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Chapter VII

Power Conflict, Commitment, & the Development of Sales & Marketing IS/IT Infrastructures at Digital Devices, Inc.

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EXECUTIVE SUMMARY

This article explores the political relationships, power asymmetries, and conflicts surrounding the development, deployment, and governance of IT-enabled sales and marketing information systems (IS) at Digital Devices, Inc. The study reports on the web of individual, group and institutional commitments and influences on the IS development and implementation processes in an organizational culture that promoted and supported user-led development. In particular, the article highlights the problems the company's IS function encountered in implementing its ad-hoc strategies and governance policies. It will be seen that the majority of these problems occurred because of the high levels of autonomy and budgetary independence of the IT-literate, engineering-oriented business 'communities-of-practice' that constituted Digital Devices. The case therefore provides rare insights into the reality of IS development and IT infrastructure deployment in organizations through its in-depth description of the positive and negative influences on these processes and their outcomes.

ORGANIZATIONAL BACKGROUND

Digital Devices, Inc. was founded in 1965 in Cambridge, Massachusetts, by Ray Stata and Matt Lorber. In 2003, the company was acknowledged as one of the leading designers and manufacturers of high-performance linear, mixed-signal and digital integrated circuits (ICs), which addressed a wide range of signal-processing applications in the electronics and related industries. Digital Devices is headquartered in Norwood, Massachusetts, and has a significant global presence in all major markets in the electronics industry. The company has numerous design, manufacturing and direct sales offices in over 18 countries and employs more than 7,200 people worldwide (Figure 1). The company's stock is traded on the New York Stock Exchange and is included in the Standard & Poor's 500 Index. Many of Digital's largest customers buy directly from the company, placing orders with its sales force worldwide; the remainder obtain their products through distributors or over the Internet. Just fewer than 50% of Digital's revenues come from customers in North America, while the balance came from customers in Western Europe and the Far East.

Ray Stata, Digital's co-founder and longtime CEO, recognized the importance of fostering a culture of openness, where employees were empowered and encouraged to be innovative. This was reflected in the company's structure, which exhibited a high degree of process decentralization, especially in the allocation of capital and operational budgets, and, in particular, the locus of decision making. Figure 2 illustrates the company's structure: the core business functions are the 'product line' Computer Products Division, Communications Division, Standard Linear Products Division, Transportation and Industrial Products Division, and the Micromachined Products Division, which was taken over by Ray Stata when he stepped down as CEO. Shown directly beneath these are corporate business divisions that provided support for product line divisions. It is of significance that Human Resources and Finance Divisions aside, all support divisions were engineering oriented, even the World Wide Sales and Corporate Marketing and Planning Divisions. This engineering-oriented culture was to have

Figure 1: Digital Devices Inc. Worldwide Design, Manufacturing and Sales Functions