

Group Project Assignment B

Introduction

In order to secure good efficiency during projects, it is critical to understand the importance of teamwork, and how that teamwork can be utilised to ensure the best outcome.

This report will look into what a team is, what systems are available to ensure good workflow in teams, and how these can be applied to a working example of a project.

Overview of team working principles

In the educational environment and the industrial environment alike, team working plays a key role. Team working will allow tasks that wouldn't normally be manageable alone to be done with ease, as working together will increase overall efficiency. Good team working practices will also allow the task to be done with minimal conflict and a good utilisation of skills.

Firstly it is important to understand what a team is. A team can be described as a multi-functional group of individuals who are collected together to reach a common goal, but building a competent team isn't as simple as that. A good team must have a good dynamic and clear roles established in order to reach their goal, in order to make sure people know what they are meant to be doing, and that nobody feels left out or over worked.

A team in industry is often formed for a project when a task requires multiple skill sets, has a complex nature, or a limited deadline which one person cannot achieve alone. In any of these cases, it is the job of the project lead or manager to assign people to a team. Once the team has been formed, a preliminary meeting is normally held to establish the goal and each person's role for the duration of the project.

Team working methodologies and theories

There are a number of theories and practiced methodologies that describe the structure of a good team. These are often used in industry as a guideline for team construction, in order to ensure good team working practices are maintained, and problems encountered within the team are reduced.

"Individuals have different behaviour, abilities, learning and cognitive styles, and it is when these individual differences are combined that the most effective teams were formed." (Sommerville, 1998)

The most prevalent theory on team working is Belbin's Team Roles, which is a structured system that utilises personalities or "types" in order to provide a guide to the best team formations. There are many others that provide similar ideas for team building. A few of these are:

- Insights Team Building
- Team Management Systems (TMS)
- Strength Deployment Index (SDI)
- Myers Briggs Type Indicator (MTBI)

All of these systems have been developed independently, and it's mostly a matter of preference as to which one is better to use for your environment. The different systems have a lot of similarities, with the fundamental idea being to understand the different "groups" of team working skills or personalities that people fit into, and most importantly to understand that people are different. Each person may have a set of skills that they are good at, and others that they aren't, and here's where these tools are useful.

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Explanation of methodologies using Belbin's Team Roles

Using Belbin's Team Roles as an example, the use of these tools can be explained. As mentioned above, these tools primary role is to split people into groups based on their skills. Belbin Team Roles utilises nine groups, each with their own strengths and weaknesses.

"Dr Meredith Belbin and his team discovered that there are nine clusters of behaviour - these were called 'Belbin Team Roles'

Each team needs access to each of the nine Belbin Team Role behaviours to become a high performing team. However, this doesn't mean that every team requires nine people! Most people will have two or three Belbin Team Roles that they are most comfortable with, and this can change over time. Each Belbin Team Role has strengths and weaknesses, and each Team Role has equal importance.

However, not all are always required at the same time - it is important to first look at the team objectives, and work out which tasks need to be undertaken. Once this has been done, discussions can take place regarding which and when each Belbin Team Role behaviour should be utilised." (BELBIN Associates, 2020)

The roles can be divided between less than nine people, or you can have more than one person in each role, depending on the size of the team and the end goal. Each of the roles has set strengths and weaknesses linked to it.

	Team role	Strengths	Allowable weaknesses
Action oriented roles	 Shaper	- Challenging, dynamic, thrives on pressure - The drive and courage to overcome obstacles	- Prone to provocation - Offends people's feelings
	 Implementer (company worker)	- Disciplined, reliable, conservative and efficient - Turns ideas into practical actions	- Somewhat inflexible - Slow to respond to new possibilities
	 Completer finisher	- Painstaking, conscientious, anxious - Searches out errors and omissions - Delivers on time	- Inclined to worry unduly - Reluctant to delegate
People oriented roles	 Co-ordinator (Chairman)	- Mature, confident, a good chairperson - Clarifies goals, promotes decision-making, delegates well	- Can often be seen as manipulative - Offloads personal work
	 Teamworker	- Co-operative, mild, perceptive and diplomatic - Listens, builds, averts friction	Indecisive in crunch situations
	 Resource investigator	- Extrovert, enthusiastic, communicative - Explores opportunities - Develops contacts	- Over-optimistic - Loses interest once initial enthusiasm has passed
Cerebral roles	 Plant	- Creative, imaginative, unorthodox - Solves difficult problems	- Ignores incidentals - Too pre-occupied to communicate effectively
	 Monitor evaluator	- Sober, strategic and disarming - Sees all options - Judges accurately	Lacks drive and ability to inspire others
	 Specialist	- Single-minded, self-starting, dedicated - Provides knowledge and skills in rare supply	- Contributes only on a narrow front - Dwells on technicalities

(IFM, 2016)

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Above is a chart showing the Different roles within Belbin's Team Roles and their associated strengths and weaknesses. Index tests can be done to determine people's roles or they can be assessed based on the individual's strengths and weaknesses. The original Index test is known as Belbin's Team Roles Self Perception Inventory (BTRSPI) which is a structured questionnaire that assesses which role, or roles, the person taking it fits into by asking a series of situation based psychological questions. "A perfectly balanced group would be a group in which all nine roles are present in a high or very high level while a perfectly unbalanced group would be one in which all the group members report the same individual role preference. The concept of role balance is therefore a configurable property of groups" (Klein & Kozlowski, 2000)

In order to prove whether or not systems such as Belbin's Team Roles are effective or not, various studies have been carried out in the past. One such study focusses on the application of these roles in the computer science field. A number of groups of university students with work based experience were classified using the BTRSPI, and put into working groups, referred to as groups with Leaders, and non-working groups, referred to as groups without leaders. The result of this study was that "teams with leaders solved the programming problems in 75.27% of the time needed by the leaderless teams" (Henry & Stevens, 1999).

Contrast to other team building methods

Insights

Insights Team Building is a consultancy based team building system, which aims to give people a better understanding of themselves and others to aim their team effectiveness. It uses a similar indexing system to the BTRSPI, but instead of assign roles, it highlights each person's greatest strengths and weaknesses, and gives information about how these can be used to better communicate with people within their teams. This system works on the principle that "Where relationships improve, so do many things fundamental to team success, including productivity, communication, clarity of role and purpose, and overall team effectiveness" (Insights, 2020).

Because the insights system doesn't use defined roles, and instead focusses on how to work with the differences of your team, it is more versatile in its application, and can be easily applied to any team without involvement of a complicated managerial system. Insights also a virtual portal for easy access to information, tips and tools to help with its deployment and use.

TMS

"Balanced teams that focus on the complete cycle of work, as shown in the Types of Work Model, are more likely to succeed. They also need greater understanding about how to maximise the value of different approaches. Each personal Team Management Profile aims to enhance self-awareness, mutual understanding and respect for the differences that build team resilience" (*TMS Development International Ltd, 2019*).

The TMS system works on a very similar principle to Belbin's Team Roles, with an index test, functions and roles. It takes a more modern approach by providing individual profiles for people alongside a number of management tools aimed to make implementation and control of the system seamless.

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SDI

“While many tools focus on what we do, the SDI goes deeper and helps us understand why we and others behave the way we do” (TotalSDI, 2019)

SDI takes a slightly different approach to the standard index and role model, and looks more into the behaviours of people in groups. The SDI system uses a dot map to plot each role, and show where conflict are likely to happen at different phases of the project. The roles are not clearly defined, and instead a quantity of each personality type is determined, meaning the system can show how much someone fits into one type, and consider this in its conflict analysis.

MBTI

The MBTI is a much older system to which a lot of the current systems are based. The MBTI uses an index questionnaire much like the Belbin's Team Roles system to work out psychological types. The index has 16 types, each with strengths and weaknesses. The system uses what are known as polar extremes of personality to determine where people fit between Extrovert and Introvert, Sensation and Intuition, Thinking and Feeling, Judging and Perceiving, and this defines the role they get.

With all of these systems, roles are used to some degree to determine the differences in people with the team. In order to form a good team using any method a good role balance must be observed.

Overview of team working activity undertaken

In the workplace I often work in teams as a part of the project work I carry out. This can be as a team member or as the team organiser, however as a company we currently do not utilise any of the recognised team building methodologies, partly due the smaller scale of our projects, but also due the business layout.

The team building system in my workplace focusses on having someone who can give insight into each involved department or sector rather than the independent skills of each person. This is due to the small sizes of each department and the lack of cross department knowledge. Projects are also handled mostly independently by the engineer leading the project.

As an example of a typical team in the workplace, I will use a recent plant improvement project. The idea for the project started from some independent work, and once brought to management they decided to make it a project. As project lead, I then worked out the scope and called a meeting with the relevant people, forming the project team. The decision for who to include was based on which departments i.e. maintenance, production, technical, quality etc. needed to be involved. A representative from each of these department was then called to discuss the details of the project. The majority of the planning and communication with suppliers and contractors for the project was then handled by myself, with the other departments supporting where necessary. Meeting were scheduled throughout to ensure departments that needed to be involved in each phase had clear actions to follow. Timing plans, action trackers, and project documentation were used throughout the project in order to ensure the project operated as smoothly as possible.

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In the case of my workplace, there is often only one representative available for each sector, and as such team building is very limited, however this does not mean considerations do not have to be made. Although it is common practice for each employee to try to maintain healthy work relationships, there are times where certain people clash in the ways they want to handle tasks, and this can cause conflict in the team. As such, it is the project leads responsibility to understand these relationships when arranging meetings and assigning tasks. As there is no system for this, it is often very subjective based on knowledge of the people involved, knowing which teams work well together and which don't. Comparing this to the research on team building methodologies above, the act of monitoring the personalities of people in the team in order to avoid conflict lines up with the theories.

(Expand to understanding of planning and execution of projects)

Applying and comparing methodologies and principles

Due to the restrictions of the number or possible representatives from each department, applying standard team building models can prove difficult, however this doesn't mean some benefit could not be had by understanding which methodologies could be applied to some extent. The system used in the workplace shows no insight into people's strengths or weaknesses, which means people don't always excel at the task given which can cause delays and confusion.

Applying a team building theory to the system used in the workplace could highlight which people are suitable for certain tasks which means some changes could be made to when and how tasks are assigned, even if the same people ultimately still need to make the decisions for their respective department.

Using the methodologies above, it is clear that a system that aims to use manager/leader focussed team building, like Belbin's Team Roles, is not going to be appropriate for this application, as even if roles could be established, the members of the team couldn't be changed in most cases. However, there are other more applicable options such as Insights. The reason Insights is a better option for this application is because it is more focussed on ensuring each member of the team understands their own strengths and weaknesses, as well as the abilities of others in the team, and allowing them to apply this when working with others. In this manner, conflict aversion and team cohesion are managed mostly on an independent level.

If the right system is used, I believe this could increase the efficiency of projects within work by allowing people to focus on tasks that they are more comfortable with, and knowing who they can go to for support where necessary. This will allow tasks to be finished on time more often, and with better communication.

Many of the team building methods are also now adopting modern technology in order to deliver materials more intuitively. TMS for example uses a full suite of web based tools to teach its methodologies and help people to apply them wherever possible. The inclusion of intuitive web based indexes and tools would help people to get used to the use of the systems. When teams are working remotely, i.e. on web calls/conferences, these modern tools will prove even more useful.

The application of standard methodologies when working remotely is even more critical than normal, as the time teams spend conversing is limited, and communication and efficiency are key.

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