1. Today you were exposed to the role that IT plays in two (groups of) companies, one in the morning, one in the afternoon. Among all the aspects of IT, what do you think was the one that played the most significant role for each (group of) company?

The presentations by WebRatio and the Italian textile association provided key insight as to the role of IT in the general Italian business model. The key IT-themes conveyed are the critical role of IT as a communication enabler, the difficulty in explaining the business value of additional IT investment, and crucial role small-to-medium businesses play in the Italian economy.

The first characteristic that is crucial to understanding the Italian economy is the importance of the small-to-medium business (SME). During both presentations, it was emphasized that the bulk of Italian business is done by SMEs. As such, both WebRatio and the textile industry have focused their efforts on meeting the needs of SMEs. Furthermore, within a given industry, there is not much consolidation which means that there are multiple competitors for any given step in the supply chain. While one would think that this makes the market for services more competitive, it appears that the lack of entrepreneurship within the business sector seems to mitigate any competitive potential.

One of the key points in both presentations was the critical role IT plays in enhancing the communications process. For example, an important success-story for WebRatio was how Acer EMEA used their product to streamline management of their web-portal. Similarly, the textile association is leveraging IT investment to create a textile-specific EDI framework that connects all aspects of the textile supply chain. In light of the fact that so much of the Italian economy is based on SMEs, the ability for technology to enhance communications is perhaps the most obvious “payback” on IT investment. Furthermore, using IT to enhance communications is also a slow way of providing each SME the semblance of independence from each other, although in reality the exact opposite should occur over the long run.

The need to explain the benefits of enhanced business communications seems to be the primary challenge facing WebRatio. Notwithstanding the fact that WebRatio leverages J2EE technologies that are counter to the Microsoft-centric business infrastructure, WebRatio expressed that the IT aspects of the WebRatio solution are less a problem than the need to convince businesses over the benefits of business-procession re-engineering. The problem, for WebRatio, is cultural and not technical.

This same cultural “barrier” is also the most significant IT issue facing the Italian textile association. In an industry where production costs have forced production overseas, one would expect that Italian textile manufacturers would be keenly focused on supply chain management. Instead, the Italian textile market is extremely fractured, to the point where there appears to exist a firm for every aspect of the manufacturing process. Rather than consolidate, the industry appears divided across manufacturing divisions. And rather than fighting to maintain its market, the industry appears to accept itself becoming a niche player. According to the textile association, the following technologies are key to the industry’s long-term viability:

   a. Document management
   b. Knowledge management
   c. Collaborative design and development of products
   d. Ability to provide greater customization based on customers needs.

These are all present-day technologies in use throughout the world. However, the textile association data also indicates that one of the barriers to industry growth is the perceived
lack of technical solutions to meet the needs of the producers. Such a disconnect between what is “really” needed and what is “perceived” is not an IT problem, but an issue with much deeper roots.

2. Your pre-trip assignments lead you to formulate questions and develop specific interests in some of these companies. Elaborate on how today’s presentation addressed those issues and/or generated new ones. Specifically identify IT issues or solutions, emerged from today’s presentations, that are unique to the Italian industrial world, if any. When possible compare the latter with analog issues/solutions present in the US industrial world with which you are familiar.

One of the key questions I had related to the ability for Italy to continue innovating given its negative population growth. How can Italian firms continue to compete given an increasingly older and, perhaps, less technologically adapt, labor market? Unfortunately, the impression I got from both presentations is that there is no good answer to this issue.

The WebRatio group is in a unique position to continue their innovation because of their tie to the Polytechnic University of Milan. By leveraging close faculty-student ties, the WebRatio team can effectively feed the need for engineering talent by recruiting graduate students. However, this approach can only go so far. If the IT industry in Italy does not attract the increasingly smaller pool of student talent it has, then the WebRatio team is at a competitive disadvantage to other countries that place a stronger emphasis on IT. And from general comments today, it appears that IT in Italy is a struggling discipline, which does not bode well for WebRatio’s future.

The situation is slightly different in the textile industry. Italy is already recognized as a leader in textile “production”, which means it can attract any talent it needs. But “buying” talent is something that other firms can do as well. And with an increasingly aging population, Italy is more likely to have to buy talent than other nations. With production of many fabrics moving to Asia, it will not be long before non-Italian firms can afford the same quality of talent. Thus, over the long-run, a decreasing Italian population will decrease the availability of local design talent to run the textile business. This will force Italian firms to look outside of Italy for their needs. At the same time, other countries whose textile industry is gaining credibility, may soon be able to afford the same talent Italian firms have today. In a world where talent goes to the highest bidder, there is a risk that the Italian textile industry will become an increasingly marginal player in the global economy.

3. Rate the effectiveness of each visit/presentation today, in a few paragraphs, addressing the following points:

- Provided a good general introduction to the company
- Provided the right amount of information regarding the role played by different aspects of IT within the company
- The company contact had a good technical knowledge and was informative
- The group’s questions were answered to your satisfaction

The key issue during both presentations was the presenters’ difficulty in expressing themselves in English. This was less of a problem during the WebRatio presentation than the textile association overview. However, during both, it was clear that the presenters were unable to explain some of the key nuances of their industry due to the translation hurdle. I believe this also impacted the amount of information they conveyed in the presentations themselves.

Overall, I was most impressed by the WebRatio presentation. Not only were they knowledgeable about their product, but they even had key staff there to explain the product to us. I believe the WebRatio presentation became too technical in the end, but I would rather have
more information than less. My primary criticism was that the discussion focused more on the WebRatio product, and less on how WebRatio uses IT internally. On the other hand, given how small a company WebRatio is, its internal use of IT is probably of less interest than the market for its key product.

The Italian textile presentation was much less organized than WebRatio's. The speakers each had unique presentations which made it difficult for me to understand how their work aligned. I felt the workers were knowledgeable of the business, but not of the IT component. As a result, the presenters rehashed material they had been provided rather than explaining the key IT aspects. On the other hand, the presenter's business insights on the textile industry highlighted how IT is much less of an issue than the cultural barriers to embracing IT. As a result, I still feel I was able to get a sense of the issues facing that textile industry.

6/28/2005 – Lamborghini & Ducati

1. Today you were exposed to the role that IT plays in two (groups of) companies, one in the morning, one in the afternoon. Among all the aspects of IT, what do you think was the one that played the most significant role for each (group of) company?

Both Lamborghini and Ducati do not appear to leverage IT for competitive advantage. Rather, the general sense is that IT is a backoffice tool like most others, and is used in a reactive, rather than pro-active, capacity. Both firms view themselves as exclusive, niche players, who can afford to deal with things in a very traditional way. And to the extent that their brand cachet remains strong, they may be able to afford this view of IT. However, it seems unlikely that this detachment from IT is a viable long-term strategy.

Of the firms we have covered in the past few days, Lamborghini was the most up-to-speed technologically. A large part of this is due to Audi’s oversight of the company. Nonetheless, the firm came across as recognizing the need for IT in the enterprise, and appreciating the benefits it can offer. At the same time, Lamborghini acknowledged that IT still plays a reactive role in the company, and that it is not a strategic focus. They acknowledged their strong IT architectural design as being a key reason for their good luck using the various technologies they have adopted thus far (including WebSphere). In fact, the Lamborghini network was rather sophisticated, including the use of two-factor authentication and IBM reverse proxy equipment to safeguard internal resources.

During the Lamborghini presentation, we also learned that Italy has stricter privacy laws than the US. It was interesting to see that Lamborghini has a specific IT position for Information Security. We did not know to ask about this at the other firms we’ve visited.

Ducati, unlike Lamborghini, appears to have a more disjointed IT infrastructure. The public web-site is outsourced and served out of Milan. The firm was particularly proud of the public web-site, noting how effective it is at enabling communication between Ducati and its customer base. In addition, an internal Oracle/Siebel CRM system resides at the factory. The CRM system is primarily for internal use only, although it does interface with the dealership network. However, there does not appear to be much automation behind the supply chain. Considering that Ducati prides itself on following Toyota’s “kaizen” assembly technology, the company’s approach to supply-chain management is antiquated. It appears that this is offset by Ducati’s niche status. As a maker of exclusive, high-priced, performance motorcycles, the uniqueness of the Ducati “experience” acts as a barrier to entry for most other competitors. However, even this niche status can only delay, not avoid, additional investment in IT supply chain management software.
It is important to note that both Lamborghini and Ducati presentations focused on the manufacturing and back-office side of the business. Another key facet is vehicle design, and it may be in this regard that technology has provided its biggest payback. For example, Ducati was able to reduce the development window for new cycle designs from 7 years to 3 via technology. However, since we did not cover design in any detail, it is unclear exactly how this was achieved and what it means for future IT investment.

2. Your pre-trip assignments lead you to formulate questions and develop specific interests in some of these companies. Elaborate on how today’s presentation addressed those issues and/or generated new ones. Specifically identify IT issues or solutions, emerged from today’s presentations, that are unique to the Italian industrial world, if any. When possible compare the latter with analog issues/solutions present in the US industrial world with which you are familiar.

One of the key questions I had related to the ability for Italy to continue innovating given its negative population growth. How can Italian firms continue to compete given an increasingly older and, perhaps, less technologically adapt, labor market? Unfortunately, the impression I got from both presentations is that there is no good answer to this issue.

Lamborghini can leverage its exclusive reputation as a maker of luxury automobiles to attract a great deal of talent. And since it does not use IT from a strategic perspective, the IT talent it does attract can be reasonably trained on the current technologies in use. This is a viable short-term approach. However, given the general trend for IT to take on strategic focus at other firms, Lamborghini’s IT needs over the long term will become increasingly sophisticated, and it is unclear to me if they will find the necessary talent in the local labor force. It is important to note that given Audi’s ownership of the company, a link to the German labor-force exists. How extensively this linkage will need to be used at a company that prides itself on a certain amount of separation from the parent company remains to be seen.

Ducati’s IT needs are very basic and non-strategic (even though the company acknowledges that the CRM information is an asset). As such, they will probably not encounter issues when looking to the local labor force for IT needs. Furthermore, their exclusive status as a maker of high-performance motorcycles will, like Lamborghini, help in attracting IT talent. But the same issues as those in Lamborghini apply here. Over the long-term, IT must take on a more strategic focus, and as such it is inevitable that the Ducati’s IT needs will become more sophisticated. To the extent that the company views IT as a strategic investment, then it will probably want to keep additional IT investment in-house. How long the local labor force will be able to serve these needs is unclear. And unlike Lamborghini, Ducati does not have a very wealthy, IT-focused parent company like Audi to facilitate it’s technological learning curve.

It is important to note that both Lamborghini and Ducati presentations focused on the manufacturing and back-office side of the business. Another key facet is vehicle design, and it may be in this regard that technology has provided its biggest payback. For example, Ducati was able to reduce the development window for new cycle designs from 7 years to 3 via technology. Since we did not cover design in any detail, it is unclear exactly what impact this will have on both firm’s labor needs.

3. Rate the effectiveness of each visit/presentation today, in a few paragraphs, addressing the following points:
   • Provided a good general introduction to the company
   • Provided the right amount of information regarding the role played by different aspects of IT within the company
   • The company contact had a good technical knowledge and was informative
   • The group’s questions were answered to your satisfaction
The key issue during both presentations was the presenters’ difficulty in expressing themselves in English. It was clear that the presenters were unable to explain some of the key nuances of their industry due to the translation hurdle. I believe this also impacted the amount of information they conveyed in the presentations themselves.

Overall, I was most impressed by the Lamborghini presentation. The presenter was able to provide a great deal of detail on how the firm leverages IT, and was open to all of our questions. It would have been interesting to see the role of IT in vehicle design, but this did not detract from his conveying the general role of IT in the firm. It is also noteworthy to point out the quality of our overall experience at Lamborghini. The entire manufacturing line was extremely clean and the museum and corporate offices was very well kept. The firm was very gracious in offering us lunch and attending to our needs. It was particularly interesting to hear that the CEO of Audi was visiting at the same time as we.

The Ducati presentation appeared to be the least organized. Although we arrived late, there seemed to be a disconnect between our questions and the presenter’s knowledge. It appears the presenters did not have a sense as to why we were there and therefore let our questions drive the general discussion. This was one of the few presentations that did not have a slide-show prepared. It would have been nice to have slides to follow along with the key points the presenter was making. The lack of prepared slides is further indication that the firm did not do much in anticipation of our visit.


1. Today you were exposed to the role that IT plays in two (groups of) companies, one in the morning, one in the afternoon. Among all the aspects of IT, what do you think was the one that played the most significant role for each (group of) company?

Vodafone and Progetto Lissone approach IT from opposite ends of the spectrum, and their different business models are the primary indicator as to the role of IT in the organization. Vodafone sells a mass-market service that is increasingly becoming a commodity and depends on IT for efficiencies of scale, whereas Progetto Lissone offers an exclusive, artisan-quality product in which IT plays a secondary role.

As one of the world’s largest telecom provider, Vodafone has made a very strong IT investment in order to:

- Manage millions of external customers
- Determine the best way of selling services to these millions of customers
- Minimize the cost of servicing these millions of users

The competitive nature of the European cell market has resulted in market over saturation, meaning that there are now more cell numbers than there are actual Italians. In such a market, the primary competitive drivers are customer service and cost-containment. High levels of customer service are necessary to retain existing customers (who now face very low barriers to substitution across different telecom providers). And since market prices for cell service are already low due to competitive pressures, cost-containment becomes key as telecom providers try to figure out the most cost effective way to service their installed base.

Vodafone leverages IT to manage the customer call center experience in the most cost-effective way. Since the most expensive customer support calls are those involving actual call center staff, Vodafone leverages IVR and ABR technologies to ensure that customer calls are handled most effectively. The IVR system provides a general purpose automated self-service system that addresses most of the basic customer needs. And the Activity Based Routing
(ABR) system ensures that each customer call is dealt with commensurate with the “value” proposition of that customer to the company. ABR matches each incoming customer call with an internal profile for each caller, and routes that call according to customer history, existing call center volume, and other factors. The end result is that Vodafone minimizes the cost of dealing with customers, while at the same time ensuring an effective customer support experience. The fact that 98% of high-value customers can get through to a call center within 40 seconds attests to the effectiveness of this system.

Furthermore, Vodafone's internal Knowledge Management initiative aims at ensuring that each customer service representative is equipped with an enterprise-wide knowledge directory to resolve customer issues. This ensures the consistency of the customer service experience across the 8 different call centers, while also providing a platform for communicating important support issues throughout the call center community. The end result should be a consistent and timely resolution of all customer support problems, irrespective of how the customer accesses the Vodafone support service.

Progetto Lissone, on the other hand, caters to large-scale, highly customized, furnishing projects which are typically bid-out by organizations. The focus of the Progetto Lissone experience is to coordinate the manufacture of a highly-customized product among the various skilled Lissone artisans. Each product is unique, and there is no interest in mass-market production. Although the Progetto does attempt to standardize the IT tools being used, as well as provide certification training using new software solutions, the role of IT in this industry is to facilitate simple back-office operations. The competitive advantage in this industry is the artisan skillset, and not the IT infrastructure.

2. Your pre-trip assignments lead you to formulate questions and develop specific interests in some of these companies. Elaborate on how today's presentation addressed those issues and/or generated new ones. Specifically identify IT issues or solutions, emerged from today's presentations, that are unique to the Italian industrial world, if any. When possible compare the latter with analog issues/solutions present in the US industrial world with which you are familiar.

One of the key questions I had related to understanding how a telecommunications provider can continue to innovate in an industry where getting “new” customers often means attracting customers from other telecom firms? In other words, is price becoming the only point of differentiation?

The Vodafone presentation clarified the competitive drivers that define the Italian cell-phone market. Given the market over-saturation, as well as the large number of competitors, price and customer experience are increasingly the primary driver in cell-phone purchases. While price may be dictated by market forces outside of Vodafone's control, customer experience is a skill Vodafone has made a significant investment in maximizing.

Another question I had involves who is the primary driver of technological innovation within the given industry. For example, in the US, the demands of business typically determine the types of technology investment, with eventual trickle-down to consumers. The opposite is true in certain Asian markets. How does the European market fare?

The Vodafone presentation indicated that in Italy (if not the rest of Europe as well), business is the primary driver of technological innovation. Considering the cultural “hesitance” towards automation we have been reminded of in other presentations, this finding may not come as a surprise. It will be interesting to see how this changes as the Italian population becomes increasingly tech savvy.
3. Rate the effectiveness of each visit/presentation today, in a few paragraphs, addressing the following points:
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   • The group’s questions were answered to your satisfaction

Overall, the Vodafone presentation was the most technically informative presentation we have had to-date. The presenters were clear, courteous, and willing to answer all of our questions. Also, they were very well prepared with the type of information we needed. Unfortunately, the focus of the discussion was on the call-center, and did not cover the use of IT in other facets of Vodafone. Nonetheless, given the nature of Vodafone’s industry, the call-center is perhaps one of the most important places for IT, and thus the presentation was very relevant.

The Progetto Lissone presentation lacked any real IT details, but I believe this has more to do with the nature of the Lissone business model than any problems with the presenters. Over the past few days, it has become clear that Italy is becoming a nation focused on custom-made, exclusive goods not targeted at mass-market appeal. In such an environment, the provider of a service or product can afford the “inefficiencies” we see when IT is not leveraged to its fullest extent. The reason for this is that the focus of the customer experience is not on efficiency, but on the unique product that will result from the process. Customers who go to Progetto Lissone (or Ducati, Lamborghini, and Tessili Italia for that matter) realize that only Lissone can provide them the unique experience they desire, and are willing to accept these “costs”. To the extent that Lissone (or Ducati, Lamborghini, and Tessili Italia for that matter) can maintain a cachet of exclusivity and uniqueness, they may be successful in minimizing their need for IT efficiencies. But I am convinced that those firms who do appeal to mass-market, and are not successful at implementing IT efficiencies (i.e. Fiat), are ultimately doomed to failure.

7/1/2005 – Ferrari

1. Today you were exposed to the role that IT plays in two (groups of) companies, one in the morning, one in the afternoon. Among all the aspects of IT, what do you think was the one that played the most significant role for each (group of) company?

The focus of the Ferrari presentation was on the cultural aspects of running a successful business rather than on the IT specifics that make Ferrari unique among other manufacturers. In this respect, the focus was on recognizing the need to foster a team culture in a hypercompetitive industry such as Formula 1. However, based on the IT information provided, it appears that IT permeates all aspects of the design, testing, and racing process. And all aspects are equally critical. During the design and testing phase, Ferrari uses simulation software to evaluate the viability of engineering concepts without actually building physical proof-of-concepts. When racing, Ferrari depends on telemetry information obtained from the cars to monitor performance and optimize racing strategy. And Ferrari leverages the portability of the IT infrastructure so as to ensure an IT presence at each race (akin to moving an IT department every 2 weeks to a new location).

An interesting point raised during the presentation was how Ferrari is adapting to the outsourcing trend. Ferrari considers its IT investment as a competitive advantage, and thus is not willing to completely outsource its infrastructure. But Ferrari did make a point that its approach to outsourcing is to maintain control over all projects, so that it is always in a position to ensure that its priorities are accomplished.
Notwithstanding the IT discussion, the focus of the presentation was on recognizing IT as a tool that, when used by a good team of individuals, can provide competitive advantage. The key to winning in Formula 1 is not in having the most advanced IT solution, but in having the team with the passion and dedication to adapt IT to the needs of the race. “Dynamic stability” was a common theme, in the sense that the Formula 1 environment changes too quickly for technical solutions to become “established”. Rather, IT solutions are constantly optimized and re-evaluated to meet new needs, and in this sense, are only as good as the team handling the implementation.

2. Your pre-trip assignments lead you to formulate questions and develop specific interests in some of these companies. Elaborate on how today’s presentation addressed those issues and/or generated new ones. Specifically identify IT issues or solutions, emerged from today’s presentations, that are unique to the Italian industrial world, if any. When possible compare the latter with analog issues/solutions present in the US industrial world with which you are familiar.

One of the key questions I had related to the ability for Italy to continue innovating given its negative population growth. How can Italian firms continue to compete given an increasingly older and, perhaps, less technologically adapt, labor market? According to Ferrari, the lack of IT experience that Italians may have relative to others is an important issue and potential long-term problem. The key point, however, is not in having a tech-savvy labor force, but in having a passionate and enthusiastic labor force willing to become part of a team. Ferrari feels that individuals whose passion and dedication for success will be able to overcome any technical disadvantages. And to-date Ferrari has been very lucky in being able to find individuals in Italy with these key qualities.

It is important to note that although Ferrari is an Italian firm, it truly has a global reach. Its partnerships with GE, MIT, Shell, and Acer mean that Ferrari is positioned to take advantage of a global technology force, even though it remains headquartered in Italy. In other words, a future lack of Italian tech talent may make it more difficult for Ferrari to find locally-trained staff, but the key ideas and technologies that provide it competitive advantage are based on the work of a global workforce. To the extent that Ferrari is able to find passionate and dedicated local staff, it feels it will be able to have them assimilate these technologies quickly.

3. Rate the effectiveness of each visit/presentation today, in a few paragraphs, addressing the following points:
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Overall, the Ferrari presentation provided a great deal of passion and perspective on the non-technical aspects of IT, but did not focus as we expected on the specific IT solutions that help make the company successful. The goal-driven teamwork that Ferrari emphasized during their presentation is something all successful businesses must strive to achieve. But in a technology-centric world as Formula 1, it would have been nice to understand the technologies that complement such a successful team. I do believe that the presenter had this knowledge, but he chose not to present it so as to minimize the amount of proprietary information he divulged. But he did try to answer questions as best he could within these constraints.
Notwithstanding the lack of technical detail, I believe the Ferrari presentation was the most passionate that we have had. And I truly believe that the team-centric focus is the reason for their success given the constantly changing nature of Formula 1 racing. But it is also important to note that unlike other businesses, the goal of Formula 1 racing is an easier one to explain to staff than less tangible business objectives like customer value and satisfaction. In Ferrari's world, you either win the race or you don't. Hence the difficulty in applying Ferrari's formula for success across other industries.