CATÓLICA-LISBON, SCHOOL OF BUSINESS & ECONOMICS

TIMWE – Born Global Firm

Case Study

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December 2012

A Dissertation submitted in partial fulfillment of the requirements for the degree of MSc in Business Administration, at CLSBE – Católica-Lisbon, School of Business & Economics.

ABSTRACT

Title: TIMWE – Born Global Firm

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TIMWE is the Portuguese based company chosen to illustrate and serve as background to support the creation of a teaching case in Strategy, exploring the internationalization of a real company and the challenges undertaken by the process of being a born global firm, followed by a Teaching Note that can be used as a tool to help solving the case.

TIMWE is a Portuguese owned company, founded in 2002, that offers mobile monetization solutions and services (entertainment, marketing and money) to its global clients (brands, end-consumers, media groups, mobile carriers and governments), by leveraging its in-house developed intellectual proprietary technology, wide network of connections, mobile expertise and local presence. The main focus of the business strategy always has been B2O (business-to-operators), and since the beginning of its foundation the company aimed to build a global reach. In 2011, it had 26 offices, employing more than 300 people, operating in 75 countries across the 5 continents, as well as partnerships with over 280 mobile carriers spread all over the world giving access to 3 billion mobile subscribers.

The case was prepared with the intent of providing useful insights about an IT services Portuguese company that managed to internationalize and operate in several countries, on top of giving a generic overview of the industry where it acts and is doing business. This case can be used as a basis for class discussion, where students have the possibility to analyze the growth and expansion strategy of the company, assess the overall industry by backing-up their decisions using all the gathered data and accurate information presented and explained in the case.

ACKNOWLEDGMENTS

This thesis closes one relevant stage of my life as a student. Throughout these years I have learned not only from the shared knowledge and guidance presented by Professors in classes, but also from all the personal experiences and friendships that I had the honor and pleasure to live and create during my long academic journey.

First of all I would like to thanks to all my family - mainly my parents and sister - for all the support during this challenging expedition and the chance they gave to me to learn, experience and grow as a person, contributing to my development as a student, giving me the opportunity to fully pursuit my academic goals and attain total personal fulfillment.

I would like to state my gratitude to my thesis advisor, Nuno Cardeal, for all his knowledge, support, and much valued feedback during the last four months, that helped me create and profile this case. To all my dissertation seminar colleagues, Elisabeth Grácio, Francisco Cardoso Ribeiro, Francisco Garcia, Guilherme Sousa, Inês Ferreira and Miguel Teixeira Pinto, I would like to say thank you all for your opinion and motivating feedback, and also for the questions, shared uncertainties and fears expressed during the group sessions.

I would like to thanks to Tânia Santos of TIMWE that assisted me in great moments of hesitation and doubt with news' articles and information about the company's history and its process of internationalization, together with my personal gratitude to all the people involved in answering my questionnaire. A special reference and deep gratitude to Diogo Salvi for allowing me to write a case study about this successful Portuguese company and the subsequent follow-up strategy.

To my friends I owe them the time I have spent discussing my thesis and the boring questions I had during all the phases of this project. Thanks for their genuine opinion, honest feedback and suggestions, and also for sharing with me their own worries and doubts about their thesis and previous works.

Finally, I am sincerely grateful to Católica-Lisbon, School of Business & Economics for the last five years, mainly to all the staff, from Professors to all the collaborators of Students Office, International Office, Career Services, and also to the students. The great atmosphere, knowledge, experiences and learning environment helped me to excel on my strengths, always aiming to achieve the best outcome and highest performance, but with a good-mood and a sense of accomplishment.

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1. CASE STUDY

1.1 Introduction

TIMWE is a Portuguese company with headquarters in Lisbon, founded in 2002, by the current CEO, Diogo Salvi, and a group of entrepreneurs. It started as a provider of mobile entertainment solutions to mobile carriers, but soon there was an urgent need to expand business activities and explore new opportunities abroad.

TIMWE's mission in broadly terms cracks down on maximizing the value created to the clients, through the offering of mobile monetization solutions and services (entertainment, marketing and money) leveraging its proprietary technology (**Exhibit 1**), the global network of connections (access to over 3 billion mobile subscribers), mobile expertise and local presence. The vision of the firm is also clear:

"We aim to be a global reference and a pioneering leader in mobile monetization, developing effective, scalable and flexible solutions customizable to the needs and strategic goals of our clients." [1]

The company works as a platform of mobile monetization that has fueled its growth through an early internationalization strategy, adapting its governance structure by becoming a born global firm. In these competitive high-tech industries, companies need to choose a key differentiation approach, and as the CEO Diogo Salvi stated:

"In this global market, you must born global, otherwise you die or you are bought by other companies."[2]

Following this strategy of establishing a global presence, in 2011, the company had 26 offices worlwide (**Exhibit 2**), employing more than 300 people, operating in 75 countries on the 5 continents[3]. With a growth rate of 2 digits year after year (**Exhibit 3**), TIMWE has been expanding at a very rapid pace, and in 2011 had registered €13.2 million in profits[4].

The firm chose to internationalize at an early stage, followed by a strong expansion to overseas countries that were emerging as potential candidates to embrace these IT services, but who seemed not to be significantly mature in terms of technological advancements. Nonetheless, it turned out to be a successful strategy, managed by an experienced and skilled

pool of professionals, with a clear goal in their minds since day one: to grow, diversify and expand in this global market.

1.2 Born Global Firm

TIMWE started at a time when the CEO, Diogo Salvi, was looking for a new challenge, after many years working in the banking sector and always involved in diverse professional and strategic projects, from restructuring (commercial, IT, etc), innovation (phone as banking channel), internationalization and M&A. Ricardo Carvalho, one of the co-founders, co-owner and managing director of the company brought his know-how about the mobile market (12 years working experience as an advisor in the digital and technology areas, and as a consultant to mobile marketing and entertainment firms), who also helped identifying the opportunities and neutralize potential threats.

The Portuguese company kick-off was given in 2002, in a country where there was no much expenditure in R&D (**Exhibit 4**) compared to its total GDP, and which even had a low percentage of human resources working in Science & Technology compared to most of the European countries (**Exhibit 5**). In 2002, Portugal did not have strong market opportunities for IT firms that wanted to establish themselves and find their space to grow. Only 0.73% of total GDP was allocated to R&D expenditure, compared to the average of European Union (1.88%), and also it was far from the figures of countries such as USA (2.6%) and Japan (3.17%). Adding to this situation, Portugal had just 17.6% of the total labor force working in projects associated with Science & Technology, representing no more than half of the European Union's average (35%).

Bearing these numbers in their minds, as well as the fact that in this high-tech industry you have to born global, if you want to survive and be competitive, it was clear for both that the company needed to choose a different strategy due to the lack of home-support in these areas.

1.2.1 From Portugal to the world, 2002 - 2004

Portugal was never a great exporter of high-tech products (**Exhibit 6**), representing in 2002 around 6.4% of the total exports. Compared to other countries (**Exhibit 7**) it is clear the country did not invest much in supporting related activities, as well as it did not develop the ideal conditions and a suitable environment for the commercialization of these products and services in the home market, especially due to the lack of incentives and the low amount of time and money spent on R&D and Science & Technology platforms.

Although this situation did not seem a good starting point for a new IT company doing business, there was one area that was showing an interesting evolution over the years (**Exhibit 8**) – ICT (Information and Communications Technology). In 2002, this market was around 7% of total turnover of the country, and was growing since 1996. This was a valid indicator to start operating, and trying to establish deals with the most important mobile operators in the country. But there was one big issue - the rather small size of the market.

TIMWE decided to make a stand; it was created as an exporter of high-tech services, since the Portuguese market of IT and telecommunications services for the mobile industry was too small and did not offer great visibility. Back in 2002, Portugal had 10.407.465 inhabitants[5], being ranked the 75th position in the world's population distribution[6], showing the market was small compared to other countries despite the level of development. The industry of telecommunications was too concentrated and was served by a triopoly of MNOs (Mobile Network Operators); PT-TMN, Optimus and Vodafone (**Exhibit 9**). Today, most of the OECD countries are broadly dominated by three mobile carriers (**Exhibit 10**), which mean they have a high bargaining power. Overall the competition in this industry in terms of mobile carriers is much concentrated. Managers understood that they needed to explore their chances in foreign countries where they could build a strong and wide network of connections and partnerships with worldwide companies getting access to a larger pool of users, creating better prospects to do, explore and expand this business.

The consumers no longer saw mobile-phones as a device which only worked as a receiver and transmitter of phone calls and text messages, but rather an instrument playing an active role in their daily lives[7]. Spotting this opportunity, the firm wanted to keep on track, selling targeted solutions, and content monetization which was advertised across multiple media channels.

The company started to deliver solutions in the mobile entertainment segment, developing and distributing mobile content, such as wallpapers, themes to ringtones, games and music clips in Europe. TIMWE saw the growing trend in the market - people were rapidly spreading the mobile experience. However, the big international players that today compete in this segment were already established: Buongiorno (1996), Zed (1996), Velti (2000) and Motricity (2001), among others. The meeting point was Europe and USA, since these regions of the globe were the ones with a solid and robust expansion in the telecommunications and mobile apps[8] industry. Today there are other interesting options (emerging countries), where TIMWE decided to start investing very early in its expansion process (**Exhibit 11**).

Consequently, TIMWE was established as a high-tech exporter with clients all over Europe, and moreover, with sales across the globe.

In fact, companies acting in this market must think globally. TIMWE always adopted the "Think Global, Act Local" approach, diversifying and expanding to other countries, offering its customized services suitable to the aims of its global clients.

TIMWE develops also mobile applications for all the mobile platforms (mobile-phone, tablet, laptop, etc), being also included as a developer in the fragmented world of mobile apps, with thousands of developers creating theirs apps (the technology used to do an app in a mobile-phone is very similar to other created to be used in tablets and laptops) mainly to iOS (Apple Operating System) and Android (Google Operating System). The company positions itself, as a provider of these apps to mobile-carriers and also assuming an important role in the mobile entertainment segment.

The mainly focus of the business strategy was, and still is B2O (business-to-operators), since it started to provide mobile entertainment services as a white label or generic brand to Telecoms (telecommunication companies). The first client came from abroad, the second was from Singapore and the third was Spanish[9]. Although the firm has 5 different types of client-segmentation[10] (end-consumers, brands, governments, mobile carriers and media groups), at the beginning, the leading deals were formed with mobile carriers, namely with Telenor Group, founded in 1855; an incumbent telecommunications company from Norway which is mostly an international wireless carrier, and now it is one of the world's major mobile operators with roughly 150 million mobile subscriptions spread all over the world[11]. Today, TIMWE has partnerships with 280 mobile carriers throughout the world[12].

The main goal of the company always has been the appropriate positioning as a partner of mobile carriers, working with the areas of VAS[13] (Value Added Services) to help operators having a good supply of entertainment to its customers, and also by managing their products and services in order to increase revenues (**Exhibit 12**).

With the purpose of offering top quality services, delivering the best solutions and maintain a high service level, the company sets up partnerships with local and global carriers (**Exhibit 13**), content owners (**Exhibit 14**) and technology companies (**Exhibit 15**). TIMWE considers there is only one way to differentiate in mobile entertainment: good quality content.

In 2003, the company started developing the first neo platforms, its proprietary technology (**Exhibit 1**) and expanded to international markets, mainly launching its Latin

America operations[14] due to the great opportunities the managers were able to spot in these markets.

The neo technology was designed and built in house by software engineers. Basically, it is a tool that is used to support the firm's mobile monetization solution and deliver top results, allowing modular and real time control and reports[15]. The neoM3, neoMiit and neoMb are directly associated with the core areas of the company: mobile entertainment (2002), mobile marketing (2008) and finally, mobile money (2010). The other two (neoMG and neoPIM) help in the process of complementing TIMWE's product portfolio, allowing the creation of software and platforms that enable leveraging the content, components and features integrated in each service.

In 2004, the company moved towards D2C (direct-to-consumers), developing direct-to-consumer distribution and monetization of mobile entertainment by launching its own portals. At the same time, the firm initiated the process of visiting all countries in Latin America, trying to look for opportunities of doing business, but especially to find out what would be the right country to start the expansion of its activities, therefore creating and consolidating the global presence.

1.2.2 Establishing the global presence, 2005 - 2007

Colombia was the first choice. In 2005, the company opened its first international office in Bogota, Colombia[16], after more than a year of successful operations in Latin America. The country was, and still is showing a good dispersion of mobile-phone users (**Exhibit 16**). Over the years the number of people using mobile-phones has been growing, compared to the stagnated linear number of telephone fixed-line users.

At the time, the ARPU (average revenue per user) was $11.32/month (**Exhibit 17**); it was below the global average. In 2005, wireless penetration increased 24.6% (**Exhibit 18**), whereas the telephone line was showing a clear stagnation.

TIMWE decided to move to Colombia, having a local office in order to manage all the businesses in that region (acting locally). It was a strategic shift, sustained by an organic growth, rather than a result of M&A. The country has three major mobile carriers, where Comcel (a subsidiary of the Mexican group América Móvil) - now called Claro Colombia after the merger in 2012 with a smaller telecommunications company named Telmex[17] - is the market leader (**Exhibit 18**) working almost as a monopolist (>60% of market share).

The Andean region in Colombia is the most populated area of the country[18], and contains the majority of its urban centers. In 2011 it generated €35.533 millions in revenues, representing 13% of TIMWE's global revenues[19].

Also in 2005, the company decided to move to Argentina[20], opening its second international office in Buenos Aires. It was a country that had an ARPU of $14.3/month, 4 major mobile carriers (**Exhibit 19**) and had registered a wireless penetration increase of 20.7%.

During all the process of expanding to these countries, there was a deep interest in moving to some emerging markets due to the potential business opportunities and forecasted business trends. These regions showed a good potential to grow, although they were clearly below the global average per user revenue. The competition in the mobile entertainment was already growing in developed markets, but there was space to companies such as TIMWE to try to sell their services in the emerging countries.

The company continued to expand, consolidating its operations in Europe and Latin America. In 2006, TIMWE opened new offices, now in Turkey and Chile, therefore strengthening its global reach.

Between 2006 and 2007 the company took a huge step forward, expanding to the Middle East and Asia, by opening offices in United Arab Emirates, Kazakhstan, and Hong Kong; Latin America, such as Brazil, Mexico, Bolivia and Paraguay, and reinforced its presence in Europe, by opening an office in Poland[21].

In 2007, the Latin America mobile content was worth $1.15 billion, and was projected to be $8.93 billion in 2014, where Brazil was the biggest market with 37.7% of the total 122.8 million subscribers that used, at least, one of the different mobile content services[22] (e.g. ringtones, games, movies, graphics, etc).

During these years, TIMWE's revenues (**Exhibit 3**) started to grow exponentially; in fact, the growth rate in 2006 was more than 600%, which shows the accelerated growth pace the company achieved in the course of its born global structure and way of thinking.

The company was able to create a global network during the expansion to other continents, building a strong presence focusing on emergent markets. The management board thought they could reach more people and increase the range and competitiveness of the firm, by diversifying TIMWE's business portfolio, hence providing and engaging the consumers in different and effective new service offerings.

1.2.3 Business portfolio diversification, 2008

After delivering solutions and services in the mobile entertainment segment, which added a stout knowledge and a meaningful experience of the mobile market, TIMWE decided to complement and diversify its business moving to mobile marketing.

This diversification was carefully analyzed, and there were basically three reasons driven the company decision to enter into a new, but related business: (1) Growth rate of mobile penetration worldwide[23] (approximately 4.1 billion mobile subscribers in 2008, with a penetration rate around 63%), and growing interest of brands in using it as main channel of communication; (2) efficient communication – great exposition of the consumers to this new channel, less costly compared to other channels (e.g. TV, radio and print), and the possibility to deliver various types of messages to the consumers (e.g. SMS, MMS, IVR[24]); (3) the privileged relations and partnerships TIMWE has with mobile carriers, which could ensure the right communication channel to deliver the message to the consumers.

In 2008, the company started to design and implement customized mobile marketing solutions and services, enabling the clients to reach and interact with the consumers anytime, anywhere[25].

MKTM – Mobilizing Brands, a Portuguese Creative Marketing & Media Agency was created and powered by TIMWE[26], and it is responsible for managing the area of mobile marketing. The project wanted to keep privileging the mobile-phone as communication channel for brands, interacting and optimizing each one of them, but betting on the integration of all advertising channels.

The initial focus was centered on exploring the Iberian Peninsula market, as João Pedro Montes - the general manager of the agency - explained:

"As TIMWE is a Portuguese company with most of its business being done outside of the home-country, nevertheless it still is important to explore our domestic market, the place where we come from, but also to serve as an example to what we can export."[27]

TIMWE developed mobile marketing strategies and solutions, ranging from mobile campaigns, sites, mobile-phone surveys, coupons, applications, profiled databases of mobile consumers (2009) and loyalty programs to encourage customer engagement. All the mobile marketing campaigns passed through several stages, until the final assessment and measurement (**Exhibit 20**). The firm applies a performance based model, where there are

variable fees linked to the performance and the goals attained with the online (started in 2009) and mobile campaigns, offering advantages to customers, since it eliminates the risk levels and ensures ROI (return on investment) in digital marketing.

In the first year, MKTM developed a relevant track record of 20 campaigns just in Portugal, to clients such as PT-TMN (mobile carrier), EDP (leading company in the energy sector in Portugal), Lipton (brand of Tea owned by Unilever) and BES (Portuguese bank). Coca-Cola, Repsol and Yahoo! are other international companies which had already started to buy the services from TIMWE's mobile marketing agency[28], reinforcing the global scale of the company.

TIMWE created many marketing campaigns throughout the years, accomplishing good results and a high level of service. For instance, on July 2010, the company released a digital campaign for the promotion of e-commerce[29] Lancôme Brazil, launched by L'Oréal Brazil that generated a relevant increase in database and online sales of the brand in the country[30]. It was used a multi-channel strategy, offering the campaign in the main digital channels, such as social networks (Facebook), search engines (Google, Yahoo!), e-mail marketing and others. The aim of the campaign was to increase awareness, penetration and boost the results of the client online sales channel. Moreover it was recorded between 300-1500 new customers per day, showing that the company performed well using its solid experience in customer acquisition by digital means.

TIMWE did not halt its expansion process in 2008, even when it was implementing a new business; the expansion strategy was one of the strategic pillars and one of the key success factors of the company, heavily contributing to its globalization and recognition worldwide.

1.2.4 Continuing the Expansion, 2008 - 2009

Europe was one of the options to continue creating a strong presence all over the world. In 2008, TIMWE decided to open an office in Madrid, Spain, mainly due to the initial focus of its new business– Iberian Peninsula.

The company chose to expand to other continents, and in 2008, it opened its first African office in Mozambique. The country had registered a significant growth rate of 2 digits year after year (**Exhibit 21**) in terms of mobile subscriptions, and in 2008, it had more than 4 million people using mobile-phones, representing an increase of 43% compared to the previous year.

Africa has been showing interesting signs to companies that want to explore this market opportunity in the region (**Exhibit 22**), since it is significantly expanding, accompanying the global growth rate level. It is not just less developed nations that are presenting interesting projections to get access to the perks of using mobile-phones, but most of developing countries offer good forecasts for the future (**Exhibit 23**), by allowing the access to a larger pool and portfolio of users.

Generically, the relative price for telecom services is higher in regions such as Africa, where the GNI (Gross National Income) per capita is lower than in developed economies (**Exhibit 24**), which can be an obstacle for further investments on these countries, since the population does not have the buying power to pay for some of the presented mobile services and products and also the education/academic background to fully understand its functionalities. However, on the next few years (2008-2010), the ICT price basket[31] had a tendency to decrease, both in developed and developing economies (**Exhibit 25**), due to the economic climate, market maturity and greater regulatory interventions.

Globally, consumers were paying 18% less for ICT services (**Exhibit 26**), showing that these services were getting more affordable worldwide, something that could be perceived as a positive message to those that wanted to invest in these countries, since people seeing the decrease on prices could be more willing to spend money in these services.

TIMWE kept doing business despite the financial crisis. For instance, in 2008, the company launched its new social network, aspiring to reach until 2010, at least, 4 million users[32]. The network was called Solemio - free online dating portal - and on the whole, its purpose was to let any person to look for their significant other. It was a reformulation of the old Lovebip (2007), which had a database of 350.000 users. The company managed to make the portal accessible to 55 countries, especially in Mexico, Portugal, Brazil, Colombia, Turkey, South Africa and USA, and available in 3 different languages (Spanish, Portuguese and English)[33].

In 2009 it enhanced the mobile marketing portfolio by launching solutions aimed to the creation and profiling of mobile consumer databases. In the same year the company consolidated its presence in Latin America and Asia with the opening of offices in Peru, Nicaragua and Malaysia. TIMWE's managers felt there were other business opportunities on the horizon; new trends were setting in most developed countries, and people are now looking towards easier and simpler ways to pay their bills.

1.2.5 New business and further consolidation, 2010

In 2010, TIMWE diversified to mobile money, offering fast, easy and safe solutions to consumers that are using mobile-phones to pay bills, access entertainment, reserve tickets and make money transfers. More than 5 billion people used mobile-phones in 2010[34], thanks to the growth of smartphones[35] in developed nations, while people in developing countries increasingly used the mobile-phones for banking and health services and also due to the rising of mobile services' usage in poor nations.

Leveraging the connections the company has with mobile carriers spread all over the world, its proprietary technology and knowledge of mobile technologies[36] (SMS, WAP, USSD, NFC), TIMWE managed to capture the opportunity that these devices were creating; easy way to do payments - easy and faster access compared to credit and debit cards, as there are no need to fill out forms or personal information for billing, simply the customer just need to have a mobile-phone enabled on a telecom service provider, without restriction of credit, so he/she can make the purchase.

Recognizing the growth potential of this business, TIMWE decided to craft its own micropayment service by phone, M-Coin (neoMb). The payment is either taken from pre-paid credits or the clients are charged on the monthly mobile-phone bill. The platform was established in 2010, increasing the profitability in the business of mobile billing and mobile payment[37]. It could be used by publishers and developers to create a payment interface In-Game and In-App to feature-phones and smartphones Android, since the mobile apps revenues worldwide projections were showing interesting and enlightening figures (**Exhibit 27**), hence making it a good monetization solution to them, as well as to handset manufacturers and retailers.

The M-Coin extended mobile payments to Digital services in 2011[38], signing a contract with Fon, the world's largest Wi-Fi[39] network, making it the pioneer by broadening the carrier billing services outside the Gaming space.

Although this diversification was happening very fast, the company did not stop continuing to strengthen its global presence, opening offices in Central and Eastern Europe (Russia and Serbia), Africa (Algeria and Angola), and Middle East (Saudi Arabia). Many campaigns, deals and projects were developed during the year of 2010; here are few of the many:

→ February; a commemorative campaign[40] of the 25th anniversary of the Portuguese newspaper "O Jogo", through a partnership with Controlinveste Group readers, creating a game that allowed contestants to interact in real time with the newspaper answering the questions sent by SMS, and which had an animated virtual stadium that included advertising formats to give visibility to sponsors;

→ March; the company launched App Republic worldwide[41], democratizing the mobile applications, compatible with most of mobile-phones, until then only available to the Smartphones' users. More than 100 applications were available at the start, including social networking, games, and entertainment applications. Before its global launch, TIMWE had already tested it in the Spanish market, receiving up-lifting feedback by consumers and business partners;

→ April; TIMWE was selected among the 3 largest digital interactive marketing companies worldwide, by a Mexican operator (Telcel), to develop a campaign[42] in Mexico linked to 2010 FIFA World Cup in South Africa, called "The ball is in your fingers", which consisted in a contest targeted to the operator's clients, offering trips to assist Mexico's first games, a semi-final and the final. There were also trips to Madrid to see the Champions League final on May, in Real Madrid's stadium – Santiago Bernabéu;

→ June; MKTM, the Creative Marketing & Media Agency created by TIMWE, developed the first campaign in Portugal[43] for Kalise Menorquina Group, a Spanish ice cream company. It was designated as "Spend your summer playing", and started in the 15th June, the day of Portugal's first game. It offered consumers Wii, Playstation Portable, Ipod's and football java games every day, with the purpose of capitalizing on the entire buzz created by the 2010 FIFA World Cup, generating positive associations between Kalise ice cream, the campaign and consumers. What all the consumers had to do, was buying an ice cream included in the promotion and send a SMS with the word Kalise and the product's code, and if the consumer was the lucky winner he/she would get one of the listed prizes.

TIMWE has been nominated and received several awards in the last years (**Exhibit 28**), due to the outstanding performance and sustained results obtained through the services and solutions delivered to its clients. The company had interesting outcomes over the years, and now wants to keep growing offering top quality services, following the trend in the mobile market, always creating value and embracing innovation as a core driver to achieve success.

1.2.6 The present and Future – To keep growing

On April 2011, the company launched a NFC application, called NFC Launcher[44], to capture the trend of the growing number of NFC tags[45] spread all over the world, and the existence of thousands of mobile applications to interpret them. Many of the tags analyzed by the application would have customizable data which will require the user/customer to have in his/her smartphone a mobile app to read it, and with this NFC Launcher the process of identification and launching of this application that reads the tag is automated, removing some barriers to the NFC. Basically, it is a cloud based solution[46] using NFC technology that allows mobile carriers, brands and device manufacturers to manage their tags, smart posters and every communication developed through this technology. It has two components: one is the mobile app itself that is installed in the mobile device, and the other is the browser BackOffice that is used to manage the tags, promotions and campaigns. The project intended to be a driver force of the NFC ecosystem, and according to TIMWE's CTO (Chief Technology Officer), Paulo Salgado:

"NFC Launcher will deliver high value to all NFC stakeholders as it will not only offer developers an independent and standardized mobile app discovery and launch service but also constitute a free mobile application for end-users to interact with NFC tags off-the-fly."[47]

It quickly had some companies interested in buying the service, such as Turkcell, the leader communication and technology company in Turkey. On October 2012[48], TIMWE launched the NFC app in MaxiPlus5, the new mobile-phone developed by the Turkish company. The new devices that already had the NFC enabled and the Mobile Order Application would allow the access to see some companies' product list (e.g. Burger King, Migros supermarkets, the fuel company Aygaz, the water company Pursu, etc), letting consumers to explore and buy products available for sale, showing their names, description, price, product logo and other information.

In the same year, concerning the Information Technology (IT) sector, the company was in the first position of Portuguese technology companies in terms of exports[49], with 97% of total revenues coming from outside the country[50]. This adds to the fact that the company acts in a global market, having a global approach, but acting locally, according to the specific needs of local clients and consumers.

TIMWE continues to follow the trends in the mobile market all over the world, not just because it is a global company, but also to understand new businesses realities and trends, the

areas that are rapidly changing, and the countries which are experiencing interesting growth rates in this industry.

The mobile market, represented by all mobile devices such as, mobile-phones, tablets, laptops, and so on, is still growing, not just in all the mobile categories (**Exhibit 29**) and developed nations, but also in developing countries, and less developed as well. The world is going mobile (**Exhibit 30**), it is even more evident when in 2011, 1.7 million Europeans were employed in the mobile industry[51]. Looking just to the mobile-phone highlights in 2011, there were almost 6 billion people with mobile-phone subscriptions, corresponding to a global penetration of approximately 85% (**Exhibit 31**). This growth was mainly supported by developing countries that accounted alone to more than 80% of the new 660 million mobile-phone subscriptions added in that year[52].

Today, smartphones correspond to 12% of total handsets in use, representing 82% of the global handset traffic[53]. In 2011, the average smartphone usage nearly tripled, as the average amount of traffic per smartphone got up from 55MB per month in 2010, to 150MB per month in 2011, generating 35 times more mobile data than the typical feature-phone, although the basic-phones still make up the great majority of devices on the network (88%)[54]. The number of mobile-connected tablets tripled to 34 million in 2011, with each tablet generating 3.4 times more traffic (517MB per month) than the average smartphone[55]. The mobile network had around 175 million laptops in 2011, and each one generated approximately 22 times more traffic (2.1GB per month) than the average smartphone[56]. By the end of 2012 there will be more mobile-connected devices than the number of people on earth, and projections appoint that in 2016, there will be 1.4 mobile devices per capita[57].

Great opportunities are arising in this market, the Telecom service providers global revenue in 2011 grew 6% to $1.8 trillion worldwide, comparing to 2010[58]. The global Telecom carrier capex[59] grew 3% from 2010 to 2011, reaching $301 billion[60].

TIMWE knows how it built its reputation throughout the years, using its experience and know-how acquired through the partnerships and business activities it had established with its global clients. The strategy will be sustained by two core drivers: globalization and diversification.

1.3 Conclusion

The managers still want to continue the growth strategy supported by TIMWE's globalization and expansion processes. Geographically, and besides the presence in its nuclear

market - Latin America[61] generated 79% of total revenues in 2010, with Brazil alone representing 44% - the company will try to reinforce the presence in emergent markets with identified potential, mainly in Eastern Europe (Russia and Kazakhstan), Asia (Malaysia and Indonesia), Middle East and Africa.

Although it has already a good penetration in markets where it is selling, TIMWE seeks to improve even more the partnerships and agreements with mobile carriers and media. Another major focus will also be the opportunity to potentiate the level and range of solutions to Mobile Government, whose main goal is helping governments and organizations around the world interacting with its citizens, in order to respond more effectively to their needs and requests.

Imagine you applied for an internship to work in TIMWE, and successfully passed through all the interviews. After some days gone by, you received a phone-call from the company, saying they want you to start the internship, with the possibility of becoming a full-time collaborator if things go well.

Assume that you were just hired by TIMWE, and the managers handled you a specific and important assignment to evaluate their strategy and growth pattern, as well as make some considerations about the future in this mobile market. They want you to make a strategic analysis, starting with an external scan of the environment and then moving to an internal analysis of the company, following these guideline questions:

1 – I*s the overall mobile market still growing? What is the global level of attractiveness for companies that wish to invest and expand their operations in the ICT industry (focusing on the telecom market)?* ***Hint:*** *Define the overall mobile market life cycle, and use Porter's Five Forces Model to assess the level of attractiveness of the telecom market.*

2 – *Who are the clients in this mobile market?* ***Hint****: Segment the clients, using generic criteria: WHO (nature of the buyers), WHAT (products/services bought), TO WHOM (nature of the consumers), WHEN (buying occasion), WHERE (buying local), WHY (buying reason) and HOW (buying method).*

3 – *What makes one company better than other? In other words, what allows a company in this mobile market (focus on the mobile-phone segment) to create more value to the clients than the value offered by the competitors?* ***Hint:*** *Apply the Critical Success Factors framework to the analysis (Key Buying Factors, Competition Engines, Critical Success Factors).*

4 – *TIMWE was created in association with the born global syndrome. What are the main advantages and disadvantages related to the process of being forced to compete with global players and think globally, but acting locally (Explore the Glocal Approach) since its inception?* ***Hint:*** *Perform a SWOT analysis and explore the Porter's Value Chain framework.*

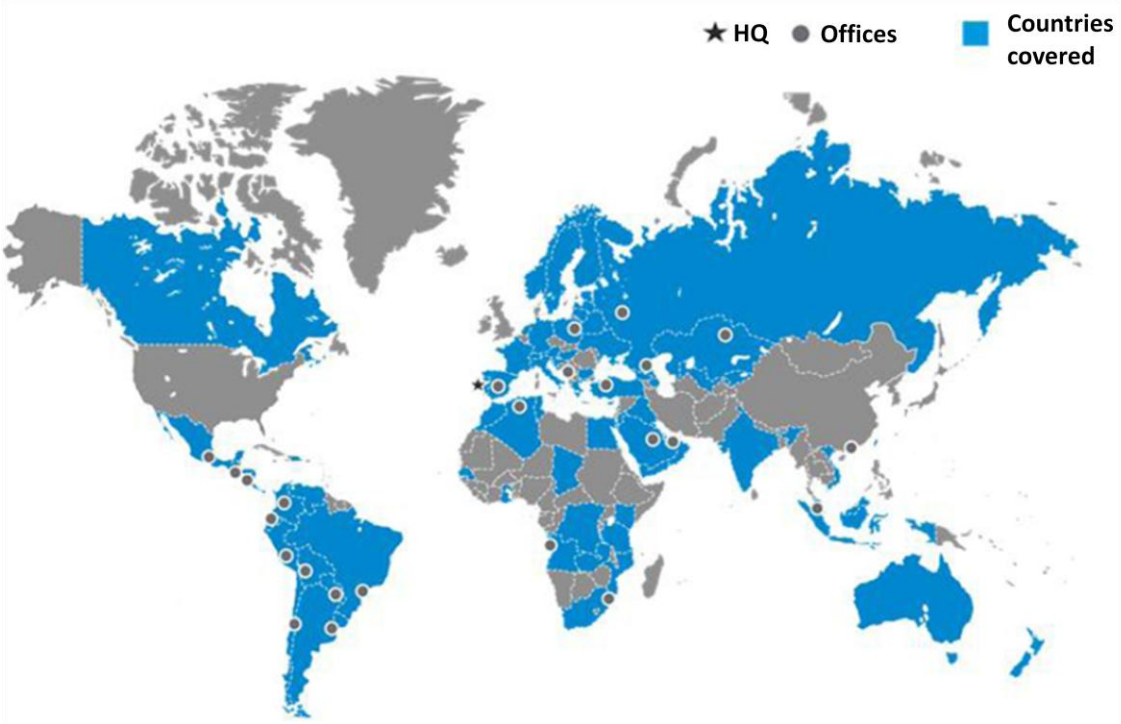
5 – *What would be your recommendations to TIMWE's growth strategy in the future? (1) Follow the same steps (continue to invest in emergent market), (2) diversify the business (Mobile Government) or (3) increase penetration in already dominant markets (Latin America). Justify.* ***Hint:*** *Study the pros and cons of your decision.*

Exhibit 1 – Proprietary Technology

Technology	Description
neoMG	It is a software building block that manages all mobile messaging traffic (SMS and MMS), ensuring the independence of connections to mobile carriers and seamlessly interoperating with third party systems (e.g. billing, CRM, etc.).
neoM3	It is an end-to-end platform that enables management and delivery of mobile entertainment content as well as management of related customer care services.
neoPIM	It is a web based platform that enables the creation, publication and management of solid, color enhanced and feature-rich mobile sites by non-technical users. Leveraging drag-and-drop and cloning editing, ready-made or custom visual components with real-time full preview, neoPIM provides a way to generate white label mobile sites.
neoMiit	It is an end-to-end platform that supports interactive mobile marketing and CRM. With neoMiit, clients may leverage personalized or targeted interactive marketing, to improve consumer engagement and demand, maximize cross and up-selling, boosting revenues and results.
neoMb	It is an end-to-end platform that supports mobile billing and mobile payment transactions. With neoMb, clients can offer an alternative method of payment, increasing their revenues by converting additional customers or quickly globalizing their business.

Source: TIMWE, 2012. Technology [Online] Available at: http://www.TIMWE.com/technology [Accessed 23 October 2012].

Exhibit 2 – Offices, 2012



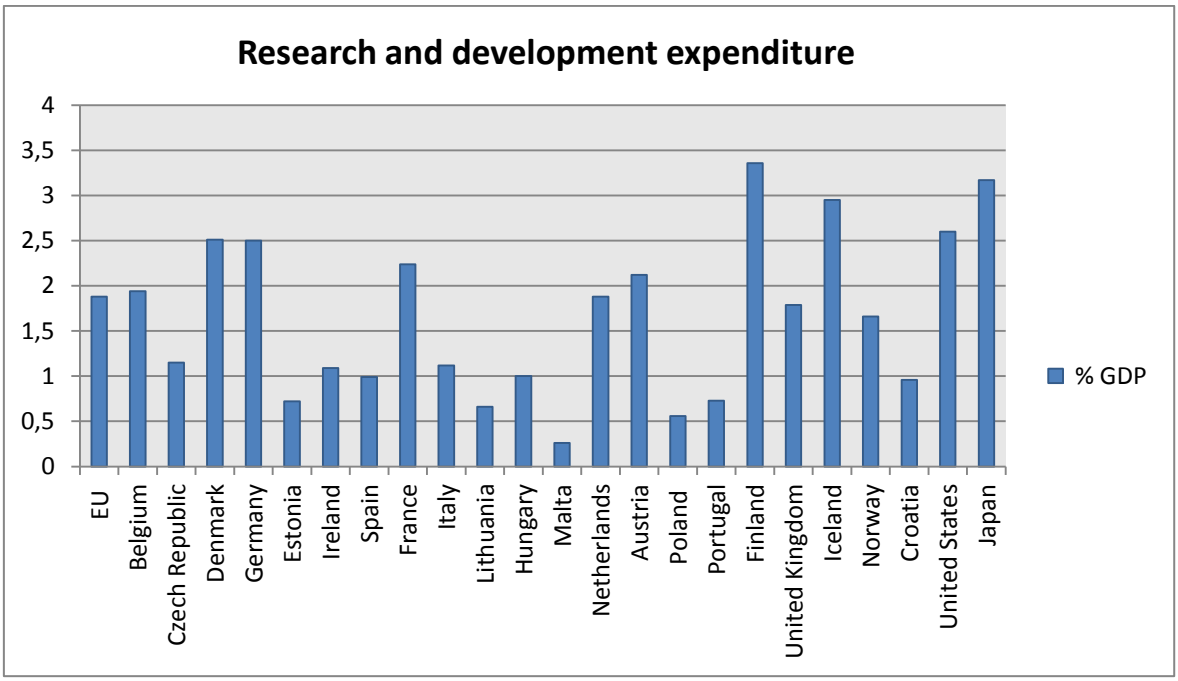
Source: TIMWE, 2012. Corporate Presentation provided by TIMWE.

Exhibit 3 – Revenues and Growth Rate, 2004 - 2011

Year	Revenue (millions €)	Growth rate
2004	2	-
2005	6	200,0%
2006	44	633,3%
2007	68	54,5%
2008	125	83,8%
2009	166	32,8%
2010	234	41,0%
2011	281	20,1%

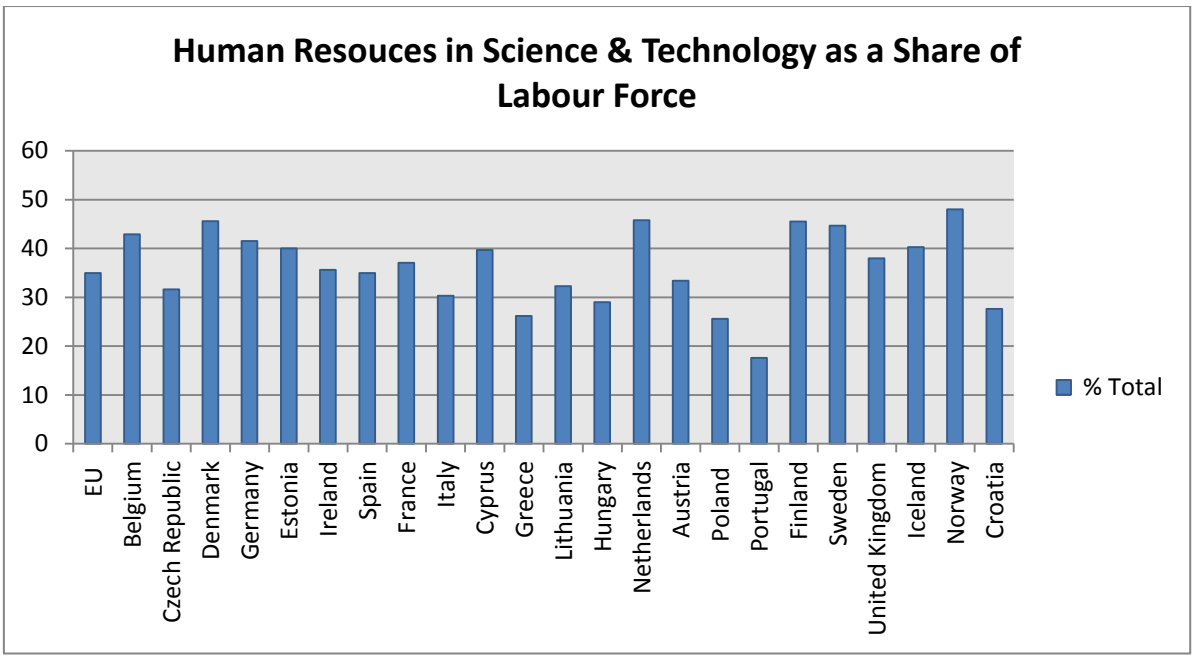
Source: TIMWE, 2012. Corporate Presentation provided by TIMWE.

Exhibit 4 – R&D Expenditure as % of GDP, 2002



Source: Eurostat, 2012. Statistics [Online] Available at: http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&plugin=1&language=en&pcode=tsc00001 [Accessed 04 November 2012].

Exhibit 5 – Human Resources in Science and Technology as a Share of Labor Force, 2002



Source: Eurostat, 2012. Statistics [Online] Available at: http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&language=en&pcode=tsc00025&plugin=1 [Accessed 04 November 2012].

Exhibit 6 – High-Tech Exports as % of Total Exports in Portugal, 2000 - 2006

High-Tech product Exports	
Year	**% of Total Exports**
2000	5,57%
2001	6,94%
2002	6,36%
2003	7,48%
2004	7,49%
2005	6,85%
2006	6,99%

Source: Eurostat, 2012. Statistics [Online] Available at: http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&plugin=1&language=en&pcode=tin00140 [Accessed 04 November 2012].

Exhibit 7 – High-Tech Exports as % of total Exports Worldwide, 2002

High-Tech product Exports (2002)			
Countries	**% of total Exports**	**Countries**	**% of total Exports**
Czech Republic	12,32%	Netherlands	18,74%
Germany	15,15%	Switzerland	21,67%
Ireland	35,35%	Austria	15,74%
Greece	6,56%	Finland	20,90%
Spain	5,71%	United Kingdom	28,64%
France	21,88%	United States	27,99%
Luxembourg	24.71%	Russia	4,73%
Hungary	21,45%	Brazil	8,98%
Malta	56,53%	Japan	23,09%

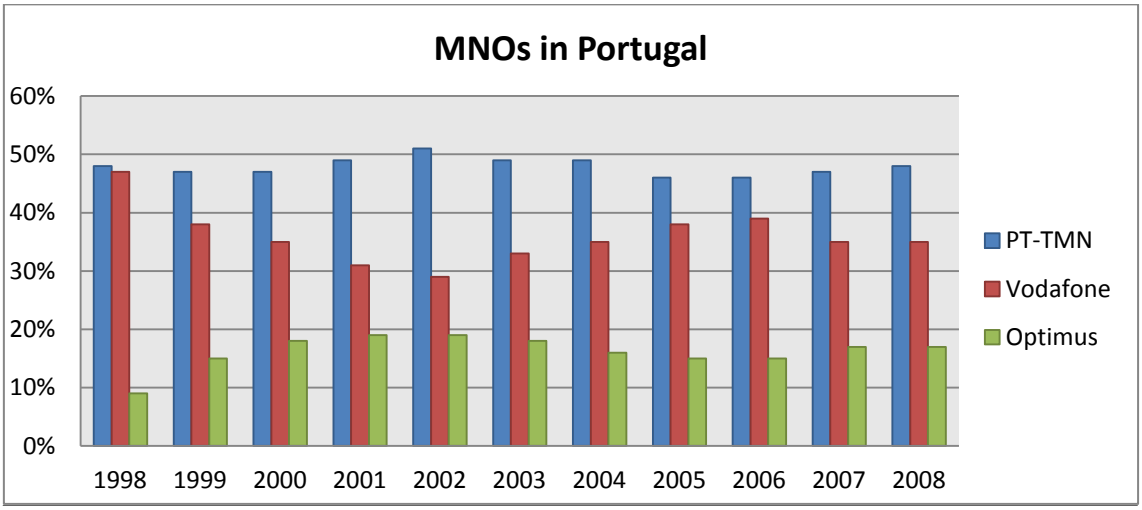
Source: Eurostat, 2012. Statistics [Online] Available at: http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&plugin=1&language=en&pcode=tin00140 [Accessed 04 November 2012].

Exhibit 8 – Evolution of the ICT sector in Portugal, 1996 - 2002

Evolution of ICT sector (in millions)			
Years	**Total Turnover (€)**	**ICT Turnover (€)**	**TIC/Total (%)**
1996	171512,49	11585,93	6,76%
1997	183834,96	13039,98	7,09%
1998	204349,97	15926,71	7,79%
1999	188979,63	10167,42	5,38%
2000	194364,81	11025,8	5,67%
2001	270893,11	19281,04	7,12%
2002	272445,59	20837,23	7,65%
Average Annual Growth Rate	8,94%	14,99%	3,71%

Source: Observatório da Sociedade da Informação e do Conhecimento, 2002, *Expressão do sector TIC na economia Portuguesa.*

Exhibit 9 – Market Share in % of Total Subscribers in Portugal, 1998 - 2008



Source: Autoridade da Concorrência, 2010, *Comunicações Móveis em Portugal*, p.12.

Exhibit 10 – Number of Mobile Carriers in OECD, 2011

Mobile Carriers		
3	**4**	**≥ 5**
Australia	Austria	Canada
Belgium	Denmark	Japan
Chile	Germany	USA
Czech Republic	Israel	
Finland	Italy	
France	Mexico	
Greece	Poland	
Hungary	Spain	
Korea	Sweden	
Netherlands	UK	
New Zealand		
Norway		
Portugal		
Switzerland		
Turkey		

Source: Bank of America Merrill Lynch, 2011, *Global Wireless Matrix 1Q2012*.

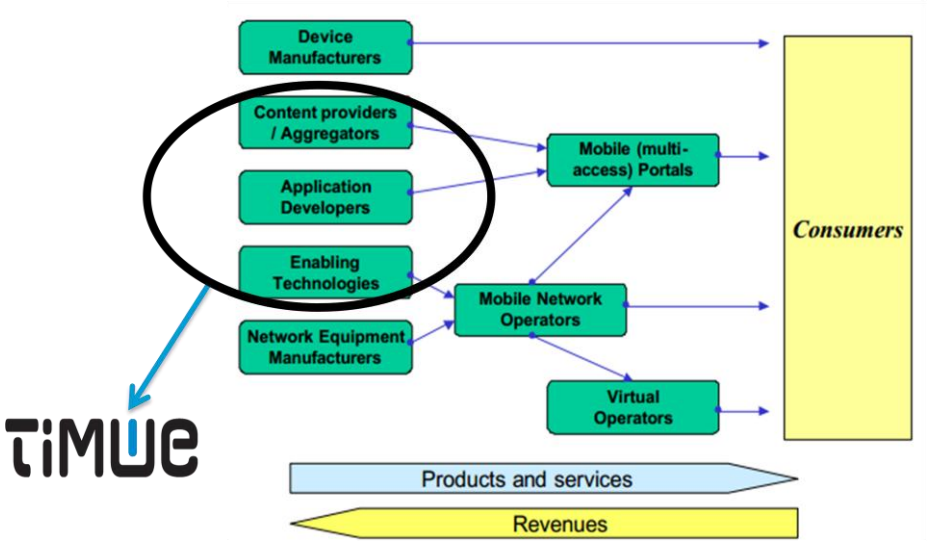
Exhibit 11 – Mobile-phone Subscribers (% total telephone subscribers), 2010

Telecommunications (2010)			
Country	**% Mobile-phone Subscribers**	**Total Telephone subscribers (per 100 inhabitants)**	**>80%**
EU (27 countries)	73,70%	165	
Portugal	77,20%	184	
USA	64,80%	139	
Australia	72,20%	140	
Canada	58,50%	121	
Japan	74,90%	127	
Brazil	82,80%	126	
India	95,50%	64	
Colombia	86,40%	108	
Argentina	85,10%	167	
Peru	90,20%	111	
Chile	85,20%	136	
Mexico	82,10%	98	
Ecuador	87,60%	117	
Saudi Arabia	92,50%	203	
Macao, China	87,00%	237	

Total Telephone Subscribers – The number of subscribers either for mobile-phone, and fixed-line phone.

Source: WTO, 2010. Documents and Resources. Statistics Database [Online] Available at: http://stat.wto.org/ServiceProfile/WSDBServicePFReporter.aspx?Language=E [Accessed 04 November 2012].

Exhibit 12 – Mobile Entertainment Industry Overview

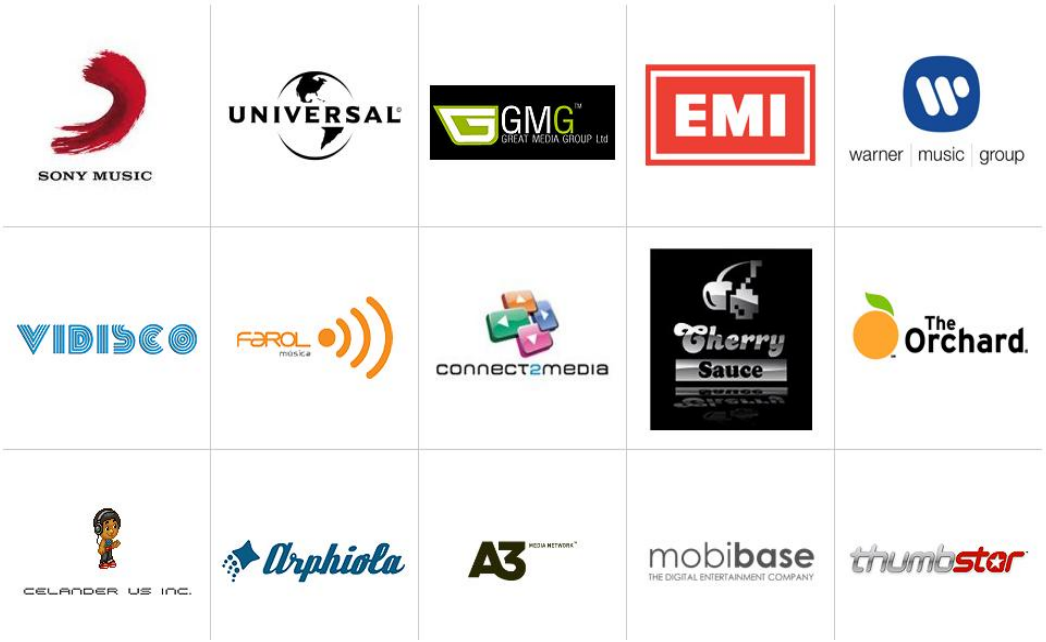


Source: Adapted from Mobile Entertainment Industry and Culture, 2003, *Mobile Entertainment in Europe: Current State of the Art*, p.13.

Exhibit 13 – Partnerships: Mobile Carriers

Source: TIMWE, 2012. Partners. Mobile Carriers [Online] Available at: http://www.TIMWE.com/partners/mobile-carriers [Accessed 05 November 2012].

Exhibit 14 – Partnerships: Content Owners

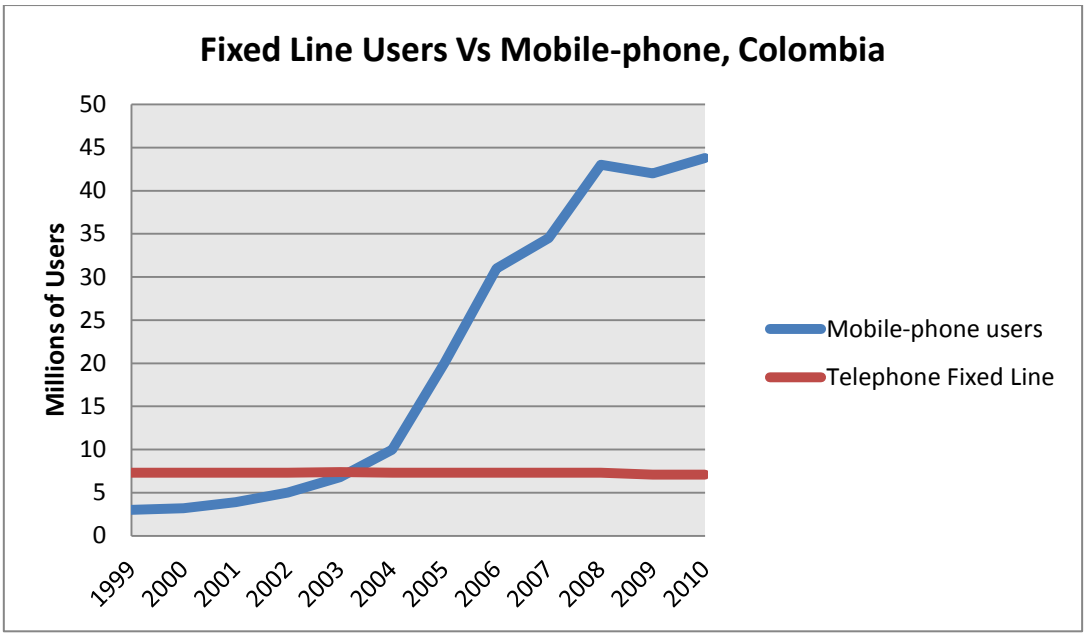


Source: TIMWE, 2012. Partners. Content Owners [Online] Available at: http://www.TIMWE.com/partners/content-owners [Accessed 05 November 2012].

Exhibit 15 – Partnerships: Technology Companies

Source: TIMWE, 2012. Partners. Technology [Online] Available at: http://www.TIMWE.com/partners/technology [Accessed 05 November 2012].

Exhibit 16 – Telephone Fixed Lines Vs Mobile-phone Users in Colombia, 1999 - 2010



Source: Comisión de Regulación de Comunicaciones – Republica de Colombia, 2010, *Escenarios Regulatorios para el Mercado "Voz Saliente Móvil"*, adapted from SIUST, p.23.

Exhibit 17 – Average Revenue per User (US$/month), 2002 - 2011

(US $)	2002	2003	2004	2005	2006	2007	2008	2009	2010E	2011E
Developed Markets	**44,46**	**47,35**	**46,83**	**46,94**	**45,5**	**45,9**	**45,41**	**43,82**	**43,2**	**41,11**
Asia-Pacific	**57,16**	**60,22**	**56,73**	**56,83**	**52,5**	**49,69**	**51,14**	**52,13**	**51,65**	**43,5**
Australia	28,71	32,23	35,59	35,44	35,63	40,34	41,73	40,05	39,85	37,61
Japan	60,44	63,8	63,38	60,53	55,78	52,22	53,9	55,41	54,99	45,74
New Zealand	23,02	30,28	34,45	34,84	29,95	31,79	27,74	22,38	24	23,47
Singapure	31,13	31,15	33,95	31,82	34,13	35,55	34,84	31,39	32,07	31,59
Europe	**29,04**	**35,58**	**39,7**	**38,51**	**37,3**	**38,91**	**37,99**	**33,58**	**32,95**	**32,36**
Austria	30,27	37,57	41,7	39,87	37,94	37,08	38,87	32,5	30,84	29,85
Belgium	32,58	39,74	45,09	45,98	43,14	43,3	41,02	36,56	35,27	33,91
Denmark	25,62	30,75	31,23	35,94	34,83	37,46	40,69	35,8	34,29	33,07
Finland	38,45	44,62	46,72	38,74	36,92	39,84	37,76	32,32	30,93	30,15
France	31,4	41,72	48,43	46,87	44,59	47,23	49,53	46,34	44,27	43,11
Germany	23,57	28,57	30,61	29	26,54	25,13	23,54	20,92	20,53	20,58
Greece	25,83	31,83	38,51	37,88	36,97	33,8	29,6	22	18,99	17,69
Italy	25,24	31,31	35,15	33,64	30,77	29,54	29,24	27,4	27,42	27,27
Netherlands	30,51	39,49	40,67	38,04	38,33	42,24	40,68	38,53	39,23	38,97
Norway	36,61	49,7	48,72	49,36	51,69	55,97	57,04	49,73	53,44	53,79
Portugal	24,63	27,99	30,86	28,87	27	28,02	27,19	22,62	21,44	20,81
Spain	27,55	33,28	38,3	40,36	39,81	43,27	43,12	36,84	34,63	33,76
Sweden	26,44	29,77	29,34	27,45	27,79	31,7	31,47	26,32	27,83	27,59
Switzerland	52,75	60,86	66,3	62,09	55,64	51,22	50,19	47	48,95	46,87
UK	30,77	36,07	41,16	39,34	41,26	45,87	41,6	33,37	33,72	33,46
North America	**54,16**	**54,33**	**53,89**	**52,37**	**52,3**	**52,85**	**51,84**	**50,84**	**49,83**	**49,16**
Canada	31,39	35,62	39,65	44,6	49,81	54,72	56,44	51,13	54,96	53,92
USA	55,42	55,48	54,83	52,93	52,47	52,69	51,41	50,81	49,34	48,7
Emerging Markets	**19,48**	**18,13**	**17,24**	**16,35**	**15,6**	**15,39**	**14,4**	**12,15**	**12,45**	**12,26**
Emerging Asia	**19,08**	**17,57**	**16,32**	**16,44**	**16,3**	**15,65**	**13,03**	**11,01**	**11,21**	**10,78**
Bangladesh	N.A.	N.A.	16,51	9,6	6,12	4,51	3,54	3,09	3,16	3,02
China	12,35	11,41	10,17	9,54	9,81	10,1	10,55	10,02	10,03	9,7
India	N.A.	12,02	11,41	10,76	9,03	8,3	6,93	4,66	3,81	3,28
Indonesia	13,9	13,04	10,35	7,72	7,68	7,1	4,96	3,86	4,39	4,34
Korea	32,33	33,8	35,14	40,26	43,34	44,54	37,05	30,78	33,73	33,62
Malaysia	24,12	22,74	19,49	17,02	15,03	18,23	17,5	15,66	15,65	15,31
Pakistan	N.A.	N.A.	8,9	6,03	4,31	3,47	2,71	2,4	2,33	2,31
Philippines	N.A.	7,98	6,26	5,46	5,55	5,45	4,74	3,95	3,88	3,84
Thailand	13,11	11,56	11,52	10,45	9,07	8,26	7	5,95	6,08	6,11
Emerging Europe	**23**	**21,22**	**20,44**	**17,39**	**15,5**	**15,23**	**15,97**	**13,14**	**13,81**	**13,88**
Algeria	N.A.	N.A.	19,18	11,74	9,64	8,27	8,74	7,24	7,07	7,01
Czech	19,39	19,02	19,91	21,59	23,14	26,02	31,82	26,02	24,79	24,73
Egypt	19,88	14,85	16,79	14,6	12,84	11,15	9,62	7,63	6,86	6,48
Hungary	21,38	23,29	24,79	24,43	22,17	25,32	25,28	20,39	19,33	18,76
Iraq	N.A.	N.A.	32,38	18,71	14,85	13,49	13,2	12,04	11,4	11,32
Israel	36,23	36,13	37,09	33,13	33,59	35,77	40,56	36,32	39,63	39,96
Morocco	11,61	12,83	13,5	12,99	11,66	11,63	11,28	10,22	10,09	10,09
Nigeria	44,29	41,98	30,39	21,32	18	14,59	13,02	10	9,39	8,97
Poland	21,6	20,11	19,72	17,53	16,87	15,71	19,96	14,37	15,6	15,71
Russia	25,18	13,3	10,09	7,79	8,82	10,43	11,83	8,75	9,08	9,53
South Africa	N.A.	25,41	28,4	25,36	21,95	20,3	17,41	17,23	19,31	19,65
Turkey	12,45	11,64	12,7	13,98	11,82	13,09	12,82	10,9	12,49	13,05
Ukraine	15,51	14,28	12,1	8,99	7,05	6,54	7,07	4,25	4,49	4,72

Latin America	15,35	14,59	13,96	14,27	14,1	15,01	15,23	13,61	13,73	13,82
Argentina	9,65	13,34	14,22	14,3	12,22	11,77	12,68	11,37	11,87	11,84
Brazil	13,85	11,77	10,25	11,03	12,28	14,72	15,27	12,97	14,57	14,49
Chile	13,46	13,27	12,61	13,52	14,75	16,77	17,61	14,32	15,5	15,21
Colombia	12,42	11,79	12,73	11,32	9,03	10,13	9,38	7,9	9,09	9,22
Mexico	17,78	17,65	18,08	18,34	18,06	18,44	17	13,7	14,72	14,9
Peru	55,83	54,27	46,79	42,16	11,82	10,36	9,31	8,2	8,29	8,15
Venezuela	20,48	16,08	11,09	15,16	15,21	13,63	18,12	21,61	13,32	14,6
Matrix Average	**38,93**	**40,3**	**40,39**	**37,76**	**35,5**	**34,64**	**33,19**	**31,33**	**30,28**	**28,38**

ARPU – In this case, is a measure defined as the total revenue divided by the number of subscribers. In this case, it gives information of revenue generated by one customer phone per month.

Source: Bank of America Merrill Lynch – Global Research Estimates, 2010, *Global Wireless Matrix*, p. 68.

Exhibit 18 – Colombia: Estimated Data, 2004 - 2011

Colombia	2004	2005	2006	2007	2008	2009	2010E	2011E
Real GDP growth (%)	4,8%	5,1%	6,8%	7,5%	2,4%	0.1%	3,0%	3,4%
Population (mn)	45,3	46	46,8	47,5	48,3	49	49,8	50,6
Wireless penetration	22,9%	47,6%	62,9%	70,5%	84,2%	82,6%	85,6%	87,8%
Increase	9%	24,6%	15,3%	7,6%	13,8%	-1,7%	3,0%	2,2%
Wireline penetration	16,7%	16,8%	17,0%	17,5%	18,0%	18,5%	19,0%	
Increase	-1,2%	0.1%	0.2%	0.5%	0.5%	0.5%	0.5%	
Subscribers (000)								
Comcel (AMX)	5.814	13.775	19.521	22.335	27.39	27.797	28.741	29.441
Movistar Colombia (TEF)	3.297	6.033	7.760	8.372	9.963	8.965	9.765	10.565
Tigo Colombia (MICC)	1.290	2.086	2.120	2.770	3.314	3.744	4.144	4.444
Total	10.401	21.893	29.401	33.477	40.667	40.505	42.649	44.449
YoY growth	68,1%	110,5%	34,3%	13,9%	21,5%	-4,0%	5,3%	4,2%
Subscriber market share (%)								
Comcel (AMX)	55,9%	62,9%	66,4%	66,7%	67,4%	68,6%	67,4%	66,2%
Movistar Colombia (TEF)	31,7%	27,6%	26,4%	25,0%	24,5%	22,1%	22,9%	23,8%
Tigo Colombia (MICC)	12,4%	9,5%	7,2%	8,3%	8,1%	9,2%	9,7%	10,0%
Total	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%

Source: Bank of America Merrill Lynch – Global Research Estimates, 2010, *Global Wireless Matrix*, p. 120.

Exhibit 19 – Argentina: Estimated Data, 2002 - 2011

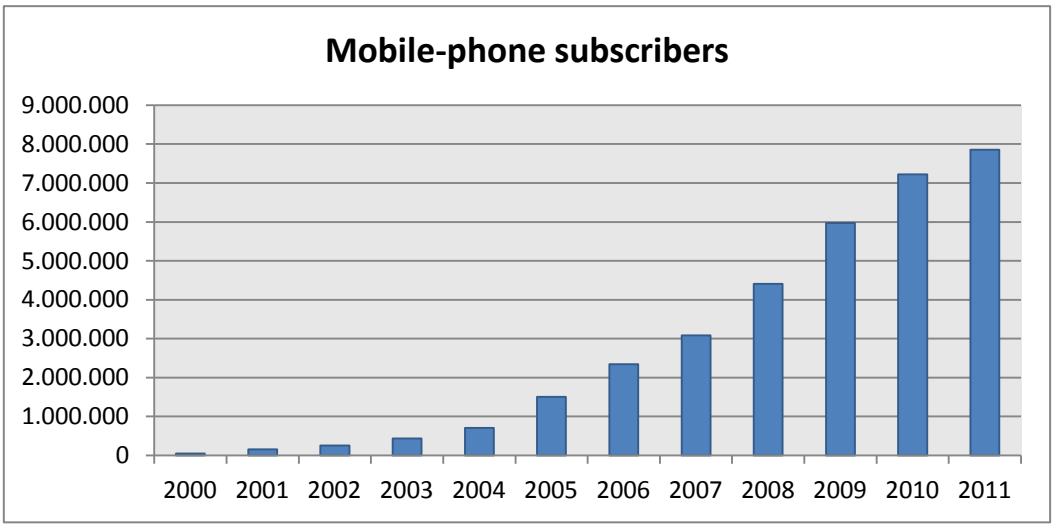
Argentina	2002	2003	2004	2005	2006	2007	2008	2009	2010E	2011E
Real GDP growth (%)	-10,9%	8,8%	9,0%	9,2%	8,5%	8,7%	6,8%	0,.4%	4,1%	3,1%
Population (mn)	37,5	37,9	38,2	38,6	39	39,4	39,7	40,1	40,5	40,9
Wireless penetration	17,4%	20,1%	34,8%	55,5%	77,7%	97,9%	11,0%	120,1%	129,0%	134,9%
Increase	-1,0%	2,7%	14,8%	20,7%	22,2%	20,2%	11,8%	10,4%	8,9%	5,9%
Wireline penetration	20,5%	22,7%	20,2%	20,9%	21,3%	22,5%	22,3%	22,1%	21,9%	21,7%
Increase	-1,3%	2,2%	-2,4%	0.7%	0.4%	1,2%	-0.2%	-0.2%	-0.2%	-0.2%
Subscribers (000)										
Telecom Argentina (TI)	2.191	2.603	3.835	6.150	8.517	10.666	12.564	14.475	16.195	17.399
Movistar Argentina (TEF)	1.617	1.824	3.370	8.155	11.059	13.630	14.830	15.932	16.832	17.532
Claro (AMX)	1.194	1.411	3.587	6.627	10.070	13.424	15.234	16.747	18.108	19.061
Nextel	207	275	378	500	651	813	967	1.030	1.120	1.183
Total	6.529	7.600	13.320	21.432	30.296	38.532	43.595	48.184	52.255	55.175
YoY growth	-4,3%	16,4%	75,3%	60,9%	41,4%	27,2%	13,1%	10,5%	8,4%	5,6%
Subscriber market share (%)										
Telecom Argentina (TI)	33,6%	34,3%	28,8%	28,7%	28,1%	27,7%	28,8%	30,0%	31,0%	31,5%
Movistar Argentina (TEF)	24,8%	24,0%	25,3%	38,1%	36,5%	35,4%	34,0%	33,1%	32,2%	31,8%
Claro (AMX)	18,3%	18,6%	26,9%	30,9%	33,2%	34,8%	34,9%	34,8%	34,7%	34,5%
Nextel	3,2%	3,6%	2,8%	2,3%	2,1%	2,1%	2,2%	2,1%	2,1%	2,1%

Source: Bank of America Merrill Lynch – Global Research Estimates, 2010, *Global Wireless Matrix*, p. 102.

Exhibit 20 – MKTM Solutions

Source: MKTM, 2012. Solutions [Online] Available at: http://www.lovebip.com/index.php?m=3&idioma=1 [Accessed 07 November 2012].

Exhibit 21 – Mozambique: Evolution of mobile-phone Subscribers, 2000 - 2011



Year	Growth Rate
2001	198,94%
2002	66,89%
2003	71,05%
2004	62,48%
2005	112,42%
2006	55,55%
2007	31,65%
2008	43,03%
2009	35,55%
2010	20,99%
2011	8,74%

Source: International Telecommunications Union, Statistics and Database [Online] Available at: http://www.itu.int/ITU-D/ict/statistics/ [Accessed 08 November 2012].

Exhibit 22 – ICT Indicators: Regions of the Globe, 2005 - 2011

Mobile-phone subscriptions (millions)							
Countries	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**
Africa	87	129	174	246	297	363	434
Arab States	85	126	175	214	265	310	350
Asia & Pacific	834	1.074	1.398	1.773	2.166	2.625	3.009
CIS	166	227	267	312	356	377	408
Europe	550	610	677	714	718	726	747
The Americas	459	552	649	741	814	876	989

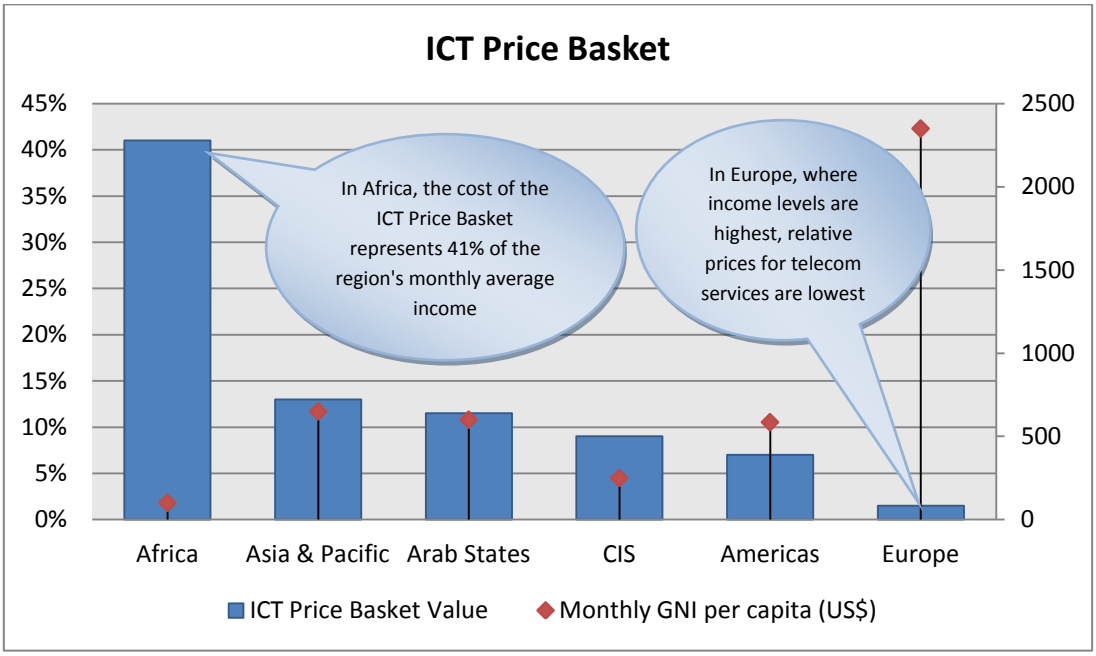
Source: International Telecommunications Union, Statistics and Database [Online] Available at: http://www.itu.int/ITU-D/ict/statistics/ [Accessed 08 November 2012].

Exhibit 23 – ICT indicators: Developed Vs Developing Countries, 2005 - 2011

Mobile-phone subscriptions (millions)							
Countries	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**
Developed	992	1.127	1.243	1.325	1.384	1.413	1.514
Developing	1.215	1.619	2.126	2.706	3.263	3.898	4.457
World	2.207	2.747	3.369	4.031	4.647	5.311	5.972

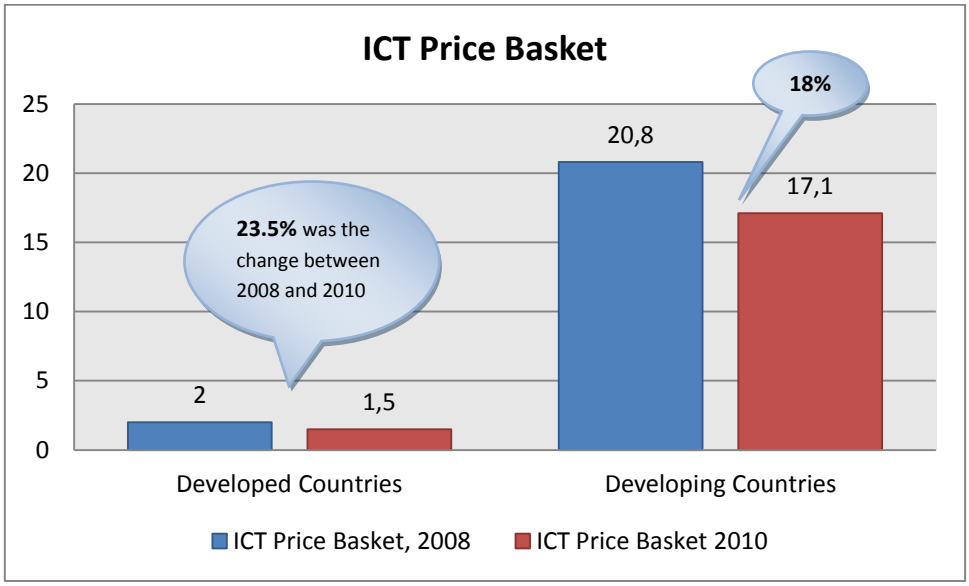
Source: International Telecommunications Union, Statistics and Database [Online] Available at: http://www.itu.int/ITU-D/ict/statistics/ [Accessed 08 November 2012].

Exhibit 24 – ICT Price Basket, 2008



Source: International Telecommunications Union, *The World in 2009: ICT Facts and Figures* [Online] Available at: http://www.itu.int/ITU-D/ict/facts/2011/index.html [Accessed 08 November 2012].

Exhibit 25 – ICT Price Basket Evolution, 2008 & 2010



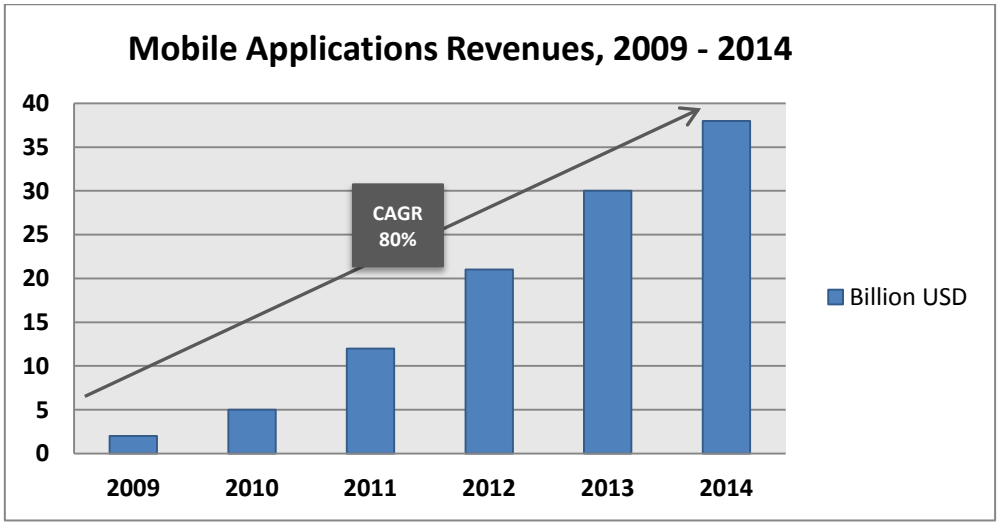
Source: International Telecommunications Union, Statistics and Database [Online] Available at: http://www.itu.int/ITU-D/ict/statistics/ [Accessed 08 November 2012].

Exhibit 26 – ICT Global Price Change, 2008 & 2010

			Average Value Change	
Prices	**2008**	**2010**	**Asolute**	**Percentage**
ICT Price Basket	15,2	12,4	2,8	18,3
Fixed sub-basket	6,2	5,8	0,4	6,9
Mobile sub-basket	11	8,6	2,4	21,8
Broadband sub-basket	165	78,9	86,1	52,2

Source: International Telecommunications Union, Statistics and Database [Online] Available at: http://www.itu.int/ITU-D/ict/statistics/ [Accessed 08 November 2012]

Exhibit 27 – Mobile Applications Revenues Worldwide; Current and Forecasts, 2009 - 2014



CAGR – Compound Annual Growth Rate

Source: GSMA**,** 2011**,** *European Mobile Industry Observatory 2011*, p. 28, adapted from Pew Research Center's Internet America Life Project, The Nielsen App Playbook (2009).

Exhibit 28 – Awards and Nominations, 2007 - 2012

Year	Awards	Nominations
2007	/	**Ernst & Young Entrepreneur of the Year** (CEO Diogo Salvi)
2008	**Internationalization Award Venture Capital IT** - from Gesventure (Portuguese Hedge Fund Investor)	Meios & Publicidade Award, New Agency Category (MKTM, powered by TIMWE)
2009	**INSEAD Entrepreneurship 2009/2010 Award** - Diogo Salvi, TIMWE's CEO	**Sapo Awards** – Mobile Direct Category
2010	**Sapo Awards** - Portugal – Gold in Best Mobile Campaign - "Date Helper" App (Client: Cornetto - Unilever) and Bronze for Entertainment and Shows with "Sudoeste 10 Live" App (Client: TMN); **MMA Awards** - "Best Use of Mobile Marketing – Central & Latin America" - With BlueMessaging developed for Cinemex, the largest movie theater chain in Mexico; **IAB** – IAB's Honorable Mention for Mobile Criativity, with Roche Augmented Reality	**Mobile Entertainment Awards**, Best D2C Company; Meffy Awards, "Best Ad Campaign" (Unicef Campaign)
2011	**Mobile Entertainment Magazine 2010 and 2011** - Diogo Salvi was named one of the 50 top most influential managers in the digital entertainment industry; **Televiva Móvel** - Torpedão Campeão Campaign (Brazil, Clients: Rede Globo, Vivo, Oi, Claro, Tim); **MMA LatAm Awards (Smarties)** – Torpedão Campeão Campaign (Brazil, Clients: Rede Globo, Vivo, Oi, Claro, Tim) for Direct Response Category	/
2012	**Globalcom Awards** – Angola - Best Marketing Campaign with the project "Globo é só na DStv", in partnership with DStv and Globo; **BES Internationalization Awards** - July – Portugal – "Internationalization – Large Companies"	/

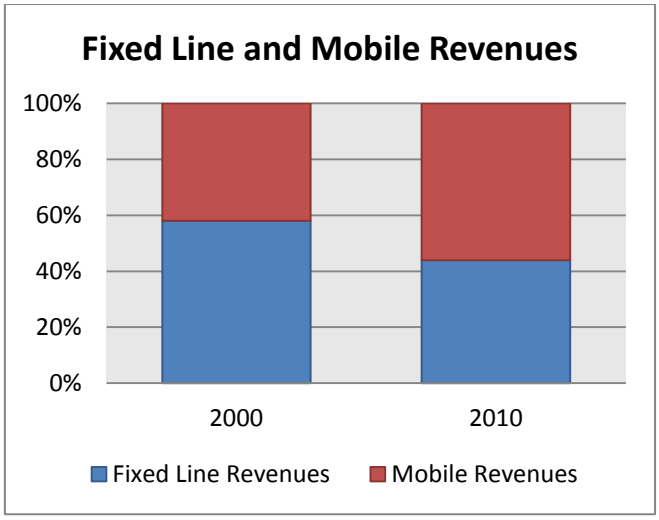
Source: Timwe, 2012. Company. Awards [Online] Available at: http://www.timwe.com/company/awards [Accessed 08 November 2012].

Exhibit 29 - Comparison of Global Device Unit Growth and Global Mobile Data Traffic Growth, 2011 - 2016

Device Type	Growth in Users, 2011-2016 CAGR	Growth in Mobile Data Traffic, 2011-2016 CAGR
Smartphone	24%	119%
Portable Gaming Console	56%	76%
Tablet	50%	129%
Laptop and netbook	17%	48%
M2M module	42%	86%

Source: Cisco, 2012, *Cisco Visual Networking Index: Global Mobile Data Traffic Forecast Update, 2011 – 2016*.

Exhibit 30 – Mobile and Fixed-Line as % of Total Telecom Revenues in the EEA (European Economic Area), 2000 & 2010



Source: GSMA, 2011, *European Mobile Industry Observatory 2011*, p.50, adapted from A.T. Kearney analysis.

Exhibit 31 – Global Wireless Penetration, 2002 - 2011

(%)	2002	2003	2004	2005	2006	2007	2008	2009	2010E	2011E
Developed Markets	**65,0%**	**71,0%**	**78,0%**	**86,0%**	**93,0%**	**100,0%**	**105,0%**	**109,0%**	**112,0%**	**114,0%**
Asia-Pacific	**64,0%**	**69,0%**	**74,0%**	**78,0%**	**82,0%**	**87,0%**	**91,0%**	**95,0%**	**97,0%**	**100,0%**
Australia	68,0%	77,0%	88,0%	94,0%	98,0%	103,0%	109,0%	115,0%	121,0%	125,0%
Japan	63,0%	67,0%	71,0%	74,0%	78,0%	82,0%	86,0%	88,0%	91,0%	93,0%
New Zealand	62,0%	70,0%	80,0%	93,0%	97,0%	104,0%	111,0%	116,0%	123,0%	132,0%
Singapure	78,0%	84,0%	92,0%	100,0%	105,0%	122,0%	136,0%	144,0%	148,0%	150,0%
Europe	81,0%	87,0%	95,0%	103,0%	111,0%	121,0%	127,0%	131,0%	134,0%	136,0%
Austria	84,0%	91,0%	99,0%	105,0%	113,0%	119,0%	128,0%	137,0%	141,0%	145,0%
Belgium	73,0%	79,0%	85,0%	84,0%	91,0%	99,0%	106,0%	109,0%	112,0%	115,0%
Denmark	77,0%	92,0%	93,0%	99,0%	101,0%	116,0%	122,0%	134,0%	139,0%	144,0%
Finland	87,0%	91,0%	96,0%	99,0%	107,0%	114,0%	127,0%	144,0%	151,0%	158,0%
France	64,0%	69,0%	73,0%	78,0%	83,0%	88,0%	92,0%	96,0%	99,0%	101,0%
Germany	72,0%	79,0%	86,0%	96,0%	104,0%	118,0%	131,0%	132,0%	138,0%	140,0%
Greece	104,0%	111,0%	114,0%	126,0%	154,0%	176,0%	204,0%	224,0%	230,0%	236,0%
Italy	93,0%	98,0%	108,0%	122,0%	136,0%	150,0%	151,0%	147,0%	148,0%	149,0%
Netherlands	74,0%	83,0%	98,0%	100,0%	104,0%	112,0%	119,0%	118,0%	120,0%	121,0%
Norway	85,0%	91,0%	103,0%	108,0%	104,0%	107,0%	109,0%	113,0%	113,0%	114,0%
Portugal	81,0%	100,0%	103,0%	111,0%	121,0%	134,0%	148,0%	156,0%	159,0%	161,0%
Spain	96,0%	106,0%	109,0%	118,0%	126,0%	132,0%	137,0%	141,0%	145,0%	148,0%
Sweden	89,0%	97,0%	107,0%	111,0%	116,0%	113,0%	123,0%	131,0%	134,0%	137,0%
Switzerland	78,0%	82,0%	84,0%	91,0%	99,0%	107,0%	115,0%	120,0%	122,0%	125,0%
UK	85,0%	91,0%	103,0%	112,0%	117,0%	122,0%	125,0%	129,0%	130,0%	131,0%
North America	**48,0%**	**53,0%**	**61,0%**	**68,0%**	**76,0%**	**82,0%**	**86,0%**	**91,0%**	**94,0%**	**97,0%**
Canada	38,0%	42,0%	47,0%	52,0%	57,0%	61,0%	65,0%	68,0%	72,0%	77,0%
USA	49,0%	55,0%	62,0%	70,0%	78,0%	85,0%	89,0%	93,0%	96,0%	99,0%
Emerging Markets	**12,0%**	**16,0%**	**21,0%**	**29,0%**	**37,0%**	**46,0%**	**55,0%**	**64,0%**	**72,0%**	**79,0%**
Emerging Asia	**10,0%**	**13,0%**	**17,0%**	**21,0%**	**27,0%**	**36,0%**	**44,0%**	**54,0%**	**63,0%**	**71,0%**
Bangladesh	N.A.	N.A.	3,0%	7,0%	13,0%	22,0%	29,0%	31,0%	34,0%	36,0%
China	16,0%	21,0%	26,0%	30,0%	35,0%	41,0%	48,0%	56,0%	64,0%	70,0%

India	1,0%	3,0%	5,0%	7,0%	13,0%	20,0%	29,0%	44,0%	58,0%	70,0%
Indonesia	5,0%	9,0%	14,0%	23,0%	30,0%	42,0%	62,0%	70,0%	76,0%	82,0%
Korea	68,0%	70,0%	76,0%	80,0%	83,0%	90,0%	94,0%	99,0%	103,0%	106,0%
Malaysia	26,0%	44,0%	57,0%	75,0%	74,0%	87,0%	99,0%	106,0%	118,0%	12,4%
Pakistan	N.A.	N.A.	5,0%	14,0%	31,0%	49,0%	56,0%	60,0%	64,0%	68,0%
Philippines	19,0%	28,0%	39,0%	41,0%	49,0%	61,0%	73,0%	78,0%	81,0%	83,0%
Thailand	28,0%	35,0%	42,0%	47,0%	62,0%	81,0%	93,0%	99,0%	102,0%	103,0%
Emerging Europe	**17,0%**	**23,0%**	**35,0%**	**52,0%**	**67,0%**	**79,0%**	**88,0%**	**95,0%**	**100,0%**	**104,0%**
Algeria	N.A.	8,0%	15,0%	41,0%	62,0%	80,0%	78,0%	90,0%	95,0%	97,0%
Czech	84,0%	95,0%	106,0%	112,0%	120,0%	127,0%	126,0%	129,0%	131,0%	133,0%
Egypt	7,0%	9,0%	11,0%	18,0%	25,0%	41,0%	55,0%	72,0%	83,0%	91,0%
Hungary	68,0%	78,0%	86,0%	90,0%	96,0%	110,0%	112,0%	113,0%	114,0%	117,0%
Iraq	N.A.	N.A.	5,0%	17,0%	33,0%	43,0%	60,0%	67,0%	75,0%	78,0%
Israel	94,0%	103,0%	109,0%	116,0%	123,0%	128,0%	128,0%	131,0%	131,0%	130,0%
Morocco	21,0%	25,0%	31,0%	41,0%	52,0%	65,0%	72,0%	80,0%	82,0%	86,0%
Nigeria	2,0%	3,0%	8,0%	13,0%	21,0%	29,0%	43,0%	48,0%	55,0%	61,0%
Poland	36,0%	46,0%	60,0%	76,0%	96,0%	109,0%	115,0%	117,0%	122,0%	125,0%
Russia	12,0%	25,0%	52,0%	88,0%	106,0%	122,0%	132,0%	147,0%	156,0%	158,0%
South Africa	30,0%	34,0%	45,0%	63,0%	77,0%	88,0%	99,0%	99,0%	105,0%	109,0%
Turkey	36,0%	42,0%	52,0%	64,0%	76,0%	89,0%	95,0%	89,0%	90,0%	94,0%
Ukraine	8,0%	14,0%	29,0%	64,0%	105,0%	120,0%	121,0%	121,0%	122,0%	124,0%
Latin America	**21,0%**	**24,0%**	**33,0%**	**45,0%**	**58,0%**	**70,0%**	**82,0%**	**90,0%**	**96,0%**	**101,0%**
Argentina	17,0%	20,0%	35,0%	56,0%	78,0%	98,0%	110,0%	120,0%	129,0%	135,0%
Brazil	21,0%	26,0%	36,0%	47,0%	54,0%	65,0%	80,0%	92,0%	101,0%	107,0%
Chile	39,0%	47,0%	60,0%	69,0%	80,0%	88,0%	95,0%	104,0%	111,0%	117,0%
Colombia	10,0%	14,0%	23,0%	48,0%	63,0%	70,0%	84,0%	83,0%	86,0%	88,0%
Mexico	26,0%	29,0%	37,0%	45,0%	54,0%	65,0%	73,0%	77,0%	82,0%	86,0%
Peru	9,0%	11,0%	15,0%	20,0%	32,0%	50,0%	64,0%	71,0%	75,0%	78,0%
Venezuela	25,0%	27,0%	33,0%	48,0%	70,0%	87,0%	98,0%	102,0%	106,0%	110,0%
Matrix Average	**21,0%**	**25,0%**	**31,0%**	**38,0%**	**46,0%**	**55,0%**	**63,0%**	**71,0%**	**79,0%**	**85,0%**

Source: Bank of America Merrill Lynch – Global Research Estimates, 2010, *Global Wireless Matrix*, p. 66.

2. TEACHING NOTE

2.1 Introduction

The TIMWE – Born Global Firm case was prepared with the intent of providing an insight about a Portuguese company of IT services that managed to internationalize and operate in several countries, as well as giving an overall picture of the industry where the company does business. This case can be used as a basis for class discussion, and all the data shown is publicly available.

The information provided in the case can be used to illustrate the assumptions and further analysis developed by the author, students and Professors, with the single objectives of teaching and analytical purposes..

All results and analysis made by the author only reflects his own application of the information disclosed in the case, using some strategic concepts and analytical frameworks developed by other authors.

2.2 Synopsis

TIMWE is a born global firm founded in 2002 that started to provide mobile entertainment solutions to mobile carriers in Europe. Moreover, in 2005, it opened its first international office in Colombia, giving the first step to its early expansion process.

The main focus of the business always has been B2O (business-to-operators), and the company has five different types of clients (brands, end-consumers, media groups, mobile carriers and governments), partnerships with over 280 mobile carriers spread all over the world giving access to 3 billion mobile subscribers.

In 2008, TIMWE decided to complement and diversify its business portfolio to mobile marketing, creating and empowering MKTM, a Portuguese Creative Marketing & Media Agency. The initial aim of this decision was to target the Iberian Peninsula market.

The expansion process continued, and the company was still moving to other countries mainly in Latin America, but also in Europe, Middle East, Africa and Asia. Later on, in 2010, the managers saw the trend that was emerging in most developed countries, and decided to diversify to mobile money, offering fast, easy and safe solutions to consumers that are currently using mobile-phones to pay bills, access entertainment, reserve tickets and send money.

Since the beginning, CEO Diogo Salvi always believed that in order to be successful and attain good financial results, TIMWE had to think globally, acting locally, otherwise it would be bought by larger firms, or being confronted with turbulent adversities.

TIMWE has built a wide network of partners, getting a good reputation and credibility, using its experience and know-how acquired through the partnerships and business activities it had established with its global clients. The future strategy of the company will be based on two core drivers: globalization and diversification.

2.3 Suggested Assignment Questions

Students must prepare their own analysis of the case based on the following questions:

1 – Is the overall mobile market still growing? What is the global level of attractiveness for companies that wish to invest and expand their operations in the ICT industry (focusing on the telecom market)? **Hint:** Define the overall mobile market life cycle, and use Porter's Five Forces Model to assess the level of attractiveness of the telecom market.

2 – Who are the clients in this mobile market? **Hint:** Segment the clients, using generic criteria: WHO (nature of the buyers), WHAT (products/services bought), TO WHOM (nature of the consumers), WHEN (buying occasion), WHERE (buying local), WHY (buying reason) and HOW (buying method).

3 – What makes one company better than other? In other words, what allows a company in this mobile market (focus on the mobile-phone segment) to create more value to the clients than the value offered by the competitors? **Hint:** Apply the Critical Success Factors framework to the analysis (Key Buying Factors, Competition Engines, Critical Success Factors).

4 – TIMWE was created in association with the born global syndrome. What are the main advantages and disadvantages related to the process of being forced to compete with global players and think globally, but acting locally (Explore the Glocal Approach) since its inception? **Hint:** Perform a SWOT analysis and explore the Porter's Value Chain framework.

5 – What would be your recommendations to TIMWE growth strategy in the future? (1) Follow the same steps (continue to invest in emergent markets), (2) diversify the business (Mobile Government) or (3) increase penetration in already dominant markets (Latin America). Justify. **Hint:** Study the pros and cons of your decision.

2.4 Teaching Objectives

The case has ten teaching objectives:

1. Make students define and identify born global firms, and the special need that drives their internationalization process.

2. To have students understanding and knowing the Portuguese context for IT firms.

3. Allowing students to have a broader view over the recent history of the mobile market; its trends and future evolution.

4. To make students think "outside of the box", meaning they need to search and interpret information to fully understand and answer the questions.

5. To make students see the importance of emergent markets in this industry.

6. To help students assess the level of attractiveness of an industry using the information provided in the case, and also using other sources.

7. To make students use strategy frameworks to support their analysis, as well as to make an effective use of their previous knowledge.

8. Helping the students to think critically and strategically about the strategic choices of a company, and give their own recommendations supported by a clear and thorough analysis.

9. To allow students analyze and interpret quantitative and qualitative data, in order to back-up the analysis.

10. To give students the chance to excel on the decision-making process, by having to give their own thoughtful and careful opinions about the strategy of the company.

2.5 Use of the Case

This case gives an example of a Portuguese born global firm and the drivers of its early internationalization strategy, focusing on the mobile-phone industry. It aims to give students the opportunity to explore some strategy concepts and frameworks, so they can support their analysis and further recommendations based on real facts.

The TIMWE – Born Global Firm case can be used in strategy courses and targets both Undergraduates and MBA students with a good acquaintance with strategic models and theoretic materials.

2.6 Relevant Theory

The case study focus on the strategy chosen by one Portuguese firm in internationalize at very early stages – being identified as a born global firm. There are some authors that try to explore the differences between EIFs (early internationalization firms), and BGFs (born global firms), but this study does not intend to put those in evidence, but stand out the embedded needs of an early internationalization approach of a born global firm, and for the acquisition of a deeper knowledge about this topic there are two pieces of academic literature that build on this subject:

1. Barkema H. Kudina A. and Yip G., 2008, 'Globalization – Born Global Firm', *London Business School*, pp. 39 – 44.
2. Cavusgil S. & Knight G., 2009, 'Born Global Firms: A New International Enterprise', *Business Expert Press*, pp. 1 – 24.

The further analysis and discussion of the case will require students to use some strategy frameworks, and understand the key concepts and implications of the final results. In the beginning of each question, there is the identification and summarized description of each model.

1. **Industry Life Cycle** – Levitt T., 1965, 'Exploit the Product Life Cycle', *Harvard Business Review*, Vol. 43, pp. 81 – 94.

2. **Porter's Five Forces Model** – Porter M. E., 2008, 'The Five Competitive Forces that Shape Strategy', *Harvard Business Review*, pp. 79 – 93.

3. **Segmentation Criteria –** Freire A., 1997, *Estratégia – Sucesso em Portugal*, 1st Edition, Editorial Verbo, p. 71.

4. **Critical Success Factors** – Freire A., 1997, *Estratégia – Sucesso em Portugal*, 1st Edition, Editorial Verbo, pp 98 -99.

5. **SWOT** – Freire A., 1997, *Estratégia – Sucesso em Portugal*, 1st Edition, Editorial Verbo, pp. 143 -144.

6. **Porter's Value Chain Framework** – Porter M. E., 1996, 'What is strategy?' *Harvard Business Review*, pp. 61-78.

2.7 Analysis & Discussion

The discussion in class can be divided in five different blocks. Each one of them corresponds respectively to the Suggested Questions also presented in the case. The case analysis and the following class-discussion are supposed to be developed in a 90 minute-time session.

The Professor may choose to ask students to prepare the case before the class discussion, as well as demanding a report based on the questions posed in the end of the case.

This is the following recommendations for time distribution in each question:

Question 1 – 20 minutes

Question 2 – 10 minutes

Question 3 – 20 minutes

Question 4 – 20 minutes

Question 5 – 15 minutes

Question # 1 - Define the overall mobile industry life cycle, and use Porter's Five Forces Model to assess the level of attractiveness of the telecom market.

Industry Life Cycle

The product (industry) life cycle framework (**TN Exhibit 1**), presents a conceptual approach to the phase in which a product or industry is presently during its lifetime. Typically, industries (and products), pass through four certain and recognizable stages and one pre-stage: Market Development, Introduction, Growth, Maturity and Decline.

First of all, it is important to know what industry is being classified, therefore taking in consideration the figures and trends presented in the case. The mobile segment is an important part of the ICT (Information and Communications Technology) industry, since what we are seeing now is a shift between the fixed-line phones to the mobile-phones (**Exhibit 30**), with the mobile industry alone accounting with 1.7 million Europeans employed in this market, in 2011. It is relevant to notice that the case gives information about mobile devices, but in addition it highlights some of the IT services (entertainment, marketing, applications, etc) available in the market and which are used to improve the global mobile network. Overall, the mobile market is divided in software/content (e.g. mobile apps, OS, NFC technology, etc) and hardware providers/manufacturers (mobile devices, such as mobile-phones, tablets, laptops,

and so on). For the sake of the analysis, the results do not make an assertive distinction between them; instead, they give an overall picture of the market.

In terms of numbers, it is clear mobile-phones are the core of the mobile industry with roughly 5.9 billion people in the world, at the end of 2011, with a mobile-phone subscription (**Exhibit 23**), with the regions of Asia and Pacific leading the way (**Exhibit 22**), being responsible for more than half of the world's total mobile-phone subscriptions (more than 3 billion). Over the years there has been an increasing global wireless penetration (**Exhibit 31**). Some developed regions showed they are still behind some emerging countries, as of the weight of mobile-phones in comparison with telephone fixed-line (**Exhibit 11**), such as India (95.50%), Brazil (82.80%), Peru (90.20%), among others. The penetration rate in 2011 was clearly below the global average matching up with the previous year, which shows the importance of developing economies in balancing the growth level, accounting alone to more than 80% of the new 660 million mobile-phone subscription added in 2011.

In 2011, the number of mobile-connected tablets nearly tripled to 34 million, whereas the mobile network had around 175 million laptops in the same year.

Estimations appoint towards the interesting fact that by the end of 2012, there will be more mobile-connected devices than the number of people on earth, and in 2016, it is expected that there will be 1.4 mobile devices per-capita.

The global number of users in all mobile devices is predicted to keep growing in the next years (**Exhibit 29**), which can mean additional revenues to the companies competing in the industry, since there are more people willing to buy these products in the future, therefore there will be more clients to companies such as TIMWE for improving business and take advantage of this growth path (**Exhibit 30**). Nevertheless, if we look to the ICT price basket, it has decreased in the last years (**Exhibit 26**) – these products and IT related services are getting cheaper – something that can be explained by the intensifying competition in the market. The global ARPU has been decreasing since 2002 until 2011 (**Exhibit 17**), which adding to the ICT price basked decline, helps to clarify that the mobile industry related to mobile-phones devices is stabilizing.

Other interesting figure relates to the mobile apps revues worldwide (**Exhibit 27**) that is expected to have a growth rate level of 80% CAGR, from 2009 to 2014, reaching $38 billion in 2014, compared to the $2 billion in 2009.

The Telecom service providers worldwide (e.g. TMN, Vodafone, etc) had $1.8 trillion in revenues in 2011; a growth rate of 6% compared to 2010. They also invested 3% more than in 2010, registering a capex of $301 billion.

Bearing these facts and figures in mind, it is possible to assume the global mobile industry is still growing, but it is likely to reach its mature phase in the mid-term (**TN Exhibit 2**) What consumers want right now is the access to more and newer value-added services and if there is no innovation and particular breakthrough, mainly concerning the manufacturing of mobile devices (mostly mobile-phones), where we see already billions of people with access to these communication/information instruments (more than one mobile device per-capita), and also new services, the industry sales will start slowing down.

The bubble is still growing, mainly supported by the continuing emergent number of IT services available and its generated revenues (e.g. mobile apps, digital imaging, wireless networks such as 3G, etc), and the new mobile devices, such as tablets and the portable Gaming consoles (**Exhibit 29**), but speaking exclusively about the overall mobile market/industry sales volume, if the end-consumers do not see and perceive any additional value and further innovations shortly in this area, soon it will start reaching the mature phase, which can happen even before the end of this decade.

Porter's 5 forces model – Telecom market

The Five Forces Model is a business strategy tool that helps to assess the level of attractiveness of a certain industry, depending on the competitive rivalry, which is influenced by the power of each one of the other forces (**TN Exhibit 3**). In this case, students are asked to apply this model to the global ICT industry, but focusing on the telecom market.

Nowadays, the telecom market is less about voice, but increasingly more about images, texts, applications, faster data-sharing, and interactive entertainment, mainly due to the increasing number of mobile devices in the network and the growing traffic capacity of these instruments that enable and facilitate communication and the exchange of information (**Exhibit 29**). Broadly, what we see is that the power is much concentrated in a few players (**Exhibit 10**), with most of countries just having three or four mobile carriers.

Threat of new entrants: Low

With this level of concentration is hard for new companies to struggle and enter in this market. The existing players already have a significant control over the distribution channels, having special agreements with retailers and handset manufacturers (e.g. Apple, Acer, Asus, Samsung, Sony, Nokia, Thomson, Huawei, etc).

It is a capital-intensive industry that requires high initial investments to start operating, and although it has been facing a continuous deregulation process, the barriers to entry exist and new companies still need to have a license if they want to get a share of the global revenues.

Threat of Substitutes: High

The fixed-line services have now a growing number of substitutes, mainly due to the wireless telecom carriers - increasing wireless penetration worldwide (**Exhibit 31**). The main substitute for the telecom operators is the internet, that already offer the possibility to people communicate in different corners of the world, with little or almost no costs at all. Skype, Google voice, and other programs and platforms, such as Facebook and Twitter are putting this market at bay. People just need a broadband internet services access, and they are ready to start sharing.

There are other examples such as in the game industry (mobile game consoles), where there are also some online platforms (e.g. Steam, Origin, etc) that allow the consumers/gamers to communicate, either by voice or texting, which can be again a substitute to the current communication services provided by telecom operators.

Bargaining Power of Suppliers: Medium

Telecom operators rely greatly on some suppliers, such as network and mobile handset equipment manufacturers, retailers, fiber-optic cables providers, and software (IT development, content/application provision) developers, so they can sell their services. Putting things like this seems they have not much negotiation power over the suppliers, but what happens is not quite that simple – there are many suppliers for the number of telecom operators.

Although the most known suppliers, such as Sony-Erickson, Nokia, Apple and other companies which not only manufacture their own mobile devices, but also provide their own software, have some “brand name” and recognition in the industry, there are a lot more in the

market, with a smaller but growing size that are now starting to make an appearance. Many of them come from Asia (e.g. Huawei, LG, Acer, Asus, etc), which adds more competition to the supplier side, making the big manufacturers and suppliers lose some market share, diluting their bargaining power.

Bargaining Power of Buyers: Low/Medium

Nowadays, there is a wider range of options to the buyers of telecom services, mainly coming from the new and alternative ways of communication and instant information sharing provided by the internet, as well as the new mobile manufacturers and independent retailers that want to make a stand in this market.

Most of the services provided by the telecom operators are treated as commodities, they have a very low price (customers are price sensitive in this market), and are now facing a continuing slice (**Exhibit 25 and 26**), essentially because of the fierce and growing competition in the mobile segment.

One important thing to remind is the fact there is a network effect in industries like this one. A single customer does not represent much for a carrier; he/she does not have a significant impact on the operator's revenues. On the other hand, one mobile carrier can be extremely important to a customer, for instance, if he/she has all his/her friends as part of one specific mobile carrier, and if he/she is not, the customer will not have access to the network benefits (lower tariffs). The power of the community is strong, but generally it does not work properly, and in an organized fashion, which make the buyers to have a limited negotiation power.

Rivalry: Medium/High

Taking into consideration the power of each force, one can say the rivalry in this market is medium/high.

It is difficult to enter and exit this market (how to destroy the networks and systems created over time?); nevertheless many small firms are struggling to sell their products and value-added services. There is a greater number of independent retailers that is now starting to come up, focusing on the sale of smartphones and tablets, and challenging the traditional operators' retail business, improving the customer experience and taking advantage of the bubble in the mobile segment.

Most of the operators try to create some switching costs, in order to have a closer customer relationship, by charging lower tariffs to those who belong to the telecom operator network, for instance, in Portugal there is TMN with Moche, Vodafone with Xtreme, and Optimus with Tag. The downside of this strategy relates to the online platforms that allow communication with no costs at all.

Soon enough, they will need to excel when it comes to multichannel sales, customer experience and politics of CRM (Customer Relationship Management). Everyone has now access and pay for mobile services, the competition will be based on price and new services that help creating a different value proposition.

The profits in this industry are getting down, mainly due to the decreasing ICT price basket, which decreased 18.3% from 2008 to 2010 (**Exhibit 26**), but also because of the increasing competition and number of players, cutting the prices even more.

Level of Attractiveness: Low/Medium

As the rivalry is moderately high, there is no much incentive for new companies to try to enter and explore this market. The big mobile carriers have a lot of power and control, and the small players only can create value where there are still some opportunities – mobile segment (value-added services).

Although the telecom business can hold an attractive rate of profitability, the most difficult and challenging part is to create a strong network of users – a community – something that takes a great deal of time and investment.

The new companies should focus rather in small, growing and innovative services, such as mobile apps and mobile-payments, and leverage what they can offer to the end-consumers trying to establish some partnerships with the biggest telecom providers, therefore getting an easily way to access the market and starting to build their own network and brand image.

Question # 2 - Segment the clients, using generic criteria: WHO (nature of the buyers), WHAT (products/services bought), TO WHOM (nature of the consumers), WHEN (buying occasion), WHERE (buying local), WHY (buying reason) and HOW (buying method).

The generic criteria used here does not have much theory behind, it just can give a heads-up about the definition of the clients in a given industry or market. This model (**TN Exhibit 4**) can be useful to know the various segments of consumers and understand their needs or reason why they buy a product or service.

In the mobile market, we do not have simply one client; the analysis must be broader, and take into account the fact we have multiple types of clients, consumers, mobile devices and services.

WHO: Nature of the Buyers

The buyers of mobile devices and services are both individuals and corporate large and/or small organizations. Most of the persons who buy these products, as well as the services (mobile apps, advertising campaigns, and so on) have some knowledge about the new technological trends and understand almost completely all the functionalities and associated features.

The people who buy these instruments tend to be young - the internet booming generation – they are tech-savvy, and have a multi-cultural approach, since they now live in a globalized world, where the easiness and quickness of communication and sharing of information and data is the new trend, everyone wants to know everything, everywhere.

These individuals were born with access to the new technological devices, such as gaming consoles, light and advanced mobile-phones, laptops and now the tablets. They can consider themselves as self-dependants of these new devices, and now even more with the new mobile apps, and mobile platforms (e.g. Facebook, Twitter, Instagram, etc). The power of the community is much stronger.

The corporate organizations are a different kind of buyers. They use the mobile devices to complement their activities, and easily share business data and up-to-date information about their activities and related markets and competitors, from all the branches to the offices spread all over the world. Mobile devices is becoming a relevant sales channel for specific industries and the most important for ICT companies. Time is everything. And time is money.

By corporate organizations I do not mean only companies, but government entities, universities, and other “businesses”. Their aim is different and not just to have profit at the year’s end or create value to the shareholders, but also offer quality services to the population, and improve the living conditions and overall development of the society.

WHAT: Products/Services Bought

The products and services bought by both individuals and organizations are a little different.

People usually are keener to buy the latest versions of the new smartphones, gaming consolers and tablets, but mostly the new apps that everyone is talking about. On the other hand organizations mostly buy other mobile devices, such as smartphones and laptops, and mobile services (marketing campaigns, information systems, applications to improve their knowledge about the clients and track their preferences, etc) in order to give the collaborators an easy and common way within the company to share information and manage the business processes, increasing cost-effectiveness and improving productivity.

In terms of features, individuals now just want to be trendy, even though it means to have the same mobile-phone, but just changing slightly the color, capacity, durability and overall performance than the ones most used in their communities (e.g. friends, university co-fellows, etc). The organizations are likely to provide the same smartphone and laptop to all the employees, with the exact same features, and design, in order to reduce IT maintenance costs, and allowing inter-actions and information sharing among collaborators.

TO WHOM: Nature of the Consumers

Individuals buy the mobile devices and services to themselves, or to offer to friends and family. The mobile apps are bought for own usage, meaning if a person wants to share with his/her friends the app, the friends have to buy or download the app for themselves.

Corporations buy the mobile devices and services usually for the collaborators and to the clients, when they see they can capture some value and deliver it in the market (e.g. the relation TIMWE has with mobile-operators). For instance, in the case of TIMWE, we see the company acts in the area of VAS, one specific type of mobile services, which it delivers to its clients, and they capitalize on it, and then sell the “whole-package” to the end-user.

WHEN: Buying Occasion

There is no particular occasion for a person buy mobile gadgets and services, besides the need to be part of the community or offer as a gift to family and friends. Nowadays, everyone has a mobile-phone, and there is no seasonal-effect in such purchases, because most of the products are not cheap, and cannot easily be bought in a regular-basis. About the services, and mobile apps, they can have some seasonality effect, for instance, if a new music

hit appears, or in Christmas time, it is likely individuals feel they need to keep in touch with the unique moment, therefore buying the ringtones, games, and other related apps.

The corporations buy the products based on two key drivers: the need to stay on top and be efficient. This is linked with a strategic approach of many companies; they have to know what is happening in the market, and if the market is moving in one way, they have to keep on tracks. For instance, Coca-Cola, the company that created Santa Claus, if it wants to remind people of the brand in the Christmas time, it probably will buy some mobile apps, as games, or music tones from mobile developers, to alert people of the meaning of Christmas, and associate it with the Santa Claus character.

The need to be efficient is more related to the shift in most industries, where doing things fast and rapidly adjust to change are very important factors (e.g. fashion, faster consumer goods, movies, music, etc) to embrace a sustainable competitive advantage. The mobile devices can give this edge, such as laptops and smartphones, which can help to make a difference, since they can be easily transported and efficiently share data.

WHERE: Buying Local

In both cases, all the mobile apps are bought through the devices that need to have access to the internet (in-home or out of home) and which have compatible versions that can run the downloadable applications.

The mobile devices can be bought in the normal retail stores, but usually the ones which focus on selling technological devices; whereas the mobile applications can be acquired online (online shops). Larger corporations buy bigger quantities compared, of course, to one individual that probably just buy one single mobile device, so they usually establish some contracts with well-known producers and software developers, such as HP, Blackberry, Apple, just to name a few. They can make a direct contact with these manufacturers and content providers, to get exclusive deals and easily negotiate the price and quantity of the transactions.

The most developed countries are the ones who started to buy the largest volumes due to the early technology expansion and wireless penetration in these regions (**Exhibit 31**), but emerging countries are now showing interesting levels of growth in terms of mobile dispersion, which reinforces the fact this market is not only strong in Europe, USA, and Japan, but also it is expanding worldwide.

WHY: Buying Reason

The buying reason is somehow related to the buying occasion. People nowadays buy these products and services to feel they belong to a community. It is more of a psychological need, rather than something they vitally need to have, given that they only want to show to their friends they are part of the network. They are bought to satisfy their needs and to give social status, as well as to provide some basic features, such as calling, texting, sharing information, playing games and music, and so on. It can be said individuals use and buy these mobile products and services to have fun, to be always connected to the online network, to be linked to the world, and know the news anytime, anywhere.

Companies do not completely buy the mobile devices and services to show to the world they are trendy, but to keep up with the evolving market, and give the necessary tools to the workers to be efficient and facilitate the decision-making process, by quickly allowing the exchange of information needed to take important strategic decisions. They are used to accelerate decisions, easily share and match data, and also to make the collaborators be accessible and ready to intervene 24×7.

HOW: Buying Method

Either for individuals and organizations, the buying method is the same. To pay for mobile devices; both can use cash, credit card, and checks to buy it on the usual retailers, or pay it online using the credit card (homebanking).

About the mobile apps the process is different, since they are bought online, and sometimes there are illegal websites that allow getting the app for free. In order to fully have the benefits of the services and applications, they have to be paid, and generally, this situation only happens on an individual-basis, whereas companies and organizations have/need to buy all the services (e.g. marketing campaigns, OS, etc) if they intend to incorporate those in their businesses.

As said previously, companies can get some discounts because they buy in larger quantities, while individuals have to pay for devices that are targeted as premium products (iPad, iPod, etc), not having any special benefit, due to the fact they usually buy one at a time.

Overall, the clients can be segmented in two types: individuals and corporations. Both of them have similar needs and reasons to buy mobile devices and services, but their strategy

is different, as well as the relations and negotiation power with the suppliers of such instruments.

Another difference highlights the propagation of these devices and services by geographical area, since most developed countries always have been great consumers, due to the effect of globalization and earlier technological (internet) booming. Nevertheless, the emerging countries are now giving cards in this market, creating new services and boosting the industry of telecommunications.

Question # 3 - What allows a company in this mobile market (focus on the mobile-phone segment) to create more value to the clients than the value offered by the competitors? Apply the Critical Success Factors framework to the analysis (Key Buying Factors, Competition Engines, and Critical Success Factors).

The critical success factors are the variables of an industry (and not of a singular company) which can allow a company to create more value to its clients than its competitors. They represent the key factors organizations should focus on to succeed in a specific industry, depending on the capabilities of the firm to manage its many resources.

First of all, it is important to know there are three generic criteria which must be fulfilled to apply this model: the critical success factors must have general applicability (all players must compete on the same or a similar basis), decisive relevance (the factors must cross the whole industry), and controllability (companies must be able to control the variables).

To understand what the critical success factors of an industry are, it is important to look to the clients and see what is behind their buying decisions (Key Buying Factors), in this case, what makes them buy a mobile-phone. After knowing their preferences, the players will compete (Competition Engines) in the market, with the aim of creating more value to the clients than the others, using the right mechanisms and tools to effectively attain success. With all this in mind, the variables of the critical success factors of the industry are more easily defined, and now we know how companies attract more clients and differentiate, in order to have and create a sustainable competitive advantage.

Key Buying Factors (**TN Exhibit 5**)

One important thing to remind is the fact mobile-phones are assuming a more dominant and prominent position in our lives, compared to the fixed-line phones (**Exhibit 30**).

Consumers no longer see them as simple devices which only work as receivers and transmitters of phone calls and text messages, but rather instruments playing an active role on people's lives.

We are living in a globalized world, where there is a much faster tracking of information and sharing of data (**Exhibit 29**), since nowadays, people always want to know about what is going on around the globe.

Individuals most appreciate the mobility and flexibility the mobile-phones are able to offer (e.g. mobile payments), as now they can talk and share information from one remote and distant place, for instance, if a person that is walking on the street in Sydney, Australia, remembers it is his brother's birthday day, he can instantly call him, while the brother is visiting Louvre, in Paris, France in that precise same moment. Simultaneously, he can check his agenda on the mobile-phone to see if he has an opening to travel to Paris and be with his brother to celebrate, booking the flight using his mobile-phone (if it has an internet connection). These are some of the many perks that these devices provide to people, the flexibility to access to information and contact with other people anywhere, anytime.

Not just with mobile-phones, but with almost all products and services, there is one key aspect that must always be present: quality. If the mobile-phone does not seize this part, having problems with the battery, or if it shows a blurry image screen, no person would buy it, regardless of the price. The device must me reliable; the consumers want something durable, and that has no functional and design problems, it must fulfill their demands. The performance of a mobile-phone is other important factor in the decision-process, as we are registering an increasing number of sharing data over the mobile world (**Exhibit 29**); mobile-phones too, need to have the memory capacity to receive all the images, documents, music, games and all the other mobile apps that enhance the mobile experience.

If the mobile-phone does not have the basic features (e.g. SMS, MMS, video-recorder, etc) people will be less willingly to buy the product, or do not buy it at all. After the internet's boom, and now with the growing impact of social networks, one can consider the internet access has something extremely relevant to the consumers, given that they want to be always in touch to what is happening in their community, and of course, to know what is going on in the world.

The final remaining key buying factors are close-related. The most famous brands of mobile-phones are well-known by the consumers (e.g. Samsung, Nokia, Apple, etc) and have a

good reputation not only the new segment of smarphones, but also in others (e.g. tablets). Some people buy a specific mobile-phone not just because of its performance, or price, but also because of the social status it can provide. Some people are willing to pay more for such machines, due to the reputation and the assured brand name in the market. There is this sense of community (network effect) where brands such as Apple were able to create, delivering innovative designs and mobile-phones that offer similar features compared to others, but are more expensive, exactly to make consumers see it as a premium brand which embraces innovation as one core driver. Consumers are an integrating part of the exclusive society if they decide to buy it, otherwise they will not get access to the network's benefits (e.g. have the same thing my friends' have), not achieving the desired status.

The price is clearly a vital factor that always has some weight in the decision process, although some people do not look to expenses when it comes to have the opportunity of belonging to the trendy community. The design is also important, because if one person looks to two different mobile-phones, but both have the same price, performance indicators, and features, they will decide based on the appeal of the device, the one that suits them better.

Competition Engines (**TN Exhibit 5**)

Companies compete in this segment based on some key strategic points. Most of them, either the ones that only manufacture the devices, as well as the software/content suppliers, but mostly the telecom service providers, since as they are usually just a few in most countries (**Exhibit 10**), they try to make it harder to consumers that want to change to other mobile carrier, thus establishing switching costs for the buyers. These costs are mainly coupled with the network effect and other aspects such as portability (changing the number of the cell-phone), contractual agreements, different interface from one mobile-phone to another, and others, which increase the costs to the users that wish to change to other mobile-operator, or decide to buy other mobile-phone from a different brand.

Differentiation of the products is also relevant, mainly to the most-known brands, which have to keep innovating and are always trying to invest in finding new technologies (e.g. 4G, NFC, etc) to motivate the people to buy the brand's products, therefore capturing a bigger shank of the market, and be easily recognized by the consumers.

In this industry, and not just in the mobile-phone segment, it is important to a have a global reach, meaning that if a brand such as Apple or Samsung can sell its products in more countries, the network effect would be greater, attracting more consumers to buy their

products. Companies fight with each other in a way to make people see they are bigger and are in more places than the competitors, and if they are selling well in other regions the word starts spreading fast. Creating a loyal and trustful pool of users has a significant importance to these companies, since they are the ones that will start building on the global reach and the community itself.

Companies in this segment also compete based on price. The price wars are not as intense as in other industries, mainly the ones which have products with lower prices – commodities, for instance. Usually, brands such as Apple do not care much about being above the average price in the market, since it wants to position itself as a premium brand. The others follow a strategy of ranging the price given variables such as; R&D costs, features, development costs, technology involved, and so on. Nowadays, there are some brands that are flooding the market with smartphones with cheaper prices (e.g. Nokia, LG, Huawei, Samsung, and others) in order to reach the low-end consumers. Most of these brands try to sell mobile-phones with lower prices, because although there is a new trend towards the high-end and premium priced cell-phones, the majority of people consider the price as the most important criteria in choosing such devices.

The value-added services are even more important in this current segment, where the companies try to offer additional services (e.g. SMS, HD voice or wideband audio, games, etc) to the clients, even when they have to pay an extra to acquire those services. The SMS and voicemail are still the most popular services worldwide, but now as we see the booming of social networks, and the increased network capability and user capability; there is a strong call to manufacturers and software providers to innovate, and develop new applications (entertainment, marketing and money), improve the mobile commerce and, finally, create advanced network services and all the supporting systems to accelerate the growth pattern of the mobile-phone market (**Exhibit 23**).

Critical Success Factors (**TN Exhibit 5**)

Bearing all this facts in mind, it is now possible to clearly appoint the critical success factors on the mobile-phone segment.

To have a good reputation and acknowledged brand image in the market is important to companies make a stand and differentiate from the competitors. Consumers will tend to buy the mobile-phones they know, or because someone advised them to buy it. At the end,

they will rely on the ones they know from name and reputation (e.g. Apple, Samsung, Nokia, Sony, etc).

One other thing is the network effect, or the power of the community. Brands must build a strong and uplifting community of users, increasing the overall coverage by increasing their global reach. This is only achievable if companies have good distribution channels, not just to have all the products available in all retail stores in-time and with fine visibility, but also in the case when they are developing a new technology or a product improvement (e.g. lighter, bigger screen, increased memory capacity, higher resolution, etc) they need to quickly carry the devices to other places around the world, and make them available in the market in a very fast-fashion, getting there before the other players. The community is something used as a switching cost to the consumers, something explained in the competition engines variables – companies try to create a loyal group of clients, and convince them to stay loyal and do not change to other telecom operator, or buy a mobile-phone from a different brand, which can make them lose all the privileges and benefits they were able to use until then.

Innovation is one key factor; companies need to keep innovating to be competitive and create more value to the clients. Investment in R&D infrastructures has a great deal of importance, since this kind of companies (manufacturers and software/content providers) are always launching and developing new ideas, in order to capture and deliver new things to the fast-changing consumer. This is not just what consumers want to see on their mobile-phones; furthermore they want a device that has a good overall performance. Firms compete also on the basis of leveraging the level of innovation, but offering a good standard performance, to keep consumers satisfied by making them understand there is a minimum of quality they will find in the market, and below that line, the products will not be recommended.

Communications is a critical success factor in the way it is used to craft different images and associations from one brand to another – it is related with creating the desired brand image and awareness. This communication is not only in the form of advertising, but also is attached with the network effect, and other aspects such as design and innovation – it is all about how companies convey the message to the consumers, and how that message is perceived and accepted in the market. It is related with the way the players make them stand out from the crowd, and what are the features they know that will captivate people's attention (different from country to country – different needs), increasing their desire to buy the products (mobile-phones) or services (e.g. mobile apps).

Finally, the price works as a differentiation factor. Most brands do not only use price to gain more market share, but it is something influencing the judgment and final decision of consumers. In the Apple's case this example is very clear, since the brand wants to position itself as premium, charging a higher price than the market average, which differentiates it from the competitors and virtually creates more value to the clients (e.g. enhanced design, growing and exclusive community, social status, etc). In terms of weight the price is important, but for some people it is not all that matters.

A company will be able to create a sustainable competitive advantage in this market if it manages to leverage all these variables in an efficient way, in order to compete with distinctiveness at the level of creating more value to clients than its competitors.

Question # 4 - Perform a SWOT analysis and explore the Porter's Value Chain framework.

SWOT Analysis

The SWOT analysis is a model used to identify the strengths and weaknesses of a company, as well as allows the identification of opportunities and threats in the external environment.

Strengths (**TN Exhibit 6**)

TIMWE is currently operating in 75 countries on the 5 continents (**Exhibit 2**), with 26 offices and employing more than 300 people. The company has now a global reach, having access to 3 billion mobile subscribers, and partnerships with over 280 mobile carriers throughout the world. This global presence allows the company to get in touch with many of the player in the ICT industry and serve this vast market (around 6 billion mobile subscribers in 2011); by leveraging the mobile monetization solution and services it offers with the in-home development of its proprietary technology (**Exhibit 1**).

Over the years this approach of an early internationalization strategy gave interesting results (**Exhibit 3**), with TIMWE registering a growth rate of 2 digits year after year. This is clearly one of the strengths of the company; soon it was able to understand the need of becoming a global player in the market, in order to successfully compete in the growing mobile industry.

It only achieved such success, due to its mobile expertise, which was built supported on the development of its proprietary technology and the establishment of partnerships with

well-known companies around the world (**Exhibits 13 & 14 & 15**). With its deep expertise and know-how about mobile technologies (SMS, WAP, USSD, and NFC) TIMWE opted to diversify the core business (mobile entertainment) and now has three distinct but complementary business areas: mobile entertainment, mobile marketing (MKTM) and mobile money.

As it expanded the business portfolio, the company reached more players in the market, continuing to grow and expanding to other countries (focused on the Latin America market). The services and solutions offered by the company were targeted specifically to the needs of local players. For instance, in 2010 TIMWE released a digital campaign for the promotion of e-commerce Lancôme Brazil (mobile marketing); in the same year it created a game (mobile entertainment) for the commemorative campaign of the 25th anniversary of the Portuguese newspaper "O Jogo", and in 2012 it launched the NFC app in MaxiPlus5 to let consumers explore and buy products available for sale (mobile money/payments) using the mobile-phone developed by Turkcell, a Turkish company.

All this was only possible due to the alignment around a common and shared vision, and motivation of all the employees, as well as the top management team in working together to become the pioneer leader in mobile monetization solutions and services, adapting to the needs and strategic goals of the clients.

Weaknesses (**TN Exhibit 6**)

By having a global presence, TIMWE has to manage very well all the operations and the partnerships with international firms, which can also be a weakness. The broad focus of the company gives it the opportunity to adapt and respond quickly to local changes, requiring resources and well developed structures and systems. One another thing is the fact it needs to install local offices to respond more effectively to the needs of local clients, thus increasing the operational and managerial costs. In order to grow successfully it has to keep close relations with its clients, and also pay attention to what is happening in every country at the same time (different countries have different market potential – **Exhibit 17**), which requires the ability to be flexible and face challenges efficiently.

The main focus of the business is B2O (business-to-operators), and as most countries (**Exhibit 10**) have 4 or less mobile carriers, it is difficult to TIMWE negotiate contracts with these clients, due to their high bargaining power. In this case, the company has always to try to innovate and create value in a clear and beneficial way, attracting more users to the network created by these clients (something they give much importance as seen previously).

Working with the VAS areas can be a weakness for the company, since these are extra-paid services presented by most mobile-operators. The services developed and offered to the clients must entertain and affiliate people, as well as having good quality content. TIMWE sell its services to the telecom service providers and other companies in different businesses, but as the core clients are mobile-operators, it has to find a way to create these apps and other solutions and increase the consumers' willingness to pay for it, something that is never certain (high level of uncertainty).

The performance based model applied by the company in some cases, such as in the mobile marketing solutions department, can be a weakness, since if one of mobile campaign does not achieve the predicted results, TIMWE will still have to pay all the costs of developing the campaign. This is a strategic move used by the company to show it always delivers top quality services, but it is risky and can present a great downside if it does not perform as expected.

Opportunities (**TN Exhibit 6**)

TIMWE has several opportunities to continue expanding and doing business in the mobile market. The wireless penetration is increasing worldwide (**Exhibit 31**), with the emerging countries showing interesting figures, and supporting the dispersion of mobile-phones worldwide (**Exhibit 23**).

Latin America – the nuclear market of TIMWE with 79% of total revenues in 2010 – together with emerging Europe are growing in terms of wireless penetration (**Exhibit 31**), which shows there are good opportunities in these markets. This growth was mainly supported by developing countries that accounted alone to more than 80% of the new 660 million mobile-phone subscriptions added in 2011. TIMWE can now strengthen its position in these growing and evolving countries, trying to make deals with the local clients and widen its global reach.

The overall mobile market is still growing (See Industry Life Cycle for more details), which is being fueled by the continuing emergent number of IT services available and its generated revenues (e.g. mobile apps, digital imaging, wireless networks such as 3G, etc), as well as the sprouting new mobile devices, such as tablets and the portable Gaming consoles (**Exhibit 29**).

The mobile government and mobile payments are two opportunities for the company to explore in the near future. Both of them are ongoing, mainly the mobile payments (started

in 2010). Nowadays, people can easily make a purchase using a mobile-phone, which is closely related to one of the key buying factors in this market: the mobility/flexibility these devices can give to consumers. Also, the short range wireless technology (e.g. Bluetooth) has been transforming the personal connectivity market, by offering freedom from wired connections. Mobile-phones can be an easy, secure and faster way to do payments, and TIMWE is already on it (e.g. M-Coin, NFC tags). The mobile government is attached to the strategy the company may choose, since today there are more public services that aim to sustainably impact on the lives of citizens. By designing and implementing the appropriate mobile solutions, the company can help the governments to maximize their reach, efficiency and impact on society.

Threats (**TN Exhibit 6**)

Although the overall mobile industry is still growing, the ARPU is decreasing (**Exhibit 17**), which shows that the industry is finding new revenue streams, and now there are organizations such as media companies, content providers, private equity companies and also internet media companies entering in this market. With more competitors in this market, the mobile communications are becoming a commodity. The ARPU is decreasing because of two factors; the increase on the number of users/subscriptions and the decrease on price.

The decrease on the ICT price basket (**Exhibit 25 & 26**) pinpoints the growing competition in this market (see Porter's 5 forces model to more details) and the fact the ICT services are getting more affordable worldwide (decreasing also the revenues). The developed nations are the ones where the decrease on price has been more evident (23.5% from 2008 to 2010), and the broadband sub-basket is the one that registered the biggest decline in absolute values, as well as in percentage (52.2%).

TIMWE has also other threat: the weak home-market. The company is in the first position in terms of Portuguese technology companies in terms of exports, with 97% of its total revenues coming from outside the home-country. Now, this threat is minimized, due to the global position the company managed to have over time. In the beginning, the weak home-market made the company to start looking to sell its mobile monetization solutions and services in other countries, since Portugal did not had the best conditions to support the growth and exploration of the mobile market – low R&D investment as percentage of the country GDP, compared to the EU average (**Exhibit 4**); few people working in Science & Technology areas compared to EU average (**Exhibit 5**); very low high-tech exports compared to most of countries in EU (**Exhibit 6 & 7**) and a growing, but small ICT industry (**Exhibit 8**).

This fact made the company need to expand to other countries and find there opportunities to sell its services very early. One thing that is true not only in Portugal (**Exhibit 9**), but in almost every other country is the number of telecom operators (**Exhibit 10**) being very small, which is always a threat for companies such as TIMWE that focus the business on selling to mobile carriers. There is no balance in terms of bargaining power, making the company fragile and much dependent on the contractual terms imposed by these large corporations. This was a threat when TIMWE started to operate, as well as it still is a threat today (although with less impact due to its current global reach/reputation), because wherever the company intends to go next, it knows in advance that it will have to struggle at the negotiation table if it wants to settle a good and profitable agreement.

Porter's Value Chain Framework

This framework divides the firm into different areas, the idea is to see an organization as a system (input, transformation process and output) that has primary activities, which are maintained and sustained by the support activities, and all together they determine the costs and affect the profits of the company (**TN Exhibit 7**).

Primary Activities

As the company only provides IT services and not products, there is no need for physical storage or manufacturing/assembling of materials of any kind. The inbound logistics are related with the partnerships it establishes with mobile carriers and other companies, in order to have a global reach and easily scale its capacity. The firm's inputs are the technology proprietary it uses to develop the best targeted solutions and services, and the way it manages to transform it into something that adds value to the clients and end-consumers.

After knowing the requests of the clients, TIMWE starts to adapt the solutions to the target audience, and this is the process of outbound logistics – the way it converts pure technology content into something that can be sold and completely satisfies the consumers' needs.

The final service changes depending on the clients, but they are interrelated with the VAS departments and, ultimately, must belong to three core business areas: mobile entertainment, mobile marketing and mobile money. The marketing & sales activities do not only help in induce the buyers to purchase the service, but also to inform and facilitate the purchase. In TIMWE's case, the company conveys different messages that change according to the type of clients, the solutions and services provided, and the countries where it is operating.

Basically these are all the activities that allow gathering, organizing, selecting, synthesizing, and distributing the service and solution to the clients and end-consumers, increasing the margins of the company.

Support Activities

The company develops its proprietary technology in-home, in order to reduce costs and have a tight control over the transformation process. With more than 300 people working for TIMWE in the areas of Marketing, Finance, Operations Management and HR it tries to have enough people, with high professional skills, which know well the mobile markets (e.g. CEO Diogo Salvi experience as a commercial, innovation, banking, M&A and in the areas of IT, etc) and have already some proved experience.

The process of developing the technology is supported by all the hardware and software components used to "manufacture" the idea and create a game, a marketing campaign, micro-payment solutions, and so on. TIMWE is an IT firm that explores the know-how of its employees and tries to establish partnerships to ensure top quality content and solutions.

Nowadays, the company has 26 offices (**Exhibit 2**), operating in 75 countries on 5 continents and this was only possible to manage thanks to an efficient and motivated team force, that are supported by modern infrastructures with each department knowing what they need to do, and how they need to adapt their approach to the clients and place where TIMWE is doing business.

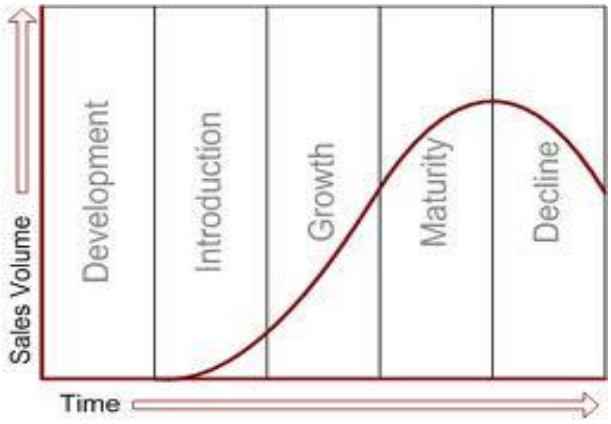
Question # 5 - What would be your recommendations to TIMWE growth strategy in the future? (1) Follow the same steps (continue to invest in emergent markets), (2) diversify the business (Mobile Government) or (3) increase penetration in already dominant markets (Latin America). Justify. (Pros and Cons)

First of all it is important to say the company will choose one of these strategies based on a financial assessment of each one of them. Students are asked to present a strategic analysis of the growth strategy they would recommend to TIMWE, since the case does not provide the financial impact of the three options.

Some examples of pros and cons of each one of them are described in **TN Exhibit 8**, but students are only asked to present the evaluation of the decision they think suits better the interests of the company, leveraging the giving upsides and downsides. These examples

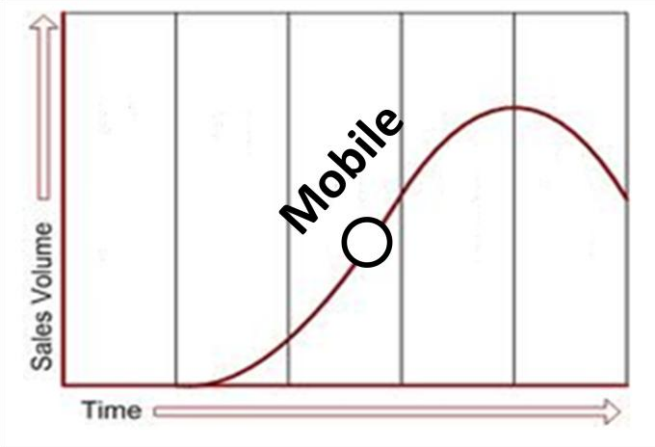
are only some guidelines to the discussion, and can be used to make students think about different perspectives, and the other strategies that TIMWE could choose.

TN Exhibit 1 – Product (Industry) Life Cycle



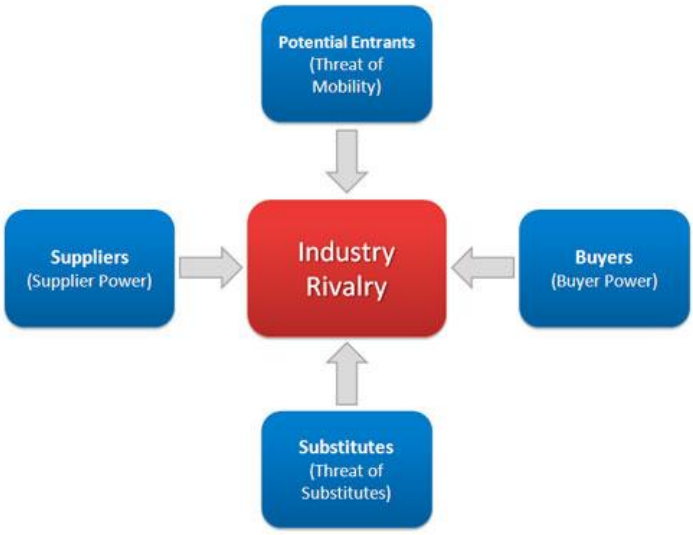
Source: Adapted from Levitt T., 1965, 'Exploit the Product Life Cycle', *Harvard Business Review*, Vol. 43, pp. 81 – 94.

TN Exhibit 2 – Global Mobile Industry Life Cycle



Source: Analysis of the author.

TN Exhibit 3 – Porter's 5 Forces Model



Source: Adapted from Porter M. E., 2008, 'The Five Competitive Forces that Shape Strategy', *Harvard Business Review*, pp. 79 – 93.

TN Exhibit 4 – Segmentation Generic Criteria

Generic Criteria	Examples
Who: nature of the buyers	Individuals (age, sex, weight, income level, family composition, life styles, attitudes, religion, etc); Companies (activity sector, dimension, technological level, management capacity, etc); Public Sector; Universities; ...
What: products/services bought	Size, price, physical characteristics, performance, durability, design, technology, warranty, ...
To Whom: nature of the consumers	Own use, family, co-workers, friends, other department, ...
When: buying occasions	Buying frequency, seasonality, special occasions (Christmas, Mother's day, etc), ...
Where: buying local	Geographic area, retailer channel, internet, home, ...
Why: buying reason	Physical need, psychological benefit, type of use, to give away, ...
How: buying method	Type of payment, type of order (personal contact, telephone, etc), type of information needed, decision process, ...

Source: Freire A., 1997, *Estratégia – Sucesso em Portugal*, 1st Edition, Editorial Verbo, pag. 71.

TN Exhibit 5 – Critical Success Factors of the mobile-phone Market

Key Buying Factors	Competition Engines	Critical Success Factors
Mobility/Flexibility	Switching Costs (Portability, network effect)	Brand Awareness/Image
Quality/Reliability	Differentiation of the product	Distribution Channels
Price	Global coverage/reach	Quality/Performance
Brand Name (Community)	Pricing range	Network/Community
Performance (storage, capability)	Innovation	Innovation (design, ideas, development) - R&D
Design	Value-Added Services	Communication
Basic features (e.g. SMS, MMS, camera, video-recorder, multimedia options, internet access, touch-screen, etc)	Technology	Price

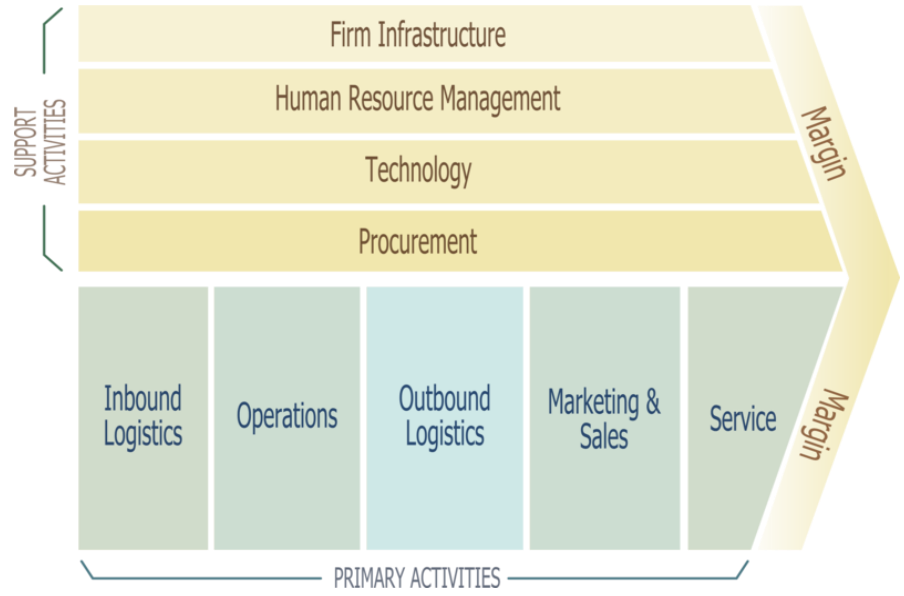
Source: Analysis of the author.

TN Exhibit 6 – SWOT Analysis Applied to TIMWE

	Strenghts	Weaknesses
Internal	Global Presence - Wide global network of connections, but acting locally	Global company with presence in many countries
		Too dependent on the telecom operators
	Mobile expertise / knowledge of mobile technologies (diversification of the business portfolio)	Offer services that must be paid by consumers
	Partnerships with leading global carriers, content owners and technology companies	Some services/solutions are paid by performance
	Aligned team with clear goals - to grow, diversify and expand (innovation as one core driver)	
	Opportunities	**Threats**
External	Mobile Government and related new services	Decreasing ARPU
	Mobile market still growing	Decreasing ICT price basket (mostly in developing nations)
	Latin America (strongest market) and other emergent countries	Weak home-market - need to expand
	Mobile payments	Few number of telecom and mobile operators – few players entering the market
	Increasing wireless penetration	

Source: Analysis of the author.

TN Exhibit 7 – Porter's Value Chain Framework



Source: Adapted from Porter M. E., 1996, 'What is strategy?', *Harvard Business Review*, pp. 61-78.

TN Exhibit 8 – Assessment of Each Strategy

(1) Follow the same steps (emergent markets)	
Pros	Cons
Lower risk --> explore markets that are growing in terms of wireless penetration (e.g. Emerging Asia, Emerging Europe and Emerging Latin America)	Other players may notice the opportunities and decide to follow the same pattern (increase competition)
Previous know-how about this strategy (already proved and sustained by previous experiences--> synergies)	Less propensity in terms of technology advancements in potential targeted countries (e.g. poor nations)
Opportunity to increase global reach	Lack of infrastructures and support activities (e.g. qualified staff, equipments, hardware, etc)
Take advantage of current situation (global coverage), to increase the likelihood of success	Different cultures and still low bargaining power (telecom providers much concentrated)
(2) Diversify the business (Mobile Government)	
Pros	Cons
Increase the range of services and solutions (one more stream of revenues)	Entities with social responsibility and bigger social impact --> reduced margins for TIMWE
Diversifying the risk (governments are entities considered financially stable)	Governments are large organizations with great influence (if things go wrong it could damage the company's reputation and image in the market)
Communicate the fact TIMWE is driving civic participation, providing services that have a direct impact on citizens' lives	Bold move (TIMWE must provide services it knows that will create value and have a positive impact on people's lives)
(3) Increase penetration in already dominant markets (Latin America)	
Pros	Cons
The company has already a good presence in these markets (good reputation)	Possibly no more space to grow (increasing competition in these markets due to the interesting figures in terms of wireless penetration)
Take advantage of current situation (global coverage), to increase the likelihood of success	Need for innovation (additional costs) to attract more and new clients --> the same for the same is probably not a good strategy (clients want something new)
Cultural proximity and large pool of users	
Consolidated experience and know already the mobile consumption habits of customers (e.g. Brazil, Colombia, etc)	Need for recruiting more staff to handle new businesses, and probably more investment in infrastructures

Source: Analysis of the author.

ENDNOTES

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[6]Countries of the World, 2002. Population Distribution [Online] Available at: http://www.studentsoftheworld.info/infopays/rank/population2_2002.html [Accessed 04 November 2012]

[7]TIMWE, 2012. Solutions. Mobile Money [Online] Available at: http://www.TIMWE.com/solutions/mobile-money [Accessed 04 November 2012].

[8]**Mobile App**, or mobile application is a software application with various types of content (e.g. games, music, calendar, email, etc) that is created to run on mobile devices, such as smartphones, tablets and so on.

[9]Information provided by TIMWE.

[10]TIMWE, 2012. Clients [Online] Available at: http://www.TIMWE.com/clients [Accessed 04 November 2012].

[11]Telenor, 2012. About Us. Telenor at a Glance [Online] Available at: http://telenor.com/about-us/telenor-at-a-glance/ [Accessed 04 November 20112].

[12]Information provided by TIMWE. Corporate Presentation.

[13]**VAS** – It is a popular designation in the telecommunications services for non-core services (e.g. SMS and MMS), with a low-cost that are used to support and promote their primary business. TIMWE works as a **VASP** (value added services provider) or **CP** (content provider) in the relation it establishes with mobile carriers.

[14]TIMWE, 2012. Company. Milestones [Online] Available at: http://www.TIMWE.com/company/milestones [Accessed 04 November 2012].

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[17]Wikipedia, 2012. Claro Colombia [Online: Last Update on 17 July 2012] Available at: http://en.wikipedia.org/wiki/Claro_Colombia [Accessed 05 November 2012].

[18]Wikipedia, 2012. Andean Region of Colombia [Online: Last Update on 1 April 2012] Available at: http://en.wikipedia.org/wiki/Andean_Region_of_Colombia [Accessed 06 November 2012].

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[20]TIMWE, 2012. Company. Milestones [Online] Available at: http://www.TIMWE.com/company/milestones [Accessed 05 November 2012].

[21]Ibid.

[22]Green T., 2008, *Latin America content market worth $1.15 billion*, Mobile Entertainment – The Business of Mobile Content.

[23]Kirk B.,2009, *Study: 4.1 billion mobile subscribers globally in 2008*, Mobile Burn.

[24]**SMS** – Short Message Service. It is a text messaging service component of phone, web or mobile communication systems. **MMS** – Multimedia Messaging Service. It is a way to send messages that include multimedia content (e.g. text, audio, still images, animation, video, etc). **IVR** – Interactive Voice Response. It is a technology that allows a computer to interact with humans through the use of voice and DTMF (Dual-tone multi-frequency signaling) tones via keypad. Some examples of IVR applications are televoting and telephone banking.

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[29]**E-commerce** is the short term for Electronic Commerce, which represents all the transactions of buying and selling a product or service over electronic systems, such as Internet. It also consists of the exchange of data, in order to assist the financing and payment aspects of business transactions (e-Business).

[30]TIMWE, 2012. News [Online] Available at: http://www.timwe.com/news/list [Accessed 07 November 2012].

[31]**ICT price basket** – It is a composite affordability measure based on three sub-baskets – fixed telephone, mobile-phone and fixed broadband Internet services – and computed as a percentage of average Gross National Income (GNI) per capita.

[32]Sapo, 2008. Tek. Notícias. Internet [Online] Available at: http://tek.sapo.pt/noticias/internet/tim_w_e_quer_4_milhoes_de_utilizadores_na_sua_880796.html [Accessed 08 November 2012].

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[34]Phys.Org, 2010. *Five billion people to use mobile phones in 2010*, [Online] Available at: http://phys.org/news185467439.html [Accessed 08 November 2012].

[35]**Smartphone** – Mobile-phone built on a mobile operating system (OS), with more advanced computing capability and connectivity than a feature phone (mobile-phone with lower price, and less features than a smartphone). Some examples of the OS used by modern smartphones incorporate Google's Android, Apple's IOS, RIM's Blackberry, Nokia's Symbian, Samsung's Bada, and so on.

[36]**WAP** – Wireless Application Protocol is a technical standard for accessing information over a mobile wireless network. **USSD** – Unstructured Supplementary Service Data is a protocol used by GSM (Global System for Mobile Communications, is a standard set developed to describe protocols for second

generation – 2G – digital mobile networks and mobile-phones) mobile-phones to communicate with the service's provider computers. **NFC** – Near Field Communications, is a wireless technology that can transmit data between two devices within a few centimeters of each other. NFC chips are now being embedded into SIM (Subscribe Identity Model, it is used to identify and authenticate subscribers on mobile-phone devices) cards in mobile-phones, enabling the access to new digital services, such as; ticketing, payments, access control and couponing.

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[38]TIMWE, 2012. News [Online] Available at: http://www.timwe.com/news/list [Accessed 08 November 2012].

[39]**Wi-Fi** – Wireless Fidelity, is a technology that allows an electronic device to exchange data wirelessly over a computer network, including high-speed internet connections. Examples of devices that can use Wi-Fi are PCs, video-game consoles, smartphones, tablets, digital audio-players, etc.

[40]TIMWE, 2012. News [Online] Available at: http://www.timwe.com/news/list [Accessed 08 November 2012].

[41]Ibid.

[42]Ibid.

[43]Ibid.

[44]Ibid.

[45]**NFC tags** are, for example, stickers or wristbands that have microchips with small antennas which can store a small amount of information and data for transfer to another NFC device, such as mobile-phone.

[46]**Cloud Based Solution** is a new common way of delivering services over a network (usually the internet). The service can be accessed from anywhere on the web (web browser, mobile-phone, tablet, TV, etc), and all the infrastructure and platforms on which the application is running is managed by the cloud providers.

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[48]Ibid.

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[54]Ibid.

[55]Ibid.

[56]Ibid.

[57]Ibid.

[58]Téral S., 2012, *Telecom capex increase expected in 2012: Asia is world's largest spender*, Infonetics Research.

[59]**Capex** – Capital Expenditure. Is a term used to express the amount of money (capital) spent by a company on improving, acquiring or upgrading physical assets, such as property, equipment and buildings.

[60]Téral S., 2012, *Telecom capex increase expected in 2012: Asia is world's largest spender*, Infonetics Research.

[61]Mundo Português, 2011. *TIMWE prepara-se para ser a primeira empresa portuguesa no NASDAQ*, [Online] Available at: http://www.mundoportugues.org/content/1/9577/timwe-preparase-para-ser-primeira-empresa-portuguesa-nasdaq/ [Accessed 09 November 2012].