1 Why globalize IT management?

The high level justification of any IT function is ultimately that a company needs an organization dedicated to ensuring that information technology is exploited as effectively and efficiently as possible. Such an organization is in a position to take a professional approach to provision of information services to the business, including applications, infrastructure and support. The real question here is why it is advantageous to manage IT on a *global* basis when it would appear, at least to the average business user, that the majority of service is delivered locally. The answer is to be found in a range of straightforward business and IT reasons, some or all of which will apply to any particular company.

In considering first of all the business reasons, it is worth thinking back briefly to what has been achieved to date by the information processing capabilities that IT provides:

- IT presents a plethora of utilities such as spreadsheets and e-mail that cut mundane administration costs and generally improve the office environment and personal productivity.
- Client server systems such as SAP provide sufficient process transparency and control to allow devolution of decision making to local managers, cutting out several layers of middle management and enabling better synchronization, streamlining and integration of business processes.
- The flattening of traditional hierarchies is further supported by real-time management information systems and applications for communicating priorities, negotiating budgets and managing incentives. Together they open up the possibility for new approaches to organizing businesses, for example along the lines of the matrix structure introduced by G. Lindahl to ABB.

Notice how there was no intrinsically global aspect to the above achievements, in fact quite the opposite: with no binding dependence on central mainframes and control, IT has enabled widespread local autonomy in businesses. The situation starts to look distinctly different when the latest requirements placed on IT are considered that result from current business developments in an increasingly competitive marketplace:

- Businesses see tighter integration with customers, suppliers and partners as a way to alter the marketplace to their advantage and to realize the same

benefits of traditional process synchronization, streamlining and integration, albeit applied to processes that extend beyond company boundaries. The Web technology utilized has by default global reach and, furthermore, the security implications of opening up internal systems to third parties are global.

- Businesses want to exploit improvement in international transportation and relaxation of trade regulations to regionalize or globalize selected business processes, either in the interests of internal efficiency or better meeting demands of global customers or partners. Fulfilling the accompanying global information requirements requires a global approach by IT (although it should be noted that the very autonomy which client server systems allowed affiliates to develop in the first place now presents an obstacle to implementing global processes).
- Bundling of particular information services with traditional products and services is seen as an opportunity to achieve competitive advantage. Examples range from remote maintenance of equipment to computerized tuning systems in cars. There is an innovative side to this that usually occurs within affiliates, but it needs to be complemented by the development of executive level understanding of the options opened up by IT, and that requires high level, global dialogue between executives and IT counterparts.

This is by no means an exhaustive list of the business drivers for managing IT on a global basis, although it does highlight how a number of current business developments can explicitly require global IT management. The nature and intentions of a firm will dictate which ones apply. Even without direct business drivers in a firm, there is an additional series of well-founded IT reasons for implementing global IT management:

- Consolidated IT efficiency can be improved by acting on local weaknesses and strengths identified in benchmarking across local IT units. Actions can still be local or alternatively take a global approach, possibly by pooling certain activities such as vendor negotiations for commodities or consolidating excessively fragmented service provision.
- The cycle of technology obsolescence occurs on a global scale, so high level planning of new technology assimilation and architecture in general can be carried out globally for the company, allowing affiliates to dedicate efforts to immediate operational priorities.
- Managing the steady accumulation of systems on a global level can be the best approach to controlling the overall complexity of systems and making sure that this neither exposes today's operations to unnecessary risks nor is so inflexible as to exclude future business options. As an indication of such complexity, one well-known oil company discovered that for the migration of its installed base of PCs to Windows® XP, a total of 25 000 applications and packages needed to be adapted to the new environment and tested.

The approach presented in this book does not, however, assume that any particular set of the above reasons is taken as the justification for global IT management. The point of departure may simply be a business executive who intuitively supports the idea of global IT management and has engaged someone to build it up, or a fully fledged global IT organization may already be in place. What is important is the intention to be *systematic* about ensuring, on the one hand, that IT can respond on a global scale to impending business requirements and, on the other hand, that viable opportunities for managing IT more efficiently and with less risk are identified and exploited. Being systematic about this task does not mean micro-managing everything that happens in affiliate IT departments, but it does mean that at least overall IT architecture, strategy, standards and control need to be actively managed. These are exactly the processes that will reveal where the benefits lie in global IT for a particular firm and take concrete steps to realize these benefits, or at least spawn initiatives to do so.

This book proposes straightforward work streams for managing global IT architecture, strategy, standards and control. Most of them have a practical exploratory component, aiming to look closely at business and IT aspects in each domain before targeting and implementing specific changes. This combines the value of quickly producing tangible results with the more subtle mid-term benefit of raising IT and business understanding of the options IT offers on a global level. This ensures that the gap between expectations and reality (so often responsible for disappointment in IT) can be managed, and that the skills are there to select and implement global opportunities when these arise.

Exhibit 1 — introduction to featured firms

To provide context to the approach presented in this book and give the opportunity to compare and contrast approaches in different industries, several major global firms kindly agreed to be featured in the text. Each chapter contains an exhibit that briefly visits the firms to see how they approach a particular aspect of global IT management. The following paragraphs introduce the firms to be featured.

Philips

Royal Philips Electronics is one of the world's biggest electronics companies, with 170 000 employees active in more than 60 countries. The firm has five divisions serving the businesses of lighting, consumer electronics, domestic appliances, semiconductors and medical systems. In several of the domains covered, such as lighting and diagnostic imaging, Philips is the worldwide leader.

Nestlé

Nestlé is the world leader in food and nutrition, operating in more than 80 countries with more than 250 000 employees, of whom about 3500 are in IT. Management

of the business is primarily by region and country, but some product groups such as water or pharmaceutical products are managed globally.

Novartis

Novartis is one of the world's largest pharmaceutical companies, operating in over 140 countries with 77 000 employees, of whom about 2400 are in IT plus 1000 ongoing contractors. The company has two divisions dedicated respectively to pharmaceuticals and consumer health. The former is further subdivided into business units covering therapeutic domains such as oncology or transplantation, while consumer health comprises business units such as baby foods or over-the-counter medication.

Toyota

Toyota is the world's third largest automotive company with manufacturing facilities in 27 countries and 247 000 employees of whom roughly 5000 are in IT. Most income is generated by the global automotive and financing divisions which are organized by region, although Toyota also has a growing portfolio of other ventures such as telecommunications in Japan. This text focuses on the global automotive division.

UBS

UBS is a major global financial services group with nearly 70 000 employees worldwide, of whom about 12 000 are in IT. The group as it stands today was formed in 1998 in a merger between Union Bank of Switzerland and Swiss Bank Corporation. It is organized in four primary business groups which are dedicated to domestic retail banking and global services in wealth management, asset management and investment banking.