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M.Sc. Applied Computing

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# Leadership and Management

Professor John Rees

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Assignment

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# 1 - Introduction

Swansea Knowledge Factors Ltd is a software development company specialising in Artificial Intelligence (AI) and big data analysis. The company has struggled recently with poor performance from its development team, leading to a new Software Development Manager being appointed by the directors in a bid to improve the company's falling standards. The company aims to be an agile software development company specialising in innovative software products and services.

The following report looks at ways of improving the effectiveness of the business by looking at how employees are motivated, how they are evaluated and developed, and also how effective the current leadership style is. Recommendations will be produced as part of this report to be implemented by management should they so wish.



## 2 - Motivation

Motivation is an important part of improving an underperforming team though it is not always successful due to the fact different people are motivated by different things and in different ways. Therefore, a simple, single minded motivational strategy will not work in this case 

One theory of what motivates employees is McClelland's theory of needs [1]. McClelland states that there are three primary motivational needs, regardless of age, gender or culture. Of the three motivational needs, one will be the dominant motivator, meaning the other two needs still affect the individual's motivation, but not as much as their primary motivator. The three motivational needs are as follows:

The need for achievement  People have a desire to succeed and excel in what they do and to go above and beyond the standards set for them. They enjoy tasks that are difficult and like to receive feedback for their work. One of the benefits of this need is that people strive for recognition and will work hard in order to achieve the best results possible. A drawback of this need is that easy or low risk tasks can feel beneath them and therefore they may not complete them to the best of their ability because the recognition they will receive will be insignificant.

The need for power. People with this need are disciplined and enjoy the work they do. They are motivated by a need to improve their own personal position within the company. They enjoy recognition, having influence over others, and competing with the aim of winning. A benefit of this need is that people who possess it tend to be much more driven and often progress much further on their chosen career path. One of the drawbacks of this need are that people tend to be much more argumentative and assertive when dealing with colleagues. This can cause friction within the team as not all members will react positively to this type of confrontational group work.

The need for affiliation. People with this need enjoy working in groups and focus more on creating social relationships. They work well within roles that involve interaction with customers or any kind of social engagement. Workplace culture norms will be adhered to, ensuring there is little chance for them to be rejected by the workplace community. A benefit of this need is that

they work well with others, and particularly well in groups. This can help improve their own productivity as well as other people they work with. A drawback of this need is that people may be reluctant to share opinions or new ideas for fear of them being rejected by other members of the group. This can mean that valuable opportunities could be missed simply because people feel they are unable to share them.

Another potentially useful motivation theory is Abraham Maslow's hierarchy of needs [2]. The theory suggests that individuals have multiple layers of needs and that in order for the higher level needs to be applicable, the most basic, lower level needs need to be met first. Maslow defines the five levels as follows:

- **Physiological** - The most basic of needs such as a roof over their heads and food and water.
- **Safety** - The need for financial and personal security.
- **Love/Belonging** - The need for personal relationships, including family and friends.
- **Esteem** - The need for respect from others and to feel confident within their surroundings.
- **Self-actualisation** - The need to improve and achieve everything they possibly can to better themselves.

One of the benefits of this theory is that the needs Maslow identifies are mostly tangible and therefore can be met should the leadership decide to do so. Structures and procedures can be put in place to make sure team members have all their basic needs met from the beginning, allowing them to aim higher to reach their full potential.

A drawback of this motivational theory is that if the company cannot help meet the most basic needs of their employees then there is no chance that they will ever meet the higher level needs. If the company requires employee to work long, unsociable hours then it will have a negative effect on their personal relationships, meaning their need for love and belonging will no longer be met. If the company is unable to pay their employees a reasonable wage then they may not be able to pay their bills, meaning their physiological and safety needs won't be met



Psychologist Fredrick Herzberg developed the Two-Factor Theory of motivation in the 1950s. Having surveyed 200 engineering and accounting professionals [3], Herzberg identified two primary factors that affect employee motivation the most.

- **Motivator factors** - Factors that lead to employee satisfaction and result in motivating the employee to work harder. These factors include being recognised for work done well, enjoying work and career progression.
- **Hygiene factors** - Factors that lead to employee dissatisfaction and result in decreasing their level of motivation. These factors include company policies, salaries, and work-based relationships.

Employees should feel appreciated and receive plenty of feedback in order to keep them motivated and satisfied with their position. Job dissatisfaction should be prevented by ensuring employees are paid a decent wage, are treated with respect and are given the support they need to fulfil their role.

A benefit of this motivational theory is that although fulfilling motivator factors leads to employee satisfaction, not fulfilling them won't lead to employee dissatisfaction providing the Hygiene factors are still fulfilled.

One of the drawbacks of this theory is that even if the motivator factors are fulfilled, employees will still be dissatisfied if the hygiene factors are not fulfilled. This means businesses must focus on hygiene factors first before focusing on the motivator factors.

Unfortunately there is no one size fits all when it comes to motivating team members. Each individual is motivated differently, often depending on factors external to the workplace. Having reviewed a number of motivational theories it is apparent that there are a number of key factors that many of them share. It is recommended that the company strive to meet these fulfill these factors in order to motivate the team and keep their. Basic needs such as salary, job security, and respect should be met before focusing on the more secondary needs such as career progression and recognition.



## 3 - Team Development

The psychologist Bruce Tuckman  states that the development of a team will go through 4 distinct stages [4] between the start and an end of a project, and in this case, their employment with the company.

The initial development stage is the forming stage. Here the team begins to familiarize themselves with each other. Roles will begin to form and responsibilities will be allocated. Members of the team will begin to form relationships with each other. Productivity will be relatively low as the focus will be on the members of the team rather than the work they will complete.

The second stage of development is the storming stage. This stage involves team members starting to become aware of their teammates' characteristics. Personalities will begin to clash as people get to know one another better. Typically this is when confrontation will take place, although some teams will try to avoid it to deal with it at a later time.

The third stage of development is the norming stage. At this stage, team members begin to work well together and start to appreciate the strengths of other team members. Conflict may still occur though the team will find it easier to deal with having had previous experience dealing with such issues.

The fourth and final stage of development is the performing stage. By this stage, team members are experienced, motivated and confident. They are able to complete work with very little or no supervision. All teams aim to achieve this stage though not all make it this far.

Although originally only 4 stages were initially specified, an additional 5th stage of development known as the adjourning stage was identified. This stage essentially signifies the end of the project or collaboration. The team may use this stage to reflect on the positives and negatives and to learn from the experience.

Another method of improving team performance is to use Belbin's team role model [9]. The team role model was designed to use the personalities and talents of team members more effectively in order to improve performance. Belbin states that there are nine team roles, all of which are complementary and a team member will typically be suitable for more than one role. The roles are defined as the following:

- **Implementer** - The organizer of the team. Task orientated, the implementer is disciplined and orderly and works to turn ideas and plans into deliverable tasks.
- **Resource Investigator** - The idealist of the team, adventurous, and enthusiastically always looking for new ideas. They develop and maintain good relationships with both team members and external parties.
- **Plant** - The dreamer of the team, always thinking outside the box in a bid to solve problems creatively. They don't always understand what other team members expect from them and that can lead to some level of unreliability.
- **Monitor** - An analyst, always monitoring situations in a bid to discover how they came about. They put a great amount of effort into deliberation and make judgements that are rarely incorrect.
- **Shaper** - Enjoys a challenge and has a strong urge to perform well. They ensure goals are met on time even if some compromise must be made. They can become easily frustrated and react emotionally.
- **Coordinator** - Manages procedures and can recognise talent, allowing them to utilise the team members to their full potential. They are effective delegators but can often give too much work to other team members.
- **Completer Finisher** - A perfectionist who pays a great amount of attention to detail. They monitor safety and quality of the work produced. They can find it difficult to delegate tasks and can become overprotective of their work.
- **Teamworker** - Works to promote cooperation between the team. They prefer to avoid conflict and often find it difficult to make critical decisions.
- **Specialist** - Knowledgeable and an expert in their field. The specialist is happy to be consulted by others in order to share their knowledge. They aren't as effective when working with other specialists and generally dislike social activities.



Having investigated multiple team development theories, it is recommended that the Belbin Team Roles theory be implemented. Assigning team members to the roles best suited for them allows individuals to make use of their own strengths whilst also contributing to improving the overall strength of the team. Aspects of Tuckerman's stages of development could also be included to promote cooperation within the team. Support should be provided as the team moves between the various stages in order to support a smooth transition between stages.



## 4 - Staff Evaluation

Correct evaluation of staff can be an important factor for a business as improper evaluation can lead to incorrect business decisions involving the individual in question. It can also affect the individual being evaluated as they may feel they deserve a better evaluation or more positive feedback.

Edwin Locke theorized that goal setting can be used to help groups and individuals to improve their performance [10]. He states that when organisations or individuals set goals that are more difficult, they work harder to achieve them, leading to improved performance. When they are committed to achieving goals, and do not have any other conflicting goals then the achievement of the goal is a positive event. According to Locke, there are five principles to follow in order to ensure goal setting performs well. They include:

- **Clarity** - Clear goals that can be measured and achieved within a defined timeframe.
- **Challenge** - Setting goals that are of moderate difficulty in order to motivate the challengee to achieve their goals.
- **Commitment** - Commitment to achieving a goal encourages the individuals or organisations to make an effort to achieve that goal.
- **Feedback** - Providing feedback on progress allows goals and expectations to be adjusted based upon the amount of progress made.
- **Task Complexity** - Defining the processes and steps required to achieve a goal helps create a clear path for the individual or organisation to achieve that goal.

One of the advantages of goal setting is that team members are given targets to aim for which they also may have had an input in setting. This motivates them to work harder because they have something to aim for which could well have been chosen by them.

One of the disadvantages of goal setting is that it has the potential to introduce increased risk of internal competition. Team members may have conflicting goals and whilst trying to achieve

their own goals they may inadvertently affect another team member trying to achieve their goals.

Another disadvantage is that team leaders can become prone to favouritism towards the individuals who regularly achieve their goals. This can lead other team members to feel less valued and less important than their teammates



Another useful theory for managing staff performance is the expectancy theory proposed by Victor Vroom [11]. The theory is that individuals will modify their behaviour because they anticipate that achieving a goal set for them will result in increased satisfaction. They adjust their behaviour in such a way that it puts them in the best possible position to achieve their goals. The key properties of expectancy theory are:

- **Expectancy** - The expectation that if they behave in a particular way they have a better chance of achieving their goals. This helps individuals identify whether they have the required skill sets to achieve their goal, if not, motivation and effort will decline.
- **Instrumental** - Performance is directly linked to the rewarding process. Individuals are motivated to complete more difficult work in order to obtain greater rewards. If rewards are the same regardless of the difficulty of the goal being achieved, motivation can be lost and performance can decline as a result.
- **Valence** - Significance of the rewards offered to individuals affects how the individuals receiving them evaluate them. Rewards are evaluated based upon an individual's values, needs and goals. An individual's performance is directly linked to how important they feel the potential rewards are.

One of the disadvantages of expectancy theory is that it is considered to be too idealistic. Performance is measured using effort, motivation and rewards and therefore makes it very difficult to measure. Leaders will often need to incorporate additional performance management theories in order to effectively measure the performance of each team member.

There are several techniques and methods available to the leadership when evaluating the performance of employees. These techniques can be categorised as either comparative, absolute, or results oriented [12].

Comparative methods are used to evaluate how employees perform whilst working in a group. Paired comparisons can be used to evaluate an employee by comparing them to another. The evaluation can look at specific aspects of their role or their performance as a whole. The ranking method evaluates by comparing all employees within the team and ranking them from best to worst. Only individual performance traits are used as part of the ranking process, rather than taking into consideration all their previous contributions. These methods can be combined for forced distribution, a method in which each individual will be rated but will also be categorised based upon their predetermined distribution.

Absolute methods are used to evaluate an employee's performance against a set of predefined performance standards. The Narrative approach is a method of evaluation that essentially describes the employee's performance in the words of the appraiser. This will include the employee's strengths, weaknesses and also areas for improvement. The Trait Rating Scale  approach consists of several personality traits along with a highly structured scaling system. The evaluator provides a numerical result on the scale indicating the performance of the employee for a particular trait. The combined total of the results then provide a numerical representation of the overall performance of the employee. Critical incident techniques can also be used although these are generally more appropriate for feedback discussions as they simply involve discussing both positive and negative observations made by the evaluator over a defined period. Another absolute method is the Behavioural Anchored Rating Scales (BARS). BARS is essentially a combination of the trait rating scales and critical incident methods of evaluation [13]. Additional descriptions are included that describe behaviours relating to the numerical values on the scale.

Results-oriented methods are used to evaluate employee performance using work outcomes and accomplishments as the basis. Targets are set between the employee and the evaluator as are the standards of performance expected to achieve the objectives. Employees are then assessed on how they achieved the targets or goals set for them. Adjustments can be made as the process moves forward, meaning the required standards and procedures can change depending on any changes to the end goal 

Due to the wide variety of roles within the team, it may be very difficult to create any reusable scale for performance comparison as each role will have different requirements and different

performance indicators. A narrative approach would be much better suited as a means to evaluate employees. The evaluator should identify any strengths, weaknesses and any areas for improvement. Targets should be set for future performance reviews as research has shown that goals help motivate individuals to improve their performance 

## 5 - Leadership

There are a number of leadership approaches that can be taken, each with their own strengths and weaknesses. Often, the approach will not only depend on the type of business involved, but also those of whom you will be leading.

Lewin states that there are three basic styles of leadership[14]. The first style is autocratic leadership. The leader typically dictates procedures and policies to their subordinates.

One of the benefits of this style of leadership is that it allows the leader to have complete control over their staff. There is very little opportunity for decisions to be questioned as all decisions are made by the leader, without any input from the staff.

One of the drawbacks of this style is that staff have very little autonomy. Constant supervision means that staff are regularly assigned tasks, whilst being closely monitored as they complete them. Staff will have to regularly report to their supervisor in order to keep them up to date with progress. The reason for this close level of supervision is that autocratic leaders often believe that unless people are closely supervised then they will not work effectively, causing them to be unproductive.

Another drawback is that there is little opportunity for staff to have any involvement in the decision making process. All decisions are made by the leader and therefore staff have very little control over any decisions made by the business. This can have a negative effect on staff morale, particularly when the decisions being made directly involve them.

The second style is democratic. The democratic style aims to include all members in the planning and decision making processes in order to combine collective experiences and opinions in order to make more informed decisions.

A benefit of this particular style of leadership is that people feel much more engaged in the decision making process because they are encouraged to share their opinions and ideas in order

to assist the leader in making the final decision. Although the leader ultimately retains full control over all decisions made, including the staff in the decision making process will make them feel valued and increase their interest and investment in the decisions being made.

A drawback of democratic leadership is that although staff are involved in the decision process, not all members of the team may have the necessary skills or experience to contribute to the decision making process. This can be counter productive to discussions and could lead to incorrect decisions being made by the leader



The third style of leadership is laissez-faire. This approach is one in which the leaders delegate the decision making process to staff members and as a result, take a much more hands off approach to leadership.

One of the benefits of this leadership style is that staff have the freedom to make decisions by themselves, without much guidance from the leadership. Leaders provide the resources needed by staff but then allow them to solve problems by themselves.

One of the drawbacks of this style is that although staff are able to make their own decisions, responsibility for those decisions still lies with the leader. If staff make decisions that ultimately end up being incorrect, the leader will still be responsible for dealing with the consequences.

McGregor disagrees with Lewin, and proposes that there are 2 distinct types of leaders. Theory X managers and Theory Y managers.

Theory X managers take a very pessimistic view of their employees. They make the assumption that the people who work for them require constant motivation in order to complete their work because they dislike work. They need constant direction, around the clock supervision, and have little or no ambition. This can make theory X managers very unpleasant to work due to their bias, unfounded opinions.

Theory Y managers take a much more optimistic view of their employees. Believing that they enjoy work and actually want to be there. Management is much more participative and collaborative than Theory X managers. Employees have much more freedom and responsibility because they are believed to be able to work on their own initiative. They are self motivated, take ownership of their work and actively seek out and accept responsibility. Theory Y managers are generally much more flexible and more pleasant to work for.

Likert identifies four main styles of leadership; exploitative authoritative, benevolent authoritative, consultative and participative [15]. Likert states that these styles are most relevant in relation to peoples involvement in the decision making process.

Exploitative authoritative leaders have very little concern for individuals and often resort to aggressive and fear based means of motivation. Communication flows one way and feedback is very rarely appreciated.

Benevolent authoritative leaders tend to have much more appreciation for individuals working for them and as such often use rewards as a means to encourage improved performance. They pay more attention to the concerns of their subordinates though this is often what they want to hear, not what they should hear. Some level of delegation will occur though all major decisions will still be made by the leader.

Consultative leaders make the effort to listen to the ideas of their subordinates. The flow of information upward is still not entirely honest and reflective of the actual situation. Although subordinates are consulted during the decision making process, major decisions are still made centrally by the leadership.

Participative leaders actively engage their employees in order to make better decisions. Employees and leaders work better together and often form close working relationships.

Research in leadership approaches has shown that those that engage with and include employees more in the decision process not only result in better decisions being made, but also help to improve employee morale and motivation.  Including employees in the decision making progress increases their personal investment in the company and as a result will help motivate them to improve their own performance, often to achieve targets that they help set.

## 6 - Executive Summary

Based upon the motivational approaches identified, the most appropriate method of motivation is an amalgamation of several different approaches. This is to ensure as many members as possible of the team can be motivated with as few actions as possible.

In order to facilitate improved team development, team members should be assigned roles most relevant to the skillsets they possess. Forcing individuals to complete roles they have no interest in or don't have the skills for is counter productive and will result in a drop rather than increase in performance. Support should be provided by the leadership during the various stages of the team's development.

Employee evaluations should take a narrative approach and be used as a means to identify potential goals for employees to aim for. Observations should be made by the leadership at regular intervals in order to regularly review team member performance and to re-evaluate their goals.

Because of the skilled level of work involved in software development, and the broad skill set each member of the team possesses, it is recommended that a much more laissez-faire leadership style is taken. By allowing the team more control over the work they do and how they complete it, not only will they be more motivated but they'll also be much less likely to leave the team. Employees should also have some form of contribution to the decision making process. They are more likely to work harder to achieve goals that they also had a hand in setting.

## 7 - References

1. **McClelland, David C.** *Human Motivation*. Cambridge University Press, 1988.
2. **McGuire, Kevin John.** *Maslow's hierarchy of needs. An introduction*. GRIN Verlag, 2012.
3. **Herzberg, Fredrick.** *The Motivation to Work*. Wiley, 1959.
4. **Schneider, Mitch.** *Building a Team*. Cengage Learning, 2003.
5. **McGregor, Douglas.** *The Human Side of Enterprise*. McGraw-Hill Education, 2006.
6. **Herman, Aguinis.** *Performance Management*. Dorling Kindersley India Pvt. Ltd, 2009.
7. **Salaman, Graeme. Storey, John. Billsberry, Jon.** *Strategic Human Resource Management: Theory and Practice*. Sage Publications Ltd, 2005.
8. **Mabey, Christopher. Salaman, Graeme. Storey, John.** *Human Resource Management: A Strategic Introduction*. Blackwell Publishers Ltd, 1999.
9. **Locke, Edwin A. Latham, Gary P.** *New Developments in Goal Setting and Task Performance*. Routledge, 2013.
10. **Belbin, Raymond Meredith.** *Team Roles at Work*. Routledge, 2012.
11. **Snead, Kenneth Carter.** *An Application of Vroom's Expectancy Theory and McClelland's Trichotomy of Needs Theory to Examine Managers' Motivation to Implement a Decision Support System*. University Microfilms, 1988.
12. **Bailey, Kathleen M.** *Language Teacher Supervision: A Case-Based Approach*. Cambridge University Press, 2006.
13. **Govekar, Paul L. Christopher, Jill Ellen R.** *Assessing Academic Advising Using Behaviorally Anchored Rating Scales (BARS)*. Ohio Northern University, 2007.

14. **Todnem By, Rune. Burnes, Bernard.** *Organizational Change, Leadership and Ethics: Leading Organizations towards Sustainability.* Routledge, 2013.
15. **Likert, Rensis.** *The Human Organization: Its Management and Wvalue.* McGraw-Hill, 1967.