CHAPTER

Universities and business — a view from a food company

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This paper is about how Nestlé is changing, and how this change might affect our relations with universities. The subject merits, most certainly, an in-depth and prolonged discussion, but this paper will confine itself to just a few aspects.

The ongoing changes at Nestlé are quite profound. In addition to continuous benchmarking, cost reduction and product improvement (both renovation and innovation), we are in the midst of important step changes in three major spheres, namely:

- Adapting our strategic focus to changing product demand;
- Altering the way our people work and cooperate, both within the company and with the outside world; and
- Developing our internal structures and systems, in particular the flow of knowledge (this project is called GLOBE, an acronym for our search for Global Business Excellence in the Nestlé Group).

A few details on the first sphere: We can distinguish between several phases in the demand for food products, which evolve in different markets over time and as people move up the income ladder:

- Initially, food is required to meet subsistence needs — people take what they can get. One of our roles is thus to make products available over time and across a region using our know-how and technology. An example of this relates to dehydration: in the north of India, for

1 Dinner speech on the occasion of the 5th Glion Colloquium, delivered on 20 June 2005 at IMD, Lausanne.

instance, we produce a range of milk products. As milk intake is subject to seasonal fluctuations, we must be able to stock the products to allow us to respond to continuous consumer demand. And with summer temperatures of 40°C and more, the only way to preserve this produce and ensure that it reaches consumers in the big cities in a timely and safe way is through dehydration — the production of milk powder.

- Over time, and with rising incomes, a market develops for products with higher value-added; products, for instance, that offer convenience and pleasure. We meet this changing demand with a diverse range of products, and we provide them in any form (multi-portion or single portion, for example), anywhere and at any time. This allows consumers to choose what they want when they want.
- In the next stage of development of the market, people begin to see nutrition as a door opener to broader well-being and fulfilment. In response to this, we will provide research-based knowledge and solutions, active ingredients and components which ultimately allow people to *design* what they want.

We expect that one of the outcomes of this development will be that food markets become even more complex and diversified, and possibly also more volatile.

Nestlé is responding to the challenge of changing consumer preferences. We are moving from being a "respected and trustworthy *food* company" to being a "respected and trustworthy *food, nutrition, health and wellness* company". As a first step, and in order to reinforce our competitive advantage in nutrition, we have decided to create an autonomous global business organization for nutrition within the Group. The nutrition market has its own characteristics. It is based on high-level research and development, and requires supporting clinical trials, while the consumer's primary motivation for a purchase lies in the nutritional content of the product itself. Our own main focus today is on infant nutrition, health-care nutrition and performance nutrition, and this new organization, Nestlé Nutrition, will be responsible for this part of our business. It will deliver superior business performance by offering consumers trusted, science-based nutrition products and services.

In parallel, thinking further ahead, we have started to ask how, more broadly, we can contribute to consumers' well-being and fulfilment.

In the second sphere: we are altering the way our people work together by:

- moving from a hierarchical structure to flat, highly interlinked networks;
- reassigning management responsibilities and accountability at the major operational levels (profit and loss responsibilities for business executive managers);

- working in clusters around concepts, rather than according to hierarchical structures; and
- opening up to ideas and other inputs from the outside world.

Our principal objectives here are to reinforce the motivation of our staff and to increase their efficiency. Specifically, we want to become more flexible, we want to turn size into strength and enhance our ability to exploit scale, while compromising neither our proximity to the consumer nor our speed of execution. To use a nautical metaphor, instead of being a big tanker, we want to become a fleet of smaller, agile ships. This means abandoning the paradigm that dictates that only focus and streamlining can lead to efficiency. Instead, we are looking for ways to combine complexity and efficiency in constructive ways.

In the third sphere: the two changes just outlined obviously require reform of our internal structures and systems. This is the main purpose of project GLOBE. It aims to create a better, more coherent and relevant flow of information and knowledge on a day-to-day basis. Furthermore, it is designed to ensure a more systematic system of knowledge exchange in order to spread best practices across the global Nestlé network.

These transformations are a response to changing markets and technologies, but they also reflect a vision for Nestlé's development into the middle of the 21st century.

Changes are being introduced in all three spheres simultaneously, despite the inherent complexity of the undertaking. We considered using a more sequential approach, but as research has shown (Pettigrew, 2000), this is unlikely to work for systemic reasons: the three areas are interdependent, and the changes are designed to create a new overall mindset. Furthermore, I am convinced that the necessary transformations can be achieved more rapidly if they are implemented in all three spheres simultaneously.

These changes inevitably alter our existing comprehensive, complex and constructive relations with universities. Let me mention just two aspects:

- The qualifications in the graduates we want to hire are constantly changing, and they are sometimes different from those attained through university education.
- We wish to deepen our research cooperation with universities and to find new forms of partnerships.

So, what kind of graduates do we need to implement the changes at Nestlé? Our general requirements are very much business-oriented. We do not seek intellectual skills for their own sake. The best candidates will certainly have a good stock of basic knowledge, but they will also have the ability to solve unforeseen and unforeseeable problems, and to adapt to changing circumstances.

Clearly we need universities to expand scientific knowledge — and therefore to prepare selected students for doing research. But curricula should not be structured in a way that prepares students principally for academic careers (the type which, of course, their professors know best).

We want to hire graduates with high-quality education, as well as practical know-how and an understanding of business realities. At Nestlé we hire not only people who have studied management, but we also look for nutritionists, biologists, medical doctors, etc.

Recently, I had a long discussion with Professor Ulrich Gäbler, President of the University of Basel, about the training of medical doctors in Europe. He has some excellent ideas, which I think are relevant for other sectors of education, too. He described the existing, rather rigid curriculum that comprises at least seven years of basic training. Prof. Gäbler argued that a more modular education could be appropriate. He envisages a three-year bachelor degree for medical students, which could also incorporate a degree of specialization. This would provide the necessary knowledge base for general practitioners, public health officials or medical technicians. For example, at Nestlé we employ a number of doctors as nutrition specialists. Their role is to inform medical practitioners about our clinical nutrition and more sophisticated infant-nutrition products. These employees need a good academic base, but not the full seven years of training medical doctors receive today.

Further modules of university training could then be offered to those who actually need higher qualifications, or those who are planning a career in advanced research. Those would be the people we would hire for our research activities.

Prof. Gäbler provides another excellent illustration of the markets' changing focus and the rigidity of the university system. Demand is shifting from curative to preventive medicine and medical support for a person's lifestyle (beyond cosmetic surgery). The focus of university education, however, remains (for historical reasons) curative medicine; there is practically no training relating to issues of "well-being" or, for example, nutrition. As he says, both the profession and universities are struggling to accept the idea that there is a market for health care and that consumer demand is changing. They are therefore finding it difficult to adapt to these changes.

My third point is on research and development within Nestlé and the links we necessarily maintain with the academic world. We have our own global research set-up; every year, we invest around 1.4 billion Swiss francs in the development of new processes and products, innovation, renovation and improvement.

And we have excellent, rapidly expanding cooperation with universities. In order to illustrate this, I will mention just one example which is still in an exploratory phase. It shows how cooperation with universities may become an integral part of Nestlé's shifting strategic focus.

As I mentioned earlier, we are broadening our focus from only food and beverages to include nutrition, wellness and ultimately well-being.

We have been building up the necessary links with universities for quite some time. For example, the Nestlé Nutrition Council, a group of international experts which advises Nestlé on nutrition and health issues, goes back 25 years. Our Research Centre near Lausanne built on the contacts and experience of the council to launch another initiative, organizing the first International Nutrition Symposium which brought together scientific leaders from a cross-section of disciplines and around the world. Over three days, they addressed key issues central to human well-being and diet. Participants included three Nobel laureates in medicine and physiology. One of them, Günter Blobel (1999 Nobel Laureate), a long-time member of our Nutrition Council, was also elected Member of the Nestlé S.A. Board of Directors in 2005. Our links with the science community have therefore been institutionalized at the highest corporate level.

And we go beyond general discussions, looking constantly for new opportunities. In a recent conversation, Professor Patrick Aebischer, chairman of the Swiss Federal Institute of Technology in Lausanne (EPFL), mentioned his new Research Centre for Degenerative Neurological Disorders. At first glance, this appears to have little to do with food. However, early research suggests that Resveratrol, a substance found in red wine, can slow degradation of the brain (caused by conditions such as Parkinson's and Alzheimer's). We have been aware of this substance for a long time and we know how to combine it, and other substances, with food so they can be easily ingested. We are now looking into ways to cooperate in this area and combine our respective expertise. It is part of our overall perception of well-being, which includes the prevention or early treatment of conditions through food choice, instead of relying on heavy medication after the damage is done.

Our overall approach is not just about preventing harm, but also contributing to well-being in a very broad sense. Let me illustrate the wide range of potential areas of interest with two further quotes: "The hedonic psychology of the future as we imagine it will analyse the full range of evaluative experience, from sensory pleasure to creative excitement, from fleeting anxiety... to joy." (Kahnemann, 1999); and: "Future synergies among nanotechnology, biotechnology, information technology and cognitive science can dramatically improve the human condition." (American Council for the United Nations University, 2005). Needless to say, we will not be able to cover all these areas — nor even try — but we will have to remain open to all these developments.

I will now take a quick look at universities as businesses. Not unlike companies, universities have started to focus on providing value for money, efficient services, etc. And, like companies, they have to handle changing supply

and demand. U.S. universities have taken this approach for a long time; now it is slowly coming to Europe, and I believe Swiss universities are quite well positioned. They have started to accept that they are facing growing competition and are adapting their structures to the dynamics of markets. Students are also exposed to more business thinking in its original, pure form through, for example, EPFL initiatives to encourage start-ups by graduates.

Universities have to adapt not only to growing numbers of students and changing demand for graduate qualifications from corporate employers and end-consumers of services, but, more importantly, to a growing supply of knowledge.

We are experiencing an exponential growth in knowledge. Estimates suggest that by the time a child born in 2005 leaves university in 22 to 25 years, worldwide knowledge will have increased fivefold. By the time he/she reaches 50, the volume of worldwide knowledge will be 30 times greater than today. This increasing volume will be matched by a growing variety of uses for knowledge. [2]

The knowledge generated will not only be scientific, and confined to journals, but will consist of a broad base of relevant information.

These growth rates in the main "product" of universities — knowledge — are meant as illustrations. This growth far outstrips average growth rates in industry. Like companies, universities will have to accelerate their processes of change, and like Nestlé, you will probably have to change in several major spheres simultaneously.

It might be interesting to come back to this point that I have only briefly discussed — and see whether there really are some commonalities in the way Nestlé and universities are changing and, indeed, will have to change.

Finally, in closing, one last point. Specifically, I wish to say a few words on IMD, host of the event. What they are doing represents in practical terms some of what I have outlined above.

- IMD has been entrepreneurial right from the beginning;
- IMD provides a modular approach to education, and it constantly adjusts its curricula to its customers, i.e. it is also able to respond to fundamentally changing business needs and other shifts in markets; and
- IMD cooperates closely and successfully with Nestlé and many other firms in conducting highly relevant research.

Given their specific situation, the IMD model cannot simply be transferred to other universities, but this approach may be used as a source of ideas to stimulate further change in our university system. Nestlé is determined to participate in the process as a constructive partner and "customer".

2 The volume of data worldwide is growing even faster, it only takes five years to grow 30 times, according to the Gartner Group.

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