expand its product portfolio.

By mid 2010, André Gil and his partners started discussing the viability of their applications. One of the main concerns was whether they could do more than those sorts of applications; what else was there to be explored and how were users choosing what applications do download.

Everyday, 30 million applications are downloaded, on average, in the entire world⁶, on a universe of 500.000 iPhone apps and 300.000 Android apps⁷. The rate at which one hears about a specific app, searches it, downloads it and eventually ends up erasing it can only be amazingly fast.

André Gil pointed out that the company realized the immense competition it was facing. There is not only at the national level a reasonable number of companies doing the same as Bliss, but also at a global scale, a far larger number with better resources.

Apart from all that, profit from applications downloaded would roughly compensate the amount of effort put into the different projects. It is not just about a guy and a computer developing an interesting, costless app; it is about a reasonable investment that involves web and software designers and a very resilient communication plan. In the end, developers still need to take into account that both Apple and Android will have a cut of 30% of their revenues.

Thus, it seems that to be sustainable in the first few years it turns out to be a tough fish for a new company in the business of application development to catch.

5. The Portuguese Case – Competitors

- **App Generation** is one of the big names in the Portuguese market for digital content creation in the application business. It was also one of the first companies, if not the first, to be created having application design as a core business – it came up in 2006, as a spin-off from N-Drive. Its aim was to focus on app development for smartphones and, later on, for tablets.

⁶ <http://appadvice.com/appnn/2011/01/number-apps-downloaded-day-reaches-30-million>

⁷ <http://www.engadget.com/2010/07/15/android-market-now-has-100-000-apps-passes-1-billion-download-m/>

Similarly to Bliss, App Generation has also made the distinction between apps as products and apps as services. Nevertheless, it is still not clear for Bliss whether this competitor is focusing its business to better attend its clients' needs or if it is being able to balance both activities.

Unlike Bliss, App Generation has been able to achieve a great deal of both national and international clients, such as: Super Bock, Optimus, A vida é Bela, Samsung, Expresso and Porto Editora.

Applications are divided into three different categories in the company's perspective: Lifestyle (Geolocation Info), Games and Tools. For each of the categories there is a quite numerous list of products available; however, the company does not seem to have won any special prizes on its creations.

- **EZ4U** is a company from Oporto created in 2008. The main reason behind its foundation was the need from different companies in two different areas: solving technological problems of companies and designing software enabling the client to create its own products and achievements. Some successful products: Cost Reduction, SMS Gateway, Planner, Indoor RTLS, iLumen, Social Graph, iTooner.

In the application business, EZ4U launched Directball, which enabled users to view or review football matches. Other features of the app were videos from the most prestigious leagues, goals and match highlights, real time notifications, etc. This application was made available for both Apple and Android operating systems. Although not a very strong competitor in the market, the company has received a lot of media recognition for this product.

- **M-Insight** was founded in 2007 and it is a 100% Portuguese capital-funded company. Its core activity is the development of technological content in mobile and tablet formats, designed especially for clients. Therefore, this company focus is designing apps for clients. Available applications' formats are quite varied, from iPhone to iPad and Android, to even Blackberry.

There is a long list of clients, which are, in most cases, linked to the tourism business. That is the case of Altis Hotels, Amazónia Hotels, Espinheiro Convent, the city council of Lisbon, Mafra, Sintra and Oeiras; Hard Rock, Eleven, among many others.

In a way, all these companies may represent a great level of competition for Bliss Applications, especially App Generation, due to its strong client base, its portfolio and the many years of experience in the market. Nevertheless, the quality of the applications and creative input generated may drive companies into different paths of success.

6. Making a decision

By the end of 2010, Bliss's partners had to come to a decision if they were to have profitable years to come. Despite knowing their products were getting very good reviews, they knew that the company would not be sustainable just by designing new games or other sort of interesting applications. What is so difficult when depending on the creation of products of this nature is the fact that its life cycle may end very quickly. Also, the funnel through which conceptual apps become actual apps is very narrow – statistics show that over 1,000 apps are sent to Apple everyday to be accepted, when in fact, only around 300 actually get to be released⁸; besides these unpleasant facts, there is no protection whatsoever of contents created, which means that any developer faces a high risk of being copied on the developments created in his app.

But the market is big and opportunities are more than plenty when searching for ways to use an interesting product in a useful, yet profitable manner.

Applications created a tremendous impact upon people; those who had a smartphone were downloading them more than ever.

Since 2007, more and more applications started to appear each day to the delight of its users. As a trend, every company and every brand was willing to launch its own. But not all companies benefit from having a web design department that is able to develop their own applications. In fact, there are many companies that specialize on this very job and serve the needs of customers who are looking for ways to give life to their idea of an app.

Being aware of the fact that the company was facing such an incredible number of competitors and with such a limited capacity for investment, Bliss faced the

⁸ App Store Metrics: <http://148apps.biz/app-store-metrics/?mpage>

possibility of changing the direction of its business. Therefore, the option of designing applications as a service for companies became more relevant.

Nevertheless, applications as products were not to be discontinued. The general idea was that, if a partnership with companies was to be embraced, apps as products should be put on standby. The reason for the company not being able to sustain and develop the two activities had mainly to do with lack of time from the developers. The time devoted for creating the sort of app the clients would be expecting, could not be compromised as Bliss's competitors would be able to offer better conditions in time deliveries.

André Gil and his partners discussed which would be the benefits of working directly with companies as clients and designing applications for these, compared to the previous hypothesis of designing their own applications.

One sure thing was that the company would be safe financially, since each application developed had a price based on the number of hours required for its creation. As a rule of thumb, labor costs approximately 45 euros per day. Nevertheless, when Bliss presents its final price for the app to be developed, this number is always subject to several changes, as usually, clients are never willing to accept the value proposed initially. This always leads the company to be very cautious when setting its price, as its bid will be going to compete with other providers.

For a more accurate price estimate, André would ask both the developers responsible for the project, and the designer, how much time they believe they will need; depending on the kind of programming techniques involved, André rounds that number a little bit, since not only can tasks overlap, but also the client's willingness to pay may vary a lot.

Creating applications for a client grants Bliss one great advantage, which is final consumers are not a requirement any longer. Once Apple approves the app, it is the client's entire responsibility the way it will manage it. Another great advantage is that research costs can be fully covered when charging a price for labor.

Some of the projects Bliss developed throughout 2011, were for clients such as Companhia das Sandes, Mitsubishi, LeYa, EDP, Vodafone, Optimus, Grupo Sovena, BPI, etc. (exhibit 5 and 6) and example of other prizes (exhibit 3 – fig. 4).

Nevertheless, by accepting this new challenge Bliss Applications could be at risk of eliminating what was the main reason for the creation of the company, which is its entire liberty of following its ambitions when it comes to creating an application. After all, the downside of serving clients' needs from nationally based companies, is attending to their own expectations about the product. For designers that were used to develop what worked best for them, this change may come as a let down. Their worst fear was that they could be depriving themselves from being successful at a worldwide scale, as they were with "Spin My Party".

In the end, what the team had to decide was between financial sustainability and independence on the development of projects.

Despite what was at stake for the company to lose, its partners decided to go forth and develop applications exclusively for companies.

André Gil confessed that it was important to turn the first year's negative results into positive in the following year. For this to happen André had to go out to the marketplace and ask companies directly, whether they would be interested in creating an app, as a way to communicate what their work was about.

Changing the direction of the company, replacing end consumers by companies as clients, allowed the company to be safe at the end of its first year, being also able to easily reach its break-even of 150,000 applications. Nevertheless, what would be the future of the company was yet an uncertainty. But would this be a viable decision? Former developed applications were to be put on hold? The company was still unsure of what to do with them. Downloads were still occurring at a satisfying level to the current date. But nobody was making sure new updates were being released as, to put simply, there was no time to do it. Clients were now a priority and a timeline, of approximately 2 months, had to be defined for the app creation or else clients would turn out to other competitors.

But was it wise for the company to opt for this sole solution?

Exhibits

Exhibit 1 – SCRUM Methodology

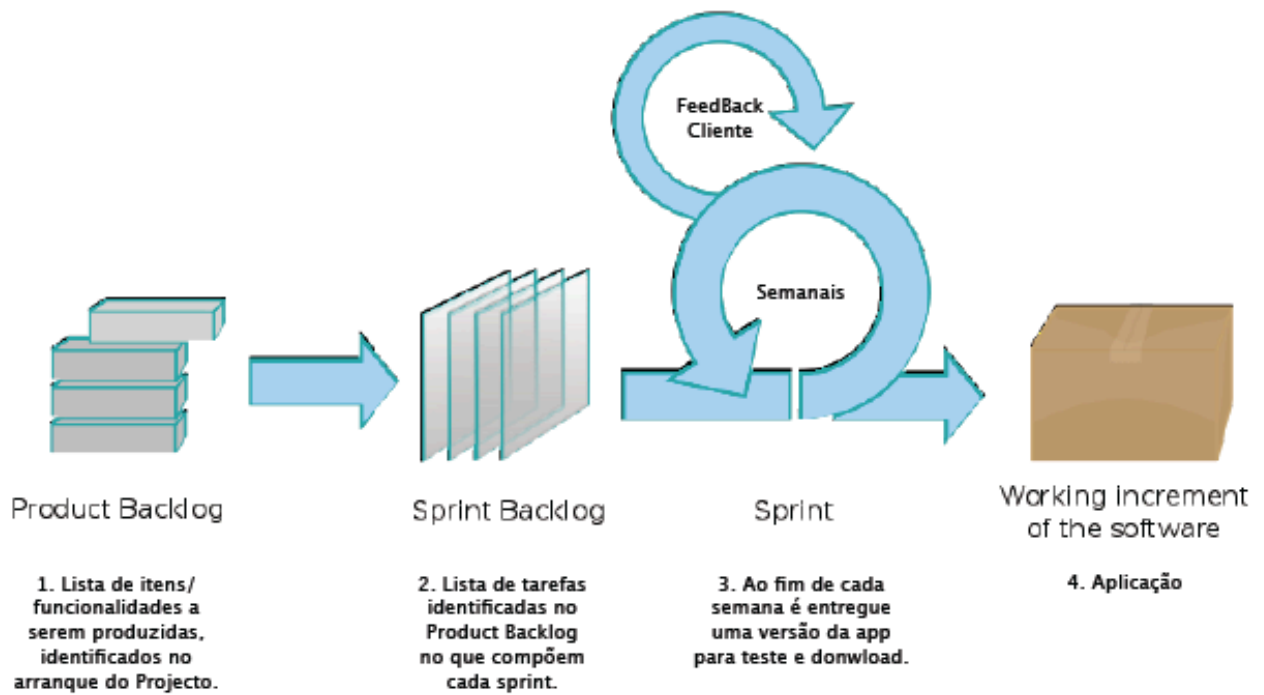


Exhibit 2 – Bliss' Applications

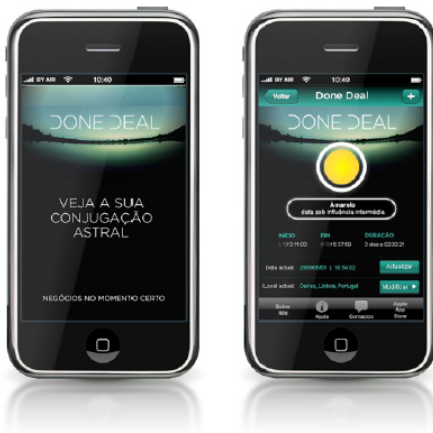


Fig. 1 - Done Deal



Fig. 2 - Tap Soccer



Fig. 3 - Vamos Sair/Going Out



Fig. 4 - Spin My Party

Source: App Store

Exhibit 3 – Prizes



Pontuação máxima de 10 estrelas na Revista Zoom i.t.



Il bienal ibero-americana de design
Il bienal iberoamericana de diseño

Convidada a estar presente na II Bienal realizada em Madrid.



Troféu Melhor Mobile Meios e Publicidade – Prémios 2011



Troféu Bronze – Aplicações Mobile Clube Criativos de Portugal – Festival 2010

Fig. 1 - Vamos Sair/Going Out



Shortlist Clube Criativos de Portugal – Festival 2011



Um dos melhores 3 jogos do mês de Junho/2010

Fig. 2 - Tap Soccer

Bliss Applications: The app business



New and noteworthy in both Austria and Germany App Stores

Aplicação destacada pela Apple nas Lojas: Alemanha e Áustria



Convidada a estar presente na II Bienal realizada em Madrid.



Troféu Melhor Jogo Meios e Publicidade – Prémios 2011



Troféu Prata – Categoria Jogos Clube Criativos de Portugal – Festival 2011

Fig. 3 - Spin My Party



Convidada a estar presente na II Bienal realizada em Madrid.



Shortlist Clube Criativos de Portugal – Festival 2011



Vencedora do prémio especial inovação.

Fig. 4 - LeYa

Source: Bliss Applications website: Newsletter

Exhibit 4 – Article on Jornal de Negócios (August, 2010)

CISION

JORNAL DE **negócios**

Tiragem: 16371

País: Portugal

Period.: Diária

Âmbito: Economia, Negócios e

Pág: 10

Cores: Cor

Área: 27,35 x 34,06 cm²

Corte: 1 de 3



ID: 31615131

27-08-2010

TECNOLOGIA

Bliss nasceu para as aplicações e já faz negócio com a Apple

Este é apenas um exemplo das dezenas de empresas portuguesas que estão a criar “apps” para a Apple

ANA TORRES PEREIRA*

A Apple veio mudar o paradigma das telecomunicações e da navegação na Internet. O negócio das aplicações (“apps”) está a mudar a interação com a rede e a potenciar o aparecimento de muitas empresas. A portuguesa Bliss Applications é apenas um dos exemplos. Nasceu no início deste ano, focada no desenvolvimento de aplicações móveis da Apple. E em seis meses já foram distribuídas cerca de 80 mil “apps” desenvolvidas pela portuguesa.

A Apple e a Google estão numa disputa feroz por este novo mercado das aplicações. No entanto, a empresa liderada por Steve Jobs mantém-se à frente, ao ser responsável pela maioria das aplicações comercializadas (52%) em todo o mundo, segundo a ABI Research. Mas, de acordo com os analistas citados pela imprensa internacional, a Apple não tem motivos para descançar, pois a Google está a reagir muito rapidamente. Só no primeiro semestre de 2010, o mercado das aplicações móveis cresceu mais de 2,2 mil milhões de dólares (1,7 mil milhões de euros), segundo a research2guidance.

É a este mercado, que já gera milhões, que as empresas portuguesas ambicionam também chegar, desde as pequenas “start ups”, como a Bliss Applications, até as grandes empresas, como a Portugal Telecom ou a Vodafone Portugal. O Sapo, por exemplo, já desenvolveu várias aplicações que são compatíveis com o novo iPhone 4, como o Kiosk, e está a conceber uma aplicação de raiz para o iPad que estará entre as primeiras 100 a 200 aplicações previstas para o novo equipamento da Apple.

“O negócio de aplicações para iPhone é apelativo, tanto pela conotação de especialidade que traz, como pelo potencial de receitas das aplicações”, admitiu Hugo Pinto, diretor executivo da Inovaworks, em declarações ao **Negócios**. O foco desta tecnológica portuguesa tem

sido tanto o iPhone, como o novo “tablet PC” da Apple, o iPad.

Paulo Alexandre Reis, diretor-geral da Digital-Minds, conta a sua experiência: “já conseguimos ter várias aplicações em primeiro no top de ‘downloads’. Entre elas, as aplicações da TVI24 e do Mais Futebol, que continuam a ser das aplicações com mais ‘downloads’ em Portugal.” Muitas destas aplicações da Digital-Minds para o iPhone

Avenda de aplicações é mais do que um negócio, é uma mudança do paradigma. Henrique Fonseca, diretor da área de serviços de Internet da Vodafone Portugal, explica que “o iPhone 4 e também o próprio iPad irão ter versões optimizadas das ‘apps’ existentes para tirarem partido das características de ambos os modelos”.

Mas não só o diretor da Vodafone Portugal está convicto de que a “oferta dos serviços [do grupo] através destes novos terminais permite que os clientes utilizem os sites e serviços de Internet preferidos de forma fácil e cómoda a partir dos seus telemóveis”.

Aqui reside a alteração, pois a forma de aceder à Internet está a mudar e há quem acredite que este é o primeiro passo para o fim da Web tal como a conhecemos. O acesso directo às “apps” está a conduzir a que se deixe de fazer a ainda habitual navegação na Internet. A Priberam, que também já desenvolveu uma aplicação para o iPhone, constatou “um aumento cada vez mais acentuado dos acessos ao dicionário através de telemóveis, em particular de iPhone. Por isso decidimos desenvolver uma aplicação de acesso ao mesmo para estes dispositivos”, disse Carlos Amaral, administrador da empresa.

Mas, se muitas destas empresas estão a arrancar com aplicações para os dispositivos da Apple (iPhone, iPod Touch e para o iPad), já estão igualmente prontas para explorar os sistemas operativos da Google (o Android), da RIM (o BlackBerry) e também da Nokia (o Symbian). *Com AM



O QUE HÁ DE NOVO NO IPHONE 4?

Mais capacidade de disco e de velocidade para acesso à Internet. Melhor resolução do ecrã e incorporação de tecnologias aperfeiçoadas para fotografar e filmar. Permite videochamadas. Pesa 137 gramas

FOTOGRAFIAS COM MELHOR RESOLUÇÃO
O iPhone 4 tem melhor câmara fotográfica. De cinco megapixels, a câmara tem “flash” LED integrado.

MAIS VELOCIDADE PARA A NET
O novo aparelho da Apple permite velocidades de navegação na Internet maiores, já que facilita o acesso a sistemas móveis mais evoluídos.

RESOLUÇÃO DO ECRÃ
O iPhone 4 integra o novo ecrã Retina, que, segundo a Apple, permite uma maior qualidade de imagem. A resolução e a nitidez são superiores.

MAIS CAPACIDADE DE DISCO
O iPhone 4 tem duas versões. Uma com 16 GB (gigabytes) de capacidade, outra com 32 GB.

NA ONDA DA ALTA DEFINIÇÃO
Os vídeos do iPhone 4 serão em alta definição. Incorpora já a tecnologia HD, o que não acontecia nas versões anteriores.



“APPS” EM PORTUGUÊS

Estas são apenas uma amostra das aplicações desenvolvidas por empresas portuguesas para o iPhone. Desde o noticiário, à georeferênciação, passando pelo desporto,

aplicações financeiras, dicionário, ou simplesmente jogos, são várias as ofertas disponíveis através da Apps Store ou do iTunes da empresa norte-americana da maçã.

Source: Bliss Applications website

Exhibit 5 – Bliss Applications' Clients



Source: Bliss Applications website: Newsletter

Exhibit 6 – Examples of applications for clients



COMPANHIA DAS SANDES®



starfoods*

Source: Bliss Applications website, Newsletter; App Store

Exhibit 7 – Devices compatible with applications designed for clients

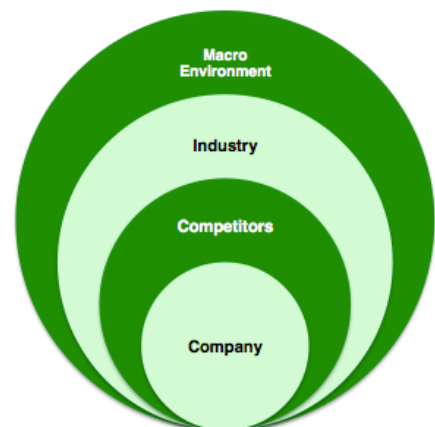
| Cliente/Proyectos | iPhone/iPod Touch | iPad | Android | Mobile Web | Windows Phone | Facebook App | Web/BackOffice |
|-------------------|-------------------|------|----------|------------|---------------|--------------|----------------|
| Fuel/Continente | x | x | | | | | |
| Jumbo | x | | x | | | x | x |
| ESS | | | | x | | | |
| BEST | x | | x | | | | |
| Grupo Tempus | | x | | | | x | x |
| Banco BPI | (design) | | (design) | | | | |
| Martini Portugal | | | x | | | x | |
| Roche | | x | | | | x | |
| Banco Sabadell | | | | | | | x |
| Sagmeister/EDP | x | x | | | | x | x |
| IADE | | | | | | x | |
| Optimus Alive | x | | x | x | | x | x |
| Sovena | x | x | x | | | x | x |
| Canal 180 | x | x | (2011) | | | x | x |
| Hotelaria | | x | | | | x | x |
| Starfoods | x | | x | | | | x |
| Leya MediaBooks | x | x | x | | | x | x |
| Mitsubishi | x | x | | | | | x |
| Tap Soccer | x | | | | | x | x |
| Spin My Party | x | x | | | | x | x |
| Vamos Sair | x | | x | | x | x | |
| Done Deal | x | | | | | | |

Literature Review

Bearing in mind what was discussed in the Case Study section, this present section intends to provide the reader with theoretical data that will provide a better understanding of the managerial and business matters discussed in the case study. The concepts and frameworks used in the Literature Review will serve as ground for the analysis developed in the Teaching Note section, in order to draw a better understanding of the Case Study.

Furthermore, due to the existence of a specific language for this technology, this chapter will also serve as an explanation of those concepts.

The following threads will be addressed in this section: Market Environment, Competition, Competitive Advantage, Market Terminology, Pricing Models, Marketing Tools, Research and Outsourcing Capabilities.



This segment will provide an overview regarding the main macroeconomic issues of the application development business, as well as the core competencies a company, relative to its market.

1. Strategic Environment

The market environment for the industry of app development can be analyzed with the use of specific frameworks. This study will allow the reader to understand the relationship between the portrayed company and other companies that can be considered to be direct competitors, as well as the overall market environment.

The analysis of the macro economic environment has already been subject to the studies of Francis Aguilar (1967), as he viewed the market to be organized in four different categories, which have a broader conceptualization in the ETPS framework: Economic, Technical, Political and Social. The notion evolved into what has become generally known as PEST and also PESTEL, as categories such as the environment and legal began to be addressed by Johnson, Scholes and Whittington (2008). Taking into account the different societal aspects described in this framework, the author sustains that these have a degree of impact to the company and that they can be measured not simply at a local, but rather at a global scale, regarding the threats/opportunities the company may face and if the market will be receptive to it.

Nevertheless, for the company to benefit from a more thorough understanding of the macro-environment, circling the business' internal strengths and weaknesses in comparison to those of the competition, a SWOT analysis may lead the manager to a better understanding of the potential risks the business may face in such broad social aspects as environmental, political and economic (Mayer and Vambery 2008).

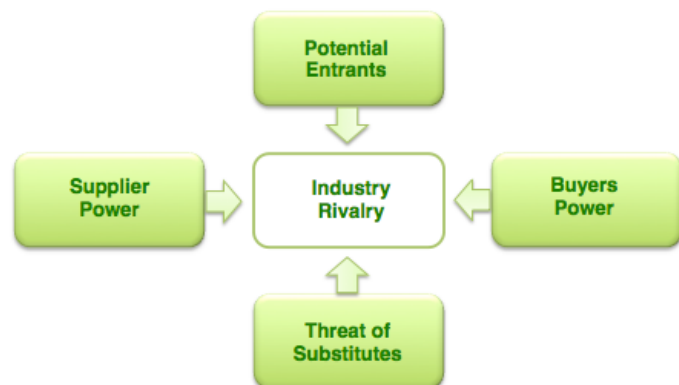


Fig. 1 - Porter's 5 Forces

For a further analysis of the macro economic environment of the given business, determining at what extent the power of the different actors – buyers, suppliers, potential entrants, the threat of substitutes and the level of rivalry – in the market can impact the level of profitability in the industry (Porter, 1980) can provide managers with the information of the attractiveness of the industry. This research measure, also known as Porter's Five Forces (Fig.1), is a framework that is able to evaluate the given industry and represent how all the parts involved are impacted, depending on the level of rivalry. Moreover, as a result, a better understanding of the industry structure is expected, as it is essential for an effective strategic positioning (Porter, 2008).

If the level of rivalry among existing firms is high, then companies in the market are expected to earn a very low return on their investment (Porter, 2008).

Furthermore, given the technological background of the case study and its rapid fading process due to constant releases of software updates, managers are conscious of the fact that products have a beginning and an end; a finite life with stages such as introductory, growth, mature and decline, that require different management approaches and may reveal how the business is kept (Mayer and Vambery, 2008).

2. Competition

The market for application development is one that struggles with intense competition. Lack of copyright legislation and low entry barriers are some of the factors that have contributed for such cause, leading the less experienced developers to place great emphasis on differentiating their products to attain more profit. The high number of applications in the market is just a consequence of the ability to imitate what the other competitors have done. Prahalad (1989) stated: "Imitation may be the sincerest form of flattery, but it will not lead to competitive revitalization". Above all, consumers will perceive companies to be more or less the same in terms of positioning and product.

Although assessing what competitors are doing and what resources they have may be key for the company to act strategically, it is not the answer for understanding

what makes it successful. Rather acknowledging which strategy the company is following (Prahalad, 1989).

Hence, one is able to understand why developers' main focus is associated with innovation, as it is likely to lead to firm heterogeneity – which will lead to the growth of the innovators as customers come to value better performing products” (Hopkins, 2008).

Nevertheless this notion has its limitations, as it is only true if the company is looking for ways to be different in the market, and still be profitable. The main concern relates to the fact that firms are becoming more alike over time, since they are imitating each other on successful strategies (Hopkins, 2008). Moreover, the concept that saturated markets should be aware of is associated with is competitive innovation (Prahalad, 1989), “(...) competitive innovation is like judo: the goal is to use a larger competitor's weight against it. And that happens not by matching the leader's capabilities but by developing contrasting capabilities of one's own”.

Related to the different stages of the life of products, the industry life cycle theory can also answer problems related to that of competition, given that “the life cycle of a given product may be different for different companies in the same industry at the same point in time, and it certainly affects different companies in the same industry differently” (Levitt, 1965).

3. Company

Analyzing the market from the point of view of the company is key to achieve the best performance possible. It is also critical to meet its competitors as a way to determine how the use of certain elements of management can lead to successful strategies.

3.1. Competitive Advantage

One theoretical approach that can be considered is the Resource-Based view (RBV) that shows how firms use resources in a strategic way in order to attain benefits (Zacharia et al., 2009). RBV proposes that when a company enjoys the fact of having a competitive advantage, it is able to create value that is not only different from its competitors, but also is unable to be easily duplicated by them (Barney, 1991). Furthermore, a sustainable competitive advantage can be defined as being

maintained overtime and the reason for the firm's sustained superior performance (Olavarrieta and Ellinger, 1997).

Nevertheless, for companies in the technological industry, resources are mostly related to knowledge, forcing the company to not to clench in their four walls. A privileged relationship with other companies in the given sector and even with others that may be complementary will help to feed this endless source that can lead the company to sustain its competitive source (Dyer and Singh, 1998). The resource-based view theory suggests that advantages from the relationship with other companies can foster advantages in four areas: relation-specific assets, knowledge sharing, leveraging/combining resources, and effective governance (Dyer and Singh, 1998).

Customers can also be the answer when striving for a competitive advantage. By designing a customer value proposition, the company is offering its potential clients valuable arguments against the other options available (Parasuraman, 1997).

3.2. Growth Alternatives

Regardless of the size of the company, it is imperative that it keeps on growing. Ansoff (1957) became the best advocate of this need of firm improvement through growth: "To improve its position, it must grow and change at least 'twice as fast'".

Furthermore, the author posits four basic alternatives for growth to a company: market penetration, market development, product development and diversification (Ansoff, 1957).

- **Market Penetration Strategy**

This strategy underlies an intended effort in increasing the company's sales level without incurring in any shifts or changes of the targeted consumers and market. It mainly seeks to increase the volume of sales to current and new customers (Ansoff, 1957).

- **Market Development Strategy**

Having this strategy in mind, the company tries to fit the product's features to a new or different mission (Ansoff, 1957). Furthermore, there are two ways to reach new markets: expanding geographically and expanding in terms of targeted consumers (Proctor, 2000).

- **Product Development Strategy**

The company can adapt the product's features or create a new one to fit to the mission (Ansoff, 1957). This strategy includes products or categories of products that are new, product line extensions or product improvement (Proctor, 2000).

- **Diversification Strategy**

Assuming a diversification strategy, the company can then undertake three different paths: vertical, horizontal and lateral diversification (Ansoff, 1957).

Vertical diversification implies a forward or backward integration. Its benefits are: "operating economies, access to supply or demand, control of the product system, entry in a profitable business, enhanced technological innovation" (Proctor, 2000). Risks may increase as the company may be more exposed, given that the strategy requires certain competences it did not showed before (Proctor, 2000).

Horizontal diversification strategy relates to expanding the existing product line by releasing products that may be or may not be related to the previous existing, as a way to sustain customer satisfaction (Ansoff, 1957). This strategic option has the advantage of not having to change marketing efforts, as the audience is exactly the same and aims towards increasing sales and distribution capacity and manufacturing scale, among others (Proctor, 2000).

A lateral diversification strategy indicates that the company is moving from one industry to a different one (Ansoff, 1957). This strategy presents a large risk to the company, as it requires specific knowledge, distracting it from its main core business. Reasons related to this option are mainly financial (Proctor, 2000).

3.3. Going Global

Finding a source for competitive advantage can also be made easier when adopting an international approach to the market. Despite much argumentation in articles discussing such topic, it is well known that international expansion is beneficial to the company (Contractor, 2007). Of course, in a digital business it is not essential for the company to be based in different country, given the ease of data transmission between peers. What is rather a discussion topic is whether the company should spread its product in a global way. Regarding this matter Ariel Michael (Yarmosh, 2010) suggests: “Although the U.S is by far the largest market for apps, it’s extremely beneficial for developers to release worldwide.”

4. Market Terminology

The market for applications has its own language. Being able to understand the various concepts related to the types of existing apps, compatible devices and its platforms is the aim of this segment. Below are the existing terms that can explain the myriad of options both consumers and developers face in this market.

4.1. Applications

In a general way, applications are a kind of digital software that can be programmed via computer. It is designed to simplify any given task.

Applications can have many formats depending on the developers’ preferences and audience to be targeted (Yarmosh, 2010).

For this dissertation, only operational systems as iOS (Apple) and Android will be analyzed.

Applications can be divided into iOS (Operating System) and Android; the first can be divided into iPhone, iPad and Universal compatible apps – this difference exists due to the higher complexity it demands to program an app for iPads, since they require more detail, that is more pixels. Android applications only have one format, both for smartphones and tablets (Yarmosh, 2010).

Moreover, one can find a difference between the native applications, which are made by the carrier itself – in this case Apple and Google (that is the case of App Store and Android Market); and third-party apps, which can be developed by every one except by the carriers (Yarmosh, 2010).

4.2. Compatible Devices

- **Apple Devices**

Since the introduction of the first version of iPhone until today, the market for smartphones has been hungry for new, more developed and more featured devices. This device was very innovative for it combined many features in one phone (iPod, phone and Internet) plus a tapping screen and one single button (Yarmosh, 2010).

When embracing the digital world of applications, it is hard to keep other compatible devices aside. That is the case of iPod Touch and iPad. In the case of the former, what is interesting about it is the fact that it is some sort of development of the old and famous iPod – its features are no longer resumed to a music player as it can also give access to an Internet connection and therefore the App Store (Yarmosh, 2010). About the latter, what was so interesting about it was that it was positioned between a smartphone and a laptop computer. iPad enforced the need for Productivity apps, as the lack of a keyboard in the tablet made the technological shift very dramatic.

- **Android Devices**

Android smartphones were released one year after the release of the first iPhone. The carrier is part of Google, therefore the phone has an integration of Google's software: Maps, Gmail, Calendar and a full HTML web browser. Android is characterized by being “ an open platform that allowed mobile operators and handset makers to use it for free with few restrictions (Yoffie and Kim, 2010). Mobile makers – HTC, Samsung Electronics, LG Electronics, and Motorola – are compatible with the Android's operating system (Yoffie and Kim, 2010), which has been subject to much criticism. Because of the multitude of brands involved – each requiring specific software – the open-source ecosystem has not been easy to deploy (Sharma, 2011).

For the overall discussion on both Apple and Android devices, the concept of disruptive technologies may play an important role as to clarify the importance of these gadgets in our society and how “improvements in technology have played a major role in creating economic growth” (Oakey, 2007). Furthermore, the author suggests the importance of these elements in our society: “ Although changes have been ‘disruptive’ to those who were personally impacted, in the medium to long run they have usually proven to be both welcome and unavoidable”.

4.3. Marketplace for Apps

- **The App Store**

The App Store is the marketplace where app users and developers can meet in a single platform, having Apple as their mediator (Yarmosh, 2010).

- **The Android Market**

In the Android Market, Google is the company behind its creation and development. The great difference between the Android Market and the App Store is the fact that the former is an open-source for the brands that have agreed with Google to be an Android device.

Android has faced hard criticism related to the numerous brands of smartphones that find themselves to be attached to the Android universe.

5. Pricing Models

Just as companies experience the difficult choice of how much to charge for any given product – as a strategic move in a highly competitive market – the same happens to a developer who wishes to launch an app, as price competition is yet the most immediate form of rivalry.

Given that in the present state of the industry the level of rivalry is quite high, price setting represents a great limitation in terms of profit. Therefore, it's the substitute products that define the ceiling price to the industry products. Competitors in the

market are constantly looking for ways to improve the price-quality trade-off, increasing the level of threat to any given company (Porter, 1979).

The main threat for app developers is customers and the pressure of free applications. Thus, app users have a very strong bargaining power, being able to press the industry to lower prices. In this case consumers are concentrated and buy high volumes; and may perceive apps to be undifferentiated (Porter, 1979).

Apps' prices can also be a way for the developers to define their strategic aim. Depending on the tagged priced, the company is setting its ground on whether to be a premium, a normal or a low kind of web developer regarding its competitors (Yarmosh, 2010).

Overtime, pricing models became increasingly more complex as new devices started being introduced, that is the case of iPad that required different and better software knowledge in what concerns app design. Nevertheless, with this product's tremendous success, the models for revenues became easier and clearer to understand, both for developers and users as there was the need to simplify the rules of the game in a market that was already too crowded.

As a rule of thumb, when choosing the price for an application, developers should take into consideration applications similar in category and features. Price should not be below similar ones nor should it be too high.

In case the developer considers that the app to be released has more and better features, than the ones already existing of the kind, then, it should be a good idea to price it slightly above as a way to draw the attention of users to more features/quality (Yarmosh, 2010).

These are the different pricing models for apps for Apple (considering iPhone, iPad and Universal apps):

- **Free** – This kind of application is more of a promotional nature than anything else. In most cases, the main goal of its release is to market a brand. That is the case of the Facebook app, working alongside the Internet website.
- **Free + Advertising** – By displaying some ads, this free application is able to tap an alternative source for profit. In order to benefit from this option called

iAd, the developer(s) grant(s) Apple the right to advertise just about anything, in spaces like headers or banners. Nevertheless, Apple has a commission percentage upon the sale price of 40%, which is a very high level of cut-offs for many of the existing apps. It may also be a very discouraging model, for ads may be quite annoying when running the application, risking the number of users to decrease tremendously (Yarmosh, 2010).

- **Paid** – This is the standard model for any given app. The user pays a designated price and is able to use it forever, without having to pay anything else in the future (Schneider and Wooldridge, 2011). This is, however a model that generates some controversy for developers. Applications cannot live forever without going through updates, in order for these to be compatible with the most current operating system. So, developers must continue releasing updates of their apps that cost them money at a zero price. In this model, Apple charges a 30% commission level upon the number of downloads made (Yarmosh, 2010).
- **Lite & Pro** – This model has had some changes over the years. When apps first came up, there was the need to allow customers to try out apps before actually paying for them. So, this version worked as a demo. Nevertheless, Lite & Pro apps were in many cases paid apps, which created some confusion, regarding what were the differences between these and the simply paid ones. For that reason, this model never gained much popularity. As a way to sort out the initial confusion, some developers started to label apps that were free and worked as demos as Lite and the paid ones and with more features as Pro (Yarmosh, 2010).
- **In App Purchases** - As a consequence of the confusion generated with the previous model, many owners of apps preferred to adopt this option; and that may be the reason for the increasing abandonment of the Lite & Pro model. Through this model, developers are able to launch an app that in terms of functionality works just like the free app model, however with the possibility of offering upgrades within the app, that can be charged. This is a very interesting model when compared to other options – the developer is able to gain more control of its users, by allowing them to try the product. Chances

are that if they like it they will want to upgrade in order to extend their options (in games, it is usually the case that upgrades give access to more levels) (Schneider and Wooldridge, 2011).

6. Marketing Tools

For application development, investing in marketing can make a tremendous difference. Even more so given the rivalry level in this market. The higher the rivalry, the higher its price competition should be; and the higher marketing budgets and product introductions too (Porter, 1979).

As referred above, the developer should bear in mind that marketing should not be used upon the launch of the app, or just intensely in a given moment; ‘You don’t want to start your marketing with a big bang (or people will run away!)’ (Yarmosh, 2010). On the contrary, it should be used from the very beginning and throughout the existence of the application, growing in intensity like “a marketing crescendo” (Yarmosh, 2010). This effort will make users curious as the developer will be unveiling and communicating certain aspects of its work so far. By the time of the launch, those who are paying attention will definitely be willing to purchase the app. Furthermore, investing in marketing for an app development business is much rather an investment in strategic purpose. It is a voice that can be heard by potential users and a way to make them aware of your existence (Schneider and Wooldridge, 2011).

The overall benefit expected is to involve customers, from the very start, with this product. If the developers are able to do so, they should expect them to be great promoters and supporters of the app. Moreover, potential customers provide yet another benefit that is giving feedback and generating ideas, which can make a tremendous difference when the app is still at a very young stage of its development. “Customers (...) will act as the gate-keepers for whether your app will be sustainable over the long haul” (Yarmosh, 2010).

Although the company can use a good marketing approach with its clients, through such tools as social networks, its products should also be able to speak for themselves in what concerns the company’s strategic positioning. Therefore, Marketing should not be used as make-up regarding the application’s flaws (Yarmosh, 2010).

In order to be able to reach potential customers, developers should take advantage of social networks such as Twitter or Facebook; Blogger can also be a great mechanism if the developer is looking for a way to share ideas in a more thorough way. The key factor developers should be looking for is to allow interaction and real-time information; furthermore, “The strengthening of ties between individuals and the implementation of marketing programs that explore the interactions in social networks are important strategies for increasing the rate of diffusion of technologies” (Kimura et al., 2008).

It's very important for the developers to show a good use of these platforms. These should be used in a professional way, as a way to guarantee customers of the quality of their products. New customers can be attained and already existing ones can be retained, when assuming such approach (Wooldridge and Schneider, 2011). In a broader note, customer service should be regarded as very important to the company for keeping users, if it places them first. This means replying consumers' comments, e-mails, tweets, etc. “If the customer feels nurtured it will most likely want to reward with their loyalty” (Schneider and Wooldridge, 2011).

7. App Creation

In the following lines, the topics discussed are the main mechanisms that app developers have to attend in order to provide the best strategic options for their application development business.

Since apps first came up, users needs have become increasingly sophisticated. With an intense rivalry in the application market, requirements for creating one have also become more severe. Both the overload of existing apps and developers are contributing for this business to be taken more seriously.

For a given start-up in the business to be able to fight back the companies that had found their way in the market, it is crucial to define what strategic approach should it embrace. Given that strategic positioning can only be achieved through the Web itself, the developers main tools can be their own website, social networks, Blogger, App Store, websites specialized in app reviewing, etc. (Schneider and Wooldridge, 2011).

Just as any other product the key answer for an application to be successful is research. A practical approach towards research can better be understood with the development funnel (Fig.2) for how to manage ideas and research (Leimeister et al., 2009).



Fig. 2: *Leveraging Crowdsourcing: Activation-Supporting Components for IT-Based Ideas Competition*

At last, the developers should be able to answer easily what should be the strategic purpose of the app: what justifies its existence? Also, it should be considered whether there is any app in the market similar to the one developed. If so, the developers should try to indicate what it does better than the already existent.

The developed app should be able to redefine the value elements of why people want this application (Yarmosh, 2010).

Despite the need for a thoughtful research method, as a mean for designing a strong concept for a product, it is also imperative for the company to find ways to protect their intellectual knowledge. Core capabilities such as 'unique', 'distinctive', 'difficult to imitate' or even 'superior to competition' are some of the key factors that can lead the company to sustain its competitive advantage (Leonard-Barton, 1992). Although these concepts seem to be of the common knowledge, it is worth clarifying them:

- *Unique* – Either due to the brand image associated, the culture of the company, history and knowledge (Nonaka and Takeuchi, 1995);
- *Distinctive* – Resources to which the company has access, are beyond the reach of others in the market. Transferring or exchanging these resources is impossible, as it is exclusive to the company;
- *Superior to competition* – Players in the market may find difficult the task of facing the product, not being able to decipher competences needed as

the overall concept is very well built from the outside (Lippman and Rumelt, 1982).

8. Outsourcing Capabilities

Since the technological arena has the need for constant feed of new knowledge, and since this same knowledge is not spread throughout the entire community of developers and companies, outsourcing capabilities may enable both networking and knowledge sharing. In this segment, outsourcing as an option, could be either considered on the developers' side or even on the clients' side.

From an economical approach, the outsourcing option was considered to be, in past research, as being a useful tool for cost reduction, innovation fostering, and above all increasing efficiency (Hamel, 1991; Powel et al., 1996). Others have further posited that outsourcing led to capability destruction on companies (Bettis et al., 1992).

Despite the efficiency in problem solving with outsourcing capabilities, given the access to new technology, this success may not contribute for any learning contribution within the company (Attewell, 1992; Fichman and Kemerer, 1997).

What can be furthermore harmful to the company, if the outsourcing relationship does not contribute to a learning experience, is that customers may suffer with it, not being able to adopt to use the new technology. In this way "Outsourcing may impact customer adoption of a new technology by affecting the firm-customer relationship" (Weigelt, 2009).

Teaching Note

1. Case Overview

The release of smartphones revolutionized the way people were able to use the Internet. Smartphones became, in a way, the *new web*. A replacement for laptops and computer sets, due to its convenience in weight and navigation.

This shift is mainly due to applications. This computer software format was able to simplify users' everyday life, by performing specific tasks.

After 4 years in the marketplace for applications to become established, app developers around the world and customers were able to learn and grow, in what comes to the meanders of the business. Especially in what should be the best strategy applied concerning the target audience, pricing models, app category, etc.

This trend attracted many start-ups to create their own business around app development, simply because there weren't many companies in the market 100% focused in the creation of this product (that is the case of Portugal) and also since it required little investment.

An example of such start-ups in the Portuguese market is Bliss Applications, focused on the creation and development of apps for smartphones and tablets for end users. The company was founded in early 2010 with 7 team members, and by the end of 2011, with profit levels being under expectations, the team needed to rethink its overall business strategy. Marketing expenses represented a great burden for the company but that effort was not yet creating enough awareness within the market; therefore there was the need to adopt a more viable cost structure that would enforce its sustainability in the long run.

However their main app releases Done Deal, Going Out, Tap Soccer and Spin My Party received very positive feedback and were being recognized internationally, André Gil was searching for other ways to attain sources for profit. It was in that context that the hypothesis of creating apps for companies came along.

André Gil went to companies to ask them directly whether these would be interested in creating an app. The response was immediate and successful partnerships were established with many companies such as Companhia das Sandes, Mitsubishi, LeYa, EDP, Vodafone, Optimus, Grupo Sovena, BPI, etc.

With the year 2011 coming to an end, André Gil found himself thinking which would be the best direction for Bliss in the upcoming year. First released applications continued to receive very encouraging comments, even though the company had fully stopped releasing new updates for them.

After all, the year that now was ending had been very rewarding with the client account growing every month. Bliss had grown more mature in expertise.

Which would be the best next step for the company was still a decision to be made.

2. Teaching Objectives

The application development business has grown very rapidly over the past few years; consumers are confronted with a wider range of choices for applications and new device launches at a very fast rate. Everywhere, across multiple industries, people are using smartphones and tablets as their personal tool for working or leisure.

But despite the fact that the undeniable success of these devices, is in the hands of powerful brands such as Apple and Android, the app development arena has offered developers the opportunity of creating their own business.

It is precisely due to the role of these devices and their potential in the future, that they have become a very relevant topic for business classes.

Below are some of the expected objectives to be taught through the analysis of the case study:

- Acknowledging the market's need for a language of its own
- The role of these technological devices in society and the breakthrough these allowed in the way content is provided
- How can a business be built around app creation
- Business' strengths, opportunities, threats and limitations
- The role of marketing and consumer service in a digital business
- The ability of developers to determine the app's strategic positioning in the market through price setting
- The usefulness of frameworks to better evaluate and compare the range of options:
 - Porter's 5 Forces, SWOT analysis, PESTEL analysis, Product Life Cycle, etc. to better portray the managerial importance of the app market for the business industry

3. Assignment Questions

In this section a few questions are offered for students who aim to prepare before class for the case study and beware of important topics specific of its nature.

- 1) Analyze the strategic environment of the app development arena. How would you describe it? What are the most important elements regarding this market and what trends should developers beware of?

- 2) Regarding Bliss Applications situation, what difficulties is the company going through and in what way is the general landscape of the market at a national and international level, creating problems for the company?
- 3) Although the company has decided to start creating applications for companies, such verdict is not yet decisive for the future. What recommendations would you give André Gil regarding Bliss' role in the market and the direction of the business?

4. Class Plan

The class plan section aims to provide the instructor with a structure for the class where the case study would be subject to analysis. The set of topics below offer a suggested walkthrough for the class. It is expected that students are able to find what was missing in their answers and learn from the overall class experience.

The case study focus on strategy and innovation topics; therefore it would be more useful for classes where these subjects have already been lectured.

- 1) Consider Bliss Applications role in the market of technology. Analyze the strategic environment for the app development arena at a national and international level and whether the concept of competitive advantage is important for the company and how can it be able to sustain it.
- 2) For someone considering entering the app development business how would you approach the attractiveness of the market and what recommendations would you make?
- 3) Given how quickly smartphones and tablets were able to spread and become integrated in our everyday lives over the course of the last 4 years, what changes should a company like Bliss consider for the next 5 years to come?
- 4) Based on the company's cost structure, examine the different scenarios the company is able to choose from and depict the possible outcomes that may

be expected whether the company decides to create applications on their own or at the service of others.

- 5) Given the cross road Bliss has encountered in this highly competitive market – whether to proceed creating apps for final consumers or for companies – what would you suggest the company to consider regarding its strategic approach and products offered?

5. Analysis

In order to analyze the managerial elements of the case study, it is important to bear in mind the materials provided in the Literature Review section that will serve as basis for the analysis below. Additionally, this section assumes that the terminology associated with the industry concerned is already known, as it was outlined previously in the mentioned section.

- 1) ***Consider Bliss Applications role in the market of technology. Analyze the strategic environment for the app development arena at a national and international level and whether the concept of competitive advantage is important for the company and how can it be able to sustain it.***

The rise of applications opened the gate for many people to explore and maximize the use of their smartphones. Acting as such powerful shortcuts for the Web – which can be an overwhelming source of information – applications were able to simplify tasks that can be done both online and offline, like searching for music. For that purpose, developers brought to the user *Shazam* and *Soundhound* that easily track what music one is listening to, be it on the radio, television or anywhere else.

As people started to realize the potential of applications, not only new ones were appearing at an astonishing rate, but also individuals and companies were recognizing its power, looking forward to build a business around it.

At a national level, the hype around app development arrived later than when compared to the U.S, for instance, as is the case of Bliss. Although players in the market such as App Generation revealed to be first movers in the app arena, having started its business around 2006.

Yet, in Portugal, to be focusing on such business is still a risk: although smartphones have had a good penetration in the market for mobiles, specially among the younger generation, the rate at which paid apps are downloaded is yet very low. For app developers who depend on end users, this business may struggle to find sources for profit; many reasons are able to explain this problem. One being the country's characteristics: the fact that the dimension of the country does not allow a very high level of consumers, the demographics reveal that the population is growing old and these are not typical users of technological devices; due the economic crisis the country is going through and the fact that carriers are to increase costs over the year 2012, people are therefore, less willing to spend money in what lies beyond their usual mobile costs.

The question may linger, if people don't have enough income to purchase paid apps, then how come they purchased a smartphone in the first place? Being able to have a set of different appliances such as smartphones, for consumers in our society, is something that for many helps to express their personality. Just as other brands, Apple and Android reflect a set of characteristics that consumers are eager to express, such as being trendy or even creative. Applications are for many the "cherry on top of the cake" that provide the extra feed for being part of this *exclusive* community of smartphone owners.

Thus, in order for the app business to be sustainable or yet more profitable, developers should take advantage from the fact that downloads can be made available for the international market. Even more so, given that this decision does not bear any extra costs for the developer.

When the company decides to go global, a number of considerations should be considered. Not only will it face the competitors at a national level, but all the app developers fighting for a share of the market in the world too. Moreover, the company should be able to understand the political and cultural differences of different

countries. Even though it won't be present, physically speaking, it should be able to express and integrate such concern.

Bearing in mind this analysis, the following frameworks may help the consolidation of ideas, regarding the first part of the question.

PESTEL Analysis

There is no particular method in order to perform a PESTEL analysis; this framework should rather be used as a reminder to the company of important market environment elements.

The PESTEL analysis consists of a checklist regarding such different aspects as Political, Economic, Socio-cultural, Technological, Environmental and Legal, giving a very thorough analysis of the market as a whole.

Furthermore, items listed will not be considered being negative or positive, as such perspective may be very simplistic regarding the reality of the business.

The PESTEL framework may be very useful as a guide not only for past events, through which managers had to experience, but most importantly as a forecast for the future. Such prediction is very important for a company, as it may help defining answers for any fallbacks required.

In addition, it may not turn out to be helpful long lists of items, as these may disguise the most important points to watch for.

| | |
|-----------------------------|---|
| <p>Political</p> | <ul style="list-style-type: none"> • Political parties' power to block or limit relationship with companies • Local or international governments relationships with companies • Intellectual property protection • Government's abiding attitude regarding competition issues |
| <p>Economic</p> | <ul style="list-style-type: none"> • GDP (local and international) • Inflation • Interest rates • Crisis environment at a global level • Consumers' expenditures on technology • Disposable income • Unemployment |
| <p>Social</p> | <ul style="list-style-type: none"> • Consumers' values and habits regarding Internet • Internet availability and accessibility in given countries • Distribution of income across countries • Demographic changes |
| <p>Technological</p> | <ul style="list-style-type: none"> • New patent and device releases • Breakthrough in technological findings • The role of R&D across companies • Other industries' growth, complementary to the market |
| <p>Environmental</p> | <ul style="list-style-type: none"> • Impact of devices on the environment • The rapid development of technology may lead to device stock-up • How energy is consumed and consideration for new types of energy |
| <p>Legal</p> | <ul style="list-style-type: none"> • Internet regulation more severe • Outsourcing capabilities and knowledge-shared may imply new regulation needed • Competition and government measures |

SWOT Analysis

Another way to analyze a company’s strategic options is through the SWOT analysis. The aim of this framework is to reveal the strengths, weaknesses, opportunities and threats of the company in relation to the market and, moreover, find out if the company has a competitive advantage over its competitors.

| | |
|---|---|
| <p style="text-align: center;"><u>Strengths</u></p> <ul style="list-style-type: none"> • Knowledge-sharing/Outsourcing capabilities • Apps’ themes is free of choice • Small investment required at initial stage • Digital content – no costs of transportation required | <p style="text-align: center;"><u>Weaknesses</u></p> <ul style="list-style-type: none"> • Marketing expenses need to be high for the products’ to be known • Intense price wars force the company to price apps at a minimum • Apple and Android cutting a relevant share of profit (30%) |
| <p style="text-align: center;"><u>Opportunities</u></p> <ul style="list-style-type: none"> • Very young market in Portugal • App Store continues to release new features for developers (e.g. iAd) • Recently developed countries get more interested in technology (e.g. India) • Technology is on constant recreation process • Companies across industries increasingly more interested in the power of apps | <p style="text-align: center;"><u>Threats</u></p> <ul style="list-style-type: none"> • Competition level is very high worldwide • Other players in the Portuguese market offering the same kind of service as Bliss • The rate of apps released a day continues to escalate • Apps life cycle tends to be very short |

Porter's 5 Forces

One of the suggested analyses for the app development market is the use of Porter's 5 Forces framework:

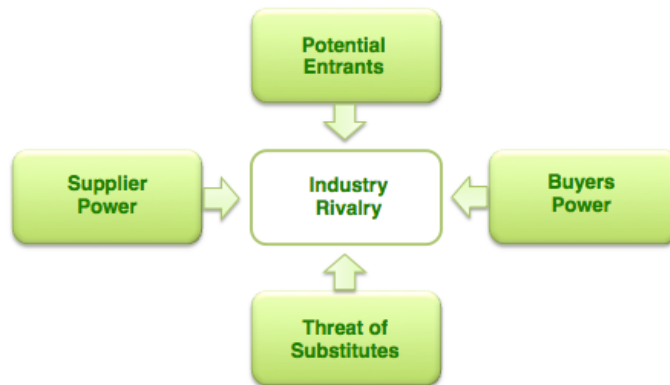


Fig. 1 – *Porter's 5 Forces*

- **Potential Entrants/Barriers to Entry** – Very low

Given the nature of the product concerned, there are little barriers to new entrants in the market. The investment required in order to be able to start creating apps for the market, is relatively small. The very high number of existing competitors in the marketplace translates how easy it can be to enter the business.

- **Buyers' Power** – Very High

Users bear a strong bargaining power in the app market given the great number of applications available both in the App Store and Android Market. One is able to purchase from a given developer and its competitors almost simultaneously.

Nevertheless, the overall level of prices across different types of apps appears to be somewhat fixed. This happens especially in what concerns smartphone apps, which are regarded as being used with lower involvement. Hence, consumers are able to exert their power mainly when choosing between paid and non-paid apps, as the latter ones create great pressure upon developers who look forward into creating a business in app development.

- **Threat of Substitutes** – Very Low

There are currently no substitutes that provide the same result and experience that apps do. So far, Apple, Android and even Microsoft with the latest Windows phone are the main players in the market providing such products. To date there doesn't seem to be any threatening product that is able to replace the power of apps.

- **Supplier Power** – Very High

Given the nature of the concerned business, the defined suppliers for the app development business may not be as straightforward as regarding traditional industries, where suppliers play an important role as proxies for specific resources or services. In this case, suppliers have to be thought as an important element to make possible the purchasing process, that is, in this case, Apple.

Developers need to pay the company a percentage commission upon the profit level attained, in order for the app to be available in the App Store. In this situation Apple has a very high bargaining power (bear in mind that Google operates under an open source regime).

Developers have a very low bargaining power due to the great number of existing developers in the market.

- **Industry Rivalry** – Very High

After four years for the market of app development to become established and to learn from its mistakes, many developers have entered and left the market allowing the way for the most innovative yet simplistic, to win their way up in market leadership. Leaders continue to deliver great products and their most loyal users will continue to download them; nevertheless, users are open to try new apps brought by developers unknown to the market and depending on the users' feedback provided in the App Store/Android Market, they are also able to make their way up to attain relative recognition. Even though such accomplishment is very difficult to attain simply through users' free will of trial, as marketing plays a very important role in user awareness, such possibility is relevant enough to create mild threat to established developers.

Nevertheless, the market has become so attractive as it has grown very rapidly over the years, that many aspiring developers continue to try their luck in app creation. The bargaining power of substitutes is very high due to the high number of apps, considering both smartphone and tablet devices for Apple and Android.

Overall, there are some factors that prove this market to be a very competitive one and others that still inspire new entrants to give it a shot.

It is a very competitive market, since in one hand the vast number of existing apps provides consumers with plenty of choice for purchase and so the switching level is very high. Moreover, the lack of content protection allows for rival companies/developers to easily copycat among the community.

On the other hand, nearly anyone can learn how to program in the required programming language, providing anyone with the opportunity to create a successful app development company; also, the market continues to reinvent itself as technology develops and the industry improves its flaws; the developers are able to learn from others through new released apps, and in this way competitors can be viewed as sources for knowledge; and apps' themes can be explored in a free way, giving room for new products to be released.

What is so interesting about this industry is that it is growing very rapidly, creating room for both experienced and new players in the market.

Nevertheless, it is expected that as the business matures, weaker players will probably feel forced to abandon the market.

Competitive Advantage capabilities

Regarding the second part of the question, about the existence of a competitive advantage in relation to both Bliss Applications and the application development market, such capability should definitively be defined strategically.

Despite the fact that the app developers do not have a strong relationship with their end consumers, as in many times these may not be aware of who is behind the

application that was developed, this bond should absolutely be established from day one in order to guarantee a greater involvement of the user.

Creating a competitive advantage is important due to the great number of players in the market at a national and international level. If the company manages to create such capability it will allow consumers to understand the difference between Bliss' apps and other players'; in other words, the company will be able to differentiate itself from its competitors.

Once again the definition of competitive advantage is very important, especially when considering a company that produces digital content, which every player in the market has the knowledge to create as well (or even to copy).

In order to create a competitive advantage, Bliss can act in two different ways that adopted altogether can provide even a stronger source of differentiation.

One way can be through the type of content that is provided for consumers. Adopting a determined style and image, may lead consumers to recognize that there is a coherence of language on the type of products created. This way, new updates or releases are able to get consumers going on the stride of products available.

Another way, and it should be something paired up with the previous suggestion, is that app developers (the company) should maintain a close relationship with their users. The key element is to keep them connected to what the developers are up to and what changes/updates/releases are soon to happen. This connection is a powerful source not only for current users, but also for potential ones as they come to be more familiarized with the company's whole application development concept.

For this powerful relationship to take place, the use of social platforms should be developed. Facebook and Twitter being the most popular among smartphone users should be used in a parallel way in order to attract all potential users and reinforce the relationship with current ones.

Taking the most out of these social platforms is a must; in order to make good use of them it is important that developers provide feed almost at a constant rate so that the level of involvement is kept constant.

Moreover, providing English written information for all users around the world, can make all the difference in what concerns turning potential users into actual

consumers of the app - this means having not only a Facebook and Twitter page written in English, but also a website available in this language.

2) For someone considering entering the app development business how would you approach the attractiveness of the market and what recommendations would you make?

Providing a thorough answer of the problem involves a good understanding of both the threats and opportunities of the market for application development, realizing that not mastering the software language in order to create an app on one's own is not necessarily a restriction. Thus, for this answer to give a general overview of the attractiveness of the market, an analysis of the pros and cons, as well as a Product Life Cycle evaluation, may be a basic way to start tackling the problem.

The aspects discussed below come as an overall understanding of the problems that developers must beware of when entering the business of applications. The aim of this analysis is to sort out which should be the best practices to capitalize on and how a start-up company can maximize its profits in such a crowded business, if it considers a differentiation approach to its products.

The given pros and cons analysis could be considered.

Pros:

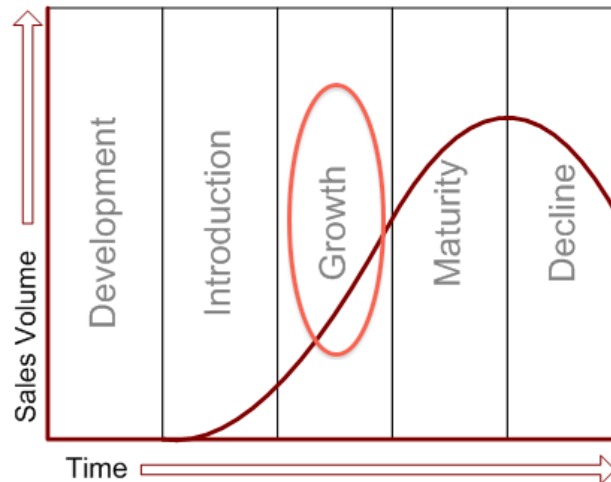
- 1) It requires little hardware, just about a laptop
- 2) It is possible to work from anyplace
- 3) There are barely any start-up costs
- 4) Once the app is launched, it can be determined at what scale the product can be available – national or global, bearing in mind that the more expanded the app is, better are the chances for attaining more profits.

Cons:

- 1) The market has already many small and big companies in the business, for which the competition level was intensely high
- 2) There are apps being released everyday at an astonishing rate
- 3) The price for which one can mark an app are somewhat fixed, as it largely depends on the price of an app that is similar in the same category; nevertheless, free applications can still be profitable, by using payable upgrading mechanisms
- 4) Apps' life cycle can be quite short, given aspects discussed in previous no. 1 and 2, and systematic upgrading of the application may turn out to be very costly
- 5) For an individual willing to create an application with very little resources, mechanisms like research and promotion are crucial for this software to be successful. Understanding the crowd to which the product is supposed to be targeted to, with the help of some reliable data of previous similar apps may help avoid some mistakes. Marketing is also crucial throughout the existence of the app; it can definitely help users to find it, in specific forums or even magazines
- 6) For the developer and even for the rest of the team responsible for the creation of an app, it is important to be aware of the fact that the carriers charge a commission percentage upon priced applications (taking only into consideration carriers like Apple and Android and that both of them perform the same commission levels) which can turn out to be quite a big slice of the overall profits generated.

Product Life Cycle

In the SWOT analysis section, product life cycle of applications was defined as being short. What the Product Life Cycle concept tries to answer is that different stages of the product's life require different managerial approaches. The way marketing, finance, production levels, human resources, etc. are managed all depend at what point of the product's life it is in.



Applications, as an overall product, can be considered to be at the growth stage, given that its 4 years market existence have allowed for:

- Its sales volume to increase dramatically
- Levels of profitability to be very high for the most powerful players in the market
- An increase of the public awareness as more and more people are purchasing smartphones
- Competition to be considered as intense, since there are always new players looking for a place in the market
- The level of competition to lead companies to decrease their prices

During this stage, the aim of the company is to increase sales levels and gain consumer preference. Since the product is digital, many aspects regarding the marketing mix may suffer some changes, which can be easier to adopt when comparing to that of tangible products.

- Product – New product features, improved quality and usability
- Price – New competitors joining the market and other ones becoming more powerful, lead the company into lowering its prices in many cases. Already existing ones that are successful may suffer price increases

- Distribution – Given its digital format and existence of an online store for its respective purchase, no extra efforts can be made in order to reinforce distribution
- Promotion – Increased advertising in social platforms and specialized sites for applications, combined with price promotions in special days.

Nevertheless, when considering applications individually, it is fair to say that their life cycle is short due to two factors. One being the market filled with a great range of options, where the consumer is able to choose between free and paid apps; and two being the fact that for many applications its content usability tends to be used up in a matter of weeks (even days).

In terms of recommendations, important factors such as differentiation capabilities as well as the competitive advantage concept should be of the general knowledge of application developers as key elements for making their way up the growth stage. By accomplishing a strong product positioning, the company would be able to set itself apart from price wars and new entrants in the market.

3) *Given how quickly smartphones and tablets were able to spread and become integrated in our everyday lives over the course of the last 4 years, what changes should a company like Bliss consider for the next 5 years to come?*

In the next 5 years, smartphones will become an even more generalized reality among mobile users. As technology progresses in the next few years, the kind of technology that is exclusive nowadays will be available across different brands and retailed at cheaper – more affordable – prices. The same logic is expected in what concerns tablets.

In that sense, applications will be more accessible to everyone – especially Android ones, given its open source feasibility.

Application development is expected to evolve in terms of:

- **Sociability** – Applications will allow greater convergences of what/how people are using their apps. People will value the sharing of knowledge, opinions, ideas and even emotions.

A good case of this trend is Instagram, a social platform for photo sharing.

In that train of thought, many online stores are providing users with the possibility of a closer link with social platforms. Allowing them to share products they like and even provide some feedback about them.

When users share a product they have just purchased or intend to buy, this leads the user's social circle to be aware of new brands/products/trends. It is a very powerful marketing tool, acting in a similar way as the word-of-mouth technique.

To this date independent platforms specialize in linking users' consumerism behavior to social platforms, by allowing them to create lists of items they have purchased or intend to (like the Portuguese sharing platform Bling) or even to create lists of items that are of their liking (like Pinterest, Fashiolista, Polyvore, etc.).

- **Online Payments** – If the choice was given for people to pick between carrying money and not to – both physical and electronic – they would choose not to in many cases. This happens especially concerning small purchases, like paying for transportation or lunch. If there would be apps that could be charged with money online, users would gladly take advantage from such software.
- **Location-Based Services** – Being able to search for places on the go, is one of the top features smartphones are recognized being worth for. With new events happening all the time, users would benefit from apps that would warn them about events of their interest. For example, last minute sales in a nearby street, or a party in a nearby disco.

- 4) Based on the company's cost structure, examine the different scenarios the company is able to choose from and depict the possible outcomes that may be expected whether the company decides to create applications on their own or at the service of others.**

In order to depict the different scenarios Bliss is able to choose from and understand their advantages and disadvantages, a profit over cost analysis may be able to reveal which can be the most profitable option, in a monthly basis. The overall initial investment will not be considered, as it is a sunk cost for the company.

Option 1:

Bliss Applications focus on the creation of applications of its own.

- **Expected Costs**

Although there is no information available regarding the average cost/day for the general manager and the designer, the same level of cost will be assumed related to that of the developers = €45 (this value can be found in the case study p.23).

Moreover, regarding the estimated costs for the amount spent in Facebook Ads, the rationale of its calculation was based on the CPC approach – cost per click (case study p. 17) – and the assumption that it is expected that the company is willing to spend €500 in a monthly basis. The CPC amount can vary depending on the impact of the ad among users, and it is up to the developer willing to place an ad on Facebook, to choose how much each click will cost by using a bidding system. Facebook recommends users a bidding CPC of €0.2 in a general situation, explaining that he/she may pay up to that amount, but that it is likely for him/her to pay less. For more expert users of Facebook ads, it is possible to choose precisely the intended bidding cost, having a minimum amount of €0.01; in this situation, Facebook offers a suggested range for a cost that is close to an optimal level.

- **Personnel:** 7 persons, €45/day, 22 days a month = €6,930
- **Marketing Expenses**
 - **Facebook Ads:** €500
 - **Journalist Review:** €800

Total costs: €8,230

- **Expected Profits**

Taking into account that the Break-even level of 150,000 (case-study p. 24) was reached within 1 year and a couple of months (approximately), the number of apps downloads/month can be calculated:

$$150,000/16 = 9,375 \text{ downloads/month}$$

Taking into consideration, Bliss' four apps' prices for Done Deal, Going Out, Tap Soccer and Spin My Party (bearing in mind both the smartphone and tablet application), it is possible to estimate an average of prices:

$$\text{Average app prices} = (0 + 0.79 + 0.79 + ((1.59 + 2.99) / 2)) / 4 = €0.9675$$

- **Profit level deducted of Apple's share:**

$$9,375 \times 0.9675 \times 0.7 = \mathbf{€6,349.22}$$

Overall expected profits/month: $6,349.22 - 8,230 = \mathbf{€ -1,880.78}$

Option 2:

Bliss Applications focus on designing apps exclusively for other partners.

- **Expected Costs**

- **Personnel:** 7 persons, €45/day, 22 days a month = €6,930

- **Expected Profits**

The profit level depends largely on how many deals the company is making in a month. Assuming that 3 companies close a deal with Bliss per month, about 2 months will be required for the app to be finished.

As the budget agreed between Bliss and the company per app depends on the number of working hours necessary to create it, the price/app \approx personnel costs.

If the calculations were to be precise the number would be equal to personnel costs (€6,930), nevertheless this budget number is subject to many negotiations with clients. Let's assume the price/app rounds to €5,000 per company.

- **Since every month around 3 companies close deal with Bliss:**

$$(5,000 + 5,000 + 5,000) / 2 = €7,500$$

Still, Bliss continues to make a profit over existing released apps. Let's say there has been a decrease of about 20% in the number of downloads of existing apps, due to the lack of updates or new releases.

- **Existing apps (20% decrease):**

$$9,375 \times 0.8 \times 0.9675 \times 0.7 = €5,079.38$$

| | |
|-----------------------|-------------------------|
| Total Profits: | <hr/> €12,579.38 |
|-----------------------|-------------------------|

| | |
|--|--------------------------------------|
| Overall expected profits/month: | 12,579.38 – 6,930 = €5,649.38 |
|--|--------------------------------------|

Option 3:

Bliss Applications is able to reconcile both the creation of apps of its own and creating apps for others.

- **Expected Costs**

Given that the company is now trying to reconcile both businesses, in order to respond to the requirements of the two different types of products a work overload

would take place; there would be a great need to expand the size of the team. In order for the company to be able to create apps, 2 additional members should be considered (1 developer for iOS and 1 for Android).

Moreover, in this option the company would be updating old apps and releasing extra features, as well.

| | | |
|-----------------------------|--|--------------|
| ○ Personnel: | 7 persons, €45/day, 22 days a month = €6,930 | |
| ○ Marketing Expenses | | |
| ▪ Facebook Ads: | | €500 |
| ▪ Journalist Review: | | €800 |
| Total costs: | | <hr/> €8,230 |

• **Expected Profits**

| | | |
|---|--|------------------|
| ○ Companies (3): | €7,500 | |
| ○ Existing and new apps (25% increase in downloads): | | |
| | $9,375 \times 1.25 \times 0.9675 \times 0.7 =$ | €7,936.52 |
| Total Profits: | | <hr/> €15,436.52 |

Overall expected profits/month: $15,436.52 - 8,230 =$ €7,206.52

Given the overall result for the three options presented, the second and third turn out to be the most advisable choices for Bliss to pick from.

The reason why the first option is far from being worthwhile is because marketing costs reveal to be somewhat fixed and personnel costs would have to be readjusted in order to lower the overall cost structure. Disregarding the importance of marketing as a source for building awareness within users, it destroys the potential value applications could have had.

Moreover, it is important to note that this present analysis is not considering any equipment costs (namely computer maintenance), which is anyway a real need for any company competing in the digital world. Hence, general profit levels, per month, are expected to be lower under a more accurate analysis.

Both the second and third options would enable the company to achieve a relevant presence in the app development market, as profit levels would be able to sustain any future investments required, pay for technological maintenance, and even increase the size of the team in order to respond to further requests of the market.

However, it is the third option the one that would provide a long-term growth for the company. Having to manage two different activities leads the company to increase the existing team size and this would bring a greater expertise – namely an increase in programming capacities (workers specialized in other programming languages, i.e. Windows gadgets and others new to the market) – making the company a more versatile one.

Moreover, Bliss would be able to face both its national and international competitors, as different activities would be managed separately. More team members enable the company to continue pursuing its growing mission: new markets within the technological devices arena could be considered for a potential entrance, leading the way for a differentiated strategy.

5) Given the cross road Bliss has encountered in this highly competitive market – whether to proceed creating apps for final consumers or for companies – what would you suggest the company to consider regarding its strategic approach and products offered?

After the analysis for the previous question, it may become clearer which are the restrictions for the business to be able to develop itself.

Regarding the company's current line of business, there are two restrictions that inhibit it to grow:

- Current workers are not able to manage two different activities
- Developing apps for companies does not support international visibility
- The current activity has removed the direct link with end users, leading the once stronger awareness with end users to fade with time
- At a national level the app development business as an outsourced capability for companies may be regarded as a less relevant product. This is due to the crisis that has taken place in the country and the fact that companies are less

willing to spend their budgets on marketing mechanisms considered as 'alternative'.

Still, going back to where the company started would not be a solution to consider in order to regain consumers' recognition both nationally and internationally, and even to stimulate sources of revenue. To be able to respond to such needs, reconciling the two activities would provide more versatility to the market's needs.

The reason why international visibility is so important for a company like Bliss is mainly because the percentage of the Portuguese population which are users of gadgets is still very small. Therefore, working solely at a national level would not provide the company with a competitive sales volume. Moreover, apps created for companies were not producing a 'travelling' factor – that is, downloads generated from multiple countries.

At a national level Bliss continued to receive very good recognition. However, if the company desires to face the competitors for the Portuguese market, it should be able to improve what it has done so far and still be able to respond to what the different players in the market are doing. Given that there are already companies creating apps both for end consumers and companies, such fact should represent a great threat for Bliss.

The company must define its strategy, not one year ahead, but in the long run since this change in market positioning, in terms of types of products offered, may harm the company's image and even the business itself. This means defining strategically what kind of products are to be developed by the company, continuing to absorb what new trends are happening in the app development community, how should it reinforce its international presence (by creating affiliates, for instance), analyzing new markets complementary to the one of app development to enter in, etc.

To make the decision of reactivating the business of app creation for end users requires a deep analysis of the company's capabilities. In case such a decision is made team members should act in a way that every arrangement should come together, in order to remove any chance for fallbacks. For instance, preparing new members in a way that they become aware of the market's needs and involved with Bliss' own working culture.

From what the case study describes, Bliss has had a good recognition from both app-experts and consumers, due to the good number of prizes it conquered and due

to the very positive level of comments received in the respective online stores. Such acknowledgment should be embraced and used for attaining users' appreciation of the company's quality of work.

Having turned its business direction towards the creation of apps for clients, since the beginning of 2011, may have been a wise decision since it was safe enough to create a sustainable future. This decision was able to provide the company with stability, which was something it didn't have after 1 year of existence. Creating sustainability for a company within a very young market in the country, with very few participants in it, was achieved through the establishment of a customer portfolio, which required good work and dedication.

The definition of the company's strategy should be coordinated with its presence in the Web, since this channel is key for information delivery and sales. It should also be the source for resilient positioning against competitors in the market.

Again, making use of the Internet would allow the company an easier approach to the global market of applications. This implies a website with valuable content regarding developed apps, a Facebook and Twitter pages. These platforms should be used as important vehicles of information regarding updates and releases. Such task the company already does in a great way, especially with the Facebook page. The company even uses it to give further information about how the developers are spending the day in special occasions.

To help potential users to understand Bliss' contribute to the world, a Vlog (Video blog) may represent a powerful tool for knowledge-sharing, especially for smartphone users who need information on the go that is presented in an interesting/interactive way. Video blogs have the great advantage of being able to show in a more creative way Bliss' suggestions regarding their own apps and even others in the market. The company has already created some videos with such characteristics for the Spin My Party application.

Moreover, the company should make more use, for future applications, of promotional tools as a way for users to try apps before buying them. This could be done in the traditional way, by allowing certain days of free download, or the app could be available in a demo version through its website, with related advertising in both their Facebook and Twitter pages.

Overall, the key idea would be to emphasize two important elements: involvement with the user and differentiation from the competitors. It is the latter one to which Bliss should give more focus.

The best path for the future of the company is to give it enough time, in order to be able to solidify its customer portfolio and sustainability issues. This will allow the team members to grow in expertise on software development, and the company to create awareness of its core business in the market. Only then should it consider expanding the team and getting the new members to be well established regarding the business' meanders; so that, finally, it should reenter the app making business for end consumers.

6. What Happened

In December 2011 André Gil and his team had already made up their minds about the direction of the business and where they wanted to be in the near future.

One thing was certain; the decision that had been taken at the end of the previous year has been a very wise one, as it allowed the company to grow and mature in expertise, but mostly to become more sustainable and profitable.

Nevertheless, the reason why the company was founded in the beginning was because both André and the initial team aspired to create apps that had their own stamp and whose final result depended on their criteria. However, the great involvement in the creation of apps for companies also allowed, to a certain extent, for developers to create products coming out of their imagination.

Still, André Gil was now reconsidering getting back to developing their own applications, as Spin My Party continued to receive, to the very date, a great number of comments, especially from American users. Those had had such a great experience with the app and were now rather disappointed that there were no updates being released.

Besides, the company had earned itself the time and place to get back to what it aimed for, now that they created stability for the company and were widely known in the market.

By December 2011, André Gil and his team had agreed that it was time to get back to creating what they were most fond of. However, Bliss was not to stop creating apps for companies. On the contrary, that activity would be responsible for sustaining the company in case users wouldn't respond well to upcoming apps.

In order to reconcile both activities, it would not be possible to demand developers to perform both tasks. Risking the overall quality of service and product developed to the client or company would be a gamble not worth taking. Therefore, the team would have to suffer some changes; by the end of the year 2011, André Gil was searching for 2 new members for the company and considering tasks' reallocation.

For the year 2012, it was not a certainty whether a new Bliss app was to be released. Nevertheless, André was looking forward to it with new ideas for apps growing everyday.

5

Conclusion

This section provides the main conclusions regarding Bliss Applications' analysis. Further considerations will be given regarding the app development market as well as the market for gadgets, at a national and international level.

Since 2007, the market for applications has been a very attractive one. The low need for investment to start a business, the fact that programming was a language that could be self-taught, the idea that apps could be built around a very simple yet addicting concept, all contributed for drawing the attention to how appealing this market was.

Over 4 years later, the market for app development was crowded. With many powerful companies rising in this business like Halfbrick Studios and Rovio, it is for sure that small developers may have felt obliged to leave the market.

But what negative factors could influence one's decision of entering the market?

The main reason for developers not to be able to survive in this industry is that the number of purchases may not be enough to sustain the investment costs; that is, whether the developer is making a living out of this activity. Another reason is that, if a given developer/company is struggling for awareness for the given app and recurring to marketing tools such as Facebook ads, a journalist review, etc. such

costs may turn out to be a great burden for a company that has a low sales volume. Additionally, the 30% Apple or Android commission share in the profit levels generated represents a tremendous cut for many developers that are still far from being recognizable.

Bliss' 2 years presence in the market granted a very good reaction of users regarding the products created; nevertheless the company was struggling with difficulties – namely in defining what product to be focusing on in the first place. Clearly, the negative elements to the app development arena, described above, played a great impact on the company, forcing it to stop releasing apps for end users.

This retaliation allowed for two advantages to take place: Bliss was able to contact directly with companies with no expertise in software programming, giving way for partnerships and word-of-mouth within companies looking for such services; and two, the company was able to remove any marketing costs it bared before, with personnel costs being covered entirely.

Overall, the company became more independent from the number of downloads as a source for profit.

After two years of existence in the market, the company was now preparing itself to get back to creating apps for users. The year that passed allowed for the company to grow, in expertise and financially, giving it the trust it needed to reenter such activity. Should it be prepared for attaining better results, is still not guaranteed.

The company should continue looking for ways to create awareness among users of smartphones. It may be discussable whether the company should keep its name under the shadow or become known to the general public. Nevertheless, if consumers are more involved with the developers regarding their work, they will be more curious to give their apps a try. If their response is positive, other advantages may take place: a powerful word-of-mouth among app consumers, satisfied users will be loyal to new releases of the company and they can also become great advocates of the company's portfolio of apps.

Due to the growing tendency of applications as a business, developers should focus on defining their position in the market, both at a national and international level. If

the company is able to transmit to users what their competitive advantage is about, new entrants in the market may represent less of a threat. Again, such advantage can be translated into what was described above: working very close to users. This provides developers with two interesting advantages: in one way they are able to foresee users' preferences in applications, and in another way they are able to create a stronger involvement with users if new information, related to how well the app is doing in the market, is released in a constant basis.

Overall, the market for gadgets and applications, in general, is still a very recent one especially concerning the Portuguese market. It is expected that over the next few years, with the prices for technology going down due to economies of scale, the use of such gadgets become more generalized, giving way for a bigger boom in the app development arena. But for now, since the restrictions felt within the country because of the financial crisis would give way for a decrease in technological expenditures, Bliss Applications would profit more if adopting a more internationalized approach to the market.

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