This case concerns an Information Systems and Technology (IS/IT) action research intervention into a train operating company in the newly privatized rail industry in the United Kingdom. Having operated for many years as a nationalized industry under government control, but outside the strictly commercial sector, the new company found itself in the position of having many of its important IS/IT systems being run by separate companies—**it was outsourced without ever having made an outsourcing decision**. The project involved information management in the maintenance wing of the company. After the event analysis of the problem situation revealed the extent of the company’s IS/IT management difficulties. Many of these problems were directly attributable to privatization and the outsourcing arrangements imposed upon the new company. The lessons from the case cast serious doubts upon the long-term benefits of outsourcing key systems and are believed to represent a significant learning vehicle relating to IS/IT adoption and exploitation.

**BACKGROUND**

Until quite recently the UK railway system was run as a state public service (British Rail) on behalf of the government. British Rail was privatized by the Thatcher government in an attempt to capture better efficiency and value for money through the exploitation of free market principles. The privatization took the form of franchising British Rail into a number of independent profit-making companies, with the government reserving the right to appoint the franchisees. The company commissioning the IS/IT study (here referred to as RTOC—Regional Train Operating Company) was one of the passenger train operating companies; other independent companies managed the track, supplied freight train ser-
vices, rolling stock or heavy maintenance. Also privatized was the former systems
development wing of British Rail, which had been responsible for developing and managing
the IS/IT systems underpinning the rail industry. This left RTOC in the position of being
de facto outsourced, without ever having made any decision to outsource. Most of their
key operating IS/IT were still the systems developed by British Rail’s development wing,
which was now split into separate commercial enterprises with which RTOC was obliged
to develop contractual relationships of a form that had previously not been necessary.
External suppliers were now responsible for providing the mainframe services upon which
RTOC relied. New IS/IT, in future, would have to be commissioned or developed in-house.

The action research team was asked to advise on the management of information for
fleet maintenance. The perceived problem was the high frequency of unscheduled delays
caued by mechanical defects with the train units. This led to many operational problems,
customer dissatisfaction, high maintenance costs and attracted penalties imposed
by TravelTrack (the track operating company) whose service was disrupted. It was
argued that better analysis of the data captured during repairs would allow better
targeting of maintenance, and better preventative maintenance. If it could be
established which defects caused the majority of the problems, it was assumed,
that these could be fixed during regular servicing. Mechanical problems would be
better diagnosed and anticipated, prophylactic action taken, problematic compo-
nents would be replaced before they failed in service, and the delays could be
greatly reduced.

The project involved an extensive study of IS/IT systems and associated information
management processes at three different sites. Contacts with the company lasted over
three years, with the main body of work being undertaken over the period September 1996
to October 1999. The action research was undertaken using Soft Systems Methodology
(Checkland 1985, Checkland and Scholes 1991, Checkland and Holwell 1997). Over fifty
personal and telephone interviews, meetings, workshops and presentations were con-
ducted, at every level in the company from engineers and train drivers to the board of
directors.

**SETTING THE STAGE**

Precise definitions of IS/IT outsourcing differ in the literature (Glass, 1996) but there
is general agreement that it is the carrying out of IS/IT functions by third parties (Kettler
and Walstrom, 1993). Expenditure on IS/IT outsourcing is considerable, with much of it
placed with a few companies (Clark et al, 1995). However, there has been only a small (but
increasing) number of empirical studies of IS/IT outsourcing, a feature noted by several
authors (e.g. Sobol and Apte 1995; Arnett and Jones, 1994). In particular, there have been
few British studies (Willcocks and Fitzgerald 1993, Cronk and Sharp, 1995). Several
conceptual frameworks have been used to underpin outsourcing research including trans-
action cost theory, organizational politics (Lacity and Hirschheim 1993) core competen-
cies, agency theory and partnership (Hancox and Hackney, 2000). Much of the research
has centered around the outsourcing decision; for instance Lacity and Hirschheim (1993)
studied the outsourcing decision-making process in thirteen companies. Their research
highlighted the political nature of this decision making, as well as its cost efficiency focus,
and served to demonstrate how complex it was to make objective decisions about the
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