EXECUTIVE SUMMARY

While abundant research deals with risks of ERP implementation, only a handful deal with ERP upgrades. This case study describes the first ERP upgrade project at the Dead Sea Works (DSW) chemical company. Whereas DSW succeeded in completing the initial ERP implementation project within budget and six months ahead of schedule, the first ERP upgrade project was fraught with difficulties in project planning, schedule control, cost containment, risk assessment, and employee involvement. Based on this case analysis, it is possible to conclude that the first ERP upgrade project at DSW was much more complicated than originally expected.

Keywords: enterprise resource planning; information system implementation; IS cost control; project management; risk assessment; upgrade project

ORGANIZATIONAL BACKGROUND

Israel Chemicals Ltd. (ICL) is a global group (See Figure 1) engaged in the development manufacture and marketing via four core segments: ICL Fertilizers (ICLF), ICL Industrial Products, ICL Performance Products, and ICL Metallurgy. ICLF has fertilizer manufacturing facilities in Israel, Spain, England, Holland, Germany, Turkey, and Belgium, and is a leading supplier of fertilizers in Europe and in the sophisticated Israeli market. ICLF has the capacity to produce about 5 million tons of potash each year and is today a major player on world markets, accounting for 11% of world potash production and 10% of international potash trade (excluding the cross-border trade between the U.S. and Canada), with the American and Asian markets being the biggest potash consumers and importers.
Dead Sea Works (DSW), a business unit of ICLF, is the world’s major producer and supplier of potash products, as well as a broad range of chemical products, including magnesium chloride, anhydrous aluminum chloride, industrial salts, de-icers, bath salts, table salt and raw materials for the cosmetic industry. DSW evolved from the Palestine Potash Company, formed in 1930 to extract minerals from the Dead Sea and to process chemicals from these minerals. DSW is unique in that it extracts potash from the Dead Sea, the largest solar evaporation pond array in the world. Much like most of its competitors, ICLF also mines potash (in Spain and England). Because DSW is a multi-firm global company, distributed within and outside of Israel, its financial performance depends on trends in the world economy, including the economic conditions in Southeast Asia and Russia, as well as changing attitudes toward the environment.

In its commitment to environmental protection, DSW adheres to three principles. First, DSW is saving on raw materials and energy. Second, DSW is recycling and turning byproducts into final products. Third, DSW is returning any residuals of raw material to their natural place, and is transferring any materials that become hazardous to an authorized and supervised waste dumpsite. In addition, DSW has joined the international Responsible Care® Program, aimed at achieving improvements in environmental, health, and safety performance beyond levels re-

Figure 1. ICL multi-firm structure