Association for Information Systems
AIS Electronic Library (AISeL)

ICIS 2008 Proceedings

International Conference on Information Systems (ICIS)

2008

Indo Gives Its Sales Force a New Mobility Technology

Sandra Sieber
University of Navarra, sieber@iese.edu

Follow this and additional works at: http://aisel.aisnet.org/icis2008

INDO GIVES ITS SALES FORCE A NEW MOBILITY TECHNOLOGY

Indo équipe sa force de vente d'une nouvelle technologie mobile

Teaching Case

Sandra Sieber

IESE Business School, University of Navarra

Pearson Ave 21, 08034 Barcelona, Spain

sieber@iese.edu

Abstract

In April 2007, the Spanish optical company indo Internacional was facing a renewal decision of the mobility solution for its eyeglasses division's sales force. Initially, the company was seeking to implement a solution that would allow to look up inventories in real time. One of the potential providers offers to extend the functionality with a virtual catalog, which would allow the company to eliminate part of the current physical sample collection of the sales force. Nevertheless, the virtual catalog would imply a major change in the current work practice of the sales force, and a new way of purchasing for the clients.

The objective of this case is to analyze the complexities of IS investment decisions from a variety of perspectives, including a financial analysis. It also focuses on broader qualitative implications in terms of its impact on current work practices of part of the organization.

Keywords: IS investment, IS implementation, organizational change, strategic value of IT, user involvement/participation

Résumé

En 2007, la société espagnole optique Indo Internacional était confrontée à une décision de renouvellement de la solution mobile pour la force de vente de sa division de lunettes. Initialement, l'entreprise cherchait une solution permettant de consulter les inventaires en temps réel. Une fournisseur potentiel propose d'étendre la fonctionnalité avec un catalogue virtuel. L'objectif de ce cas est d'analyser la complexité des décisions d'investissement en SI depuis différents points de vue, et compris selon une analyse financière.

Resumen

En 2007 la empresa Española Indo Internacional se plantea la renovación de la solución de movilidad de su fuerza de venta de la division de gafas. Inicialmente se plantea una alternativa que permita ver en tiempo real el inventario disponible. Sin embargo, uno de los potenciales proveedores plantea dar un paso más incluyendo la posibilidad de virtualización del muestrario físico. El objetivo del caso consiste en el análisis de la complejidad de las decisiones de inversión desde diferentes perspectivas, incluyendo el análisis financiero.

It was a beautiful sunny day in early April 2007. Roger de Ramón, the IT director of the optical group Indo Internacional, was sitting at his desk in the recently opened corporate headquarter office near Barcelona.

De Ramón was studying the results of a pilot test that the company had run with the eyeglasses business unit sales team. The test was conducted in two stages. While the first stage involved only two salespeople and one eyeglass collection, the second stage was more ambitious. Indo gave 14 of its traveling salespeople a Tablet PC with the digital catalogue software covering frames and sunglasses. The Tablet PCs were connected to the company's internal database allowing the salespeople to substitute part of their traditional sample collection with a visually attractive electronic catalog updated in real time.

The results of both stages of the pilot, however, were hardly conclusive, leaving De Ramón with many unanswered questions. Did he choose the right mobile solution? Perhaps, he should have picked a solution from a different vendor? But above all, should he go ahead and implement the system despite the inconsistent outcome of the pilot test? It was time to make the decision.

Indo and the Optical Market

Indo Internacional was a parent company to a group of firms that made and marketed frames, ophthalmic lenses (organic and mineral), as well as tools and equipment for opticians and ophthalmologists.

The company was founded by Cottet brothers in 1937 in Seville. In 1943 it was relocated to L'Hospitalet de Llobregat (Barcleona) and in 2007 it moved again, this time to its present location. From its early days, Indo demonstrated a pioneering attitude towards technology, especially in the areas of lenses and equipment for opticians. And in 2007, this innovative spirit was still key to the strategic vision of the company. Indo was comprised of three business units: lenses, equipment and eyeglasses. The main clients of all three units were retail opticians. Each business unit, however, had its own P&L account, as well as sales, marketing, and R&D teams (see Exhibit 1). In 2006 in Spain, there were 8,500 optical retail outlets, which could be divided into three groups: chains, such as General Óptica, making up 12% of the market; retail associations, such as MultiOpticas or +Visión, comprising 59% of the market; and the independents accounting for the remaining 29% of the market.

Exhibit 1: Evolution of the Financial Results of Indo *(in Thousands of Euros)*

	Eyeglasses			Lenses			Tools & Equipment		
Year	2006	2005	2004	2006	2005	2004	2006	2005	2004
Turnover	31,393	29,264	27,044	75,315	76,250	68,854	38,459	39,146	31,235
P&L	433	-19	-1,405	2,558	1,803	4,048	3,537	2,849	1,984

Notes: In 2005, Lenses incorporated a new company into the Group with a turnover of €5 million
                  In 2005, Tools & Equipment carried out an extraordinary non-recurring sales transaction of a value of €3.25 million

Source: Company data, reproduced with permission

It was a saturated market in a mature industry: 45% of the revenue of an average retail outlet in Spain came from the sales of ophthalmic lenses, 25% from frames, 16% from contact lenses and their solutions, and 16% from sunglasses. The rest corresponded to the sales of cases, thermometers and other complementary products.

Ophthalmic Lenses

An ophthalmic lens is a graduated lens made of glass or organic material, which is fitted to a frame. For Indo, ophthalmic lenses made up 51.9% of the total group sales and 39.2% of its profit. The company sold mono- and multi-focal organic (73% of the total) and mineral lenses (27%). Within this segment, Indo was the market leader, producing 32% of the 14.5 million lenses made in Spain. A French company, Essilor was just behind them, with a market share of 28%; followed by Japanese, Hoya, with 13%; and Prats, another local manufacturer, who held 12%. In Spain, the quality and service levels of Indo's products were considered to be medium to medium-high. The lenses division was facing increased price pressures due to direct imports by the distributors from cheaper countries. This had led to decreasing margins in the past three years.

Tools and Equipment

The tools and equipment unit was launched in 1970 with the goal of "providing the optician with what he and she needs". The unit made and marketed equipment and instruments for optometry and ophthalmology (e.g., lasers, surgical microscopes, refraction instruments for sight tests, etc.). It also distributed equipment produced by other manufacturers. In 2006, the unit had a turnover of €38.5m and brought in 54.2% of the company's profit. Indo's market share within this segment in Spain was around 65%.

Eyeglasses

Indo's eyeglasses business unit produced and sold frames for graduated lenses and sunglasses for the Indo, Carolina Herrera (CH), Paco Rabanne, XS, Purificación García and Chupa Chups collections. It also distributed, among others, the Givenchy, Tommy Hilfiger, Gant and Sting collections in Spain.

The unit, managed by Jordi Rovirosa, accounted for 21.7% of the group sales, yet its P&L account was almost in deficit. The unit remained, however, a key part of the group due to the visibility it gave to the Indo brand and the licenses it owned at the points of sale.

Since 1998, all Indo frames have been manufactured by Suzhou Indo Optical Spectacles Co. Ltd in China. By moving its production to China, Indo was following the general market trend - 86% of all eyeglasses sold worldwide in 2006 were made in China. The process of creating a new collection took six to seven months. On top of that, three more months were needed to manufacture and deliver the collection to the points of sale.

The frames market polarizing into two different segments: top of the range and bottom of the range products. In Spain, as well as in the rest of the world, the top of the range segment was almost exclusively occupied by Italian companies: Luxottica and Safilo. In addition to their own brands, these companies held licenses from some of the

most prestigious brand names around the world (see Exhibit 2). The market for the bottom of the range eyeglasses was dominated by direct imports from Asia, which many opticians sold under their own brand.

Exhibit 2: Frame Manufacturers in Spain and Their Respective Collections and Market Shares			
Company	**Luxottica**	**Safilo**	**Indo**
Collection	Bulgari Chanel Emmanuel Húngaro Ray-Ban Versace Donna Karan Vogue	Gucci Polo Ralph Lauren Giorgio Armani Dior Pierre Cardin Burberry Max-Mara	Carolina Herrera,212 Paco Rabanne,XS Purificación García Chupa Chups Guess, Gant Tommy Hilfiger Harley Davidson Columbia, Kipling Converse Massimo Dutti,Sting Nina Ricci, NBA ACB, Indo
Estimated market share	30%	20%	12%

In Spain, the graduated frames market had leveled off at five million pairs a year. The sunglasses market, on the other hand, was showing an annual growth of 5 to 6% fuelled primarily by the demand from millions of tourists visiting the country each year.

It was estimated that 20 million pairs of sunglasses were sold each year. Of these, the traditional optical outlets sold only five million pairs; the rest was distributed through sports shops, beach areas, hypermarkets and street vendors. Optical retailers had a lot of bargaining power over the frame providers.

In the eyeglasses sector, Indo held third position in Spain and sold around half a million pairs a year. This translated into a 12% market share.

In 1994, the eyeglasses unit of Indo expanded internationally and started marketing the Carolina Herrera and Paco Rabanne collections outside of Spain. In 2006, after some rough years, the unit enjoyed a 7.3% growth in sales and its total worldwide revenue amounted to €31.4 million. Its margins also improved by 11.9% driving the profits up by 36.1%. Its global sales network comprised 85 salespeople, with 65 of them in Spain.

In the eyeglass sector there was a general trend for the frame manufacturers to acquire licenses of well-known non-optical brands to market their products. For example in 2007, Luxottica purchased the license to the Oakley brand in order to boost its entry into the sports sector. In addition, similar to the fashion industry, the eyeglasses market was driven by extreme swings in consumer demand, which forced the frame manufacturers to launch a new collection each season. At Indo, for example, 750 new models were launched in 2006. Finally, the market was characterized by intense competition among the brands for the shelf space. Once the most successful models were sold out, their replacement would take about three months to arrive. Orders not filled within three months would automatically be cancelled and the shelf space for the unfilled orders would be taken over by competitors.

The Daily Life of an Indo Eyeglasses Salesperson

Normally, each salesperson at Indo was responsible for about five different collections out of the 20 that Indo offered (for example, the salesperson working with the Paco Rabanne collection, would not carry the Carolina Herrera eyeglasses.)

An optician would usually receive one visit a month from Indo, each time from a different salesperson with a different range of eyeglasses. As such, each salesperson visited their client around three or four times a year.

In order to show the product, the salesperson carried around a sample collection of all currently offered models within the product range that he or she managed. Each collection consisted of between 30 to 60 models, and each

model could have between three and six varieties (color and size). This amounted to around 630 pairs per salesperson.

Indo made a significant investment in order to ensure its sales force had the best resources available. Each salesperson was provided with samples of all models offered in the current season, at an average cost of €15 per pair, and an elegant set of leather cases. A sample collection comprised on average 630 eyeglasses. The cases cost the company €900 per salesperson and were renewed every two years. In addition, the marketing department allocated €60,000 a year to print catalogues and another €150,000 to promotional materials for the points of sale. At the end of the season, sample eyeglasses and frames were offered for sale at a 50% discount. Nonetheless, 30% of the samples usually remained unsold.

Normally, a salesperson would spend the morning visiting opticians. He or she would try to arrange the longest appointments - those where four or five collections would need to be shown - at the start of the day. Each visit could go on for as long as two hours as opticians liked to try on different eyeglasses and compare the models. A salesperson would usually take an order for between 30 and 60 pairs and then continue to the next visit. An average price for a pair of eyeglasses was around €40.

The availability of products was critical. Indo usually tried to deliver between 60 and 70% of an accepted order during the first week and fulfill 95% of the order within three months. Orders unfilled within three months were automatically cancelled. Given the fluctuations in fashion, this represented a good level of service within the sector,

When visiting key clients, salespeople would often phone the logistics department to confirm the availability of different models or to try to resolve problems relating to cancellations. This helped to foster an impression among the clients that the company was responsive to their needs and its service was reliable.

Starting from September 2000, salespeople submitted all their orders from a laptop computer using a tailor-made application based on the IBM Lotus Notes software. The application also allowed them to consult statistical information related to sales. Although the initial adoption of the system was difficult, after a while salespeople had no major complaints about using it. They would usually use their laptops at night (whether from a hotel or from home) to connect to the company's SAP system and send in or submit for approval their sales orders for the day. The user-friendliness of the system, however, remained marginal and salespeople often had to spend up to half an hour per order to complete the task. In 2006, Indo decided to take advantage of the planned replacement of their pool of laptops to implement a change to the system.

A New Solution for the Sales Team

The eyeglasses unit manager, Jordi Rovirosa and Roger de Ramón, the IT director, started talking in 2006 to jointly work on a mobile solution that would bring about significant change in the sales team. From the very beginning, it was clear that any system should avoid any loss of sales, since the unit was just starting to show profits. Hence, if possible, the system should allow to increase sales per salesperson. Jordi Rovirosa had his doubts about the existing systems on the market and was also concerned about the potential reaction of opticians to the new system. He had asked De Ramón to find a solution that would minimize negative impacts on both the clients and sales force.

De Ramón's department had an annual budget of €3.2 million. It was made up of 21 people who provided worldwide IT support to Indo's three business units. In total, the department supported more than 1,000 computers. Indo also had an SAP R/3 Enterprise Resource Planning (ERP) system for their finance, production, sales, logistics and human resource departments. The company had 300 licenses for this system.

Regarding possibilities for the new solution for the sales team, various mobile devices available on the market. These ranged from electronic organizers, such as a PDA, to a new generation of telephones, such as the Blackberry, to the so-called Tablet PCs. In theory, all of these devices offered the potential to file orders during a client visit and to establish an on-line connection with Indo's internal systems. The real-time connection to Indo's SAP system would allow the salespeople to have an order confirmed in fewer than 60 seconds. Also, when a product was unavailable, the system could recommend similar alternatives, which would help a salesperson avoid losing part of the sale.

In an attempt to find out how various solution alternatives would affect the day-to-day work of a salesperson, De Ramón initially contacted two companies with experience in mobile solutions: Moviforce and Softsale.

Moviforce, founded in 1986, offered solutions for various platforms, including PDA and Blackberry. Also, the company offered different options in terms of contract arrangements, including complete or partial outsourcing (user support, hosting, etc.) of IT services. Nevertheless, after a careful assessment of their proposal, Indo decided to reject it, as the company found that Moviforce did not sufficiently understand their needs in a variety of dimensions.

Softsale, founded in 1991, was known for the development of solutions related to Customer Relationship Management (CRM), Sales Force Automation, and Business Intelligence in the consumer and pharmacy sectors. Softsale's tools were easy-to-use, and they became one of the "standard solutions" in the area of CRM software and information systems for sales departments. They had implemented over 200 solutions in a wide variety of companies, covering areas such as: 1) automation of the entire sales process (including negotiation, segmentation, customer care, sales, distribution and payment); 2) support for the management of both direct sales and pre sales, as well as point of sale management, and 3) a central set of applications adapted to the needs of a sales department. They could also provide certain ERP-like functions for clients who didn't have such a system in place.

Softsale's proposal to Indo consisted of a PDA solution, which unlike the laptop with Lotus Notes that was currently being used, allowed the salesperson to send orders from the shop. They had conceived a solution that would allow to gather all relevant information about online inventory and expected delivery dates. Software and license costs were budgeted at €115,000, and the proposed solution required for some back-end interface adaptations which were expected to cost around €4,000. The PDA also combined functionality of a telephone and a browser and provided e-mail access.

Informally, Indo contacted a third supplier, Kinetical. This happened during the final of the Spanish basketball league where both companies served as sponsors.

At the time, Kinetical was a relatively small Catalan company that focused exclusively on mobile solutions. It had gained visibility in the sector thanks to their PDA solution for referees of precisely the Spanish basketball league. They worked with Microsoft, Hewlett-Packard and Vodafone and managers of all three companies provided the vendor with positive references (see Exhibit 3). Kinetical also had started to achieve some presence in the textile sector, with leading local textile clients such as Escorpión and Punto Blanco adopting their virtual catalogue solutions. Recently, they had begun to work with some mass consumer product companies.

Exhibit 3: Opinions of Technological Partners

Microsoft: "Kinetical is one of the most advanced companies in mobility solutions; and without doubt the best solution in terms of graphics and usability".

David Fernandez, Director of Mobility, Microsoft Ibérica

Fujitsu Siemens: "They are one of the European companies who add most value to our excellent Tablet PCs. Their success stories are used by our sales team to illustrate the real benefits an integrated mobility system like Kinetico can bring to their businesses."

Guillaume Wiart, Sales Director of Movilidad Iberia

HP: They have been one of our partners specialized in mobility since 2000. Their solutions are really flexible and very easy to use in any environment, for salespeople, health and safety inspectors, etc.

Alfredo García – Director of Mobility Spain

Vodafone: "One of the most complete mobility solutions; capable of integrating a digital catalogue and online orders"

Isac Agüero – Head of the Partner Program

Source: Kinetical's web page, accessed on July 24, 2007.

Following the first informal contact during the basketball final, a formal presentation of Kinetical's PDA solution was set up. However, once the vendor learned more about the Indo's sales process, they asked for a three months extension in order to come up with more complete solution. Ultimately, Kinetical proposed a solution that included a Tablet PC with a specially designed software application called the K Sample Sales. With the emphasis on usability, the new solution incorporated a digital product catalog that was automatically updated when the salesperson

connected to the main server. Kinetical believed that, similar to the garment industry, this new system could substitute many of the product samples and printed catalogues that sales people had to carry around with them (see Exhibit 4 for some screenshots of the proposed solution). The sales director of Kinetical, Albert Riba, said, "if we were able to eliminate half of the sample collection of clothing and get salespeople with an average age of 50 to use the application, we should be able to do the same at Indo."

Exhibit 4: Virtual catalog screenshots
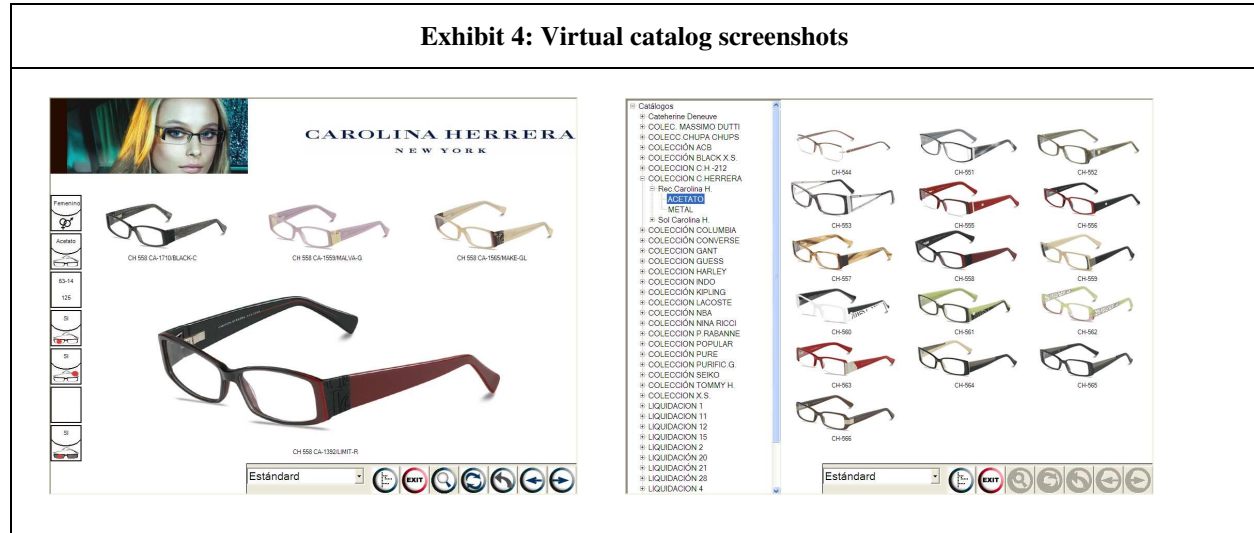
The idea of virtualizing part of the product samples was indeed appealing to Indo. The big question, however, remained whether the opticians would buy in to the idea of a virtual eyeglass collection, and if the virtualization would affect overall sales. Opticians were accustomed to having an opportunity to try on the physical frames in order to see how they looked, and nobody in the industry had ever made an attempt to change this sales practice. In addition, there was a risk that opticians would see the service as a sale from catalog, which was acceptable only for the very low-end segment of the market. Finally, it remained to be seen whether the salespeople would accept such a system. Although a reduction in the physical sample collection would be welcomed, the new system implied a fundamental change in sales process and it was difficult to predict users' reactions.

The financial costs of the software solutions offered by Softsale and Kinetical were similar: both cost €115,000 for 85 users (see Exhibit 5). The main cost difference lay in the proposed hardware, given that the Tablet PC was a great deal more expensive than the PDA solution (and even the laptop one). In addition, the rollout of the Kinetical software required photographs to be taken for the virtual catalog.

Exhibit 5: Comparison of direct and communication costs of the different alternatives			
	Current situation	**Softsale proposal**	**Kinetical proposal**
Device	Laptop PC with Lotus Notes	PDA	Tablet
Cost per device	€1,200	€600	€2,109
Graphic potential	PC 15"	3,5"screen	12" screen
Catalogue photos	One photo per model	One photo per model	Four photos per model
Software and license costs		€115,000	€115,000
Interface adaptations		€4,000	€4,000

		Softsale proposal	**Kinetical proposal**
Annual maintenance		15% of the software cost	12% of the software cost
Communications	Spain	€25 per month x 65 salespersons	€25 per month x 65 salespersons
	Portugal and the rest of the world	€65 per month x 20 salespersons	€65 per month x 20 salespersons

The cost of connection and communication had to be added to both solutions. In Spain, wireless Internet connection via 3G card cost €25 a month for each salesperson.

But on the other side of the coin, a direct saving on order printouts had to be taken into account, which amounted to €1,500 per month. Other minor saving could be expected by reducing the need of insurance, as well as theft (typically, 3 entire sample collections were stolen every year, and the cost of insurance was 1.8% of the sample collection's value).

Also, as part of the new systems, each salesperson would be able to check an up-to-date inventory status each morning, and depending on the status, decide how to manage his or her meeting with each client. For example, salespeople could conceal unavailable models, which would help them avoid order cancellations. Hence, it could be expected that with some experience any salesperson could achieve 100% of complete orders, without any cancellation.

Implementation of the Pilot Tests

In order to see the clients' and sales force's reaction to the new system, Indo decided to undertake a pilot test of Kinetical's Tablet PC solution, with a small part of the catalogue digitized, but without the option of transmitting the orders in real time. The Purificación García frame collection was chosen for pilot test because of its stable sales record. Two salespeople were chosen to pilot the system: one was 56 years old from the Catalonia network; the other one was 35 and worked in Andalusia.

The first salesperson was very positive about the system and claimed that 80% of clients had accepted the new initiative well. In addition, his sales had increased by 5% compared to the same period of the previous year. The second salesperson, however, maintained that 70% of the clients were reticent towards the new application. The sales data from the test was also inconclusive as the sales volume of sunglasses doubled with respect to the previous year, while the sales of graduated eyeglasses fell by 10%.

Faced with these results, De Ramón proposed that Indo might want to only eliminate 50% of the physical sample collection. He decided, however, to carry out a second pilot test first. On Jan. 18, 2007, 14 salespeople from the Catalonia area (which included Zaragoza and the Balearic Islands) tested the new Tablet PC with the Kinetical software installed using their entire sample collection. The results of the pilot test, however, were inconclusive, and showed some unanticipated issues. First, 20% of the photographs included in the virtual catalog differed from the real color of the frame, although this difference could be digitally corrected in 90% of the cases. Second, for the newly introduced collections, such as the Carolina Herrera collection, physical product samples for all models had to be shown due to the perceived complexity of the frame[1]. Lastly, physical samples of sunglasses, which made up approximately 25% of the current collection, could only be reduced by 25%. After three months of trials, opinions of the salespeople about the system were generally positive, although the top sellers were among those least in favor.

A salesperson from Zaragoza, who offered all the collections and visited his clients once a month, showed the highest satisfaction level. However, it was difficult to compare his recent sales with those of the previous year as, in addition to the current collections, he had been able to make an attractive extra sale as he took the opportunity to sell some of the previous year's Carolina Herrera stock, which he could now "see" in the system.

The final decision: Go or not go?

So, due to the inconclusive pilot test results, De Ramón still had many doubts. Were they risking too much in choosing Kinetical as their mobile provider? Were they making the right decision? Could the system be implemented across Spain or would serious problems arise? Would the savings from the new system justify the investment? Could the collection of physical samples really be reduced and, if yes, then by how much? And lastly, were they doing the investment analysis correctly? Roger de Ramón decided to have another look at the numbers in front of him (see Exhibit 6), and revise his calculations before starting the decisive meeting with Jordi Rovirosa.

---

[1] These frames had several colors, or were combining different materials, or had some new textures that in the opinion of the opticians required physical contact to be fully appreciated.

Exhibit 6: Key figures of the mobility project	
Lotus Notes + laptop	
Renewal of laptop pool	1200 Euros/pc
Current communications	1000 Euros/month
Current printing of orders	1500 Euros/month
Annual cost of the catalogue	60,000 Euros
Number of photos of printed catalogue	1 per model
Point of sale materials	150,000 Euros
Eyeglasses on offer	
Number of different models	1,000 models
Number of variants (color/size) of each model	4
Average period offered for	12 months
Average cost of the eyeglasses	15 Euros
Samples	
Number of salespeople	85
Total number of leather cases	255 cases
Cost of the cases	300 Euros
Average discount on the stock clearance of sample eyeglasses	50%
Length of case durability	24 months
Cost of insurance	1.8% of sample collection value
Unsold sample eyeglasses	30%
Other	
Key photos (available in the printed catalogues))	1 x model
Tablet photos	1 x variant
Cost per photo	20 Euros/photo
Improvements to take into account	
Reduction in cancellations	5%