

The Changing Management Dynamic of the 1980s: A dive into the Butler Cox Foundation reports

Background Context

The Butler Cox Foundation was an IT advisory group which operated from 1977 to 1991. The foundation sought to guide IT Directors through the ever-advancing world of technology during the 1980s and aid them in straddling the corporate and IT systems divide. Stemming from the work conducted by Sir George Cox and David Butler and their IT consultancy firm Butler Cox plc, the foundation produced, among other materials, a series of reports for their subscribers. These reports not only charted the progress of technology during the period the foundation was active, but they also emphasised the organisational, corporate, and sociological changes which occurred in tandem. The reports cover a range of topics including the emergence of e-mail, the increasing accessibility of micro-processors, and the challenges of presenting information and data to senior managers. All together they cover an important period in the narrative of technologization.

During the 1980s, one would see the emergence of technologies which would form the basis of modern communication and workflow, such as e-mail and word or data processing software. However, alongside this progress lay a great divide in approach towards and understanding of said technological developments. On one hand, you would see the business focused, corporate managers who looked for the practicality of implementation and commercial incentives for the adoption of any new system or methods. On the other there were those who worked in the systems departments, while they kept up more keenly with all the latest developments and popular technology trends, their desire to see them introduced was not always justified in purely financial terms.

Amidst the technological advancement of the 80s, we see a distinctly human story arise; two camps with two distinct approaches and goals who must coexist in a commercial environment in which one camp outranks the other. This report explores this dynamic through a study of management, with a particular focus on the relationship between those who occupied senior corporate management positions, and those who worked as IT systems directors. It will discuss the challenges faced by managers on both sides of the divide and how management as an activity occurred during the same period. Using the reports of the Butler Cox Foundation which refer to management, and its issues, this report will cover a time period from 1978 to 1991. Although not fully encompassing the period the foundation was active, it still provides extensive coverage of the 1980s and draws from twenty of the reports published by the foundation. In addition, this report makes use of interview transcripts

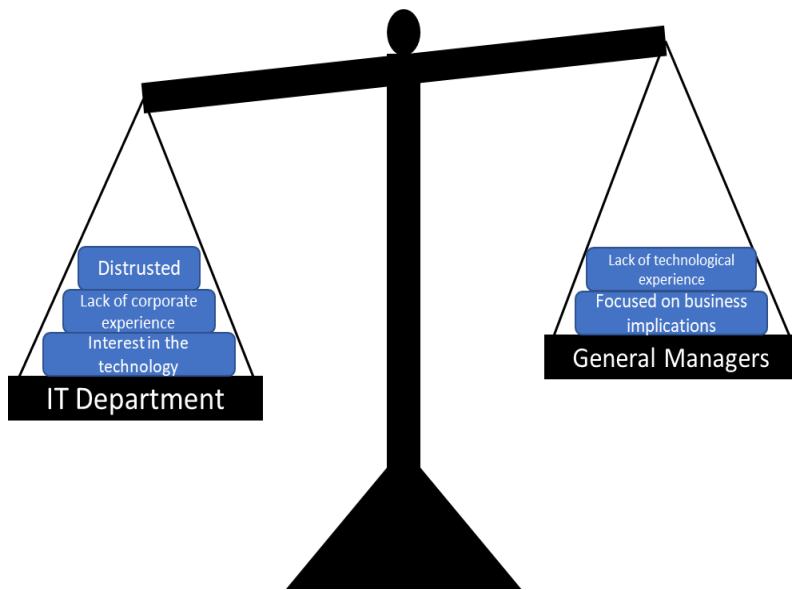
collected by the Archives of IT and from discussions with Sir George Cox and David Butler themselves to paint a broader picture of life in IT and management during the 1980s.

Management Relationships and Challenges

To understand the relationship dynamic between systems directors of IT departments and the senior corporate managers, one must begin by looking at the popular perception of IT departments at the time. Both Sir George Cox and David Butler were invaluable in shedding light on this through discussion. Understanding that IT departments were perceived as laying within the underbelly of an organisation, effectively hidden from view, to work in such a department was not treated with the same level of respect as a manager in say, a sales department, for instance. While this lack of respect may seem to stem from the hostility of luddites to the new wave of technologists, it seems a better appraisal, at least to Sir George and David Butler, that such a relationship formed from distrust. After all, advances in automation, data processing, and communications technology had all led to reorganisation of corporate structures, and thus, a plenitude of redundant workers.

When presenting to senior management, systems directors or those responsible for technology related suggestions, would find it difficult to convince others that the adoption of new systems or technology would be financially viable. This challenge is founded in the differing expertise and outlooks of both senior management and systems directors. Employees of IT departments were not hired for their commercial acumen, rather their computer skills. When needing to create proposals which they believed would be beneficial for an organisation, they often lacked the pedigree needed to convince corporate managers they should be entrusted with financial decisions. Alongside the issues of trust raised earlier it is clear that IT department employees and particularly systems directors, who served as the intermediary to senior management, faced a considerable challenge.

To characterise the relationship as one of the corporate overlords looking down on their IT departments ignores the genuine concerns they faced in a decade of rapidly changing technology. Having already mechanised many of their systems in the decades prior, often at great expense and with considerable unknowns in the systems they were adopting, they were now being asked to do equally extensive changes to their systems once more. Sir George Cox summarised it well in that office



Managing the needs and desires of both sides of the IT project divide was a difficult task.

mechanisation was considered to be a one and done change and that senior management were bewildered that they should need to undertake such projects on a regular basis. These changes were often suggested in a widening array of departments. IT systems were becoming entrenched in marketing, sales, communication, company organisation, and to ensure each new system worked seamlessly with the others, further changes would be needed. These changes were not

limited to the systems themselves; one example was given by Sir George of a regional health board who were able to remove local directors because the centralisation possibilities offered by new technology meant they no longer needed them. While it is easy to say in retrospect that IT departments were underdogs in the corporate world who were straining against the bonds of their senior managers, their continued push for change and the resulting reorganisations should be acknowledge as reasonable causes for hesitancy and a level of distrust.

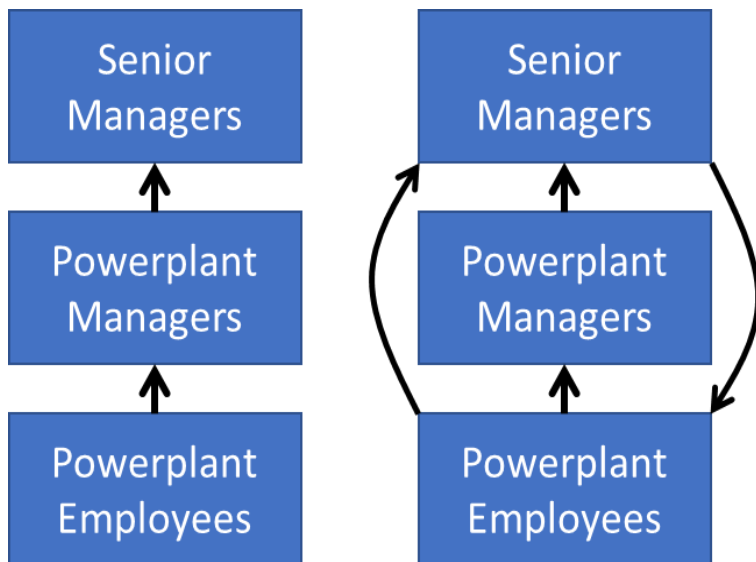
A particularly interesting product of this relationship which was uncovered through the Butler Cox Foundation reports and discussion with Sir George Cox and David Butler were the challenges of and perception toward project management. The June 1978 report which focuses on project management concerns for systems directors highlights some of the difficulties they face. As stated previously, the time period was one of frequent change, and as a result, major projects were often run-on short time scales, generally having a 1-2 year time period before final implementation. Such time scales were necessary so that changes were still relevant when they were adopted. As systems became more complex, these turnarounds became unrealistic and led to many cost and time overruns. From the perspective of senior managers outside the department it may well have seemed farcical. After all, those who were calling for repeated change were becoming unable to underdeliver. Butler and Cox, through their foundation's reports, offered some solutions to these challenges. By reviewing the outcomes of projects, both upon completion and sometime thereafter, it was hoped that any post-implementation issues could be resolved, and future project management may benefit from such knowledge. It was necessary to conduct follow up reviews so that any "teething problems" or

temporary concerns related to the implementation of a new system would not be over emphasised in reviews.

This last aspect was not only emphasised in the one report: several years later in 1984, a follow up entitled “Managing the human aspects of change” focused on IT project managements related to human behaviour and end user needs. Citing the unprecedented rate of change in technology during the period, the foundation made it clear that end user needs must be considered for new projects to succeed. After all, if IT departments and systems directors were unaware of how their projects would affect job experience or user needs, how could they hope to be successful both during and after the project is complete? Not only was understanding the needs of end users necessary, but also their emotions and behaviour. Change necessities the learning of new skills and methods, frustration towards IT departments and personnel could readily amount if this was not accounted for during project development.

Butler, Cox, and their foundation were not alone in these concerns. The relationship between managers and IT departments was recognised as fractious by others working at the time who were not linked to the foundation. For instance, Andrew Herbert working for APM Consultancy during the 1980s describes an example in which companies were encouraged to follow industry standards in a bid to remain competitive. While concerned with the financial constraints of a struggling business, managers were being asked to back the adoption of new technology and systems. As Herbert himself describes it: “So adopting new technology was sort of the last thing the management wanted to hear.”. While a new system may be beneficial for an organisation in the long term, the upfront cost was of considerable concern to managers. This being especially true if a company was struggling financially.

Another example is that of John Handby, working as an IT director for National Power starting in 1990, at the very end of the period in question. When attempting to introduce email systems for communication within powerplants, he faced pushback from managers. Having previously enjoyed the power which came from being the manager of a remote organisation such as a rural powerplant,



The existing system of communication(left) in National Power powerplants in which the powerplant manager is the sole contact to senior managers and the proposed system (right) which would allow employees to contact senior management directly.

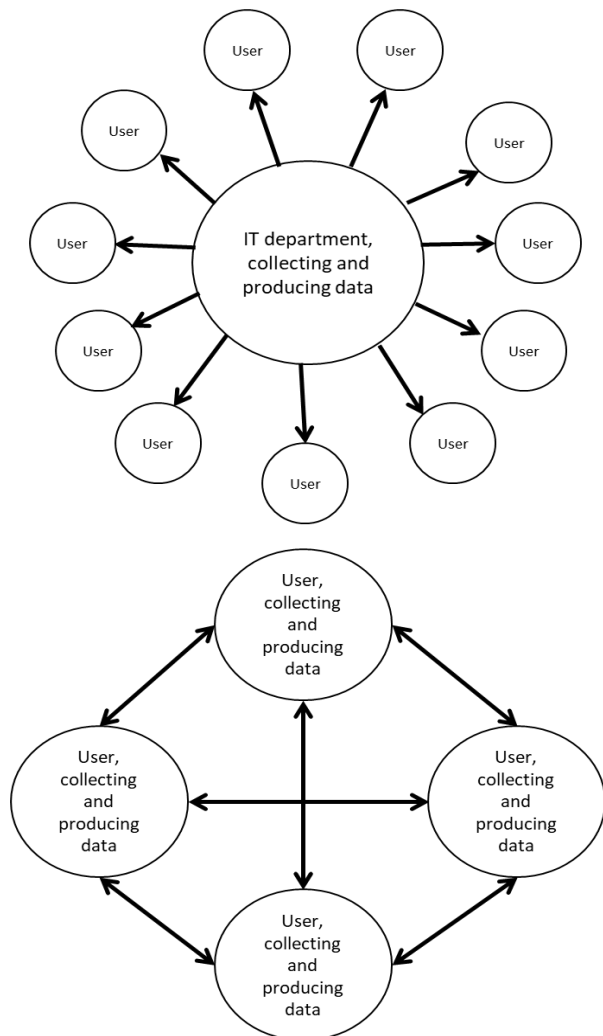
managers were the sole point of contact and influence for many working in these buildings. Now with the possible introduction of a local network and email systems, employees would have access to faster, and peer to peer official communications. By connecting all powerplants to one interconnected network, powerplant managers themselves would face greater oversight from more senior managers. Handby, as an outsider to these powerplants, had even

faced issues in communicating that new systems would be introduced as managers had been the sole controller of external communication fax systems. Only through persistence and careful selection of employees tasked with implementation and persuasion of managers was Handby able to succeed in implementing this “huge cultural change”.

We can see then from the reports produced at the time by the foundation, discussion with Sir George Cox and David Butler, and interview transcripts from others who lived the reality, that management relationships were frequently fraught with challenge during the 1980s. Both the perception of senior corporate managers that IT departments and systems directors were not staying in their lane, and the underdelivering or overrunning of new IT projects resulted in an uneasy working relationship.

Changes to Management during the 1980s

The processes, technology, and challenges of management each underwent significant change during the 1980s. While the previous section looked at the relationship between senior managers and IT departments/systems directors, we turn now to the activity of management itself. What tools did managers have access to, how were they being used, what challenges did they have to tackle, and how were they able to keep up with changes to their working practice?



A centralised network (Top) in which all users rely on the IT department and a decentralised network (bottom) in which they are free to produce and share data independently

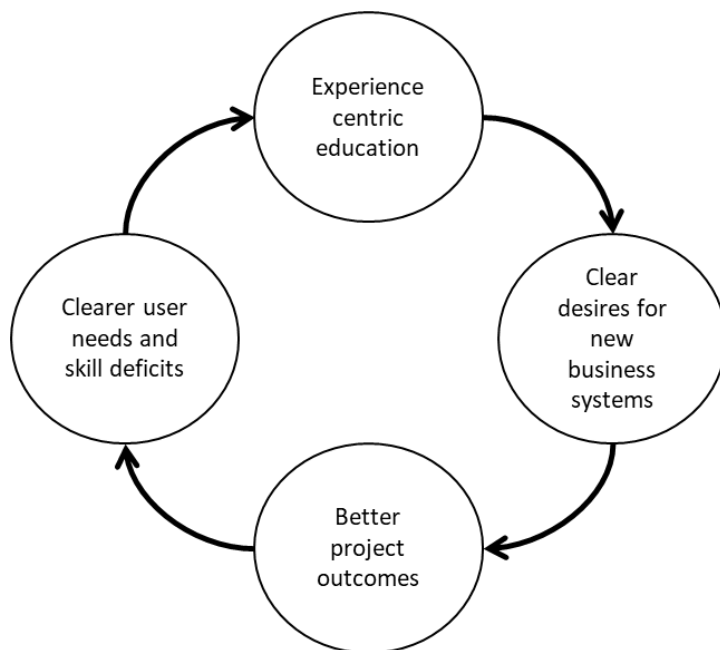
One of the Butler Cox Foundation reports which illustrated clearly these themes is the May 1984 report entitled “Managing the Microcomputer in Business”. While the report looked to address and tackle the number of associated management challenges which would entail with the increasing installation of microcomputers within the office environment, it also provides insight into some more general issues. Predicting that microcomputing would occupy 50% of an organisation’s total data processing costs by 1991, it was clear even in 1984 that decentralised systems would be at the forefront of many organisations’ workflow. Although such proliferation may have been beneficial to workers’ flexibility and access to data it raised concerns with regards to organisational structure. IT departments were no longer the sole repository of technology and information but must now work to maintain and provide necessary education for a far wider reaching network of machines.

Control is a recurring theme when looking at the management of decentralisation. Frequently discussed in Butler Cox Foundation reports focused on the topic, control over computing and user activity is seen as essential. The reasons for the perceived need for retaining a degree of centralisation and control is not clear from the reports themselves. Whether it is an issue of trust towards employees, or apprehension toward the transition process and associated costs, decentralisation had to be carefully managed. While the benefits of widespread computer system use are recognised, it is

still suggested, especially in their April 1980 report, that widespread decentralisation “may lead to chaos”. Opinions on this issue were divisive. Contrasting views are present within transcripts of those who have been interviewed by the Archives of IT. For example, John Handby who was discussed previously noted the benefits of a decentralised communication system. Conversely, Dr Michael Taylor notes the chaos caused by decentralised computing on the Metropolitan Police’s IT systems. Numerous different approaches and adoption of a variety of systems by individuals working in different departments had led to, for want of a better word, chaos. Taylor describes the issues faced in the reintroduction of a centralised system to better connect units of the force. Often those who had created and introduced a “local DIY solution” would move on, leaving their successors unaware of the workings or even existence of these decentralised and unique systems.

With regards to the impact such a trend had on corporate managers, of all levels, it is important to understand the skills deficit which had to be overcome. Not only must workers learn to use their new machines, but additionally, managers had to understand their purpose within the organisation. It was not just enough to use a computer, they had to know how and why such machines were and could be used to improve organisational performance. And, in a period of constant technological change, this knowledge would have to be kept up to date and flexible. The Butler Cox Foundation report mentioned an “18-month effect” in which new software for new computing purposes would be introduced. Similar to the quick turnaround time of IT systems projects causing issues for project management, the ability to keep up with changes in workplace technology would have been essential.

To facilitate such a need, the education of managers, and employees as well, would have been required on a frequent basis. Both through discussion and their produced reports, Butler and Cox were critical of such efforts. Looking first at the July 1987 foundation report on Senior Management IT education, it was noted that most training offered to senior managers regarding IT had been wrongly targeted and ineffective. Often focused on educating managers in using computers, rather than on the possible business implications such machines could provide. It was deemed that UK industry lacked proper education on how to direct systems departments to meet the business goals of an organisation. A potential cause of this identified within the report was that it was often IT department staff who were providing the education and thus were teaching what they knew; how computers worked and how to use them. While the report’s claim that senior management and IT staff learnt



Offering better education to managers and users uncovered business implications of new systems and produced more successful projects. This made skill deficits and user issues clearer and in turn, made future education easier to target.

differently is dubious, it still speaks to the disconnect between the educators and the educated. One potential solution which the report suggested at the time was that a practical, experience centric, approach to education should be adopted. Through a lack of general computing knowledge, and education systems which did not cover the business implications of the new machines and systems, it is no wonder a skills deficit developed during a period of rapid change; many were simply left behind.

In contrast to talk of decentralisation challenges, skills deficits, and lacklustre education, the digitisation of the 1980s did still provide some benefits to managers. The widespread installation of computers improved management's access to a wide range of data, whether it be employee information and wages, or business finances and forecasts. Access to more data would be a boon to decision making for managers once teething problems with presentation and graphics were resolved over the course the 80s. The digitisation of organisation records and the use of personal computing to access them was recognised in several Butler Cox Foundation reports throughout the 1980s as just one of the benefits managements would enjoy through the adoption of new, decentralised computer systems.

From an employee perspective this may not have been seen as so beneficial. Tens of thousands of data entry jobs would no longer be needed in a business environment which used computers to achieve the same workflow with a fraction of the number of employees. Of course, when considering those responsible for wages and company profits this would not be seen as such a negative consequence. This issue was touched on earlier when considering the relationship between corporate managers and IT departments, in that case there was a suspicion towards IT departments and the job losses associated towards digitisation. However, it would be understandable that senior managers would consider a smaller payroll at no cost to productivity a net gain to an organisation.

Throughout the 1980s we also see the emergence of new communication software and technologies. To delve deeply into the specifics of communication trends during the 1980s is best explored in a separate report, though we shall touch briefly on some trends in communication, to explore their management implications. From email to voice communication, these systems would allow for greater inter and intra company connectivity. No longer having to rely on the physical mail rooms and services of the past, communication could now be near instant and more convenient. A more connected workforce enabled managers to delegate, organise, and receive information from their employees and peers more easily. These boons of communication were featured heavily in the Butler Cox Foundation reports throughout the 1980s and email is of particular interest as it features several times over the course of the foundation's work and thus charts the development of the tool.

Closing Discussion

The **topic** of management, both as an activity and the individuals who practised it, is an interesting point of discussion when looking through the lens of 1980s technological change. Both through the work of the Butler Cox Foundation and the interviews from individuals active in the field at the time we've been able to understand just a few of the main challenges and changes from the period in question. The Butler Cox Foundation clearly recognised several of the forthcoming trends in management during the 1980s. Identifying the difficulties in balancing the technology focused desires of IT departments and the financial concerns of corporate managers featured in several reports. The very existence of the Foundation and the work they conducted showed that systems directors needed assistance in convincing their senior managers that the changes they wished to make were beneficial to the company or organisation. Clearly one of the main challenges faced by organisations at the time was the relationship between IT departments and corporate managers. A relationship which faced issues of suspicion, overrunning costs and timescales, and a disconnect in the aims and frequency of changes to systems.

A lack of experience in delivering projects and the constant nature of technological change was a recipe for disaster. It wasn't until project managers began to overcome the challenges of quick turnarounds, end-user training, and conduct follow-up reviews that they were able to keep up with the ongoing changes. Once initial skill deficits had been overcome, and experience of adopting new changes had been gained, corporate managers became much more aware and appreciative of the business implications these changes were having. Additionally, there was wider recognition that IT was a necessary component for competitive organisation; to ignore its potential would be left behind.

The work of the Butler Cox Foundation and the reports they produced predicted fairly accurately the trends of the decade. One aspect in which it struggled however was predicting human behaviour. The business implications of new systems and methods would be a complete unknown until users got their hands on it. Reports could predict the benefits of any number of methods, but they could never say with certainty how they would be received by individual organisations. Aside from the inability to predict human behaviour, the only notable shortcoming from the reports covered for this piece were related to hardware trends. The “Managing the microcomputer in business” report mentioned previously predicts the dominance of IBM, AT&T, and Apple computers. In 1984 such a statement was reasonable with little outside competition for these market leaders. Moving into the 1990s however Apple had entered a period of decline and AT&T had become uncompetitive. Incorrect predictions such as this may have had considerable effect on organisations who chose to adopt systems packages which would lose support within a few years a necessitate a replacement.

Ultimately the Butler Cox Foundation reports provide an invaluable tool in understanding the changes and challenges of the 1980s. Looking forward to the present day, we can see how changes during this decade led towards the current work relationships and environment. Personal computing and decentralised systems are the norm, even if managers still retain some level of control and supervision. IT departments are no longer viewed with suspicion and are an essential part of day-to-day work, whether it be system maintenance or providing training. Employees and managers of all levels rely on the means of communication which first appeared during the 1980s, now more than ever. While a challenging and often unclear period of technological and social change, it is ultimately apparent that what was occurring was the emergence of the modern office experience.

Bibliography

Butler Cox Foundation reports

Available on the Archives of IT website: <https://archivesit.org.uk/publications/butler-cox-reports/>

June 1978	“Project Management”
September 1979	“Management Services and the Microprocessor”
February 1980	“Electronic Mail”
April 1980	“Distributed Processing: Management issues”
May 1982	“Implementing Office Systems”
September 1982	“A Director’s Guide to IT”
March 1984	“Presenting Information to Managers”
May 1984	“Managing the Human Aspects of Change”
September 1984	“Managing the Microprocessor in Business”

June 1987	“The Impact of IT on corporate Organisation Structures”
July 1987	“Senior Management IT Education”
February 1989	“Mobile Communications”
June 1991	“Managing the Devolution of Systems Responsibilities”
July 1991	“The Future of Electronic Mail”

Interview Transcripts

Made available by the Archives of IT, available to access on the Archives of IT website.

Dr Andrew Herbert OBE	Interviewed by Mark Jones	4 th April 2019
Dr Michael Taylor	Interviewed by Richard Sharpe	20 th August 2018
Mr John Handby	Interviewed by Richard Sharpe	16 th June 2016

All transcripts made available by the Archives of IT were reviewed during the course of research but only those listed above are referred to in the report.

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