Automation and the trade unions.
A challenge to the working environment

P.G. Higgins

Peter Higgins, M.Eng.Sci., B.A., M.I.E.(Aust.), lectures on Control Engineering and Technology Policy in the Department of Mechanical Engineering at Swinburne Institute of Technology. In 1981-2 he was a visiting research fellow at the Technology Policy Unit, Aston University, U.K., and has recently returned from study leave at the Norwegian Computing Centre and the Work Research Institute, Oslo. Correspondence: Swinburne Institute of Technology, Hawthorn, 3122, Australia.

The introduction of new manufacturing techniques often significantly affects the working environment. Therefore, the labour movement may seek organisational mechanisms which will permit an active role in deciding the form of technology being chosen. Challenges to the managerial prerogative depend upon judicial, legislative and contractual agreements. This paper discusses the means available for trade unions to seek active involvement.

Keywords: administrative decision-making, bargaining, consultative mechanisms, industrial democracy, technological change, trade unions.

In the past decade, industrial workers have had to learn to adjust to a wave of new techniques, such as robots, numerical control machine tools, and computer-aided design entering their working environments. The response by trade unions to the impact on the working environment of their members has tended to be limited and reactive. Not wishing to challenge managerial prerogative to choose the manufacturing plant, they have tended to concentrate on such issues as the ergonomic suitability of work stations provided for their members, rather than seeking an active role in broader decision-making.

For a specific product, or range of products, a variety of technologies are usually available for adoption. Some techniques will permit a move to more participatory forms of organisational development, whereas others based on a philosophy of Tayloristic fragmentation of work provide no avenue for autonomous decision-making.

Therefore, unions may have to move from merely discussing some selected issues regarding the safety of a particular form of technology presented to them by the company, to a position where they will play a significant role in the choice of technological form. A precedent has already been set in Australia. The Australian Telecommunications Employees’ Association, in its dispute with Telecom in 1978, put forward the concept of an Exchange Support Centre to counter Telecom’s desire to set up Exchange Maintenance Centres.

Note that this precedent for active involvement by unions in the selection of the form of the work process associated with technological change came from a union whose members are highly skilled. Likewise, in Britain the most notable challenge to management's prerogative to choose the form of technology came from a highly educated section of the workforce; that is, the Alternative Corporate Plan put forward by the Combined Shop stewards at Lucas Aerospace.1

Accompanying the change in composition of the union movement towards a more highly educated membership, the desire to participate in the design of the working environment, including its technological form, will become more prevalent.

The introduction of new manufacturing techniques often results in significant
changes to the organisational structure which impinge upon the working environment. To ensure that the quality of the working environment is at least maintained, and hopefully improved, the labour movement must seek the instigation of organisational mechanisms which will support challenges to what is seen as a managerial prerogative. To be able to move from a deterministic technology which accepts the fait accompli, to one where the technology adopted is a consequence of an active choice, taking due cognizance of a labour perspective, the labour movement has to be able to articulate its position coherently.

A challenge to the status quo requires a bag of social tools. The labour perspective must attain legitimation through judicial, legislative and contractual agreements.

Policy support
The ACTU has articulated its position in its “Policy on New Technology” (1979) which states that “trade unions, must, as a right, be included in the planning stage of technological change as a condition precedent to any changed operations”. The essence of this policy is that unions, on the various issues arising from technological change, should seek, from the contemplative stages, mechanisms to challenge traditional managerial attitudes and prerogatives regarding consultation, notice and the right of termination.

Judicial support
The ACTU was able to obtain some teeth to this policy through the job protection test case which resulted in the insertion of a number of clauses relating to job security into the Metal Trades Award. The section dealing with technological change requires employers to notify unions six months before any impending technological change, to enable consultation over such issues as redundancies, income maintenance, and retraining. This initiative, along with other legislative attempts and judicial interpretations, is quite narrow. Notification is restricted to the immediate effects on employees. Consultation is thereupon constrained to consideration of measures to avert or mitigate the adverse effects of such changes.

Legislative support
In Australia, legislative support for consultative mechanisms have not generally been instigated. One exception is the 1983 amendment to the Victorian Industrial Relations Act, which empowers the Conciliation and Arbitration Board to make awards in relation to the duties and responsibilities of employers upon the introduction of, or decision to introduce, technological changes.

The Swedish Co-determination Law, and the West German Works Council Act are much more stringent. Paragraph 91 of the German Act empowers Works Councils to intervene and demand correction of jobs that have been organised in a way that contradicts tested scientific knowledge with respect to human requirements.

Technology agreements
(1) The principle of consultation
A major concern that John Alford, Research Officer, Australian Railways Union, highlighted when discussing the reasons for union involvement in the consultative mechanisms in Victorian transport authorities was that unions will end up accepting mechanisms which “secure compliance with politics and decisions which may not necessarily be in their best interests”. For the following reasons, he believes that unionists should be involved in administrative decision-making:

(a) As management is integrated across functional divisions in the enterprise, management decisions are opaque to unionists.

(b) Planning consists of a fabric of an entire range of strategic management decisions, which may
not be visible. Instead only the second order decisions regarding the carrying out of policy are seen.

(c) Unionists may gain strategic advantage if they are able to influence the structure of the consultative mechanisms so that the procedures, timing and content of information flows is subject to some influence by unionists themselves, instead of being at the sole discretion of management.

(2) The consultation process

(a) Consultation over effects rather than technological form

Bargaining over the effects of new technology and associated working methods is one strategy that could be adopted. This includes detailed discussion of manning, training, grading/job evaluation, skill and career development, etc. No attempt is made to get involved in management decision-making over change.

(b) Challenging chosen technological form

A second strategy which could be adopted is to challenge the chosen technological form. If bargaining is left until the technology has been implemented, many of the characteristics of the system would have become fixed, thus reducing the scope for negotiating over the impact. The union is therefore placed in a mere reactive role.

Schneider, in her study of technology bargaining in Norway, found that unions using such an approach “failed to develop the tools, resources or perspectives necessary for dealing with technological problems in the long term, and are unable to influence the broader social or employment effects of the technology”. This approach suffers an important structural limitation: “the union is rarely able to get information about forthcoming systems early enough to actually suggest alternatives to them.

So that new systems can only be modified to a limited degree.”

A further problem, raised by Schneider, is that the crucial distinction between “union participation” and “user participation” in the development process can tend to be blurred. The latter reduces involvement to the domain of technical problems raised by users.

If, instead, negotiations are able to be conducted over a significant period before the technology is implemented, the unions would obviously have a much longer time to consider the problems that may arise when the new technology is implemented. The success of the bargaining then depends on the ability of the trade unions to assess both the whole range of possible impact of the new technology and their power and ambition to modify the technology. Hence, they must be able to set their own goals, negotiate them with management, and then monitor their introduction.

A major problem confronting this strategy is the way that given policies of new technology and associated systems are presented as the only possibility.

(c) Challenging selection criteria of technological form

Becoming involved in the decision-making over specifying and selecting the new technology would be the most demanding strategy, but it would permit unions to actively and explicitly influence the nature of the system that is eventually introduced. The unions would then be placed in a position where they will be able to generate positive and progressive models for change.

(3) A pre-eminent example

The Norwegian Basic Agreement (1982) has provided the trade union movement with a useful benchmark for judging proposals which may arise. The section on Technological Development and
Computer-based Technology states that:

“New solutions and systems may affect the employees’ workplace and working conditions. When this is the case, it is important that new technology is not just evaluated on the basis of technological and financial conditions, but also based on social conditions. This overall consideration forms the basis for the design, introduction and use of systems and new technology … Changes in organization, employment, information routines, contact between individuals, etc, shall be included in this general consideration …

For work situations which come under this agreement, the parties shall discuss in advance how the work structure, management and working conditions may best be arranged. Training and retraining needs shall be clarified during such discussions. Development of the professional content of the individual jobs shall be particularly emphasized.”

The Australian experience

In Australia, design and selection of technology to be implemented in the manufacturing industry has a long way to go. A 1979 study by the Department of Science and Technology revealed that even the essential requisite of provision of information associated with proposed technological change is not supplied to the unions. Only 6% of the sample had any formal consultative body to cater for joint decision-making. The issues over which such participative consultation was considered appropriate were few and at a low level, with emphasis on some aspects of workplace design and choice of the particular type of technology. For the majority of cases (66%), management retained its right to decide what information would be supplied. Only 29% of this group gave employees the opportunity to express their views and opinions; although management retained its right to make the final decisions.10

Under the present political climate where the Federal Government is promoting consultative mechanisms for the trade union movement, a unique opportunity has arisen for unions to seek a more significant role in decision-making associated with the introduction of new manufacturing techniques.

References