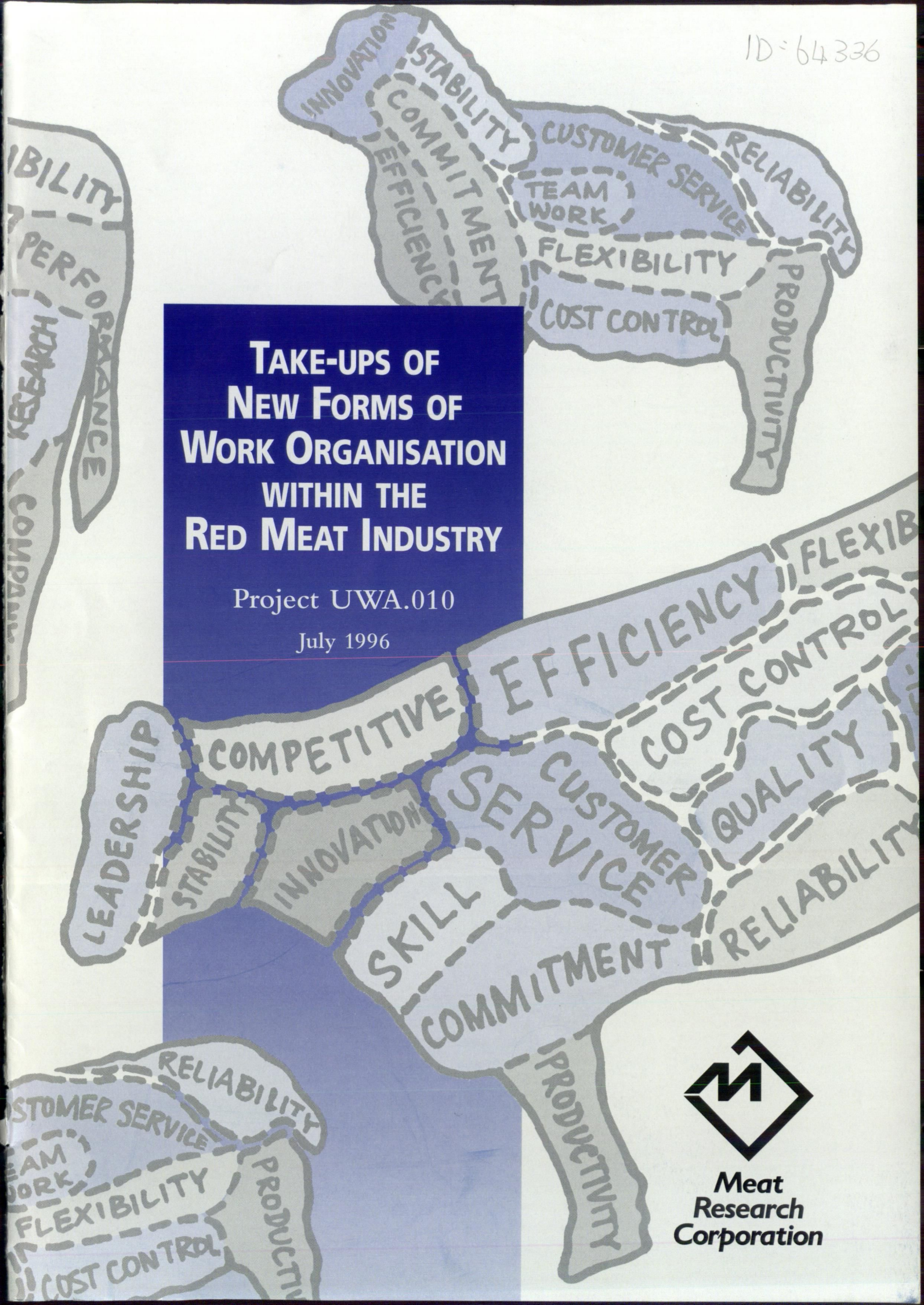


# TAKE-UPS OF NEW FORMS OF WORK ORGANISATION WITHIN THE RED MEAT INDUSTRY

Project UWA.010

July 1996





**A** survey of 71 red meat processing plants in Australia was undertaken by researchers from the University of Western Australia for the Meat Research Corporation to establish a profile of the characteristics and the adoption of certain work organisation practices linked to increased competitiveness in manufacturing organisations. This survey uncovered four key findings:

1. Red meat processing firms are responding to increased competitive pressure in the market, as evidenced by the push to improve the quality of the product and from reported high levels of effectiveness in pursuing this strategy.
2. Most red meat processing firms tend to have an "elite" organisational culture that strongly values compliance with rules and managerial directives and status and discourages employee participation and other forms of organisational change and innovation.
3. Of the "high performance" work organisation practices reviewed, the use of job or task rotation is most prevalent while multi-skilling across traditional boundaries is limited.
4. Human resource management practices are typically highly centralised and not guided by formal strategic plans. Unfortunately, limited formal training and other supporting human resource management practices complement the importance placed on skilling and flexibility of the workforce.

## Worldwide Research

Research within the United States, the United Kingdom and Australia confirms a global trend for firms to pursue increased competitiveness through innovative work organisation and management practices. Frequently, emphasis is placed on adopting a "high performance" model of work organisation involving broad job classifications, job rotation, teams, quality circles and TQM, along with a range of human resource management policies and practices designed to support and sustain those changes (e.g. skill-based pay, competency-linked training, employment security guarantees, flexible working hours).

Over recent years, a number of influential reports have strenuously argued the case for similar reforms within the Australian meat processing industry. The ultimate goal of the reform is to enhance productivity and for the meat processing industry to become more competitive.

The survey forms a part of a larger project which attempts to answer six research questions through two waves of data collection from a large industry sample:

1. How much variation in work organisation and management practice currently exists within the industry, and what factors influence the approaches adopted?
2. What percentage of meat processing firms are actively seeking to implement innovative models of management and work organisation?
3. What specific forms do these innovations take, and how do they relate to "best practice" models within other industries?

4. Where implemented, how successful are these innovations in terms of their degree of penetration within meat processing firms, and in terms of their perceived impact on company performance?
5. What factors are associated with success and/or failure in attempts to introduce workplace change within the industry?
6. What is the overall rate of change in management and work organisation within the industry?

The results of the first phase of data collected through the industry survey is summarised in this report and addresses the extent to which new models of work organisation such as multi-skilling, employee self-management and total quality management are penetrating the industry. The results also provide important baseline information on the nature of work organisation and management practices within the industry which are associated with success and/or failure in attempts to introduce workplace change within the industry.

## Research Protocol

The researchers sent a questionnaire to 177 meat processing plants and received 71 replies. This represents a response rate of 40%, which is considered acceptable within the industry. The surveys were completed by senior management representatives from the plants.

Those responding were a good representation of the population of Australian red meat processing plants, with a proportional mix of plants from each of the states.

The population studied was also reflective of the industry as a whole in that it contains a predominance of small processing facilities, many of which are subsidiaries of larger corporations. The data presents a picture of an industry in which most plants are more than 20 years old, where production is usually carried out within a single shift, and where at least half the plants are small and operate only in the domestic market. These sample characteristics are consistent with those identified by a range of earlier industry reports and reviews.

Information was collected in nine basic areas:

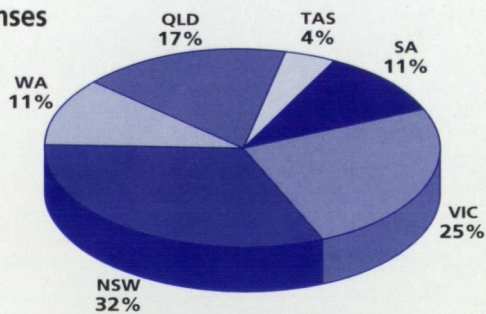
1. General Company Details – Main product groups, year founded, numbers of employees, annual \$ turnover
2. Organisational Structure – Structural configuration, functional specialisation, extent of centralisation
3. Market environment – e.g. Stability and predictability of demand for product
4. Competitive strategies – Components of company strategy, effectiveness relative to competitors
5. Organisational Culture – Values underpinning company and human resources strategy
6. Production Technology – Sources of technological and process variability
7. Work Organisation – Incidence and degree of penetration of: teamwork, employee involvement practices, multi-skilling and job rotation
8. Quality Management – Quality control/audit activities, penetration of quality management practices
9. Human Resource Management and Industrial



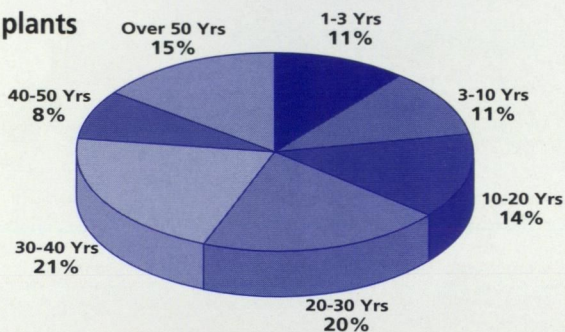
Relations – Recruitment practices, compensation systems, training and HR planning, types of employee agreements, industrial relations climate.

## Industry Survey Overview

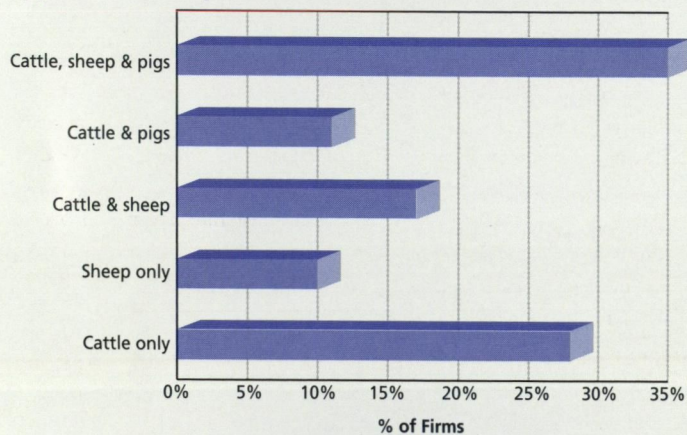
Plant responses by state



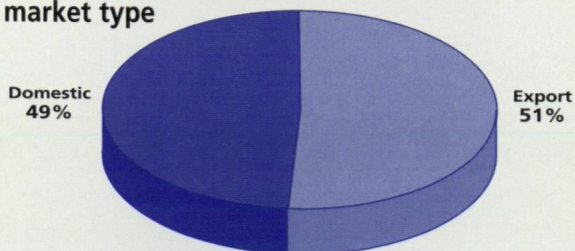
Age of plants



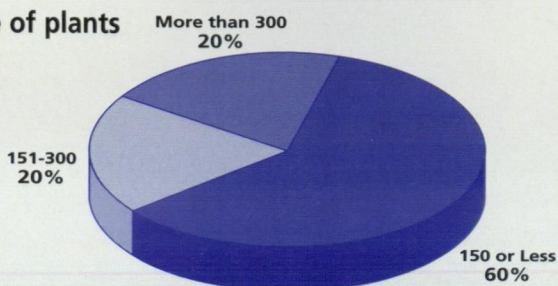
Type of animal processed



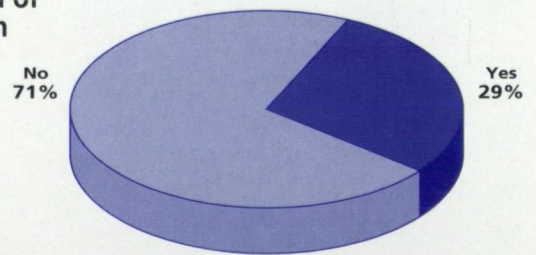
Plant by market type



Size of plants

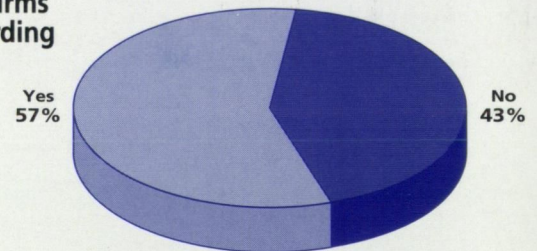


Operation of more than one shift

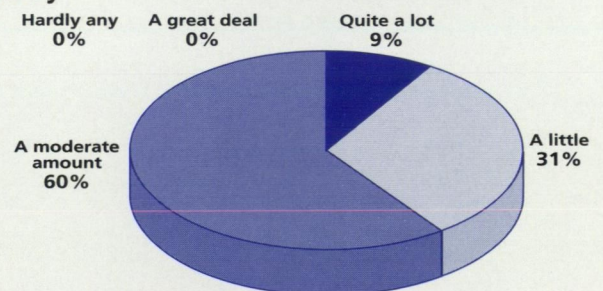


Profile of Firms

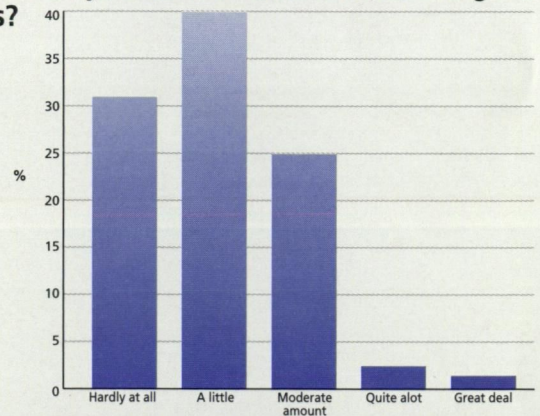
Percentage of firms operating according to a formal strategic plan



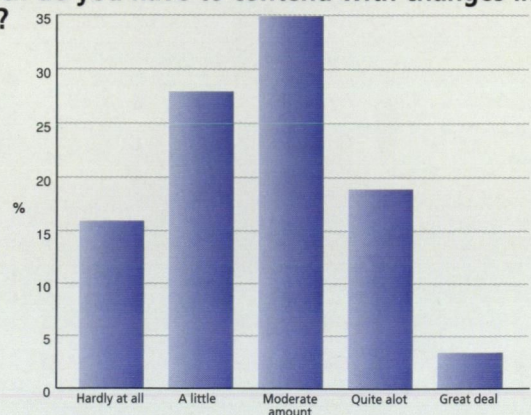
Percentage of respondents reporting environmental uncertainty



How much do you have to contend with changes in supplies?

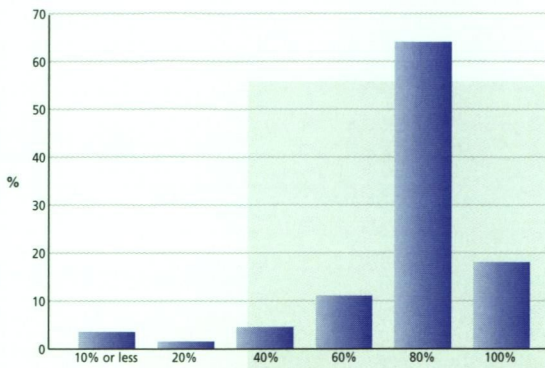


How much do you have to contend with changes in demand?

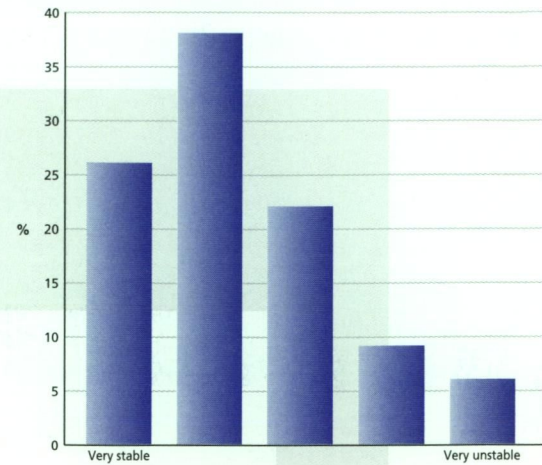




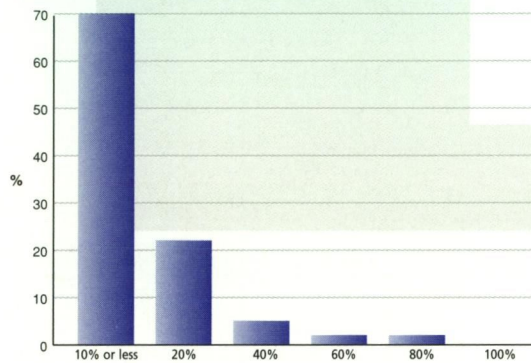
### What proportion of production is repeat orders?



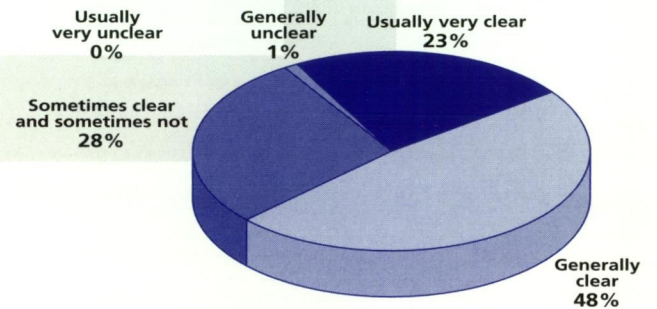
### How stable is the level of repeat orders?



### What proportion of production is special orders?



### Degree of production uncertainty



## Principle Findings

### Competitive environment and strategic orientation

Organisational effectiveness depends on a "tight fit" between business strategy, human resource strategies and associated work organisation. As a result, the nature of the emphasis placed on various competitive strategies should be reflected in strategic choices about the take-up of innovative work systems.

The following table illustrates the industry's strategic orientation (importance) and how effective the industry perceives certain corporate strategies.

**TABLE 1 Importance vs Effectiveness of Corporate Strategies**

Item	Importance	Effectiveness	Difference
Customer Service	6.75	5.86	0.89
Level of product quality	6.74	6.06	0.68
Operating efficiency	6.49	5.58	0.91
Developing a committed workforce	6.31	5.51	0.80
Brand identification/company image	6.30	5.60	0.70
Delivery reliability	6.30	5.79	1.06
Raising skill level of workforce	6.14	5.26	0.88
Volume flexibility	6.08	5.64	0.44
Developing a more flexible workforce	6.03	4.55	1.48
Rigorous control of costs for all the firm's operations	6.01	5.45	0.56
Procurement of raw materials	5.94	5.26	0.68
Competitive pricing	5.76	5.53	0.23
Cost leadership	5.75	5.29	0.46
Cost advantage in raw material procurement	5.73	4.92	0.81
Quality and coverage of product distribution	5.64	5.20	0.44
Premium pricing	5.60	5.05	0.55
Product features	5.60	5.30	0.30
Up-to-date plant and equipment	5.56	4.97	0.59
Control of channels of distribution	5.32	4.77	0.55
Targeting niche market segments	5.22	4.83	0.39
Strong salesforce	5.14	5.00	0.14
Innovation in manufacturing process	4.97	4.56	0.41
Reducing employment numbers	4.76	4.77	-0.01
Vertical integration	4.69	4.64	0.05
Market segmentation	4.28	4.63	-0.35
Design flexibility	4.17	4.49	-0.32
Products designed for ease of manufacturing	4.13	4.43	-0.30
New product development	4.05	4.23	-0.18
Development of foreign markets	4.03	3.82	0.21
Innovation in marketing techniques	4.03	4.33	-0.30
Market research	3.86	4.24	-0.38
Advertising	3.03	3.61	-0.58



The results suggest that red meat processing firms are responding to increased competitive pressure in the market by placing significant emphasis on improving quality of the product.

Firms also see themselves as very effective in pursuing these quality strategies. Paradoxically, marketing and advertising – two means whereby information on quality can be transmitted to existing and potential customers – are ranked as low strategic priorities.

An important finding is the relative significance accorded to human resource management strategic initiatives. The largest gap between perceived importance and effectiveness occurs in the areas of human resource management.

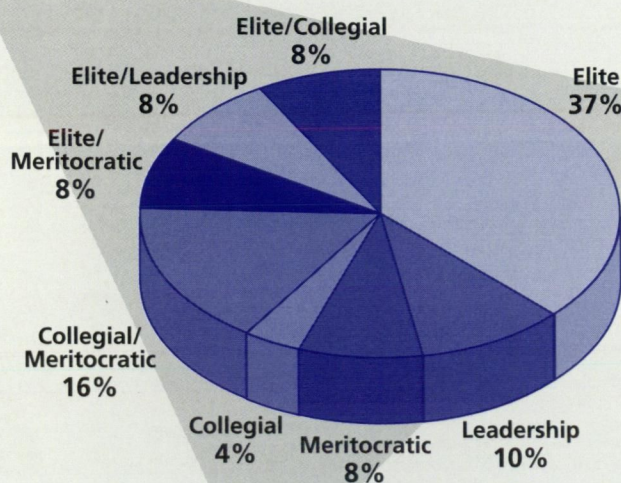
Most domestic market firms show a desire to develop a more flexible, skilled and committed workforce while export firms were more likely to pursue labour force reduction as a central strategic objective. As might be expected, large export firms also saw themselves as more effective than smaller domestic firms in many areas of operation.

### Organisational and cultural profile

Organisational culture and values are strong sets of shared beliefs about the best way to manage, organise and structure the firm. Dominant organisational values shape processes of innovation and change, both in relation to management systems and technology. They indicate how difficult or easy it will be to implement change.

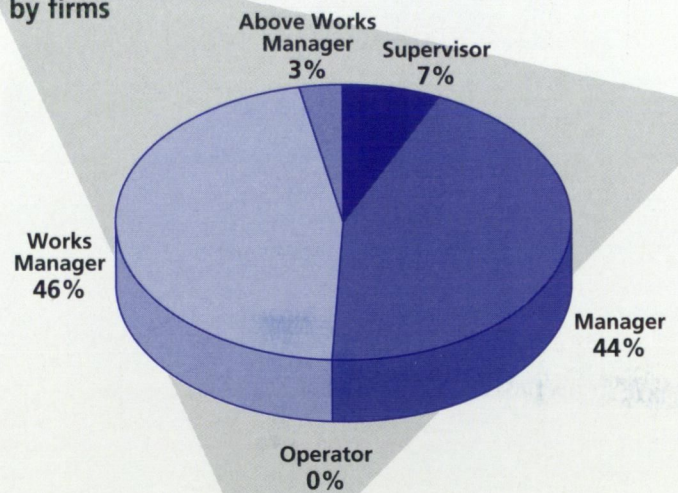
In profile, most red meat processing firms tend to have an organisational culture that strongly values compliance with rules and managerial directives and status. This gives less weight to human resource management considerations and discourages employee participation in decision-making and other forms of organisational change and innovation. The older and larger the firm, the stronger this culture is likely to be.

### Cultural profile of organisations surveyed



The results reflect that red meat processing firms tend to be traditional authority structures, with decision-making responsibility located fairly high in the organisational hierarchy. Relatively few firms employ people in specialist customer service, marketing, training, personnel or research and development roles. Communication patterns reflect the centralisation of decision-making responsibility, with most communication directed at staff or managerial employees.

### Lowest level of production decision-making reported by firms



These cultural and structural configurations are somewhat typical of older firms successfully operating in large stable, predictable markets. According to most of these managers, supply of stock – though it may be limited – is generally predictable, with demand for product reasonably stable and the bulk of production comprised of repeat orders.

This culture and structural profile, however, sits somewhat uncomfortably with the espoused strategic emphases of many firms.

The Top 5 most important strategic concerns:

1. Customer service
2. Product quality
3. Operating efficiency
4. Employee commitment
5. Brand identification/company image

The biggest gap between perceived importance and effectiveness occurred in “developing flexibility in the workforce”.

In most areas of contemporary manufacturing, flat decentralised structures which encourage the devolution of considerable responsibility for decisions affecting quality, operating efficiency and customer service to lower levels of the organisation are seen as essential “best practice” models of organisation needed to achieve the sorts of strategic goals desired by firms in this study (Technology Foresight, 1995).

The results of this study also suggests that firms in this industry do not possess an organisational culture which encourages the take-up of “high performance” work organisation and management practices, such as multi-skilling, employee self-management and a quality focus.

### Take-up of new forms of work organisation

Work within red meat processing plants in Australia is almost universally organised around a mechanical “chain” system of disassembly. Within this system, shopfloor jobs are generally highly specialised and routinised (one worker performs a single standardised task or narrow range of tasks, and planning, coordination and control functions associated with work performance are vested almost exclusively in management and supervision).

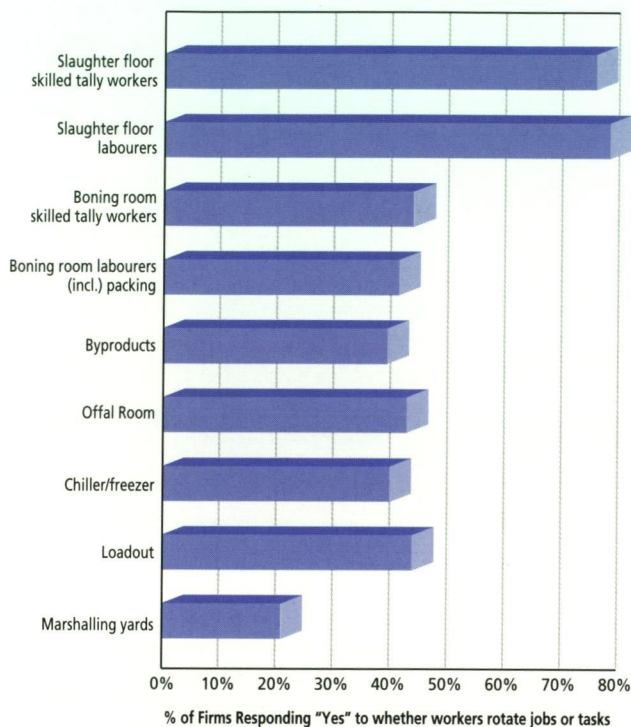
Evidence suggests that effectively addressing increasing competition in the market place for manufacturers is associated



with the development of more flexible "high performance" approaches to work organisation and management. These approaches may be grouped under the headings of multi-skilling, self-management, and quality management.

Of the "high performance" work organisation practices surveyed, the use of job or task rotation is most prevalent. This is frequently a requirement of industrial agreements, and most often occurs within existing job demarcations, such as slaughtering or boning.

### Extent of job rotation by functional area



Job rotation of this type, however, represents a relatively low point on a continuum of overall multi-skilling, with the movement of labour across traditional job boundaries a comparatively rare event. The pattern of skills development in firms means that most see the flexible movement of labour across skilled/semi-skilled tasks as a difficult proposition.

Employee self-management initiatives – at both the individual job level and team level – are amongst the most powerful and popular "high performance" manufacturing management initiatives.

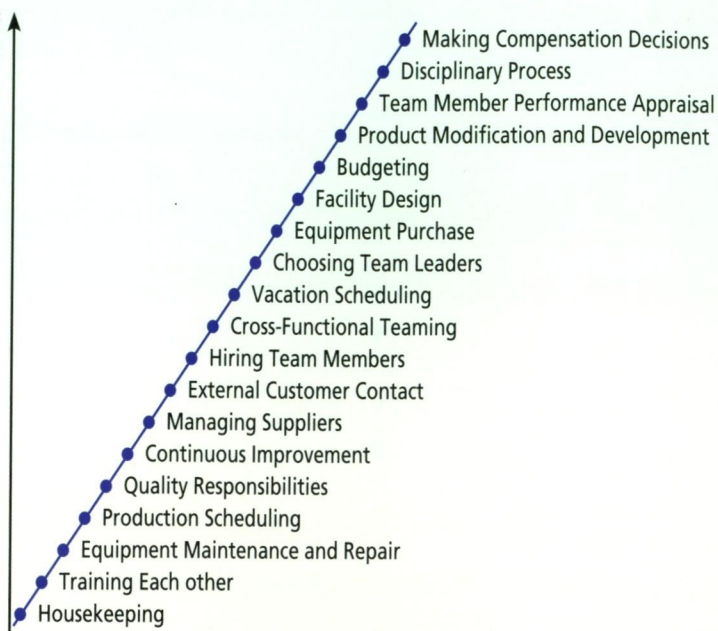
As technology becomes more complex in manufacturing, the need to have individual production operatives taking direct responsibility for operating decisions becomes critical to overall work system performance. Studies undertaken in Australian and overseas suggest that self-managed/self-directed teams have overtaken quality circles/process improvement teams in popularity within manufacturing (Cordery, 1996; Osterman 1994).

The results of this study present a mixed picture in relation to the uptake of employee self-management as a "high performance" strategy.

Although more than half of the firms reported incidence of self-directed/self-managed teams, these teams are found mainly in the downstream areas, such as by-products and chiller/freezers and not in the central production areas. Furthermore, when one looks at the degree to which control is delegated to teams and to individual employees, it is apparent that very low levels of employee self-management occur within the meat

processing industry in Australia. Where individuals and teams are given some autonomy to make their own decisions, it is mainly in the areas of quality control, varying the pace of work, housekeeping and training other employees.

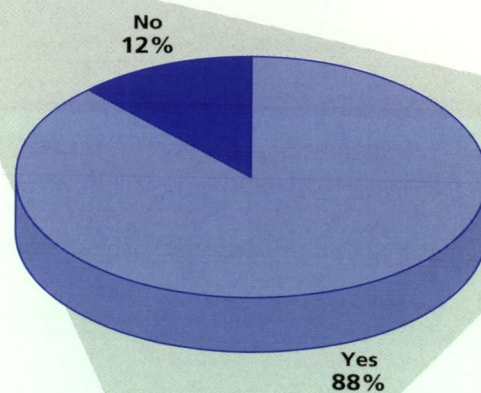
### Degrees of team self-management



### Responsibility/Authority

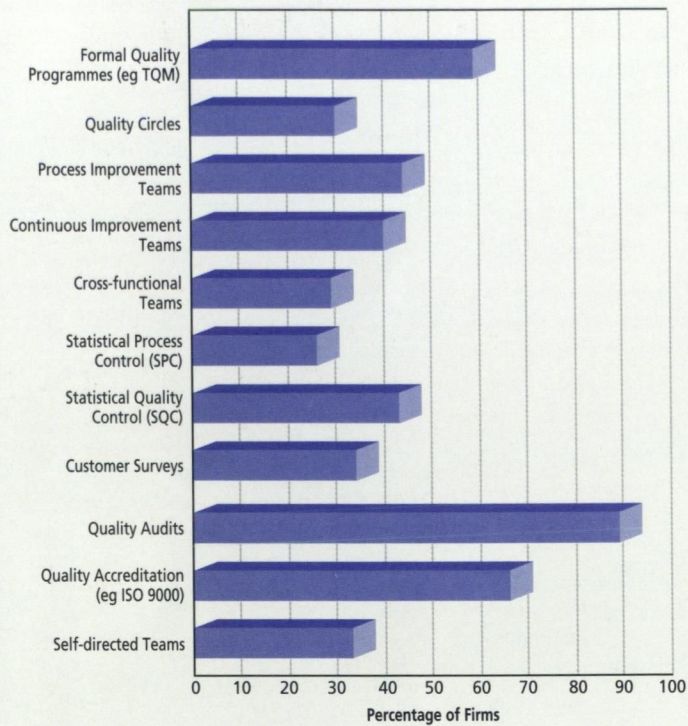
In contrast to employee self-management and multi-skilling, the development of quality initiatives in the industry is quite extensive. Survey results show moderately high levels of adoption of elements of quality management in terms of strategy, implementation and training to support the diffusion of specific quality techniques.

### Written statement of quality policy





## Written statement of quality policy



It is generally recognised that the types of workplace innovation discussed in this section do not stand alone in organisations. These innovations generally need to be supported and maintained by a package of structural and managerial measures. Particularly important are human resource management practices, which must underpin the development of a more flexibly skilled and quality-focused workforce, and the development of responsible autonomy at shopfloor level.

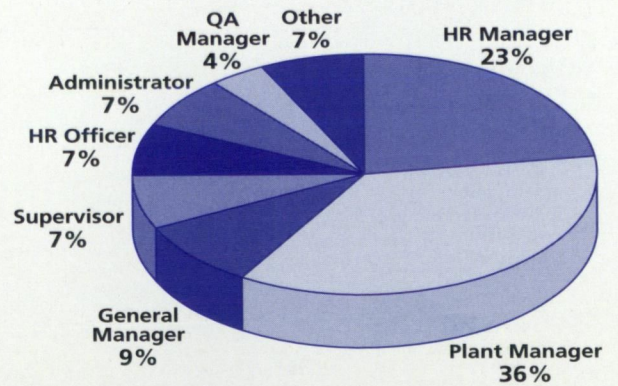
## Human Resource Management Practices

Human Resource Management (HRM) practices are key levers for the implementation of "high performance" work systems. Effective HRM requires four essentials:

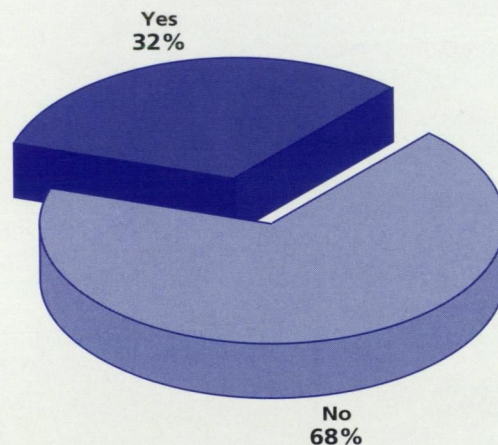
1. Congruence of HRM and business strategies
2. Line manager ownership of HRM
3. A thorough and careful approach to HRM practices such as training
4. The consideration of employees as valued assets whose commitment to the organisation and its goals

The findings indicate that plant managers largely control human resource management practices within the industry, and these practices are generally not guided by a formal strategic plan. As with other decisions, human resource or personnel decisions tend to be highly centralised, frequently being made exclusively by the works manager, reflecting their perceived impact on the firm's "bottom line".

## Who has responsibility for personnel matters?



## Do you have a formal HRM strategic plan?

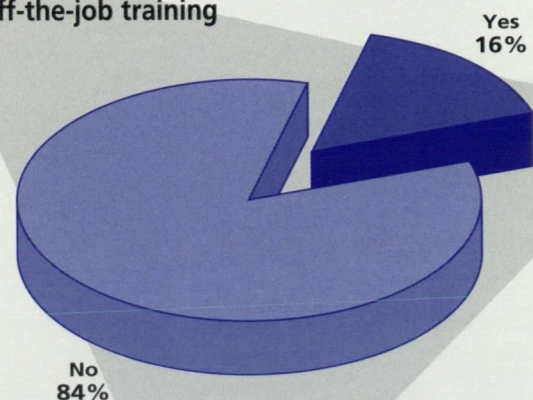


The study looked at the emphasis placed on employee training, since this is one of the key requirements for the development of the "high performance" approaches.

According to the survey, most firms believe their training budgets adequately meet their training needs. But, formal training other than induction is scarce and a great importance is placed on skilling and flexibility of the workforce.

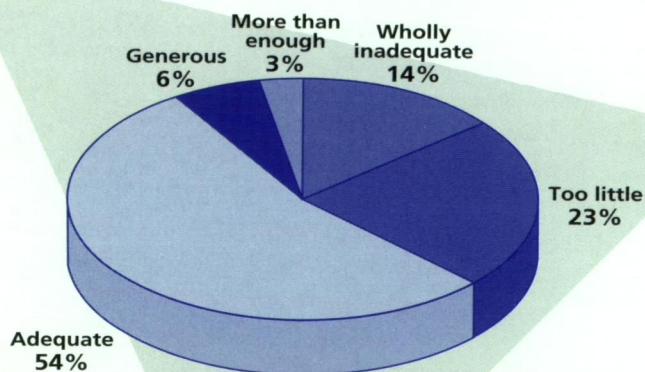
Findings suggest a gap between desired goals regarding skilling, flexibility and effectiveness, and the practices and resources which are the means to achieve these desired ends.

## Percentage of non-casual employees receiving off-the-job training





## Is existing training budget adequate for needs?



Related to the training issues is the one of career progression. Production workers currently have very few career path options, and this could be an important determinant of the commitment of employees and their interest in enhancing their skills.

Perceptions of industrial relations issues are also interesting.

Despite the high profile given within the industry to industrial relations issues and instances of industrial conflict, the overwhelming majority of firms surveyed reported that their industrial relations climate was good or very good. (These are manager's perceptions of the industrial relations climate at the time of the survey, October 1995, and, as such, do not reflect industrial relations climate in an absolute sense.) It may very well be that the industrial relations climate at the time of the survey was perceived as being good in an industry which traditionally plagued by a poor industrial relations record.

## Where to from here?

The operating environment for the red meat processing industry is involved in a dramatic change, in the direction of increasing competition and dynamism (Meat Industry Council, 1996).

National and international regulatory standards regarding quality, hygiene and product description are becoming increasingly strict. Export and domestic markets are becoming more volatile. Consumer habits are changing, with red meat declining in popularity. And, stock supplies are becoming more uncertain, largely as a result of increases in live shipment.

These factors are interacting to create an extremely difficult operating environment for many processing firms.

The strategic imperatives identified by meat processing firms in this survey implicitly recognise pressures for change, and are similar to those which have come to dominate other areas of manufacturing, namely quality, customer service, efficiency and human resource development. Adopting approaches to work organisation which would facilitate effective attainment of these goals, however, is another matter, with the meat processing industry having much ground to make up.

Recognition of the importance of such work organisation initiatives is one thing. Implementation of such initiatives is another.

Research has identified several pre-conditions to the implementation of both multi-skilling and self-management (Pearce & Ravlin, 1987). The first of these is the nature of the work – overall. It must be sufficiently variable and non-routine, and it must require a degree of problem-solving and decision-making, and make possible the development and use of a variety of skills.

This first pre-condition is met to some extent within existing meat processing technologies, though opportunities for multi-skilling and self-management will grow considerably as the industry begins to invest, as it must, in advanced manufacturing technologies.

A second pre-condition is a climate of managerial support. Employees must wish to take on added skills and responsibilities.

Unfortunately, the culture within meat processing firms is frequently not supportive of change generally, and of alterations to traditional patterns of managerial control and authority in particular. Similarly, research has indicated that meat workers are frequently intolerant of both union and management efforts which are not seen as primarily oriented towards extrinsic rewards. (e.g. Inkson, 1987).

It is possible, however, to identify several paths toward satisfying the need for managerial and employee support:

- Strong visionary leadership is required at the top of organisations and within the union movement, providing support and encouragement for managers and employees in the reform process.
- Managers must be educated and trained in the skills of managing under the new work organisation approaches.
- Employees must be consulted about the precise nature of the reforms and the manner of their implementation.
- Human resource management policies and practices need to be overhauled in order to support the changes – for example, an increased emphasis on training and skill development for shopfloor employees, clear links between skill acquisition and remuneration, and the development of broad classification structures (Walton, 1985, Walker 1992, Storey, 1993).

In the context of the history of industrial relations within the red meat processing industry, these reforms may seem extremely difficult. It is possible, however, to learn much from the approaches taken by the many other Australian industries which have been down the same workplace reform path. Their experience stands as proof that change is possible, and the tough times predicted for the industry deem it a necessity.

## Further Information

If you would like additional information about this survey, please contact the Meat Research Corporation Meat Processing Team:



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