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# The Information Plan for Celerity Enterprises, Inc.: A Teaching Case

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# **EXECUTIVE SUMMARY**

Celerity Enterprises competes in the semiconductor manufacturing industry. At the start of the case, business conditions are favorable for them to launch a new production facility to manufacture flash memory. The new facility must achieve exceptionally ambitious productivity and cost goals. A facility-level strategic planning process reveals opportunities to substitute information for other more-expensive resources. By the end of the case, just a few months later, worldwide economic conditions change radically and the future of the new facility is in jeopardy.

The case describes the participants, the planning process and findings. It provides a rich setting to discuss aligning information and business planning, realities of the volatile industry, outsourcing for IS planning leadership, and using a combination of top-down and bottom-up planning.

# BACKGROUND

## The Case

This case seeks to address the dynamics of information planning in a highly volatile manufacturing industry. To portray the dynamics with realism, the case also highlights: (1) the need for a firm to align its information

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strategy with its overall business strategy, and (2) the need to engage in a planning process such that employees participate and embrace it, and ultimately own the resulting transformation.

Information planning is, itself, a part of an information system development cycle. That development cycle is a major component of the organization's own life cycle. Finally, the organization itself is a player within its industry. Industry dynamics and worldwide economics play a major role in influencing the direction of an organization, and its IS planning in turn. As readers analyze this case, it will be useful to keep in mind this interdependence among the IS planning process, the culture of the organization, and the dynamics of that organization within the industry.

#### **Celerity Enterprises**

Celerity Enterprises competes in the semiconductor manufacturing industry and is based in the USA. Like many such companies, it was formed in the 1960s by a dynamic team of scientists and engineers. Celerity now is a Fortune 100 company with six manufacturing sites and four assembly sites in the USA, Asia, Europe, and Latin America. Celerity boasts 70,000 employees across these facilities, with nearly 80% of them in manufacturing or assembly positions. While all research and development, transnational email, business transactions and internal conferences are conducted in English; daily operations are conducted in the local languages.

Celerity enjoys state of the art information services, thanks to two separate but related internal organizations: Automation and Information Support. Automation is responsible for manufacturing-related information services while Information Support is responsible for business-related information services.

Automation's purview includes production planning and scheduling, process control and real-time data collection on the factory floor. Automation is on Celerity's critical path at all times, since information flowing within, to and from the factories forms the lifeblood of the company. Automation must approve any and all proposals for changes that impact manufacturing or communications with manufacturing.

The Automation hierarchy spans from the Director of Automation (reporting to the Vice President of Manufacturing) to Automation specialists dedicated to specific machine tools in each factory. Since the manufacturing processes are closely guarded corporate secrets, no significant Automation work is outsourced.

Supporting Celerity's business information requirements, the Informa-

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