WHY WE WROTE THIS BOOK

The area of enterprise-wide systems, a recent term used to refer to a broad range of large corporate systems, is now receiving enormous attention from academics and managers from a variety of areas. At its core is the Enterprise Resource Planning (ERP)/Customer Relationship Management (CRM)/Supply Chain Management (SCM) movement that accounts for most of the latest developments in corporate Information Systems.

As researchers, we have become fascinated by the volume of investment and the amount of managerial and company resources devoted to acquiring and implementing these technologies and systems since the mid-1980s (when these packages were not even called enterprise-wide systems or ERP). As a result, the more we learn about what vendors, systems integrators, consultants, and client organizations are experiencing with ERP, the more we wonder about the rationale for ERP and the managerial validity of how ERP projects are administered.

We are not doubters of the usefulness of ERP, and we are not nonbelievers in the benefits they can yield, but we ask two fundamental questions: (1) is ERP really for everyone, and (2) are organizations, under the guidance of consultants, going about it the right way? Our concerns are tied to one key point that is covered in this book: what happens when generic solutions are applied to the specific problems of an organization? Are there any risks that an organization is led to sacrifice some of the perfectly sound and long-nurtured business processes they are currently using, key elements in their success, in order to force-fit the processes required by the implementation of an
ERP package, with a zero modification objective? Also, could it not be that the difficulties inherent in such a generic approach are compounded by the recourse to an army of consultants already tied to a particular software vendor?

The purchase of corporate information systems has been put forward as an alternative to systems development, but the processes involved in buying ERP packages are removed from the ideal scenario envisaged by the advocates of off-the-shelf (OTS) software purchases. The most striking feature of the process followed by organizations is the absence of proper prior analysis of their needs and the absence of alternatives. Organizations (those we are aware of, at least) are deciding to acquire ERP as a matter of principle, it seems, when not simply instructed to do so by multinational headquarters. No alternatives are considered, little analysis is carried out, no rigorous software selection process is followed, and no negotiation is undertaken in order to decide to what extent the new software is going to replace current business logic or complement it. In one organization we visited, the whole ERP project was stopped when managers realized they just did not know enough to continue with the implementation and awareness-raising seminars were run over a period of several weeks to ensure everyone knew what the ERP software, and the ERP project, entailed. The role played by consultants in ERP projects is not likely to help resolve these problems, as most consultants are already tied into one software vendor and push organizations to go ahead without covering any of the initial steps required for proper preparation in an ERP project.

STRUCTURE OF THE BOOK

This book does not serve as an introduction to ERP. The content does not go into detail in regard to the technical aspects of ERP software. Rather, it concentrates on an investigation of the rationale for ERP by raising key questions that managers should ask themselves prior to considering ERP. Concentration is placed on the process that should be followed in planning to acquire ERP. It concentrates on the impact of ERP on the organization, in particular, on what happens to the core competencies of a firm when it sacrifices most of what it once knew and implements a totally new piece of software covering most, if not all, aspects of its business. Finally, consideration is given to the steps that can be taken to ensure that the ERP package purchased by an organization does not steamroll existing practices, when they are the products of years of learning and just cannot be improved upon. The new target of zero
modification in ERP implementation (which was not always a feature of implement-
mentation projects in the mid- to late-1990s) makes a lot of sense and re-
duces the uncertainties involved in applying the ERP rationale to an organiza-
tion, but that is mostly from a software vendor/system integrator point of view.
The interest of the implementing organization and of its managers is clearly the
opposite.

These areas are fundamentally important for the future of the ERP mar-
ket and should be of concern to academic researchers of corporate informa-
tion systems deployment and of concern to managers who seek to implement
ERP and other new frontiers, for example, CRM, SCM, e-business, or ERP
III (see Chapter 14).

In this book, we present a collection of chapters written by us or invited
from colleagues who share our interest in the ERP movement. Chapter 1 sets
the scene and will prove particularly useful to those who are not already famili-
lar with the area of enterprise-wide systems. A number of alternative defini-
tions of ERP are presented, and the reasons why these types of systems have
become so important for organizations at this point in time are highlighted.

Chapter 2, written by Bill O’Gorman, retraces the story of ERP to its
manufacturing roots and considers the long evolution of MRP/MRPII toward
systems that cover the whole firm. Applicable only to manufacturing environ-
ments, the birthplace of ERP systems, presented in this chapter is technical
knowledge that must be known by researchers and managers who need to
understand how ERPs fit in the bigger picture of organizations.

In Chapter 3, a case study of ERP implementation (written in collabora-
tion with Eleanor Doyle) is presented. It is of particular interest, because the
project gave rise to the consideration of alternatives and a serious analysis of
which product to buy. The case also presents a comprehensive review of the
impact of the software from a postimplementation perspective.

In Chapter 4, we consider the weaknesses of the apparent approach to
ERP implementation adopted by many firms by comparing it to some of the
most famous normative models of decision making put forward since manage-
ment emerged as a science.

In Chapter 5, our Australian colleagues, Lorraine Staehr, Graeme Shanks
and Peter Seddon present a second case study of ERP implementation in
which the lack of proper preparation prior to the implementation of the pack-
age led to many problems and to the organization not achieving all the benefits
it sought. In contrast to our own ideas, they conclude that not enough align-
ment with the SAP package, rather than too much reliance on it, led to some
of the problems.
In Chapter 6, we present a third case study (written in collaboration with David Lawlor), in which concentration is placed on the software selection aspect of the project.

In Chapter 7 (written in collaboration with Peter O’Doherty), we consider whether the concept of ERP is useful to smaller firms as well as to large corporate entities. In particular, we consider whether lower-impact implementations — shorter, cheaper, incremental — are possible, which may make them more acceptable for Small and Medium Enterprises (SMEs).

In Chapter 8 (written in collaboration with Kevin Higgins and Mark Synnoff), we focus on what happens to competitive advantage in an industry where most firms are equipped with ERP and this type of system becomes the de facto standard. We put forward key questions that managers must ask themselves before embarking on ERP projects in their firms.

In Chapter 9, Tom Butler and Aidan Pyke illustrates our contention that ERP packages should not be allowed to steamroll existing practices, with a case study of implementation where managers viewed SAP as a means to an end, rather than an end in itself. The research study examines how the organization took tried-and-tested organization-specific routines for problem solving, organizational learning, and decision making into account when implementing SAP modules.

In Chapter 10, we put forward a model based on the notion of organizational prerequisites that can be used by managers to frame their ERP projects and better prepare in a vendor/consultant independent, methodology-independent, and preimplementation thought process.

In Chapter 11, we put forward a model borrowed from international politics, to illustrate how decision making in relation to ERP implementations in organizations relates more closely to what is termed “nondecision making” than to proper managerial decision making. We also show that ERP projects must be viewed in the context of the interaction between three key actors — the ERP vendor, the ERP consultant, and the implementing organization — if one is to get a full picture of how the ERP market functions.

In the next two chapters, we examine whether the ERP movement brought anything radically new or if it is merely an updated version of previous ideas dating back to the start of Information Technology deployment in organizations. In Chapter 12, the ERP market is studied critically, and it is argued that there is need for stronger influence from the pull side of the market to compensate for the overwhelming push side represented by vendors and consultants. Considered in Chapter 13, written by our Swedish colleagues Sven Carlsson and Jonas Hedman, is the future of ERP and, particularly, the development of enterprise portals.
Finally, in Chapter 14, we conclude with some general ideas on how to progress from here, both from the point of view of people who provide advice about ERP (experts) and from the point of view of people who are considering buying into ERP.

We hope that this collection of chapters will generate much interest and contribute to the development of enterprise-wide systems for the future. We hope to provide true support to organizations and the development of methodologies that are less disruptive to organizational day-to-day business than is the case today. When ERP projects stop being the make-or-break ventures they can be, and when we stop getting these negative reports about failed implementation, the target will have been met, and the ERP market will be less of a jungle than it is today.