



ENTERPRISE INTEGRATION
I N C O R P O R A T E D

WHITE PAPER:

WHAT IS A SYSTEM ORGANIZATION MODEL?

When implementing enterprise software solutions, three dependent concepts must always be addressed during the design phase:

- Organization Model,
- Business Processes, and
- Master Data.

At Eii, our consultants are often asked questions about the design of these key components, because they are complex, confusing, and often widely misunderstood. This technical note addresses the first of the three critical elements, the System Organization Model. What is it, and why is it important. The three elements and an assertion about their dependency are depicted in Figure 1.

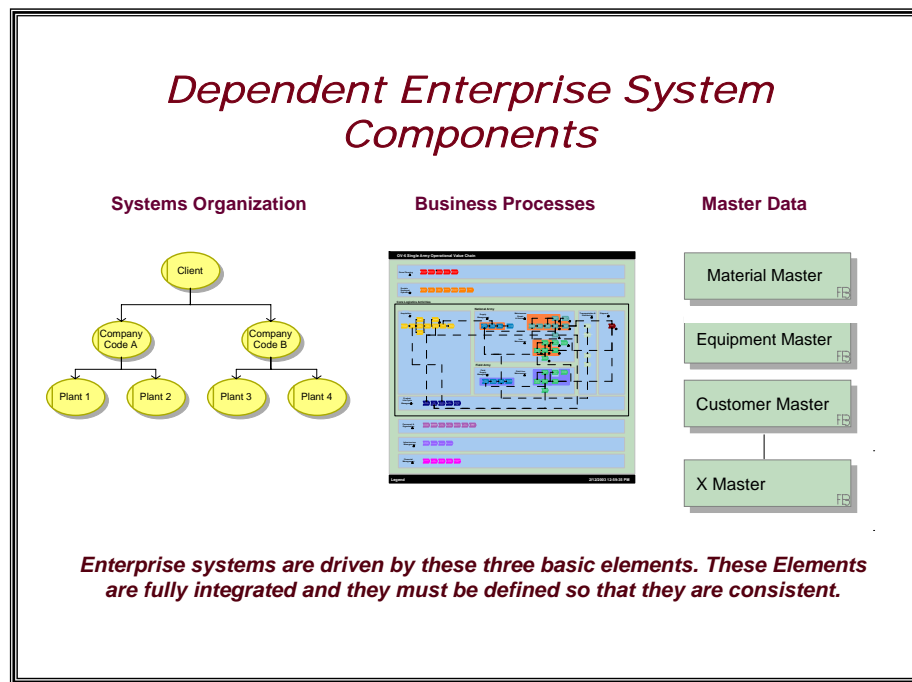


Figure 1: Dependent System Concepts

All three elements are completely specified during the design phase of a project, and they have a profound and critical impact on the scope of the solution. If these three items are specified incorrectly, the system will not perform as expected.

THE ORGANIZATION MODEL

Enterprise systems, by definition, enable the key back-office business processes or an organization. Information flows horizontally across the enterprise from department to department, and information flows vertically through the enterprise. These formal information flows are typically defined in an organization chart. Of course, there are also many informal information flows that are not documented in the organization chart, which does not imply that they are not important, but they are typically not

represented on the organization chart. Every firm has an organization model, even if it is not formally represented in an organization chart.

Even though the formal flows are not inclusive, they are of critical importance. For one thing, they define how critical financial and human resource information is aggregated and shared across the organization. Financial roll-ups are critical, and the display and sharing of financial information must be tightly controlled. Likewise, the organization chart may define how materials or critical inventory are shared across units, or how equipment is “checked-out” for sharing across organizational units. These formal relationships and flows are critical for efficient and effective execution in any enterprise.

If an information flow (e.g., financial data) is shared with an entity that is not on the organization chart, that is, someone who is outside of the enterprise, special consideration must occur. If the external sharing is with a supplier or a customer, then an electronic commerce transaction may be required. If the sharing is with an independent division that is not a part of the self-contained enterprise, then some type of consolidation or data synchronization solution must be implemented. In many cases this may be inevitable, but it should be avoided whenever possible, because of the obvious cost and data integrity issues.

THE SYSTEM ORGANIZATION MODEL

Enterprise systems must be capable of “mimicking” the formal information flows that are described in the previous section. The informal flows will never be fully implemented in any system, but it is critical that the formal flows be represented in the enterprise system. If these flows are not properly specified, and if the organization model is not aligned with the enterprise system, then one cannot do simple things like close the books or share inventory. In the most extreme cases, poor organization model alignment can lead to perverse behavior, like the buying and selling of equipment and inventory inside of the same enterprise.

Hence care must be taken when aligning the organization model with the enterprise software product. If this alignment is not correctly executed, then future changes may require significant re-work, schedule slips, and cost overruns. In the most extreme case, a poor organizational model design may even require a re-install of the enterprise system.

To facilitate organizational model alignment, each enterprise system has a “built-in” organization structure that must be manually aligned with the organization model. This structure is called the System Organization Model. These are important concepts:

- Organization Model – the structure of the implementing organization, and
- System Organization Model – the structure that is permitted by the enterprise software.

It may or may not be possible to bring the two into agreement. Figure 2 indicates the alignment of a hypothetical organization model with the SAP System Organization Model.

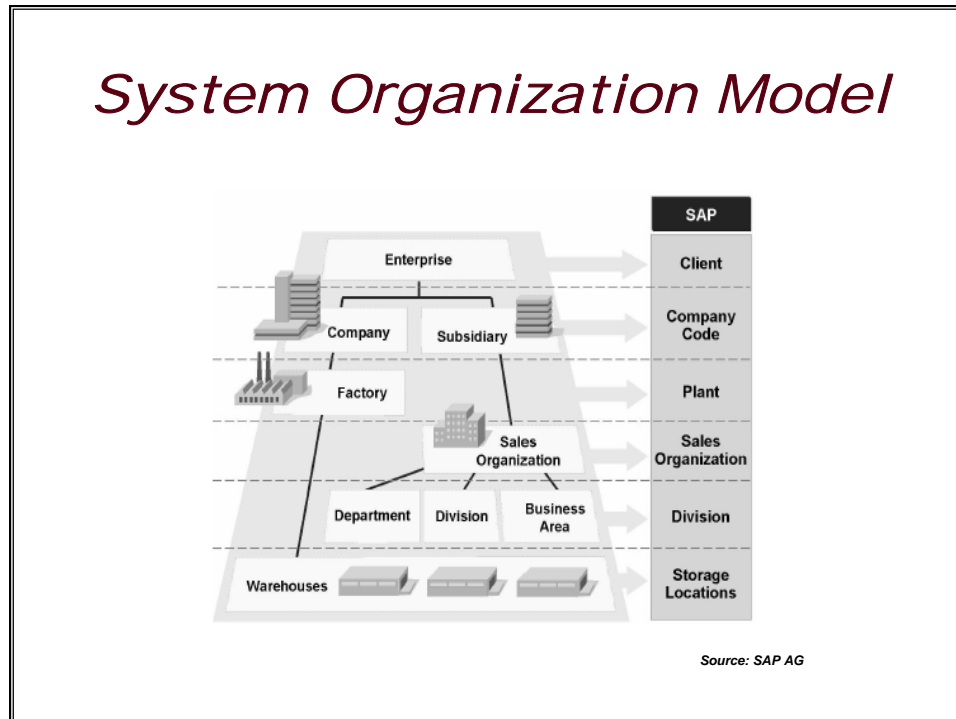


Figure 2: System Organization Concept from SAP

The alignment is more than a matching of names. Certain information flows across organizational objects are not supported by the software; hence, some information flows are not allowable. This design requires deep expertise in two areas:

- A thorough understanding of the information flows in the implementing organization, and
- A thorough understanding of the information flows that are allowable in the software.

This is a complex solution architecture design problem, and it should be addressed with care by experts so that the expensive re-work can be avoided.

WHY ARE SYSTEM ORGANIZATIONAL MODELS CONTROVERSIAL?

The concept described above seems straightforward, but it is often the most difficult part of any enterprise system implementation. The obvious question is: Why? The answer is simple. The organization model defines an enterprise, and it also defines the sharing relationships within an enterprise. If the system organization model relates to an entire enterprise, then theoretically, all financial information is sharable within the constraints of that system organization model.

Managers at the sub-enterprise level tend to protect their information flows, with a desire to share as they deem appropriate. This leads to stovepipe implementations of enterprise systems with little sharing of information across budgetary boundaries. It also leads to inefficient designs where departments and/or division buy and sell from each other to avoid sharing information. This type of

inefficiency can only be accomplished through excessive interfacing, and excessive interfacing is a critical cost-driver on any enterprise system implementation project.

The system organization model defines a dimension of enterprise scope. If managers demand autonomy as opposed to participating in the enterprise, then a narrowly scoped system organization model is one way to control information flows at a sub-enterprise level. Of course, this artificial political constraint reduces the effectiveness and increases the cost of any enterprise solution.

CONCLUSIONS

Given the critical defining characteristics of the System Organization Model, it must be defined at the highest level of the enterprise. The internal unit that defines the System Organization Model must be the same unit that defines the Organization Model. One is a representation of the other, and they cannot be separated or delegated to a lower level for definition and design.

Given the political nature of this critical design decision, senior executives need expert advice on system organization design. The consequences of a poor design are significant, so this decision cannot be delegated to an implementation team or a program manager. The System Organization Alignment decision must be completely understood and approved by the senior executive team. System Organizational Model design, just like Organizational Model Design, cannot be determined at a lower level of the organization. It must be determined at the highest level of the organization.

ADDITIONAL INFORMATION

For additional information on related topics, please visit the download section on our Website:
<http://www.eiisolutions.net/whitepaper.php>