Questions on the Role of Information Technology in Italian Industry

1. (Ferrari) Technology is playing an increasingly visible role in the modern automobile. Innovations such as diesel engines, anti-lock brakes, and 4-wheel drive have increasingly leveraged technology behind-the-scenes to deliver their benefits and to continue their advances. But technology is now starting to take a “visible” role in the driving experience – some cars today offer on-board GPS systems that plan the most efficient travel route, Bluetooth cell phone connectivity, on-board cameras for rear-view driving, and even entertainment systems with DVD players.

The luxury sports car market that Ferrari has dominated was traditionally focused on delivering the optimum driving experience through increases in engine power, luxury, and handling performance. How will the more “visible” technologies we are starting to see in other car segments enhance or detract from Ferrari delivering this optimal driving experience? In other words, will today’s Ferrari customers not buy a Ferrari in the future if it does not contain GPS or a DVD player? If such technology will become more mainstream in sports-cars, how will Ferrari compete given that such technological innovation usually originates outside of Italy and out of Ferrari’s direct control?

[Among other things, this question will help me understand how technology is impacting the demands of the typical Ferrari customer, as well as how the company is adapting to these changes. Companies like Ferrari are unique in that they sell both a product and a certain level of prestige. Yet technological innovation usually results in accelerated commoditization. I’m curious to understand how firms find a balance between the two.]

2. (Vodaphone) With over 98% of Italians owning a cell-phone, the Italian cell phone market is one of the most saturated in the world. Given that handsets are already incredibly integrated technologies, and that the handset manufacturers may provide the same model to various cellular providers, how does a telecommunications provider 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?

Understanding how telecommunications companies are adapting to this level of market saturation may be indicative of what will occur when other global markets (i.e. the U.S.A) approach similar saturation points. And the behavior of businesses in this climate may be applicable to other industries as well. Italy provides a very unique study-case, in the sense that while other nations are growing in terms of population size and cultural identity, Italy has a rather homogenous, densely populated culture. To the extent that people will continue to communicate tomorrow as much as they do today, the Italian telecom experience may be enlightening.

[This question will help me understand how telecom companies are responding to the challenges brought forth when everyone essentially has the same technology and prices are increasingly similar. How do they continue to obtain a competitive advantage using the very technology that, by definition, requires interoperability among different competitors? ]

3. (Question for all firms) Despite the arrival of approximately 70,000 new immigrants every year (BBC News, 2002, “Europe’s ageing workforce”), the Italian population is actually in a state of decline. Furthermore, Italy also has among the lowest fertility rates in the world (1.2 children per women). In a world increasingly governed by technological innovation, how can Italian firms continue to compete given an increasingly older and, perhaps, less technologically adapt, labor market? Will being headquartered in Italy still be a desireable option 20 years from now?
[This question will help me understand how Italian industry is adapting to an aging Italian workforce that may not be willing to adopt the newer technologies that will be the basis for future progress. Italy does not face this problem alone, but certainly provides a unique study-case. In such a small country, to what extent can importing the talent to drive tomorrow’s technology dilute Italy’s national identity?]

4. (Question for all firms) Technological innovation is driving global business. However, demand for technological innovation can come from 2 different audiences. In the United States, for example, the needs of business often drive where technological innovation occurs, with consumer-oriented technological innovation playing a secondary role. On the other hand, in Asia it is often the consumer segment that dictates technical innovation (SFGate, 12/9/2004, “ASIAN POP The Gadget Gap -- Why does all the cool stuff come out in Asia first?). In your specific industry, who is the primary driver of technological innovation, and do you see this changing as both business and consumers become increasingly technically savvy?

[This question will help me understand how quickly we can expect to see technological innovation reaching the consumer markets. For example, in Asia the consumer market drives a great deal of the innovation, with the end result being that many new technologies reach consumers long before businesses adopt them. In other cultures where business drives innovation, the opposite is true. I would like to get a better perspective on where Italy fits in this spectrum, and whether its position is changing as Italian industry and culture takes on global characteristics.]