European Entrepreneurship Case Study Resource Centre

Sponsored by the European Commission for Industry & Enterprise under CIP (Competitiveness and Innovation framework Programme 2007 – 2013)

> Project Code: ENT/CIP/09/E/N02S001 2011

# Tecnomodel (Italy)

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# TECNOMODEL

# Introduction

Tecnomodel originated in the early 1990's when Daniele Scotucci and Daniela Funari were united in matrimony. They had varied career paths in the footwear industry, and now with their marriage and entrepreneurial passions integrated, they decided to form a new company that included their technical and creative skills. They set about starting a successful entrepreneurial venture by deconstructing and revising the process of designing and manufacturing high-end shoes in Italy.

Tecnomodel, a high-end service company, occupies a well-defined competitive position in the value chain of the high-value footwear industry. Tecnomodel offers a one-stop-shop for capturing the creative muses of famous designers. The organisation converts the idea/design into computer sketches that are then translated into operational manufacturing steps with estimated development costs and raw material requirements, and finally it is developed into a prototype that can be seen, touched and worn. All of this is operational within a fraction of time that other firms require under the traditional process. "From idea inception, to the project process, to a functional prototype", this is the simple, but powerful, logic of the service provided by the company.

The process begins with the transfer of a shoe sketch into a CAD/CAM application, and concludes with the production of a prototype alongside a detailed digital user manual containing all of the relevant information regarding the details of producing the shoe on a large scale base. This innovation was a breakthrough in the traditional value chain of the shoe industry. The Tecnomodel business model allows major brand designers to separate the engineering phase from the manufacturing activity, thereby giving the designers the opportunity to maintain high quality standards and to control production costs.

At the end of 2009, after a period of rapid growth, the entrepreneurs felt that if they wanted to further develop their business then they had to think about a new growth strategy. Three different options have been discussed:

- 1. To offer new services;
- 2. To enter new foreign markets;

#### 3. To start an upward vertical integration process.

Each of these options has their own strengths and weaknesses, and making a decision was therefore becoming more complex. The entrepreneurs wanted to know: "which of these options could offer Tecnomodel the required opportunity to grow in the long-term?" Daniele wanted to make a choice as soon as possible. Daniela, however, was more cautious as she was not fully convinced about the opportunity to develop according to these three options.

#### The Shoe: One of the Most Complex Fashion Products

The shoe is one of the most complex stylistic products to design and produce from the planning/engineering phase right through to the manufacturing production process; indeed compared to other fashion products the shoe is considered the most challenging. The first element of complexity concerns the great number, and the potential variety, of components used. Particularly for women's fashion shoes, the finished product is the result of the assemblage of more than 200 elements. A close look at the designers' creation highlights the great variety of the elements employed; they include leathers of various thickness and colour, synthetic materials, zippers, fabric, metallic minutia, etc. Furthermore, as opposed to all other items of clothing, the shoe has a specific three-dimensional shape that must be exactly reproduced and developed with equal precision in all the committed sizes. In addition, the planning and design of the shoe must not only consider the problem of the feasibility of the product from an industrial point of view, but also the critical issue of the quality which is contained in the ergonomic profile of its shape. No other fashion product has to undergo such mechanical stress and precision, as it is the foot in which a person puts all of their weight when standing upright. If the shoe is not well made, its faults become immediately visible and felt. The entire process of planning and engineering begins with the creative action of a designer, who draws an image on a sheet of paper which expresses their own style. Unfortunately, designers are usually guided only by their creative impulse and often cannot follow through with the realisation of the finished product, or the ergonomic quality and the relevance of production costs.

In the early 1990's, computer-based technology was starting to be introduced in the traditionally manufacturing based industry of fashion. CAD-CAM, that is, computer-aided design and manufacturing, were beginning to be extensively utilised, especially in larger companies in the fashion industry. Unfortunately, in the specific sector of the footwear industry, the integration of these computer-based technologies found a series of obstacles to their effective usage. In particular, two main obstacles were present: the three-dimensional

conformation of the finished product; and the development of the sizes. These could not be expressed in terms of a proportional increase from one size to another, but had its own range of absolute value (6.6 millimetres in European sizes, 8.4 millimetres in the USA). The phase of planning to develop the shoe model and the phase of cutting the shoe, therefore, remained separated from the subsequent, more mechanical, phases of sewing and assembling. As a result, the skill of the workers continued to be fundamental in optimising the phases of planning and engineering, and in compiling them. This was made possible due to a long period of training, with expert workers, that resulted in a specialised know-how that is difficult to be codified and conveyed on the job. In fact, the tacit knowledge of the worker was difficult to be translated into explicit knowledge that can be replicated.

Since there were so many difficulties regarding footwear, major producers of numerically controlled machinery (e.g. sewing machines) that serviced the fashion industry kept their focus on the clothing fashion industry. From amongst the many manufacturers of fashionwear production machinery, a Japanese company called Brother distinguished itself for being highly innovative. Their sewing machines were seen as flexible, advanced in technology and sturdy. They enjoyed tremendous success with their sewing machines and were exporting their fashion machinery to Italy to be used in the production of items for the fashion industry. The process of sewing a clothing item was not substantially different from the process of sewing a shoe and so the Brother sewing machines could be used for sewing the upper part of the shoes. The difficulty in manufacturing the shoe was with regard to programming the sewing machines and directly using the data that had been calibrated for the cutting of the elements. If this technical obstacle could be resolved there would be a strong acceleration in the production phases and a dramatic reduction of the planning/engineering costs. Spurred by this opportunity, an important Italian shoe company bought a numerically controlled sewing machine, with the aim of modifying its software in order to use it for the shoe production. At that time, in 1992, this company had spent more than 65,000 Euro to buy the machine, the computer programme and the software supplied for sewing clothes. The owner of this shoe factory had accidentally talked about his project to the young couple from Macerata<sup>1</sup> province, and they had shown some interest in the affair. Daniela Scotucci had some previous experience and training in fashion pattern development, while Daniele Scotucci had an indepth know-how in software programming. These two were the ideal couple to embrace this

<sup>&</sup>lt;sup>1</sup> Macerata is a mid-size town in the center of Italy, in the Marche region. In this area there is a long tradition in shoe manufacturing, which is particularly strong in some Industrial districts like the one located around Porto Sant'Elpidio, a small town on the Adriatic Sea where Tecnomodel is located, reference appendix one.

challenge: this couple, Mrs Daniela and Mr Daniele Scotucci, were to become the entrepreneurs that established the future Tecnomodel organisation. The main objective was to put together, in a single piece of software, the instructions for the cutting phase and, in parallel, the instructions for the subsequent sewing phase.

After 6 months of unfruitful attempts and consequent frustrations, Daniele and Daniela were on the point of giving up. They did not succeed in creating the machine and technology to satisfy the needs of shoe factories. At last, after many months of repeated efforts, the breakthrough arrived. When they finally succeeded in realising the cutting and the sewing of a great red ribbon, with only one form of software, they realised their professional life was at a turning point.

When Brother, the Japanese company, discovered that more than 90 of their numerical controlled sewing machines had been sold in Italy, within one year and to shoe manufacturers (and not to any clothing companies, as assumed), they wondered what was happening. And so, one day in 1993, two Japanese engineers from Brother arrived at the Scotuccis' flat in Porto S.Elpidio. Daniele was informed by the company members:

"Even if you have deciphered and modified the software of our machines without our permission, we are not here to sue you. Instead, we are here to propose to you an opportunity to work with us".

The job would have consisted in training the workers of the international branches (offices) of the organisation in programming the machines in order to fully utilise them in the footwear industry. Although the offer was economically tempting (more than 15,000 Euro per month of net earnings), the Scotucci's declined the offer. Over the five following years they worked full time for private Italian shoes factories as programmers of sewing machines converted to footwear manufacture. Unfortunately, in the early 2000's their business as software consultants was coming to an end: this was the moment when the Scotucci's entertained the idea of creating Tecnomodel.

#### The Establishment of Tecnomodel

A breakthrough was needed for the two novice entrepreneurs, and the most natural way for them was to enter the footwear manufacturing industry. However, there were many obstacles along this road, mainly because of the fierce competition typical in the district's competitive arena, as footwear manufacturing in Porto S.Elpidio was the primary occupation of the area's inhabitants. This was a serious challenge for Daniele and Daniela Scotucci, as neither had experienced direct competition before. They always faced the market in an almost monopolistic way because of their high technical skills in their previous ventures. They understood that in order to compete in the manufacturing industry they needed to be innovative in order to differentiate themselves and avoid direct competition in an intensely competitive business.

The couple spent time observing the ongoing changes in the structure of the industry and the behaviour of larger companies. The specific detail, which attracted the attention of the Scotucci team was the increasing significance of independent stylists and designers, even in footwear sector. Acting as 'fashion-makers', these designers were extending their influence in almost all the principal fashion sectors, including footwear. In general, these independent designers did not have a proprietary factory, but relied on independent manufacturers, mainly small sized-companies, for the realisation of the prototype and the subsequent collection. As a result of globalisation and the arrival of Eastern European and Asian countries as manufacturers in the fashion industry, these fashion-makers, as well as major brand holders, started to consider those countries as suitable locations for the manufacturing of a large share of their collections.

However, because of the complexity of designing to manufacturing footwear products, two important phases of the production process highlighted the argument against the delocalisation of the industry outside of the traditional locations, that is, the geographical locations in which the core footwear manufacturing industry has developed: prototyping and samples production. Prototyping was considered highly complex work, involving the design of components and engineering of subsequent productive phases, followed by the careful assembly of components. For major stylists, prototyping is among the most critical phases of the entire process in launching a new collection. The aesthetic beauty of the product and its intrinsic quality represented the basis for the evaluation of the collection by the watchful public who attended such fashion shows. Consequently, the shoe has to be produced in an industrial setting, outside the atelier of a brilliant designer: it has to be ergonomic, easy to assemble, and its parts have to be available on the supply markets. Finally, it has to be affordable within the market segment that it is supposed to address and arrive on the market on time. This requires frequent interaction between the designer and the organisation responsible for producing a prototype. It is quite usual that some changes to the previous draft are requested immediately before the launch of the product, and as a result everything has to be rearranged overnight. This interwoven relationship between design, prototyping,

modifications and last minute edits ensures a time sensitive and intricate process. After the prototype has been developed and tested, the manufacturer produces a number of samples (from a dozen to often hundreds of shoes/pairs) which are distributed to the sales network to be presented to dealers. Samples are a key tool for supporting sales, because producing samples in assorted colours, with different colour-matching and accessories, it is possible to test the reaction of the market to the collection and, in turn, to help the brand holders in choosing the final product range to be manufactured.

Before the explosion in international global trade both foreign and Italian brand holders usually ordered prototypes and samples from a number of Italian craft manufacturers. These manufactures charged designers a significantly lower price because this phase was considered as a preliminary step to a larger commercial deal. In other words, the prices for prototypes and samples were very low (close to the actual cost of production) because larger profit margins were expected from the subsequent production of the entire production line. This mechanism locked-in brand holders, as they had to utilise the manufactures of the initial prototype for the entire collection. Furthermore, firms in low-cost countries are commissioned by brand holders for only a share of the entire collection, and use reverse-engineering of the sample before starting the production, in which they literally opened the shoe and disassembled the components in order to copy them. This major force of change, the globalisation of markets and the delocalisation of the productive activities, while exposing an increasing risk to traditional manufacturers in the Italy, could produce an extraordinary source of opportunity for the nascent Tecnomodel. The creative destruction of the Italian shoe industry was underway and opportunities were abounding for Tecnomodel.



## Figure One: Major Brands Value Chain - Traditional Suppliers

The Scotucci's entrepreneurial idea was to provide high quality prototypes to major players in the fashion industry, together with other critical services that would later emerge as a competitive advantage for the growing company. These services included: guaranteed delivery time, total product engineering and high quality manufacturing. In other words, Tecnomodel offered not just the prototype (and related samples), but a number of files (the guide-card) in digital format containing all of the instructions concerning how to produce the shoe, the characteristics of the leather and other components to be used, and also, a detailed cost analysis for the product. This digital guide-card could be transferred instantaneously to any manufacturer in any remote part of the world.

# Figure Two: Major Brands Value Chain – Tecnomodel New Business Model



A small shoe-production facility would also be part of the new factory. Prototypes and samples would be manufactured there, applying design and operation-management technologies developed by the entrepreneurial team. Consequently, Tecnomodel had developed a new business model mainly targeted to detach the prototyping from the manufacturing phase, thus allowing large fashion players to escape from the lock-in by small manufacturers (reference Figure One). After the co-design and developing phases are brought to completion in synergy with the brand holder, Tecnomodel would produce both the prototype and the whole set of information needed to manufacture the industrialised shoe, thus allowing the company to use market-available manufacturer for the manufacturing (reference Figure Two).

# **Tecnomodel: The Best Kept Secret of Italian Shoe Design**

The Scotucci husband and wife team now believed that Daniela's design and manufacturing capabilities, together with Daniele's ICT-based competencies and entrepreneurial spirit would, again, pave the way for innovative success. Tecnomodel expanded its service portfolio to support shoe production organisation and management, starting from shoe design and engineering to offering a full range of services. Tecnomodel is able to assist customers regarding all issues related to the implementation of the development phase of a new production in the footwear and leather goods industries. Their services are focussed on two main areas: prototyping and sampling. Prototyping consists of the creation of a functioning product from a fashion sketch or a drawing. It is mainly aimed at controlling the technical and market-risks arising from the launch of a new product. To this aim, Tecnomodel is able to perform a series of tests which consider the technical aspects as well as the design side of the projected product. In the technical tests, the company checks the fitting of the shoe with the feet and the balance of the model, whereas in the design tests the company examines the visual appeal of the product, the viability of the chosen combination of colours and materials, the selection of the appropriate accessories and refinements. When the prototyping phase is over, it is possible to see and touch the product, previously only available through the PC screen or on paper, and to discover how the light shapes the real form of the shoe or how the shoe actually fits. The prototyping phase produces not only the very first product, but also a large amount of information on the technical features and fashion characteristics of the new product. All of this information is collected in a report which is the basis for the second phase, sampling. Sampling consists of reproducing the prototype in a small collection of manufactured products which allows brand holders to exhibit the product during trade fair previews and to provide the sales network with a well identifiable, real craft-made wearable product.

A third service is entirely Information Technology (IT) based, as it is the realisation of the technical mapping of the product, which consist of a package collecting all of the information required to manufacture the product. This package is realised solely in an electronic support which guarantees the full transferability of the information and allows a remote manufacturer to realise the product even if they have never seen it before. In addition to the technical mapping, this service also provides a detailed cost calculation, based on standard cost of inputs and materials, of the single unit of the product to be manufactured, and allows brand holders to have an important contractual tool for their negotiations with manufacturers.

The digitalisation of services is a key in Tecnomodel's strategy, but nonetheless, there is room for complementary 'off-line' based services. For instance, alongside the files with all of the information regarding the new model's production process, Tecnomodel sends to the clients an elegant bag containing all the single components and the technical description of them. By offering a wide set of virtual as well as real services, Tecnomodel differentiates itself from traditional shoe producers by positioning the company at the interface between design and production and becoming a 'partner' and not just a sub-contractor for major footwear designers. Daniela argues the benefits of Tecnomodel by saying:

"After receiving a rough sketch of the idea of the shoe, we are able to return to our customers a technical guide in electronic format which they call ironically 'the stupid kit'. The guide provides detailed information on the selection of the leather, its efficient cutting process and treatment, the sewing and assembly phases, as well as the quantity and unit costs of components needed to define the total manufacturing cost. Also a complete kit of all components is provided, in picture and in kind, to ensure that the manufacturing process is accurate and fast".

To reach such a competitive position the company has invested heavily and consistently in IT infrastructure and in the training of their personnel. Just at the beginning of the new venture they bought a main server that cost 80,000. Few shoe companies, regardless of their size, had spent so much money on a single state-of-the-art IT infrastructure. The continuous retooling of Tecnomodel through new hardware and software acquisition to their IT platform ensures that Tecnomodel is at the cutting edge of innovation in shoe design and manufacturing. At the end of 2008, investments in IT-based infrastructure were estimated at about 200,000, a significant portion of firm's net assets.

The rise of Tecnomodel's competitive and financial results resulted in the market appreciation of their business model. At the end of 2009 revenue had surpassed  $\textcircled$ 1.3 million, with an increase of approximately 60 percent compared to 2007 (reference Appendix Two; details regarding the profit and loss of Technomodel from 2006-2008). The workforce was now composed of 25 people within the factory located in Porto S. Elpidio. The client portfolio included some of the most prestigious fashion brands such as Diesel, Geox, La Perla, and many others. Nevertheless, the global economic downturn has also negatively impacted the shoe industry, although Tecnomodel's market outcomes for 2010 are still very good, and the Scotucci's are confident that their company will continue the growth trend of the previous years into the near future.

## The Growth in Competition

One of the primary objectives of the Scotucci entrepreneurs was to develop innovation as a tool to set their company apart from the competition. To a certain degree, Daniele and Daniela had anticipated the changes brought by the globalisation in the Italian shoes industry and some competitors have started to copy their business model. Indeed, a handful of direct and indirect competitors now offer design and pre-production services to medium-large shoes manufacturers. Small shoe producers, due to the global crisis, tend to be more sensitive regarding this and offer prototyping and small series samples production service at a price. Competitors are currently offering a more limited portfolio of service, but at a discounted price. For the service of developing a model-size range, Daniele reported that competitors in southern Italy are offering a price of €22 Euro per model/per size, a fraction compared to their €35 charge for the same service. But above all, Tecnomodel fears competition from the Far East and Brazil that has seen considerable growth in this market, with an estimated total consumption of 110,000 samples of production just for one of the big Italian fashion designers. Tecnomodel was able to secure less than 3,000 pairs and international competitors now control 97 percent of this massive budget. The reason why this happens was easy to identify - cost. Cost is the major advantage of foreign competitors. Tecnomodel is now subject to the same rule of thumb as the competitors they defeated at the beginning of their history. Big clients tend to involve Tecnomodel only in very complex shoes models and/or for a fraction of the total needs of samples. The remaining part of the budget is assigned to shoe manufacturers in China, Brazil or elsewhere. These competitors pay a fraction of the salary that usually goes to a specialised Italian shoes-maker. Daily wages for Tecnomodel was about €180, comparing to approximately \$100 USD per month in China. Consequently, the sampleproduction business was in serious danger, at least in the medium-term, because foreign competitors were raising their quality standards. Recently, a prominent Italian shoe producer designed a very innovative and complex shoe model that won a European prize for innovation in shoe design. The cost that Tecnomodel charged for one sample was approximately €600, and they hoped to secure the entire production plan, that was still relatively small at about 100 pairs. However, the company was given only a budget for 20 pairs, the other 80 went to a competitor. Ironically, while Tecnomodel's engineering services were innovative and effective, the foreign manufacturer implemented their design and could also produce very complex shoes.

#### **Strategic Choice: What about the Future?**

According to Daniela and Daniele Scotucci, Tecnomodel is still a benchmark in the footwear prototyping industry: high-end customers continue to prefer them for quality and price. However, they agreed that their business model could be, at best, defended and the growth pattern experienced in the past could not be maintained in the future in the absence of a radical strategic change. Therefore, they are considering different options for adapting Tecnomodel's business model to the new competitive arena. Three strategic options have so far come under the entrepreneurs evaluations:

- 1. Services development by offering new tools to fashion designers and shoe-makers in order to let them concentrate on their core functions;
- 2. International expansion establishing operating branches abroad;
- 3. Vertical integration through the acquisition of a fashion brand.

Each of these options required detailed consideration as their next strategic decision would have a vital bearing on the long-term sustainability of the business.

#### Services Development

The first strategic option extends the traditional activity of the company by developing a portfolio of fashion-related services that complement the portfolio of existing activities. This action will be targeted to the existing customer base. The primary objective is to further integrate Tecnomodel's value chain with those of its clients. Tecnomodel aims at positioning itself as a strategic partner not only for prototyping and sampling, but also for the overall logistic management. Acting as a general contractor, Tecnomodel would allow shoe-makers to concentrate on the very end of the value chain, that is, brand management, marketing and distribution. All other functions may be performed by Tecnomodel, either directly or via a sub-contractor under Tecnomodel control.

#### International Expansion

Through the establishment of operating branches abroad, Tecnomodel would regain momentum on the cost-based strategic approach. At the same time, this action would allow the company to be present in major foreign shoe districts, thus making Tecnomodel attractive also for local players. Many foreign countries have overtaken the Italian shoes industry, and some of them appear quite attractive for a 'resource and market seeking' strategy: China, Brazil, Tunisia, and East Europe are all potential candidates. Core functions, in particular technology innovation and related capabilities, would be kept in the Italian headquarter in Porto S. Elpidio, whereas labour-intense activities, like sampling and manufacturing, could be moved to foreign branches. Some years ago, Tecnomodel started a branch in an important footwear district in Mexico. Unfortunately, at that time the founders' limited experience in foreign production and in managing and controlling a foreign branch made this initiative unsuccessful. As Tecnomodel was growing fast in the Italian market, Daniele and Daniela decided to fully commit to this market and, eventually closed down the Mexican branch. At the end of 2008, the idea of an international expansion strategy was re-approached as Daniele became more confident in his capability to effectively manage a foreign branch. Two key issues deserved careful consideration: location choice and partner selection. First, the location would have to be very well connected to an airport hub, and Tecnomodel would have to have some resident employee in the foreign branch. Second, a (reliable) local partner should be established in order to better understand and manage the business and economic network in the foreign district.

## Vertical Integration

The third option was a high-risk strategy of vertical integration, much in line with Daniele's entrepreneurial ambitions of horizontal integration or internationalisation. If Tecnomodel had to grow fast, then the integration with a fashion brand would be the most efficient option. A new, rising fashion brand would be the ideal target. A very well established brand would be too expensive to acquire, and definitively beyond Tecnomodel's budget. Conversely, a designer at the very beginning of their career might accept more readily a 'fair' contract agreement for licensing the brand. Often, a young fashion designer is successful in breaking the walls of media fashion, and some of these young designers enter the celebrity industry in the future. However, there is no guarantee of this and the only thing Tecnomodel could do is gamble on the up-coming designer they are convinced will be a future 'guru' in the fashion industry.

Each of these options opens various possibilities for TecnoModel, and making a decision was becoming very difficult. Which of these options could offer Tecnomodel the required boost to grow in the long-term? Daniele and Daniela disagreed on the importance of the timing of the decision as he wanted to make a choice as soon as possible but Daniela was not fully convinced about the opportunity to develop the organisation looking at these three options.

# **Appendix One**

#### **Macerata-Fermo Footwear District**

A density of manufacturing that is quite unique on the Italian scene, comprising of more than three thousand small and very small enterprises, usually artisans, employing more than 20 thousand employees and producing top-quality shoes, with annual sales exceeding 1 billion Euro and exports reaching 56 percent. All located in the narrow valleys in the marshes between the provinces of Macerata and Fermo in a handful of 36 small towns. This is the location of the Fermano-Maceratese industrial shoe district, one of Italy's manufacturing industries that is of major interest because of the high level of productive integration and the high-quality of work that it achieves<sup>2</sup>.

The greater part of production in the district is aimed at a product for the medium-to-high market brands for women. 93 percent of the firms and 87 percent of employees are concentrated in areas embracing 36 towns in the two provinces of Macerata and Fermo. Porto S. Elpidio, that is the town where Tecnmodel is located, is one of the most involved in footwear production and with a pervasive presence of small and medium high quality producers. The Macerata-Fermo district is the largest Italian district in terms of employees, firms and (number of) shoes manufactured and exported.

At the end of 2009, the shoe industry in this area comprised of 3,100 firms, 3,300 local units and 21,000 employees. In the last decades, the district has experienced a huge decrease in the number of firms and employees due to the increasing competition from Asian countries in the low-end market and the delocalisation of a large part of manufacturing activity to low-wage East European and Mediterranean countries<sup>3</sup>. The reduction of the regional footwear industry has been less pronounced than that experienced by other Italian regions with the same prevalent specialisation (Veneto, Toscana, Campania, Puglia).

Today, the district has three major points of weakness. The first is related to the difficulty in finding trained and qualified workers in the area, the costs for which are considerably higher than those for shoe producers abroad, particular in Asia. Secondly, the high cost of the

<sup>&</sup>lt;sup>2</sup> ICE, Italian Institute of External Trade - Italtrade Commission.

<sup>&</sup>lt;sup>3</sup> In 1991 there were 4,800 firms and 44,000 employees in the district; in 2001 the industry has declined to 4,300 firms and 31,000 employees; in 2005, to 4,000 firms and 25,800 employees (ISTAT, Italian Institute of Statistics).

production infrastructures and raw materials, which also amplifies the competition with Asian competitors. Finally, there are difficulties in the development of exporting activities because the small and very-small organisational sizes hinder a substantial commercial and distributive presence in foreign markets.

However, the district maintains a number of key factors of competitiveness: great productive flexibility, high quality of raw materials, manufacturing skills, technical-productive capacities and creativity in the design phases. Furthermore, it is also the quality of the final product, well-recognised at world level, which renders this industrial district still extremely competitive, despite the crisis that the sector has been experiencing.

The footwear industry plays a big role in the productive sector of this area. The image of the province of Fermo, in Italy and the world, is represented by shoes. Around half of the generated income comes from this sector, and more than 50 percent of workers in manufacturing are employed in the footwear industry, in firms with less than five employees in 90 percent of cases. Despite the recently observed decline in output and employment, the footwear 'productive network' centred on the Fermo-Macerata district maintains a leading role in a number of important international markets as a benchmark for quality and style. Approximately 50 percent of the total exports from the district goes to major developed countries in Europe and USA.

# **Appendix Two**

# **Financial Details of Tecnomodel**

The company performance in the last three years shows the effectiveness of the business model. Total revenue almost triples from 2006 to 2009, with a significant boost on net profitability. The composition of the P&L shows the sustained incidence of wages expenses due to the remuneration of qualified employees.

	2006	2007	2008	2009*
Revenues (x 1.000 Eur)	449	816	1250	1360
Revenues	100.0	100.0	100.0	100.0
Materials	25.8	10.5	9.6	9.9
Services	45.9	46.2	44.0	37.7
General expences	8.2	11.3	9.1	17.6
Wages	17.8	23.0	19.4	13.3
Depreciation and amort.	2.8	0.0	2.0	3.6
EBIT	-0.6	8.9	15.9	17.9
Interest expenses	3.3	1.8	1.6	2.2
Taxes	1.2	0.2	1.0	0.6
Netincome	-5.1	6.9	13.4	15.1

Tecnomodel Profit and Loss: 2006 – 2008

\* = Provisional

# Acknowledgements

The authors would like to acknowledge Dell Inc. for sponsoring the Global Small Business Excellence Award and ICSB International Office located in Washington D.C. to allow them to use the case material to develop the following business case. Please contact ICSB office with any enquiries about the competition or the business case at icsb@gwu.edu