Developing teams and the allocation of rewards within a team environment

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Developing teams and the allocation of rewards within a team environment

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Abstract

Team development requires commitment and effort from senior managers who must be prepared to challenge the "status quo" in order to provide an environment within which teams can flourish. Furthermore, team development is not a finite activity and requires sustained efforts to improve performance. Understanding the characteristics of effective teams and recognising the restraints within which the team operates can enhance the effectiveness of a team development programme. This paper explores whether effective teams exhibit particular characteristics and how these characteristics can be encouraged in establishing a new team.

Rewards and recognition processes have been identified as key characteristics of effective teams and efforts should be made to develop appropriate system. It can be argued that individual rewards are not appropriate within a team environment. However, there is little evidence that companies have developed processes for the allocation of financial rewards on a team basis. As a consequence, it is likely that any attempts to develop team rewards will need to start from first principles. The process outlined in this paper provides practical advice to those involved in the establishing such a system.

Keywords: Construction, teams, partnering, alliance, rewards, financial

Introduction

Partnering is a structured management approach to facilitate team working across contractual boundaries and can be project specific or strategic. The main critical success factor for partnering is the commitment of all partners at all levels to work together for mutual success. The result should be that the partnering agreement, rather than the contract documents, drives the relationship between the parties. Partnering should not be confused with long-standing relationships, negotiated contracts or preferred supplier arrangements, which lack the structure and objective measures that must support a partnering relationship.

The central purpose of partnering is to improve performance. Research (Bennett and Jayes 1995) has found that improvements in productivity typically range from 5-20 per cent, with the greatest efficiencies resulting from strategic arrangements. In addition, there are a number of additional
benefits such as improvements in customer focus, quality, efficiency, speed, certainty, responsiveness, understanding, team spirit, innovation and safety together with an associated decrease in claims and litigation.

Partnering is not a new concept - the process has been used throughout the oil and gas industries for many years and within such industries there are well-documented case studies of the advantages to be gained (Knott 1996). The process is not a totally new way of working within the construction industry; however, despite the extensive use of teams and numerous studies into their effectiveness, the behaviour of teams is not fully understood and failure rates are high. For example, within the USA, 80 per cent of Fortune 500 companies have half their employees on teams but there is evidence of a 50 per cent failure rate (Joinson 1999). In a separate study (Mendzela 1997) highlights that 60 per cent of US teams fail.

Comparison of Traditional Procurement Arrangements with Partnering and Alliancing

Traditional Procurement Arrangements
In most traditional types of procurement each organisation tends to work towards its own objectives with the Client taking responsibility for the co-ordination of each engineering discipline, as illustrated by Figure 1. Communication and interfaces are difficult to manage with little interface between the contractors. Bennett (1995) identified that reciprocal interdependencies comprise tasks that are progressed in a series of steps whereby the output from one group becomes the input for another group and are typical of construction projects. These relationships are difficult to manage, requiring close contact and good communications between the interdependent teams.

Figure 1: Traditional approach to project management
Partnering and Alliencing Arrangements
The term partnering describes an arrangement between two organisations, usually a client and a contracting organisation. Whereas the term alliencing describes an arrangement between more than two organisations, for example, a client and a number of different contracting organisations. One of the key features of partnering and alliencing arrangements is that the organisations agree to work collaboratively through the establishment of a joint project team, see Figure 2. The joint team allows improved communications and improved co-ordination of multi-disciplinary activities. If managed correctly, an alliencing arrangement can overcome some of the problems with traditional project management. The use of joint project teams appears to be common practice throughout many industries across the world, for both strategic and project specific arrangements.

![Joint Project Team](image)

*Figure 2: Alliencing team arrangements*

Initiating, Building and Maintaining Partnering and Alliencing Arrangements
Partnering and Alliencing arrangements can be used within the public and private sectors of the construction industry. However, within the public sector, European Union and UK legislation designed to ensure competition and transparency in transactions. As a consequence, an approach described as post award project specific partnering emerged to allow Clients to select and subsequently partner with a contractor through normal tendering processes (ECI 1997). However, the new EU legislation will make longer term relationships more acceptable.

Alliance Team Building
The term ‘team building’ is often used to describe attempts to make a team effective. However, DeMarco and Lister (1987) believed that this implies that the process is merely a formality and that
any assortment of individuals can be built into a team. They suggested that there can be no guarantee that a team will truly 'jell' (sic). However, they argue that much can be done to encourage the team to become effective. For example: Bennett and Jayes (1995) suggested that a process of 'internal alliancing' must take place prior to entering into any arrangements with external companies.

Team Development
Construction projects have traditionally concentrated upon three criteria: time, cost and quality, at the expense of the people dimension (Johns 1995). However, team development is not a finite activity that can be neatly achieved by a training day at the start of a project and must be viewed as a long-term commitment through a number of stages. Bee (1997) suggested that a failure to address the barriers to efficient and effective working is one of the main reasons why project teams underperform. Tuckman and Jensen (Buchanan 1997) proposed that teams pass through five stages of: Forming; Storming; Norming; Performing; and Adjourning.

Workshops
Research by Bee (1997) suggested that focused attention on any form of team integration or the establishment of team processes tends to be the exception rather than the norm for project teams. This view conflicts with evidence from the construction industry, which demonstrates that 'team workshops' are current practice for teams embarking upon collaborative working arrangements. Bennett and Jayes (1995) also supported the use of team workshops and suggested that an initial workshop should be held within one month of contract award to establish how the organisations will work together. The use of workshops is not the prerogative of alliance teams and is also adopted within single organisation teams (Jackson 1998).

Vision
A common vision or purpose is a pre-requisite for an effective team. Wageman (1997) stated that a clear and engaging sense of why the group exists is a characteristic of superb teams. Lownds (1998) identified that on the Heathrow Express project, the move towards collaborative working would have been eased if the senior management team had jointly created a vision at the outset of the project. One way in which a common vision can be identified is through a 'Vision' or 'Mission' statement. Blount (1998) identified that this was the first step in 're-engineering' a nursing department at The Children's Hospital of Buffalo. However, research by Covey (1998) suggests that while 85 per cent of organisations had a mission statement, only 15 per cent had attempted to follow it.
Align Objectives
The alignment of objectives is essential to ensure that individual efforts are translated into team effort, which results in a positive impact upon the overall programme (Bee 1997). Unsynchronised objectives of organisations result in waste and increased costs. Buchanan (1997) suggested that introducing super-ordinate goals that are desired by both groups and only achievable through the joint efforts and pooled resources of otherwise conflicting groups could reduce inter-group conflict. Williams and Lilley (1993) identified that within an alliance, problems in communication may result from differences in corporate cultures. This may be overcome by the development of a specialized language (Kets De Vries 1999). In accordance with recommendations made by Bennett (1995) and Masciarelli (1998), consistency in the use of terminology can be achieved through the production of a contract dictionary.

Strategic Processes
A financial incentive arrangement can provide each alliance organisation with the opportunity to take a financial share of the benefits arising from collaborative working. Rule and Keown (1998) identified that gaining clarity around how strategic decisions will be made helps to bridge the cultural gaps between alliance partners. In particular, they suggested that there are typically cultural gaps in the speed of decision making and attitude towards risk. The alliance organisations agree to undertake the project for a fixed price, known as the Target Cost. Any deviation between the final out-turn cost and the Target Cost would be shared between the alliance organisations in pre-agreed proportions.
Characteristics of Effective Alliances and Teams
Buchanan (1998) defined group effectiveness as: ‘the adequacy of a group in performing its functions as an organized system and achieving its task-related objectives’. Rule and Keown (1998) classified top performing alliances as those which exceed partners’ expectations and suggested that companies can improve their prospects for success by concentrating upon a number of key ‘competencies’ which are characteristics of the top performing alliances. Literature suggests that effective teams and effective alliance arrangements exhibit a number of common characteristics: Purpose; Measurement of Progress; Effective Processes; and Constructive Interpersonal Relationships, as summarised in Tables 1 and 2. However, each characteristic cannot be considered in isolation as there is a considerable inter-relationship between the categories.
Table 1: Characteristics of successful alliancing arrangements

<table>
<thead>
<tr>
<th>CHARACTERISTIC</th>
<th>SUPPORTING REFERENCE</th>
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</thead>
<tbody>
<tr>
<td>Purpose</td>
<td></td>
</tr>
<tr>
<td>• Common sense of purpose</td>
<td>Knott (1996), Rule and Keown 1998</td>
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<tr>
<td>• Co-operation in working towards mutual objectives</td>
<td>Bennett and Jayes (1995)</td>
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<tr>
<td>Resources</td>
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<td>• Empowerment of individuals</td>
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<tr>
<td>• Making use of diversity of talent from each of the organisations</td>
<td>Costain/Thames Water, Pinnell (1999)</td>
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<tr>
<td>• Change in approach by supporting functions e.g. finance, training, to enable the achievement of partnering goals</td>
<td>Bennett and Jayes (1995)</td>
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<tr>
<td>Effective Processes</td>
<td></td>
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<tr>
<td>• Appropriate Systems</td>
<td>Costain/Thames Water, Pinnell (1999)</td>
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<tr>
<td>• Decision making – Joint formulation and implementation of decisions by the team in the best interests of the project</td>
<td>Bennett and Jayes (1995), ECI (1997)</td>
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<td>• Problem Resolution - Shared responsibility for resolution of problems</td>
<td>Bennett and Jayes (1995), CIB- Tunstall bypass, Pinnell (1999),</td>
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<tr>
<td>• Recognition and reward processes - Equitable sharing of rewards</td>
<td>Bennett and Jayes (1995), Galliford, ECI (1997)</td>
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<tr>
<td>Constructive interpersonal relationships</td>
<td>CIB- Tunstall bypass, Galliford</td>
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### Table 2: Characteristics of effective teams

<table>
<thead>
<tr>
<th>Author</th>
<th>Purpose</th>
<th>Measurement</th>
<th>Resource</th>
<th>Effective Process</th>
<th>Constructive Interpersonal Relationships</th>
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Purpose
A number of authors (see Table 2) have suggested that a common sense of **purpose** is the basis of an effective team, providing a clear and engaging direction for all individuals. There is further agreement (see below) that a common sense of purpose can be achieved through the following:

- agreement of common objectives;
- mutual agreement of goals by the team; and
- alignment of the objectives of the team with that of the organisation.

**Agreement of Common Objectives**
Handy (1993) suggests that unless individuals in a group make specific efforts to agree on common objectives they will tend to promote their own interests at the expense of the group. This is further supported by Buchanan (1998), Heerman 1998 (1998), Mendzela (1997), Covey (1998), DeMarco and Lister (1987) and Bragg (1999a). In construction projects, it is the unsynchronised objectives of the parties, which results in waste, which translates into increased costs (Whitelaw 1999).

**Mutual Agreement of Goals**
Buchanan (1998) identified that establishing overall purpose is a managerial activity. However, the Blanchard Management Report (1998) demonstrated that if goals are enforced upon a team then it is unlikely that the team will experience a sense of excitement about their accomplishments and will be less inclined to meet deadlines and achieve goals. Further support is provided by Joinson (1999) who explained that The Unisys Corporation learned that simply asking its employees to implement a management decision did not ensure 'buy in' from the team. The individual team members should be responsible for agreeing the objectives and goals of the Joint Project Team. Heerman (1998) further supported this and argued that team visions are a product of individual visions and there is a need to support the team in identifying personal and professional goals and intentions. If members are fulfilling personal visions then they will be more engaged and passionate about their team contribution.

Although organisations should not attempt to enforce goals, teams should be encouraged to 'stretch' to improve their performance (Kets De Vries 1999). If stretch goals are met then members also experience an increased sense of pride and achievement. However, DeMarco and Lister (1987) warned against management attempting to impose an impossibly tight deadline to create a 'challenge'. Such an approach is likely to cause effort to slip and this can be explained by considering Handy’s (1993) views on competition, i.e. if the major determinants of success are not within the control of the team then the 'competition' will be seen as unfair and competitors are likely to withdraw. Within a partnering arrangement the use of ‘stretch targets’ allows team members to set their own targets and then seek ways to improve on them further. This was a key feature of the alliancing arrangement between BP and its partners in the development of facilities for the North Sea oilfields of Andrews and Cyrus (Knott, 1996).
Alignment of Team and Organisational Objectives
A number of authors further identify that the team goals must be:
- aligned with organisational goals (Anon (1999), Hyatt (1998) and Joinson (1999));
- consistent with the cultural values of the organisation (Hyatt 1998); and
- consistent with the values of the customer (Johns 1995).
Within an alliance arrangement it may initially appear to be impossible to align the goals of the team with those of two or more organisations each with its own culture. For example, the steady, role culture of many clients is very different to the task type culture (Handy 1993) typical of many contracting organisation, which must be flexible and sensitive to market conditions.

Measurement of Progress
The Measurement of Progress is a common characteristic of effective teams and alliances (see Tables 2 and 3). Johns (1995) suggested that people cannot work without goals or without knowing how well they are doing in relation to them. However, it is not practical for a team to measure its success against a single goal, i.e. the completion of a project, which may typically take from three to five years to complete (Holpp 1999). A number of authors (Holpp (1999), Brooks (1997) and Bragg (1999b)) all recommend that regular progress reviews should be undertaken to maintain group and individual accountability.

A regular review of progress allows the team to examine ways of becoming more efficient and effective in the future (Brooks 1997) which Egan (1998) identified as being one of the key characteristics of a partnering arrangement. However, this is not an activity which is the exclusive responsibility of senior management; the team itself should be self conscious about its own operation and should regularly review its own progress (Buchanan 1998). The team must set their own measurable objectives to enable them to determine the degree of their success (Joinson 1999, Kets De Vries 1999).

Regular progress reviews are already an essential feature in the management of construction projects and there are a number of well-developed approaches for monitoring and controlling projects (Bee 1997).

Resources
The category of Resources has been used to examine how individual team members and senior management influence the effectiveness of the team.

Senior Management
Within the previous section it was identified that team members should take responsibility for establishing goals and monitoring progress, roles traditionally undertaken by senior management. However, some form of management support is still required, partly in the form of physical
resources such as money, personnel etc. but also to nurture team spirit (Heerman 1998) and provide leadership (Bennis 1988), DeMarco and Lister (1987) and Cohen and Chang (1997)). Holpp (1999) also showed that management support will be essential as the use of a team may require changes to be made to existing processes (e.g. job descriptions) which may have implications elsewhere within the organisation.

Kets De Vries 1999 argued that, within an effective team, leadership is distributed and behaviour is egalitarian and participatory. Buchanan and Kets De Vries also suggested that the leadership role should be based upon expert knowledge rather than status or position power. The different power bases, which may be used by an individual to influence others, are discussed by Handy (1993). The Blanchard Management Report (1998) also identified that the need for expert power will necessitate that members become more flexible and share the responsibilities for leadership. However, not every employee will want or be able to accept the leadership role.

Bennis (1998), Johns (1995), Joinson (1999), Kets De Vries (1999) and Willis (1999) suggested that within a team, the leadership style should be one of coaching, to provide feedback and checkpoints to ensure that the team’s direction is consistent with overall strategy but avoiding rigid control that impairs creativity. Joinson (1999) suggests that managers must achieve a transition from ‘command and control’ to ‘coach and facilitate’ and the team leader may need to modify his behaviour as the team grows and changes.

According to McGregor (in Buchanan 1997), within effective teams, actions are clearly assigned to individual team members and carried out by them. This is important because there is evidence that individuals put less effort into a task when they share responsibility with others (Maginn and Harris in Buchanan 1997). Brooks (1997), Heerman (1998) and Johns (1995) agree that a single individual name should be associated with each task to ensure ownership and accountability. This view is also supported by Bragg (1998) who added that there must be group accountability and mutual responsibility for achieving results. The Blanchard Management Report (1998) suggested that this could be achieved if each member understands his role in realizing the vision of the team.

DeMarco and Lister (1987) identified two additional areas, which require management support and co-ordination. Firstly, senior support may be necessary when allocating individuals to teams, as individuals cannot function effectively if they are members of multiple teams. Handy (1993) identified that such a situation will result in conflict as team leaders will compete for available resources. Secondly, DeMarco and Lister also identified that management co-ordination is required to provide further opportunities to keep the team together on future projects. Bennet and Jayes identify that quality standards are achieved more consistently and the costs associated with negotiating and administering contracts are reduced when team members work together regularly. Such arrangements are fundamental requirements of a strategic partnering arrangement and result in even greater cost efficiencies than project specific alliancing arrangements.
Individual Members
Research by Wageman (1997) suggested that the design of the team has a greater impact upon team performance than effective coaching. Within the Xerox organisation, leaders of the most successful teams gave first priority to getting the team established. In selecting individual team members, it is essential that they possess the necessary skills and ability to complete the goals of the team (Hyatt 1998). However, Joinson (1999) suggested that training would be a necessity, as teams must be created from an existing pool of resources that do not necessarily possess the range of skills required. The need for training was supported by the Blanchard Management Report (1998) and Brooks (1997) who suggested that a team also provides individuals with opportunities to develop and learn new skills. This is of particular relevance to some staff who may be reluctant to ‘transfer’ to an alliance project team, especially when they are coming from a successful parent organization offering substantial benefits and security (Rule, Ross and Donogher 1999). In addition to skills and ability, individual team members need:

- the self discipline to be able to work independently (Anon 1999);
- to be empowered to make decisions (Kets De Vries 1999, Bragg 1999b); and
- the ability to think independently (Joinson 1999).

Skills and ability will not necessarily help the team in making and implementing decisions, solving problems or interacting with other team members. Consequently, a number of authors (Gregory 1999, Brooks 1997, Johns 1995, Senior (1997)) agree that individuals also adopt a team role in addition to their functional role. Team role theory was initially proposed by Belbin (Fisher (1998), Senior (1997), Handy (1993), Buchanan (1987)) in the early 1980’s and suggested that high team performance is associated with teams, which are balanced in terms of the team roles represented amongst team members. Team role theory is commonly used in the recruitment and selection of team members and in training associated with team development (Senior 1997). Belbin suggested that an individual’s propensity to adopt a specific team role is influenced by personality traits and some author’s suggested that personality can be identified through the use of psychometric tests (Fowler 1997).

Effective Processes
Effective teams pull together by using a common approach to both technical and interpersonal issues (Bragg 1999). In addition, high performing alliances have well defined work processes supported by an integrated infrastructure Rule (1999). In particular, effective teams had processes for:

- external and internal communication (Brooks 1997, Johns 1995);
- problem solving (Blanchard Management Report (1998) and Rule (1999)); and
- rewards and recognition (DeMarco and Lister (1987), Heerman (1998), Brooks (1997), and Gregory (1999)).
Communication
Each of the characteristics of a successful team is dependant upon effective communication. For example, Willis (1999) identified that communication is essential in establishing a common vision, providing feedback on progress and rewarding success. In addition, effective teams have intense communications across and between project teams, with customers and with management (Johns 1995). The nature of the communication must be open and consistent, allowing individuals to share information without blame or criticism.

In addition to formal, work related communication, individuals will also organize their own informal communication patterns (Buchanan 1998 and Groat 1997). Although communication associated with non-work issues will detract from the short-term team outputs, it contributes towards a more cohesive team, capable of greater performance in the long term. Buchanan (1997) agreed that regular interaction with others increases cohesiveness, resulting in increased satisfaction through the development of social and emotional ties.

Decision making
Wageman (1997) identified that teams with the prerogative to make their own decisions about how to manage their work outperform those that do not. Intervention by a manager is shown to compromise the team's sense of ownership as when problems arise the team may attribute the cause to the leader not themselves. This is further supported by the Blanchard Management Report (1998) which identified that the most effective decision making and problem solving methods encourage participation from the team members. Wageman (1997) also recommended a proactive stance to problem solving, with individuals encouraged to experiment with new ways of working and empowered to take action to solve problems. According to Johns (1995), teams should establish procedures for analysing, reporting and reviewing performance against baselines together with processes for considering, approving and implementing change.

Within an alliance, there must be a mutually agreed process for decision making which allows each individual organisation to be fairly represented. Rule (1999) suggested that this could be achieved by assigning a balance of executives from each organisation and establishing a governance board with equal representation from each organisation. This approach has also been adopted on a number of projects in the oil industry (Knott 1996).

Constructive Interpersonal Relationships
Handy (1993) identified that 65 per cent of the most important unsolved problems of organisations include intergroup rivalries, lack of co-operation and poor communications. Groat (1997), Johns (1995), and DeMarco and Lister (1987) agreed that constructive interpersonal relationships are essential to the effectiveness of a team. Such relationships allow views to be shared and involve different problem solving styles, which improve the quality of decision making. Handy (1993)
added that compatibility between individuals is more crucial if the task is complex and requires a high degree of interaction between individuals.

The Hawthorne Studies conducted by Mayo between 1927 and 1932 demonstrated the influence of social factors on workplace behaviour and signalled the birth of the Human Relations School of Management (Buchanan 1997). A common conclusion drawn from the Hawthorne Studies was that a happy or satisfied worker was a productive one. However, in recent years this relationship has been disputed (Handy 1993) and others have suggested that it is increased productivity that results in increased satisfaction. The characteristics of effective interpersonal relationships, as identified by literature, are summarised in Table 3.

Table 3: Effective interpersonal relationships

<table>
<thead>
<tr>
<th>Acceptance of group conclusions</th>
<th>Acceptance of individuals</th>
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<tbody>
<tr>
<td>• Results oriented environment</td>
<td>Tolerance of and sensitivity to individual differences awareness of strengths and weaknesses</td>
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<td>• Relinquishment of personal agendas</td>
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<td>Constructive external relationships</td>
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<td>• Seek best practice from outside the team</td>
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<td>• Review intergroup boundaries</td>
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<td>• Recognise problems of other groups</td>
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<td>Openness and honesty</td>
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<td>• Feedback given and received</td>
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<td>• Promises and commitments honoured</td>
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<td>• Views expressed without fear of reprisal, ridicule or retaliation</td>
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<td>• Conflict managed constructively</td>
<td></td>
</tr>
<tr>
<td>• Problems confronted</td>
<td></td>
</tr>
<tr>
<td>• High morale</td>
<td></td>
</tr>
</tbody>
</table>

Rewards

Wageman (1997), in particular, identified that team rewards are strongly associated with superior teams. However, there is debate over the extent to which such systems are important. For example, results of a survey by Sweeney (1999) suggested that rewards are less important to team members than the other characteristics of effective teams, particularly a clear vision. In addition, Sweeney (1999) warned that teams should not overly focus on rewards but suggest that rewards must be complementary to other team factors and should be used to reinforce certain activities. However, it must be recognised that rewards may be either financial or non-financial.
Financial Rewards
One of the most common arrangements for the allocation of financial rewards is the use of performance related pay (PRP), which rewards individuals for their personal contribution to organisational success. The most widely used form of PRP relates annual incremental progression to individual salary (Torrington 1995). The performance of each individual is measured against personal objectives on an annual basis. The extent to which the personal objectives are achieved determines the amount of the financial increment awarded.

Non-financial Rewards
Many companies make increased use of non-financial rewards to recognise team success (Torrington 1995). For example, Eddie Bauer, a clothing retailer, uses an array of prizes, such as certificates, for good behaviour, which are argued to have a powerful effect because they are more public than pay rises (Cairncross, 1999).

The Use of Individual Rewards within a Team Environment
Despite the widespread use of PRP, there are a number of disadvantages associated with its use within a team environment. For example, Bee (1997) and Torrington (1995) suggested that:

- individuals are encouraged to concentrate upon their own objectives;
- the arrangement does not encourage the concept of working as a team towards team goals and can act divisively to damage relationships within a team; and
- managers may concentrate upon individual rather than team performance.

According to Bee (1997), the focus is now shifting away from individual performance-related pay and turning towards team pay and other methods of rewarding the whole team. He also suggested that team pay works best for teams which are:

- stand alone units established for a specific purpose with clear targets;
- composed of people whose work is interdependent; and
- managed by project leaders adopting a facilitating/coaching style of leadership.

Bee (1997) and Brooks (1997) both recognised that delivering results depends upon the individuals and the team both working at optimum performance. These views suggest that a reward system should recognise the performance of both the individual and the team. However, this view is not shared by Wageman (1997) who warned that the use of mixed rewards could send mixed signals to the team and undermine its ability to operate as an effective unit.

Arrangements for the Distribution of Team Rewards
There are a number of possible arrangements, which may be used to distribute rewards as summarised in Table 4. The literature review also identified a ‘sociometric’ approach proposed by Weinberger (1998), which allocates rewards based upon the extent to which team members collaborate with one another within the team. Measurement is based upon a short questionnaire,
which is completed by each team member. Scores from the questionnaire are represented in a
matrix and a number of calculations are undertaken to determine the relative allocation of reward
for each individual. The final allocation of reward depends on the ‘centrality’ of a member to the
team. The measurement of centrality considers the importance of an individual to other team
members. A higher proportion of the overall reward would be gained by an individual heavily relied
upon by others. Weinberger’s (1998) proposals were based upon a small team of only six members
and by modifying the proposals to suit a larger team the process becomes more complicated,
involving several calculations on a large matrix.

Table 4: Possible arrangements for the allocation of rewards

<table>
<thead>
<tr>
<th>Method</th>
<th>Advantage</th>
<th>Disadvantage</th>
</tr>
</thead>
</table>
| 1) Divide the sum equally between all members | • Simple to administer  
• Most commonly used system of allocation | • Assumes that each member makes an equal contribution towards the achievement of the team goal  
• Offers little incentive to more senior staff  
• Evidence suggests that this is viewed with disfavour by employees (Weinberger 1998) |
| 2) Divide the sum in proportion to salary | • Simple to administer  
• Traditional, tried and tested approach  
• Reflects different responsibilities of members | • Assumes that the contribution made by each member is directly proportional to their salary  
• Pay differentials between organisations may distort the overall allocation |
| 3) Divide the sum according to manager’s discretion | • Simple to administer | • Reliant on manager’s perceptions  
• Possibly viewed with distrust by members (Weinberger 1998) |
| 4) Divide the sum in accordance with a ‘sociometric’ scoring system | • Rewards allocated according to the perceptions of other team members  
• Rewards collaborative behaviour  
• Recognises that some individuals are more instrumental in achieving the goal | • Not commonly used  
• Time consuming and complicated to administer  
• Does not recognise the need for individual success in completing tasks (i.e. collaboration alone will not deliver the project) |
Developing a Reward Process
A reward process can be developed through consideration of a number of different aspects as summarised in Table 5.

Table 5: Specific to consider during the development process

<table>
<thead>
<tr>
<th>Issue</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Who is included within the team?</td>
<td>The team size will obviously affect the size of individual payouts. In addition, the sociometric assessment as developed from Weinberger, may become cumbersome due to the large matrices associated with larger groups.</td>
</tr>
<tr>
<td>How will the process be applied to members who leave or join the project before the end or after the start?</td>
<td>This may affect members’ perceptions of the fairness of the process. This situation is likely to occur with a project team, which expands and reduces throughout the project duration. Similar consideration may be needed for part-time staff.</td>
</tr>
<tr>
<td>What are the implications upon other staff and how does this fit with other reward systems?</td>
<td>Within an alliance arrangement, the development of any process must be consistent with the existing corporate processes in existence within each organisation.</td>
</tr>
<tr>
<td>When and how will the payment be made?</td>
<td>Hackett (1999) suggested that employees need to ‘feel’ the impact of their efforts by quickly experiencing the results. There should be as little time as possible between performance and the related payout. The payouts should be made at the same time for all staff, irrespective of organisation.</td>
</tr>
<tr>
<td>What should be rewarded?</td>
<td>Wageman (1997) suggested that effective reward systems must be linked to clearly defined goals that have a reasonable chance of being achieved.</td>
</tr>
</tbody>
</table>

Team Reward System
This section illustrates the Team Reward System used on a case study project used to examine the theoretical framework developed in the earlier sections. This includes a summary of the scoring process together with a number of scenarios which illustrate how a typical individual would be rewarded, depending upon the varying degrees of success achieved by an ‘imaginary’ team.
Primary Objectives
It was decided that the reward should be based upon the team's success in achieving a number of primary and secondary objectives. The primary objectives were:

- the completion of the project below the Target Cost; and
- the completion of work programmed to take place within a nineteen-day period.

The primary objectives were given equal weightings and determine the maximum value of reward, up to 10 per cent of gross salary, for each team member. Each of these primary objectives was deemed to be of equal importance and carried an equal weighting (see Figure 4). The importance of these objectives was such that if the team failed to achieve the required standards then there would be no reward.

*Figure 4: Primary objectives*

![Primary Objectives](image)

**Primary Objectives**

- Programme: 50%
- Financial: 50%

a) **Financial**
The score depends upon the cost saving against the Target Cost estimate and is calculated on a pro-rata basis as follows.

<table>
<thead>
<tr>
<th>Saving on Target Cost:</th>
<th>Score:</th>
<th>£1.5million</th>
</tr>
</thead>
<tbody>
<tr>
<td>zero</td>
<td>zero</td>
<td></td>
</tr>
<tr>
<td>100%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*score increases as saving increases*
b) Programme
The score depends upon the amount of work undertaken within blockade as a percentage of work programmed.

<table>
<thead>
<tr>
<th>Percentage of work</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>90%</td>
<td>0%</td>
</tr>
<tr>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

score increases as percentage of work increases

If the team are successful in achieving the primary objectives then a sum of money is available as a reward, the size of which would depend upon the degree of success in achieving these objectives. The value of this reward would be further adjusted to reflect the team's success in two further categories:

- Secondary Objectives accounting for 75 per cent of the 'pot'; and
- Collaboration Score accounting for 25 per cent of the 'pot'.

Secondary Objectives
The balanced scorecard approach identified the key success measures for the project and so it was deemed appropriate that success against these measures should be rewarded. The secondary objectives are allocated the following weightings and determine the amount by which the reward is adjusted.

- Safety 50
- Customer Satisfaction 25
- Performance Reviews 25
a) **Safety**
The safety target is expressed as a ratio of the number of incidents divided by the number of hours worked and was set at 0.5.

b) **Customer Satisfaction**
The criteria the case study team undertook a minimum of two customer satisfaction reports per month to achieve a prescribed score as a minimum.

c) **Performance Review**
Each team member had to ensure that they had completed all performance reviews with their subordinates within prescribed timescales. The percentage of reviews completed was compared to a performance scale which resulted in a score of between 1 (low) and (high, i.e. 100 per cent completed.

**Collaboration Score**
The collaboration score was based upon Weinberger's (1998) proposals. However, the calculation of the reward was simplified to avoid the need for complex matrix manipulations. The arrangement allows each member to score each of the other team members through completion of a questionnaire. The proportion of the reward associated with this objective would be adjusted on a pro-rata basis to reflect each individual's score. That the questions ask members to score each other against:
• the frequency of interaction, e.g. daily, weekly;
• reliability of information provided, e.g. accuracy and timeliness;
• availability of support e.g. is the individual the sole source of information; and
• overall attitude and co-operation.

Score from questionnaire: zero
Score: zero

Score increases as the collaboration score increases

Non-financial
A number of non-financial reward and recognition processes were used to recognise the case study team:
• upon completion of the Target Cost the Alliance Board wrote to the team expressing their appreciation for the efforts made by the team throughout the development of the Target Cost;
• special efforts were rewarded by a brief note within the team’s quarterly newsletter;
• the corporate newsletters produced by each organisation included regular feedback on the performance of the team;
• following a presentation to journalists representing local, national and technical publications, the Project Director wrote a personal thank-you to those involved in the presentation; and
• various ‘social’ events were arranged to reward the team throughout the project.

Team Reward Mechanism – illustrated by scenarios
Table 7 illustrates the application of the team reward process described above through a number of scenarios. This will identify the overall reward due to a typical team member earning a salary of £25,000.
Table 7: Team Reward Mechanism – illustrated by scenarios

<table>
<thead>
<tr>
<th></th>
<th>Example A</th>
<th>Example B</th>
<th>Example C</th>
<th>Example D</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Primary Objectives</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Financial</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>saving on target cost (£m)</td>
<td>0</td>
<td>0.75</td>
<td>0.5</td>
<td>1.5</td>
</tr>
<tr>
<td>Score</td>
<td>0</td>
<td>50</td>
<td>33</td>
<td>100</td>
</tr>
<tr>
<td>Value of reward (£) (max 5% of salary = £1250)</td>
<td>0</td>
<td>625</td>
<td>412.5</td>
<td>1250</td>
</tr>
<tr>
<td>Programme</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>amount of work undertaken within blockade as a percentage of work programmed</td>
<td>90</td>
<td>80</td>
<td>100</td>
<td>95</td>
</tr>
<tr>
<td>Score</td>
<td></td>
<td></td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Value of reward (£) (max 5% of salary = £1250)</td>
<td>0</td>
<td>0</td>
<td>1250</td>
<td>625</td>
</tr>
<tr>
<td>Maximum allowable value of reward (£) (max 10% of salary)</td>
<td>0.0</td>
<td>625.0</td>
<td>1662.5</td>
<td>1875.0</td>
</tr>
<tr>
<td>The maximum allowable reward is now adjusted to reflect success against the Secondary Objectives and the Collaboration Score</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Safety</strong></td>
<td>0.5</td>
<td>0.6</td>
<td>0.7</td>
<td>0.5</td>
</tr>
<tr>
<td>actual performance</td>
<td>50.0</td>
<td>0.0</td>
<td>0.0</td>
<td>50.0</td>
</tr>
<tr>
<td><strong>Customer Satisfaction</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>actual performance</td>
<td>3.5</td>
<td>2.5</td>
<td>2.0</td>
<td>3.5</td>
</tr>
<tr>
<td>score (max score = 25)</td>
<td>25.0</td>
<td>0.0</td>
<td>25.0</td>
<td>25.0</td>
</tr>
<tr>
<td><strong>Performance Reviews</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>actual performance</td>
<td>5</td>
<td>1</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Score (max score = 25)</td>
<td>25.0</td>
<td>0.0</td>
<td>0.0</td>
<td>25.0</td>
</tr>
<tr>
<td><strong>Secondary Objectives - Total Score</strong></td>
<td>100.0</td>
<td>0.0</td>
<td>25.0</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Secondary Objectives - Total Value</strong></td>
<td>0.00</td>
<td>0.00</td>
<td>311.72</td>
<td>1406.25</td>
</tr>
<tr>
<td><strong>Collaboration Score</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum amount of reward associated with secondary objectives (75% of the total reward)</td>
<td>0.00</td>
<td>156.25</td>
<td>415.63</td>
<td>468.75</td>
</tr>
<tr>
<td>actual performance</td>
<td>5.00</td>
<td>4.00</td>
<td>3.00</td>
<td>4.00</td>
</tr>
<tr>
<td>Score</td>
<td>100.00</td>
<td>80.00</td>
<td>60.00</td>
<td>80.00</td>
</tr>
<tr>
<td>Collaboration - Total Value</td>
<td>0.00</td>
<td>125.00</td>
<td>249.38</td>
<td>375.00</td>
</tr>
<tr>
<td><strong>TOTAL VALUE OF REWARD</strong></td>
<td>0.00</td>
<td>125.00</td>
<td>561.09</td>
<td>1781.25</td>
</tr>
</tbody>
</table>
Conclusion
Effective teams do exhibit a number of common characteristics and these characteristics can be encouraged through team development programmes. However, different teams will have different strengths and weaknesses, requiring efforts to be directed at the development of certain characteristics, which may change as the team matures. As a consequence there is no standard template, which can be applied to ensure the effectiveness of a team. Team development programmes require commitment and effort from senior managers who must be prepared to challenge the “status quo” in order to provide an environment within which the team can flourish. Furthermore, team development is not a finite activity and requires sustained efforts to improve performance. Understanding the characteristics of effective teams and recognising the restraints within which the team operates can enhance the effectiveness of a team development programme.

Rewards and recognition processes are characteristics of effective teams and efforts should be made to develop appropriate system. It can be argued that individual rewards are not appropriate within a team environment. However, there is little evidence that companies have developed processes for the allocation of financial rewards on a team basis. As a consequence, it is likely that any attempts to develop team rewards will need to start from first principles. The process outlined in this paper provides practical advice to those involved in the establishing such a system. The lack of “best practice” within this are may be due to the difficulty in defining and measuring the characteristics, which are valued. In addition, the attempt to develop a reward process is time consuming and required commitment from senior management to ensure that the arrangement does not conflict with other existing systems in place throughout the remainder of the alliance organisations.
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