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**INSIGHT INTO THE COMPOSITION OF THE  
MANAGEMENT TEAM:  
A SOURCE OF COMPETITIVE ADVANTAGE**

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**INSIGHT INTO THE COMPOSITION OF THE MANAGEMENT TEAM:  
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**ABSTRACT**

Many writers have drawn attention to the growing importance of teams to the functioning of organisations. At the same time, however, there is a growing amount of evidence to suggest that senior management groups find it difficult to work together collaboratively in this way.

One well known approach to the study of management teams is that provided by Meredith Belbin and his colleagues. This work, which began at Henley in 1969, has been developed and is now used in a number of countries. In recent years the Belbin approach has been subject to criticism by psychometricians who have drawn attention to the dearth of published evidence to support his team role model.

This paper traces the development of the Belbin approach and describes the experience gained by the writer in using this to examine the top management teams of three organisations. These include an entrepreneurial concern which had undergone considerable growth; a large bureaucratic social welfare organisation and a major international consumer goods company. Although the team roles were meaningful and useful to the management teams concerned, it was concluded that the need for an objective evaluation of the reliability and validity of the Belbin Interplace system would seem to be an urgent one.

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## **1. INTRODUCTION**

The rate of change in contemporary organizations is well-documented and the evidence available suggests that the environment in which many organizations function will continue to become increasingly turbulent and unpredictable, sometimes leading to the demise of even major organizations. As Pascale (1991) has pointed out, for example, of the corporations listed in the Fortune 500 ranking in 1985, 143 were missing by 1990 and Senge (1992) notes that Shell has estimated that the average lifetime of the largest industrial enterprise is less than forty years. In Australia, the degree of change is well illustrated by the 1989 survey of 545 companies by CCH. This study found that in the previous two years 58 per cent had changed their fundamental mission; 62 per cent had made significant changes to their corporate goals and objectives; and 65 per cent had made major changes to their strategies. The consequences of such dramatic changes have included a greater emphasis on less hierarchical organizations; downsizing; empowerment; re-engineering; and a concentration on quality and improvements in both customer and supplier relationships. These changes have been accompanied - possibly - by a growing awareness of the potential importance to organizations of effective human resource management and the use of work and management teams.

Research (Ernst & Young and the American Quality Foundation, 1992) suggests that the best performing organizations have nearly all their employees participating in teams and many writers (e.g. Pascale, 1991; Senge, 1992; Limerick & Cunningham 1993) have drawn attention to the increasing need for team work in the contemporary organization. Furthermore, this growing emphasis on co-operation is to be found at all organizational levels. The increased use of work teams on the shop floor has been noted by Lawler (1992) who points out that a 1987 survey of the Fortune 1000 companies found that only 28 per cent had work teams, whereas a second survey of the same companies in 1990 showed that this figure had risen to 47 per cent and was projected to increase. Growing emphasis has also been placed on the need to achieve greater use of cross functional teams at the middle management level, as well as on sharing in decision making by the most senior members of organizations.

Perhaps the complete antithesis to the team approach to management can be found in the entrepreneurial concern in which one person makes most of the decisions. In some cases, such highly-talented and motivated individuals achieve enormous economic success, but it is obvious that such people are rare. Hamel and Prahalad (1994) concluded that corporate leaders come to believe that they are really visionaries, when in fact industry vision is the product of many people's vision. As they put it: "A venture capitalist may be willing to bet a few million dollars on a visionary, but it would be foolhardy to bet the future of a multibillion dollar company on any single individual's reading of the future." (p.76). Some evidence to support such a view was provided during the period of economic recession in the late 1980s and early 1990s when Australians witnessed the failures of many such organizations dominated by one person (Sykes, 1994). When one considers the limited nature of any individual's information-processing capacity; the expectations of growing numbers of highly-qualified individuals in the workforce that they should be involved in decision-making; and the recognition that individuals suffer from moods and have prejudices which affect their judgments, a more collaborative approach would seem to have many advantages.

As Lawler (1992) has written, a great deal is known about how to structure and manage production teams, but relatively little research has been carried out on teams at the senior management level. In the United States, for many years Argyris (1985) has examined the reasons why intelligent and able managers so frequently fail in teams and suggests that a major variable in determining success is the extent to which they face conflict. Katzenbach and Smith (1993) have distilled their experiences in working with a wide range of teams as consultants with McKinsey's. They concluded that although it is obvious that teams outperform individuals, a number of factors (e.g. heavy time demands and a culture of individual and not collective achievement) conspire to make it difficult for teams to exist - particularly teams at the top of organizations. In Europe, a study by Kakabadse (1991) of 158 British and Irish companies with over 2,500 employees, found that 76 per cent of general managers felt negative about their immediate bosses in the senior team and 52 per cent of chairmen and chief executive officers were uncomfortable about the effectiveness of the top team leading the organization and the performance of its members. The same researcher also reports that a staggering 76 per cent of respondents recognized that there

were substantial hindrances obstructing the senior team in achieving objectives. Such a result may be due to the personality characteristics of those who reach senior posts (Dixon, 1994) or because the competitive culture to be found in some organizations does not foster interdependence.

Any steps that can be taken to improve on this state of affairs would appear to be of considerable value as accounts of high-performing organizations increasingly note the contribution of teams (Moss Kanter, 1983 & Pascale, 1990). Senge (1992) has proposed that there has never been a greater need for mastering team learning (defined as the process of aligning and developing the capacity of a team to create the results that its members desire) than there is at the present time. Similarly, Katzenbach and Smith suggest that it is the team which is the key that could unlock the performance potential of the organization of tomorrow. Because of the potential of senior management groups to influence organizational functioning, the study of such teams is a fruitful area for further investigation.

This paper describes some work with top teams that the writer has been involved with since 1988. In addition to personal interviews and observation of the groups in action, several instruments - viz. the Cattell 16 Personality Factor Inventory - 16PF (Cattell, 1970); the Watson-Glaser Critical Thinking Appraisal (Watson & Glaser, 1980) and the Belbin Interplace (Belbin Associates, 1988) - have been used. The only approach common to all these cases was that of Belbin, and the discussion in this paper will be confined mainly to its use.










The Belbin approach to team building and effectiveness began at what was then the Administrative Staff College (now the Henley Management College) in 1969, with some of the later studies being carried out at the Australian Management College. Belbin invited course members undertaking a residential general management course to complete a battery of psychometric instruments before competing in teams in a one week computerized business game. Each team had an observer who recorded the behaviour of the individuals concerned every 30 seconds using a system developed from Bales' (1950) interactive process analysis. Using the data obtained, the researchers then analysed the personality characteristics and critical thinking abilities of the various teams, comparing the successful with the less successful. With greater experience and insight, Belbin and his co-workers began to predict before the game what the finishing order of the various teams would be. Dulewicz (1995) reports that the correlation between the rank order predictions and the actual course results for three courses (with two teams of six and one of eight) has been computed as +0.55 and is statistically significant ( $p \leq .01$ ).

From these investigations, eight team roles emerged and a ninth role was added at a later date. Belbin (1981) defines a team role as: "a pattern of behaviour, characteristic of the way in which one team member interacts with another so as to facilitate the progress of the team as a whole." Brief details of the various team roles Belbin and his team identified are shown at Figure 1 and more detailed descriptions are to be found at Appendix A. At a later stage of the work, two further developments occurred. One was the introduction of a Self-Perception Inventory which enabled the users to arrive at their team roles without the need to use psychometric instruments. The other was what Belbin (1988) terms a computer-based Human Resource Management System - Interplace, which incorporates reports by independent observers.

A member of the Belbin research team, Mottram (1982), suggested that certain combinations of team roles made for more effective teams and noted that the team role of an individual was not necessarily associated with his or her functional role. He noted that the most effective managers seemed to be those that recognized their own best team roles correctly; perceived the most effective contribution they could make in the situation or the team they were working in; and were prepared to work to their strengths rather than allow their comparative weaknesses to affect their performance. Mottram proposed that the ideal team consists of individuals occupying a range of the Belbin roles, viz. a Co-ordinator; a Plant; a Monitor Evaluator; one or more Implementers, Team Worker, Resource Investigator or Completer/Finisher; together with Specialists as required.

This paper will draw on experience gained in using the Belbin approach to examining management teams in twelve organizations, private and public, large and small, in a number of countries. The three examples which follow have been chosen to illustrate the variety of responses obtained. (In order to protect the anonymity of those concerned, only brief details of the organization have been provided.)

Figure 1: Belbin Team Roles

	ROLES AND DESCRIPTIONS TEAM-ROLE CONTRIBUTION	ALLOWABLE WEAKNESSES
	<b>PLANT:</b> Creative, imaginative, unorthodox. Solves difficult problems.	Weak in communicating with and managing ordinary people.
	<b>RESOURCE INVESTIGATOR:</b> Extrovert, enthusiastic, communicative. Explores opportunities. Develops contacts.	Loses interest once initial enthusiasm has passed.
	<b>CO-ORDINATOR:</b> Mature, confident and trusting. A good chairman. Clarifies goals, promotes decision-making.	Not necessarily the most clever or creative member of a group.
	<b>SHAPER:</b> Dynamic, outgoing, highly strung. Challenges, pressurizes, finds way round obstacles.	Prone to provocation and short-lived bursts of temper.
	<b>MONITOR EVALUATOR:</b> Sober, strategic and discerning. Sees all options. Judges accurately.	Lacks drive and ability to inspire others.
	<b>TEAMWORKER:</b> Social, mild, perceptive and accommodating. Listens, builds, averts friction	Indecisive in crunch situations.
	<b>IMPLEMENTER:</b> Disciplined, reliable, conservative and efficient. Turns ideas into practical actions.	Somewhat inflexible, slow to respond to new possibilities.
	<b>COMPLETER:</b> Painstaking, conscientious, anxious. Searches out errors and omissions. Delivers on time.	Inclined to worry unduly. Reluctant to delegate.
	<b>SPECIALIST:</b> Single-minded, self-starting, dedicated. Provides knowledge or technical skills in rare supply	Contributes on only a narrow front.

## 2. THE AUSTRALIAN MULTI-NATIONAL CORPORATION

Within a ten-year period, this high-tech firm had developed its operations dramatically from its beginnings with ten people to an organization employing many hundreds and operating on three continents. The chief executive (the original founder of the business) recognised that the existing organization could no longer cope with the demands of the developing business situation and had invited a firm of management consultants to advise on the structure that should be adopted. At the same time, he also recognized a number of problems in the functioning of his top management team (which consisted mainly of individuals that had been with him since the establishment of the company) and sought some assistance in dealing with these.

Several psychometric instruments were completed by this senior executive group and fed back to them, both individually and - where appropriate - as a group. Although the results of the Cattell 16PF and the Watson-Glaser CTA were of interest, what really struck them as extremely meaningful was the presentation of their Belbin Team Roles (arrived at using the Cattell 16PF). The distribution of these roles is to be found at Appendix B. These highly-intelligent individuals were only too aware that they did not function as well as a team as they thought they should, and expressed some anxiety about this. They were intrigued at what they saw as the accuracy and elegance of the analysis of their group as shown by the distribution of the Belbin team roles. The Group CEO found the use of the Belbin model to be illuminating and useful in that it provided him with a framework that he could employ when considering the behaviour of the members of his top team. He also said the team roles were valuable in that they allowed discussion to take place about the behaviour of individuals in a depersonalized way (e.g. Tom acts like that because he is a Monitor Evaluator).

It may be seen from Appendix B that this team consisted mainly of Plants and there are two common difficulties associated with dealing with such particularly clever people. Although these individuals are creative (for this team role Belbin adopted the existing Cattell formula for Creative Disposition), their emotional and intellectual independence usually means that they do not fit well in teams. Furthermore, when they are team members, their creative dispositions may lead to their abounding in ideas or, just as likely, opting out of group discussions and becoming inactive because their sensitive natures have been affected by the implied criticism involved in the rejection of their ideas. Although this team displayed both types of behaviour, the former predominated, for, while a great deal of discussion took place, relatively little action appeared to flow from this.

Although it is unusual to find a Plant holding a CEO post in an established organisation, it is by no means uncommon to find them at the helm in newly-formed enterprises. Although the Group Managing Director was found to have the Completer/Finisher as his team role, his behaviour was much more akin to that of the Plant which was found to be his secondary role. Indeed, as he achieved a high score on the Watson-Glaser CTA and was the inventor of the original and major product sold by the organisation, in many ways he possessed many of the personal qualities of the sort of person Belbin described as a Super Plant (Belbin, 1981). It might be predicted that such a person would experience problems in coping with the changes implied in managing a larger and more sophisticated organization. In the past, the Group Managing Director had made most, if not all, of the major decisions, and was very much the driving force in the business. His colleagues had

always interacted with him in this way and they, too, found it difficult to adopt a more collegial approach even if they suspected that his solutions were not correct. What this group needed to do - in Argyris' terms - was to overcome their defensive routines i.e. the habitual ways which they had developed to protect themselves from embarrassment and threat.

Although they had high regard for the Group Managing Director and his considerable achievements, during personal interviews three of the four managing directors reporting to him expressed a degree of ambivalence in that they considered they were not really treated as chief executives, and yet one suspected that they would not all have really appreciated true delegation. What seemed critical in this group was the virtual absence of anyone in either of the two leadership roles, viz. Co-ordinator or Shaper. (Although the Group Finance Director and the CEO of Country B did have these as their secondary roles, their relative youth and lack of technical expertise in the industry concerned made it virtually impossible for them to exercise a leadership role within the group.) A more psychiatrically-oriented observer might ponder as to whether or not the founder had - albeit unconsciously - chosen as subordinates individuals that would not challenge his leadership. Over the three years that followed, the overall performance of this organization declined to the stage where it was merged with a larger concern.

In many ways this group exemplified the problems often encountered in organizations where technical experts are promoted to senior management posts. Although highly intelligent and technically able, they sometimes appear to lack an appreciation of the markets they serve and undervalue the importance of managerial tasks - particularly those in the human resource management area such as recruitment and selection or management development.

### **3. THE SOCIAL WELFARE ORGANISATION**

Work with this group of five senior managers took place in 1993. This team was responsible for the management of a major social welfare organisation which had many of the characteristics of what Burns and Stalker (1961) would have classified as a mechanistic organization. It was a major employer providing services over a large geographical area. The top management team completed the Belbin Self-Perception Inventory and Observer Reports on one another and the results obtained are shown at Appendix C.

As in the previous example, when these results were presented the group responded positively and remarked on how insightful the analysis appeared to be. They immediately noted that the Director had the Team Worker as his primary role (the word chosen most frequently from the list on the Observers Report to describe his behaviour was "caring") and pointed out how this team role exemplified his unassuming, "diplomatic" management style. Although the Director's formal position in the organization required him to fulfil a leadership role, some of this was largely of a ceremonial nature and much of the management of the concern was in the hands of his subordinates.

There were wry smiles amongst this group when it was explained that some interpersonal conflict could be expected between the two individuals with the Shaper team role, the Deputy Director and the Director of Operations, and it did indeed appear that relationships



between these two people were sometimes difficult. A noticeable gap in the distribution of team roles for this group was the absence of anyone with either the Plant or the Resource Investigator team roles as a primary role, although in the case of the latter, the Deputy Director did have this team role as his back-up role (i.e. a team role other than his primary role to which an individual has some affinity). As most of the activities of this organization - which has a long history of service in its field - were of a routine nature, the absence of the two roles primarily concerned with ideas was not seen as a great problem.

A more serious omission, however, was the absence of anyone occupying the Monitor Evaluator role. The group responded in an emotional way to this when this gap in the team roles was pointed out. They explained that in recent months they had been involved in a series of major property negotiations and had not fared as well as they might have done if they had had someone to analyse more critically the proposals put before them. Furthermore, in this organization, where trust was an important value, there had been some recent cases of fraud, which had made the top team aware that possibly they had been too trusting and should perhaps introduce some tighter control systems.

As this organization was a sub-unit of a much larger concern and members of the top team were appointed by head office, it did not have the capacity to alter the composition of its members. Nevertheless, they considered the analysis of their team using the Belbin approach to be illuminating and were determined to recognize the gap that had been revealed i.e. the need for someone to provide them with prudent advice. They decided that they would bring in someone (possibly as a consultant) with the appropriate skills as required.

#### **4. THE AUSTRALIAN CONSUMER GOODS COMPANY**

This work took place at the request of the organisation concerned as it wished to discuss the application of the Belbin Team Role model at its annual top management retreat. This well-known and highly-profitable company was facing a considerable number of difficulties from various groups in the environment in which it operated. Such problems were not likely to be overcome for a number of reasons and, furthermore, it was expected that the pressures to which they were subjected would increase. The distribution of team roles obtained is shown at Appendix D,

It can be seen immediately that this team, consisting of six senior people, had four who had the Shaper as their primary team role. One would expect the degree of conflict between such a group of opportunistic, tough-minded, emotional and extroverted individuals to be considerable and, indeed, this appeared to be the case. This situation can sometimes be ameliorated by a team member with the trusting and sensitive personality of the Team Worker, but no individual in this group had this for either a primary or secondary role. One would predict, therefore, that this would be a tough no-nonsense and highly competitive organizational culture.

Apart from the likelihood of a high degree of internal conflict, the distribution of team roles also showed an absence of anyone with either the Plant or Resource Investigator roles. This suggests that this team is unlikely either to generate novel solutions to the problems they faced or to import new ideas from outside the organisation. It was put to them that the analysis of the team roles suggested that this was a team which could perform well in a

steady-state situation, but - because of the absence of Plants and Resource Investigators - might experience problems in attempting to cope with rapid change.

Although the Group CEO accepted the results obtained, he did not wish to pursue any further work involving the writer as a facilitator. He did, however, take some steps to improve the functioning of his top team, but details of these are not available. It should be noted, however, that within a year of the original study on the composition of the team roles, the share price of this major company was reduced by 50 per cent and the Group CEO and a number of his immediate subordinates were no longer employed within the organization. When a draft copy of this paper was sent to the person who had been the Group Chief Executive (now the managing director of another major international concern) for comment, he observed that "...it was a long bow to link (i.e. direct causal effect) the management team mix weaknesses to the subsequent management changes and performance downturn." It was not the intention of the writer to do this as clearly many factors other than the composition of the top team are likely to be involved in any reduction in the performance of an organization. Nevertheless, it is interesting to note that whenever this example has been used for teaching purposes with either MBA students or managers attending executive programme, invariably it is predicted that such a team would not be viable in coping with a turbulent environment!

## 5. DISCUSSION

When the results of the Belbin team role assessment were presented to these three top management teams, all found them to be meaningful. The writer has presented Belbin team results in this way to twelve teams, and in all cases the individuals concerned perceived the results given to them as being a reasonably accurate reflection of how their teams were, in fact, made up. What was also noted, however, was that even in organizations that were convinced that the findings were accurate, the steps taken to remedy the gaps identified were usually minimal. There were several reasons for this.

In the case of the Australian Multi-National Corporation, this group were not really "a team" at all and could be seen in a number of ways as consisting of two sub-groups. One sub-group consisted of the Group CEO, the Director - R & D and the Finance Director (all located at the Head Office), and the other, the CEOs. The CEO of the Australian company (also located at the Group Head Office) enjoyed membership of both sub-groups, but it was a matter of some concern to the other CEOs that his office was located at the Group Head Office in close proximity to that of the Group CEO. Nadler & Tushman (1990) have drawn attention to the importance for team functioning that those concerned have a perception of a common fate i.e. individual members believe that the success of the team will, in the long run, be more salient to them than individual short-term success. This was most certainly not the case in this organization, despite various valiant efforts on the part of the Group CEO. The CEOs of the subsidiaries in the various countries tended to concentrate almost entirely on their own part of the organisation and only combined in order to ward off further requests for funding from the head office. Nevertheless, the team in which they were members was the major strategy group for this company and, as Hamel & Prahalad (1994) have noted in another context, they needed not only to sustain the position of the Corporation in its existing markets, but to ensure its position in the markets of the future.

As the financial position of this organization deteriorated, the stress levels for member of this group rose considerably and one outcome of this was that they concentrated even more on their individual responsibilities than they had done previously. As Katzenbach and Smith (1993) note, however, such behaviour is to be expected. When failure occurs, it is normally the CEO that is replaced - not the top team. Hence it is understandable that this group would not challenge the Group CEO and he, in turn, may have found it particularly difficult at that time to share major responsibilities with anyone. A further problem he faced was that, with one exception, all the members of this top team had been with him since the early days of the organization. This long association made him loathe to remove any of them from their posts, even if he had doubts about an individual's competence. Although convinced that the Belbin exercise really had pinpointed urgent needs for change in the top team, no action was taken apart from attempting to fill gaps in the team roles when a new Group Marketing Director was appointed.

In the case of the Social Welfare Organisation, both their organizational structure and the membership of their regional top team were prescribed. Although fascinated by the results obtained and claiming that they were useful in interpreting previous experiences this top team had undergone, the flexibility that could be exercised was minimal. The most they could do, therefore, was to note their deficiencies as a group and to bear these in mind i.e. by bringing in the skills and expertise normally provided by a Monitor Evaluator.

Within the Australasian Consumer Goods Company, discussion on the results presented carried on for many hours. One of these involved was sufficiently interested in the Belbin approach to ask the writer to see if it would be possible to conduct a similar exercise with his management team, but this approach was not followed up either by this individual or the writer. Although, as mentioned above, the person who was previously the CEO of the Australasian Consumer Goods Company has reported that some work did take place to rectify some of the team role imbalances uncovered, no details of this are available.

Perhaps these difficulties in actually changing the team reflect some of the problems inherent in attempting to use research findings, arrived at in an experimental situation, in the "real world" of organizations, where so many factors impinge upon the situation. Had these groups taken more steps to improve their performances as teams, would this have reflected in the performance of their organizations? The answer to this question is far from clear cut. It has been known for many years that improvements in teamwork do not always lead to increases in productivity. The phenomenon of "social loafing", for example, was first noted by Ringelmann (1913) who found that when students were pulling on a rope the average pull of individuals was 85 kilograms, but that the average pull of groups of seven was only 450 kilograms - 75 per cent of the total of their individual efforts. In a review of the research on team building in organizations, Tannenbaum et al (1992) suggest that such interventions have a positive impact on attitudes, but no reliable impact on team performance. Similarly, Sinclair (1992) has expressed doubts about what she perceives as a panacea offered by the "team building industry". She points out that some individuals will never perform well in team situations and, indeed, there may be cases where the team approach is inappropriate.

Although cited in many management and organizational behaviour textbooks (eg. Armstrong, 1992; Huczynski and Buchanan, 1991; Knowles, 1990; McKenna, 1994) as a method of selecting and training teams, in the last couple of years some concerns have

been expressed regarding both the taxonomy of roles put forward by Belbin and the psychometric properties of his Self-Perception Inventory (BTRSPI).

Furnham, Steele and Pendleton (1993), after carrying out three studies on the BTRSPI, expressed considerable doubts about its psychometric properties and concluded that neither the internal reliability nor the factor structure gave confidence that it could have predictive or construct validity. They also expressed concern about the norms available and the construction of the questions. Belbin (1993) responded by pointing out that the BTRSPI was not designed as a psychometric instrument - it was included as an appendix to his original textbook in order to provide readers with an opportunity to carry out a simple "do it yourself exercise" in order to gain some insight into their own team roles. As a self-standing instrument, therefore, the Self-Perception Inventory does not exist, despite its extensive use in the field of management education! Also in his response, Belbin observed that Furnham et al. in their evaluation had not used the questionnaire in the way recommended and, in particular, they had not included the results obtained from the reports by independent observers (as incorporated in the Interplacesystem). He also added that although personality differences probably underline team roles, other factors such as value systems and learned behaviour were also significant. (Furnham et al. are also equally critical of another approach to the measurement of team roles developed by McCann and Margerison (1989) which they claim appears to have little or no evidence of the factorial structure of the questionnaire [to confirm the classificatory/taxonomic scheme put forward], nor any evidence of the predictive or construct validity of the test. However, it was noted that this instrument does have norms and evidence of internal reliability and concurrent validity.)

In addition to the BTRSPI it is, of course, possible to arrive at the Belbin team roles utilising other psychometric instruments. Dulewicz (1995) tested the inter-method reliability of obtaining the team roles using data obtained from the Cattell 16PF and the Occupational Personality Questionnaire (Seville et al, 1992) completed by 100 individuals attending a management programme. This study provides some evidence for the factor structure and the concurrent and construct validity of the team roles identified by Belbin and his colleagues, but does not lend support for the BTRSPI. Dulewicz also notes that probably the only evidence published in support of the predictive validity of the Belbin team roles was that concerning the rank order predictions and actual course results for three courses at Henley (Belbin et al, 1976).

Finally, Dawson, Lord and Pheiffer (forthcoming) have examined the test-retest reliability of the Belbin Team Roles Self-Perception Inventory with a sample of 130 students undertaking a residential experience as part of a management education programme. They report a test-retest reliability coefficient of .594. Although this value is low, it should be borne in mind that personality measures (to which the BTRSPI is similar) tend to have test-retest reliabilities in the region of .60 to .70 and it is possible that with 130 respondents the likely margin of error could well bring the result into this range. There was also a three-month time interval between the administration of the questionnaire, during which time the respondents were, presumably, introduced to the Belbin team roles - an exposure which well have influenced their responses on the second testing.

## 6. CONCLUSION

Although subject to criticism on psychometric grounds, as this paper has shown, the Belbin approach has been found to be extremely useful in the field of management development. Because of its importance in the field of Human Resource Management throughout the world, the need for an objective evaluation of the validity and reliability of the Interplace system appears to be an urgent one. Although it is likely that such additional research will add to the pioneering work of Belbin and his associates, this paper has shown that for many years managers have found the Belbin team roles to be a useful and interesting way of examining the functioning of the teams of which they are members. They also report that such team roles are valuable in providing them with labels they can use to discuss group processes. In the experience of the writer, if time allows (and it is appreciated that this is sometimes difficult to obtain in busy organizations), and a psychologist or other accredited person be available, a number of benefits accrue from using Interplace as one of a battery of such instruments. In this way it is possible not only to arrive at team roles, but to gain insight into a range of other factors (personality characteristics; creativity levels; management styles; etc) also likely to influence the performance of a team.

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SUMMARIES OF BELBIN TEAM ROLES

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**PLANTS (PL)**

**CHARACTERISTICS:** Plants are innovators and inventors and can be highly creative. They provide the seeds and ideas from which major developments spring. Usually they prefer to operate by themselves at some distance from the other members of the team, using their imagination and often working in an unorthodox way. They tend to be introverted and react strongly to criticism and praise. Their ideas may often be radical and may lack practical constraint.

They are independent, clever and original and may be weak in communicating with other people on a different wave length.

**FUNCTION:** The main use of a PL is to generate new proposals and to solve complex problems. PLs are often needed in the initial stages of a project or when a project is failing to progress. PLs have usually made their mark as founders of companies or as originators of new products.

Too many PLs in one organization, however, may be counter-productive as they tend to spend their time reinforcing their own ideas and engaging each other in combat.

**RESOURCE INVESTIGATORS (RI)**

**CHARACTERISTICS:** Resource Investigators are often enthusiastic, quick-off-the-mark extroverts. They are good at communicating with people both inside and outside the company. They are natural negotiators and are adept at exploring new opportunities and developing contacts. Although not a great source of original ideas, the RI is effective when it comes to picking up other people's ideas and developing them. As the name suggests, they are skilled at finding out what is available and what can be done. They usually receive a warm reception from others because of their own outgoing nature.

RIs have relaxed personalities with a strong inquisitive sense and a readiness to see the possibilities in anything new. However, unless they remain stimulated by others, their enthusiasm rapidly fades.

**FUNCTION:** RIs are good at exploring and reporting back on ideas, developments or resources outside the group.

They are the best people to set up external contacts and to carry out any subsequent negotiations.

They have an ability to think on their feet and to probe others for information.



## **MONITOR EVALUATORS (ME)**

**CHARACTERISTICS:** Monitor Evaluators are serious-minded, prudent individuals with a built-in immunity from being over-enthusiastic. They are slow in making decisions preferring to think things over. Usually they have a high critical thinking ability. They have a capacity for shrewd judgements that take all factors into account. A good ME is seldom wrong.

**FUNCTION:** MEs are best suited to analysing problems and evaluating ideas and suggestions. They are very good at weighing up the pro's and con's of options. To many outsiders the ME may appear as dry, boring or even over-critical. Some people are surprised that they become managers. Nevertheless, many MEs occupy strategic posts and thrive in high-level appointments. In some jobs success or failure hinges on a relatively small number of crunch decisions. This is ideal territory for an ME; for the man who is never wrong is the one who scores in the end.

## **CO-ORDINATORS (CO)/CHAIRMAN**

**CHARACTERISTICS:** The distinguishing feature of Co-ordinators is their ability to cause others to work towards shared goals. Mature, trusting and confident, they delegate readily. In interpersonal relations they are quick to spot individual talents and to use them in the pursuit of group objectives. While COs are not necessarily the cleverest members of a team, they have a broad and worldly outlook and generally command respect.

**FUNCTION:** COs are well placed when put in charge of a team of people with diverse skills and personal characteristics. They perform better in dealing with colleagues of near or equal rank than in directing junior subordinates. Their motto might well be "consultation with control" and they usually believe in tackling problems calmly. In some firms COs are inclined to clash with Shapers due to their contrasting management styles.

## **SHAPERS (SH)**

**CHARACTERISTICS:** Shapers are highly motivated people with a lot of nervous energy and a great need for achievement. Usually they are aggressive extroverts and possess strong drive. SHs like to challenge others and their concern is to win. They like to lead and to push others into action. If obstacles arise, they will find a way round. Headstrong and assertive, they tend to show strong emotional response to any form of disappointment or frustration.

SHs are single-minded and argumentative and may lack interpersonal understanding. Their's is the most competitive team role.

**FUNCTION:** SHs generally make good managers because they generate action and thrive under pressure. They are excellent at sparking life into a team and are very useful in groups where political complications are apt to slow things down; SHs are inclined to rise above problems of this kind and forge ahead regardless. They are well suited to making necessary changes and do not mind taking unpopular decisions. As the name implies, they try to impose some shape or pattern on group discussion or activities. They are probably the most effective members of a team in guaranteeing positive action.

## **IMPLEMENTERS (IMP) COMPANY WORKER**

**CHARACTERISTICS:** Implementers have practical common sense and a good deal of self-control and discipline. They favour hard work and tackle problems in a systematic fashion. On a wider front the IMP is typically a person whose loyalty and interest lie with the Company and who is less concerned with the pursuit of self-interest. However, IMPs may lack spontaneity and show signs of rigidity.

**FUNCTION:** IMPs are useful to an organization because of their reliability and capacity for application. They succeed because they are efficient and because they have a sense of what is feasible and relevant. It is said that many executives only do the jobs they wish to do and neglect those tasks which they find distasteful. By contrast, an IMP will do what needs to be done. Good IMPs often progress to high management positions by virtue of good organizational skills and competency in tackling necessary tasks.

## **TEAM WORKERS (TW)**

**CHARACTERISTICS:** Team Workers are the most supportive members of a team. They are mild, sociable and concerned about others. They have a great capacity for flexibility and adapting to different situations and people. TWs are perceptive and diplomatic. They are good listeners and are generally popular members of a group. They operate with a sensitivity at work, but they may be indecisive in crunch situations.

**FUNCTION:** The role of the TW is to prevent interpersonal problems arising within a team and thus allow all team members to contribute effectively. Not liking friction, they will go to great lengths to avoid it. It is not uncommon for TWs to become senior managers especially if line managers are dominated by Shapers. This creates a climate in which the diplomatic and perceptive skills of a TW become real assets, especially under a managerial regime where conflicts are liable to arise or to be artificially suppressed. TW managers are seen as a threat to no one and therefore the most accepted and favoured people to serve under. Team Workers have a lubricating effect on teams. Morale is better and people seem to co-operate better when they are around.

## **COMPLETER-FINISHERS (CF)**

**CHARACTERISTICS:** Completer-Finishers have a great capacity for follow-through and attention to detail. They are unlikely to start anything that they cannot finish. They are motivated by internal anxiety, yet outwardly they may appear unruffled. Typically, they are introverted and require little in the way of external stimulus or incentive. CFs can be intolerant of those with a casual disposition. They are not often keen on delegating, preferring to tackle all tasks themselves.

**FUNCTION:** CFs are invaluable where tasks demand close concentration and a high degree of accuracy. They foster a sense of urgency within a team and are good at meeting schedules. In management they excel by the high standards to which they aspire, and by their concern for precision, attention to detail and follow-through.

## **SPECIALISTS (SP)**

**CHARACTERISTICS:** Specialists are dedicated individuals who pride themselves on acquiring technical skills and specialized knowledge. Their priorities centre on maintaining professional standards and on furthering and defending their own field. While they show great pride in their own subject, they usually lack interest in other people's. Eventually, the SP becomes the expert by sheer commitment along a narrow front. There are few people who have either the single-mindedness or the aptitude to become a first-class SP.

**FUNCTION:** SPs have an indispensable part to play in some teams, for they provide the rare skill upon which the firm's service or product is based. As managers, they command support because they know more about their subject than anyone else and can usually be called upon to make decisions based on in-depth experience.

***Australian Multi-National Corporation  
Most/Least Preferred Team Role - Derived from Cattell 16PF***

Position	PL	RI	CO	SH	ME	TW	IMP	CF
Group CEO	2	0	-	-	-	0	-	1
CEO Australia	-	2	-	-	-	1	0	-
CEO Europe	1	2	-	2	-	0	-	-
CEO United Kingdom	1	-	-	-	2	-	0	-
CEO United States	1	-	-	-	2	-	0	-
Director R & D	2	-	-	0	1	-	-	-
Finance Director	1	1	2	0	-	-	-	-

***Key***

1 = Primary Role  
2 = Secondary Role  
0 = Least Preferred Role

PL = Plant  
RI = Resource Investigator  
CO = Co-Ordinator/Chairman

SH = Shaper  
ME = Monitor Evaluator  
TW = Team Worker

IMP = Company Worker/Implementer  
CF = Completer/Finisher

***Social Welfare Organisation  
Most/Least Preferred Team Roles***

Position	PL	RI	CO	SH	ME	TW	IMP	CF	SP
Director	-	-	-	0	-	1	2	-	-
Deputy Director	-	2	-	1	0	-	-	-	-
Director of Administration	-	0	-	-	-	-	-	2	1
Personnel Director	-	-	2	0	-	1	-	-	-
Director of Operations	0	-	-	1	-	2	-	-	-

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SP = Specialist

***Australasian Consumer Goods Company  
Most/Least Preferred Team Roles***

Position	PL	RI	CO	SH	ME	TW	IMP	CF	SP
Group CEO	0	-	2	1	-	-	-	-	-
Director - Services	-	0	-	-	1	-	-	-	2
Director - R & D	-	-	-	1	2	0	-	-	-
Director - Marketing	0	-	1	-	-	-	-	2	-
Director - Production	-	-	-	1	-	0	-	-	2
Regional Director	-	0	-	1	-	-	2	-	-

***Key***

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