

# UNIVERSITEIT TWENTE.

HONOURS PROGRAMME - CHANGE LEADERS

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## 'How are you doing?'

A systematic analysis of performance appraisal methods in relation with organizational structures

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March 18, 2016

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# 1 Introduction

At the start of December the website [managersonline.nl](http://managersonline.nl) posted an article in which the results of the annual benchmark from Raet HR<sup>1</sup> was published. The most notable result was the opinion of employees about job performance evaluation methods. The research found that 27 percent of the Dutch employees feel that evaluation- and rating conversations<sup>2</sup> do not contribute to their personal development (Managersonline.nl, 2015). Employees see those conversations as a ‘must-do’ instead of a possibility to evaluate and develop themselves. This results in a rapid decrease of traditional performance appraisal methods and an increase in methods in which the employee is contributing and is involved in its personal development (Managersonline.nl, 2015).

Performance appraisal methods exists of different factors which have been extensively described by academic literature (Arvey, 1998). Arvey distinguishes different themes within the job performance evaluation:

- Performance is multidimensional: refers to the different angles that a performance evaluation has to address to cover all aspects of performance.
- The area of appraisal is ever changing and expanding: refers to the fact that because the interpretation and perception of a job is changing and therefore methods should change with them.
- Appraisal methods are task-oriented and contextual: refers to the notion that a job exists of a task-specific component (the core business of a job) and a context which refers to the acting of an employee in the organizational and social sphere to reach the set targets of an organization.

Because performance appraisal methods are ever changing due to the perception of the content of the job and a changing organizational culture it is interesting to research whether a performance appraisal method can be matched to a particular organizational structure. However, a first glimpse of appraisal methods shows that a whole world of evaluation programs exists. Therefore, this paper will create a structural overview of appraisal methods which provides an insight in the different types of methods and their perceived strong and weak points. Furthermore, this research will try to link this structural overview to the different types of organizational structures as described in the distinguished research of Miles et al. (1978). So in short this research exists of two research questions:

- Which types of job performance evaluation methods are known from academic literature?
- What is the dominant job performance evaluation method for a particular organizational structure?

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<sup>1</sup>Raet HR is a company which, as a pioneer, created HR-software in the cloud and offers different kinds of software and services to manage their HR business.

<sup>2</sup>Free translation from the Dutch “beoordelings- en functioneringsgesprekken”.

The academic relevance of this paper is established by solving two practical problems which are found in the academic literature. First, the theory on performance appraisal methods is a jungle which does not provide a clear overview of the different methods to use. Therefore, this paper will try to expose a clear overview of the different types of those methods to with a logical and clear distinguishing character of the different methods. In addition, when searching academic literature, a great amount of literature can be found on organizational structures and on performance appraisal methods. However, articles which link the two concepts to each other are hardly, or not, available. Because of a time-limit and because of minimal resources the authors of this paper question the validity of their assumptions. Nevertheless, it provides a good start for further research in this area.

The societal relevance of this paper relates to a matching activity where managers who need to conduct appraisal performance can relate to the method most suitable for their organization. This means that if a manager can distinguish an organizational structure from the structures described in this paper he/she can see which appraisal method best suits his/her organization. It should, however, be noted that the claims that the authors make in this paper are not as rigid as it might be perceived i.e. matching an appraisal method with an organizational structure which does not comply with the results from this paper is of course possible.

The paper is structured in the following way: First, the paper start with the theory which will start with the conceptual model of performance appraisal methods followed by the structure of the different performance appraisal methods that we have distinguished and analyzed. The second part of the theory will expand on the different types of organizational structures distinguished by Daft and Marcic (2006). The second part of the paper exists of the analysis which starts with a demarcation of the organizational structures and a clearer explanation how we perceive those structures followed by a textual addition to the matrix which is created for the comparison between appraisal methods and organizational structures. Finally, we will expand on the paper as a whole and discuss the flaws and options for further research.

## 2 Theory performance appraisal methods

Performance appraisal methods are widely discussed among academics, not only the validity and accuracy of different methods but also the categorization and effectiveness of those methods. Scholars are strongly divided which performance appraisal method suits best in different organizations, also over time the performance appraisal methods have changed. Before the 80's appraisal methods were widely used which focused on past-performance whereas after the 80's the methods which focused on the future of the individual and developmental feedback became more popular (Ilgen et al., 1993). This part of the paper will elaborate on the performance appraisal methods techniques and divide them into traditional and modern appraisal methods based on the article of Shaout and Yousif (2014). In their article the scholars also distinguish fuzzy methods as a third type of appraisal method. Because the fuzzy methods are complicated and because there is a lack of research in this field of study we will only focus on the traditional and modern techniques. At the end of this chapter there will be a systemic overview of the different techniques so it will be easy to compare to the different types of organizations that are described further in this paper.

### 2.1 Performance appraisal methods

“Performance appraisal refers to the process by which an observer, often a supervisor or a peer, rates the job performance of an employee.” (DeNisi et al. (1984), p. 360). These methods are most often annually or semi-annually conducted with the intention to stimulate personal performance and individual development (Wagner and Goffin, 1997). There is however in the academic literature no consensus on how the performance appraisal methods should be categorized. For example, Wagner and Goffin (1997) categorize appraisal methods in the outcome of the process as absolute and comparative appraisal ratings, whereas Shaout and Yousif (2014) display performance appraisal methods as past-oriented appraisal methods, methods which evaluate the actions of the individual in the past and future oriented appraisal methods which focus on the goal of the development of the individual. They also distinguish fuzzy methods which are actually a mixture of past-and-future-oriented appraisal methods. Next to a dis-consensus of appraisal methods there is also a critique on performance appraisal. Lee (2005), for example states that performance appraisal is periodic and event-based and focused on evaluative methods. Lee (2005) therefore makes a plea for abolishing the appraisal methods and focus on feedback since this is information-based, ongoing process and occurs as often as possible and stimulates the individual to improve him/herself continuously.

Although there are discussions about the consensus and whether appraisal methods are the right way to steer your organization this paper will focus on the appraisal methods which are categorized via the past-oriented and future-oriented way because we think that this is the most feasible and most logical way of categorizing such methods. Nevertheless, it should be noted that other ways of

categorization are not wrong or not as good they are just different and work just as good as the categorization that is used in this paper it is just different.

## 2.2 Past-oriented appraisal methods

These types of methods, also marked as traditional methods, focus only on the past performance of the individual. Shaout and Yousif (2014) distinguish the following past-oriented methods:

- **RANKING METHOD.** The superior ranks the characteristics of an employee on a scale. This system was developed first used in 1813 when an army general submitted an evaluation of his squad to the US Army (Wiese and Buckley, 1998). At first ranking was done compared to people so an officer would rank his squad from best to worst performer. Later on this was converted to the judgmental rank order which placed the ones being rated (ratee) in a category compared to other ratees (top 25%, top 50%, bottom 50% and bottom 25%) this could also be done on an individual scale. The problem with this type of rating is that there is little to no feedback and there is a strong bias from one person who scores high and who scores low. (Wiese and Buckley, 1998)
- **GRAPHIC RATING SCALE OR TRAIT RATING SCALE.** In 1931 a new enhancement was made to the ranking method which led to the Graphic Rating Scale (GRS, also known as Trait Rating Scale) (Shaout & Yousif, 2014; Wiese & Buckley, 1998). This method is known as one of the most used performance appraisal methods in history. The rater indicates on a numerical scale to which degree the ratee possesses the skill, trait, or characteristic. The critique of this scale is that the dimensions are often ill-defined and therefore not very useful for feedback (Wiese & Buckley, 1998).
- **CRITICAL INCIDENT METHOD.** This theory was developed in the 1940's in the US army when a research was conducted under 1000 candidate pilots and their flying skills. The critical incident method takes into account the incidents that occur throughout a year in which the incident, an action which in itself permit inferences, is so clear for the observer that the consequences are known by the observer leaving little to no doubt to its effects (Flanagan, 1954). In other words, the employer looks at the actions of its employee and reviews its actions as to what influence this has had in the organization compared to other employees.
- **NARRATIVE ESSAY.** Raters describe employee behavior in an open-end setting which means that they write a report on an employee involving its strengths and weaknesses according to the employer. Furthermore, concrete feedback is given to improve the employee. In common a narrative essay is written once or twice a year. There is however little or no con-

sensus for the criteria in a narrative essay which makes its accuracy very difficult to measure (Smith and Hornsby, 1996).

### 2.3 Future-oriented appraisal methods

These methods focus on the future of the individual and are also marked as modern appraisal methods. It should hereby be noted that Shaout and Yousif (2014) do not agree with Lee (2005) because they see giving feedback as an appraisal method whereas Lee (2005) makes a clear distinction between those two. The following methods are distinguished by Shaout and Yousif (2014):

- **MANAGEMENT BY OBJECTIVES (MBO)**. Founded by the famous scholar Peter Drucker in 1954, who is seen as one of the founding fathers of modern management, management by objectives (MBO) or management by results (MBR) pleads for a cooperation between management and employees to set objectives. It is easy and possible for the management to see whether the employees achieve their goals and objectives. The theory believes that the more you involve your employees in the decision-making process of objective setting the more likely they are to achieve them. One of the most techniques derived from theory is to make objectives S.M.A.R.T. which is a management technique still used on a regular basis (Rodgers and Hunter, 1991).
- **BEHAVIOURALLY ANCHORED RATING SCALES (BARS)**. This method measures performance over different dimensions. It builds forth on the critical incidents theory of Flanagan (1954) and steers heavily on job-orientation instead of trait-orientation. Supervisors get their information from multiple colleagues of the one being evaluated and converse these critical incidents to performance dimensions which are rated on a scale. Disadvantage is that the dimensions are not very accurate (problem from qualitative to quantitative conversion) and the method sticks to traditional appraisal methods (Schwab et al., 1975).
- **HUMAN RESOURCE ACCOUNTING (HRA)**. This is a method which provides numerical information about the cost and value of people which can be used in decision-making for example to make cuts or to keep investing in people. This can be seen as an appraisal method but is also fragile since people valued and do not really get a chance to improve themselves. However, since the eighties it has been clear that intellectual property rights and investing in your personnel will grant an organization most of the time with higher turn-over. This shift has occurred because of the movement of post-industrialization, the rise of consultancy and service firms and globalization (Flamholtz et al., 2010). In our opinion the HRA is not really an appraisal method since it only assesses the health of the employee database of a company on financial grounds. Can this be used for appraisal? We think not because this is a financial review of the orga-

nization instead of an appraisal method for an individual or a group.

- **ASSESSMENT CENTER.** Assessment Centers are primarily used for promotion and selection of managerial functions. Furthermore, they are used for training and development, career planning and improving managerial skills and predictive advancement criteria (Klimoski and Brickner, 1993). However, there is little uniformity in assessment centers they use guidelines which combines several assessments for the specific goal of the assessment center. Candidates, recommended by a supervisor, do not get a lot of information about the assessments before they start to see whether or not they are up for the job. Still there is a great discussion about the validation of the assessment centers because of the lack of uniformity in testing the validation. Especially predictive and construct validation results are quite low but are increasing (Spsychalski et al., 1997).
- **360-DEGREE FEEDBACK.** This method is one of the fastest upcoming appraisal methods used in businesses. It is founded on the idea that through personal feedback the individual can grow and learn from its behavior towards other coworkers. Therefore, the assessed points out a number of co-workers which will rate the assessed via surveys. These results are collected and printed into a document which is used by the specialist to reflect on the assessed. The specialist and the assessed then walk through the report and the assessed writes a developmental plan for him/herself based on the feedback of the report (Chappelow, 2004).
- **720-DEGREE FEEDBACK.** 720-degree feedback is almost the same as 360-degree feedback, the only difference is that the 360-degree feedback process is done twice. First the assessed creates a developmental plan which he/she discusses with the specialist. Afterwards the plan is send to the co-workers who filled in the survey and they give feedback on the plan which then again is discussed with the assessed. This process is seen as very effective but inefficient because it takes a huge amount of time but every point of the assessed is discussed in multiple sessions (Kaur, 2013).

Now that the different appraisal methods are discussed it is important that this is placed in a systemic overview in a table (see Table 1) to compare the appraisal methods with the organizational structures.



Table 1: Systematic overview of appraisal methods.

Appraisal Method	Summary description
Ranking Method	<ul style="list-style-type: none"> <li>Supervisor ranks employee relative from each other</li> <li>Strong bias and no feedback</li> </ul>
Graphic Rating Scale/Trait Rating Scale	<ul style="list-style-type: none"> <li>Supervisor ranks employees in dimensions on a scale</li> <li>Ill-defined dimensions and no feedback</li> </ul>
Critical Incident	<ul style="list-style-type: none"> <li>Supervisor looks at which moment the employee made a difference in the organization or at critical moments.</li> <li>Strong bias and some actions may not be noticed</li> </ul>
Narrative Essay	<ul style="list-style-type: none"> <li>Supervisor writes a qualitative report on an employee.</li> <li>Lack of feedback, perception of one person</li> </ul>
Management by Objectives	<ul style="list-style-type: none"> <li>Cooperation between management and employees to set objectives and achieve them</li> <li>Good for incorporating employees, bad for feedback and personal development</li> </ul>
Behaviorally Anchored Rating Scales	<ul style="list-style-type: none"> <li>Combination of critical incident and graphic rating.</li> <li>Ill formed dimensions, low feedback possibility</li> </ul>
Humans Resource Accounting	<ul style="list-style-type: none"> <li>As noted we do not see this appraisal method as performance appraisal but as organization evaluation.</li> </ul>
Assessment Center	<ul style="list-style-type: none"> <li>Center with different goals for higher ranked employees which assesses the capabilities of that person based on the request of the supervisor.</li> <li>Low validation whether or not this is a good method.</li> </ul>
360 Degree Feedback	<ul style="list-style-type: none"> <li>Coworkers give their perception on an employee via a survey which is discussed with the specialist and the assessed.</li> <li>Validation and accuracy of method is discussed.</li> </ul>
720 Degree Feedback	<ul style="list-style-type: none"> <li>Coworkers give their perception on an employee and provide feedback on the plan that the assessed has written together with the specialist.</li> <li>Validation and accuracy of method is discussed.</li> </ul>

## 2.4 Conclusion

The performance appraisal methods from Shaout and Yousif (2014) provide a stable basis on the most frequently used and most popular appraisal methods nowadays in organizations. There is a clear distinction between the traditional and modern appraisal methods in which the first one is more focused on the supervisor-employee relationship which is very hierarchical. The modern methods focus more on a collaboration between employees but also between management and employees. Furthermore, the traditional methods are more focused on rating whereas the modern ones are more focused on feedback. Nevertheless, every performance appraisal method has its own strengths and weaknesses and every method is more applicable in an organization than in the other. For example, in a modern organization where the aim is for people to work on their own and come up with great ideas the ranking method will most probably not flourish because it goes against the values of the organization whereas in a factory at an assembly line the 360-degree method will most likely not have the benefits that it could have. In short, it is up to the management in collaboration with specialists and employees which performance appraisal methods suits the organization best.

### 3 Theory organizational structures

In this section, multiple different organizational structures will be described. This is done, because one appraisal method can be effective in one type of organization, but not another. Therefore, each organizational structure will be handled and eventually a table concerning the pros and cons of each structure will be demonstrated. Based upon this, it will be possible to match the right appraisal method with the right organization structure, which will be done in the next section.

There is a wide variety of organizational structures. An organizational structure can be defined as “(1) the set of formal tasks assigned to individuals and departments; (2) formal reporting relationships, including lines of authority, decision responsibility, number of hierarchical levels, and span of managers’ control; and (3) the design of systems to ensure effective coordination of employees across systems” (Daft and Marcic, 2006). In order to clarify such a structure, organization charts are often used. In such organization charts, the solid lines represent chain of command (Ebert et al., 2014). With regards to the organization chart, organizations can be structured in a vertical and a horizontal manner. Whenever an organization has many hierarchical levels, the organization chart will appear tall and thereby vertical. Without hierarchical levels, the scheme will appear horizontal.

The organizational structures can be organised by taking two aspects into account. The first one is the responsibility for the workflow decisions and actions. This holds how different tasks are divided and how they are performed. This can also be called the span of management, referring to the number of employees are reporting to each supervisor. This can be seen as a vertical versus a horizontal organization. The second aspect holds the responsibility for strategic direction of the company (Wilderom, personal communication, November 17, 2015). This can be either centralized, meaning that the top of the organization is responsible for the strategic direction, or decentralized, at which this authority is pushed to lower hierarchical levels (Daft and Marcic, 2006).

In a traditional organization, there is much hierarchy. The responsibility for both the workflow decisions and actions, and strategic direction of the company is with the top managers. Basically, in such an organization the employees have very limited power. Within a traditional organization, other structures can be distinguished. The oldest and most common ones are the functional- and divisional organizational structure. These structures can also be combined, in another relatively common one, the matrix organizational structure (Daft and Marcic, 2006; Ebert et al., 2014). Due to several current advances in technology, new organizational designs became apparent. The most common ones are the team-, virtual and learning organizational structure (Daft and Marcic, 2006; Ebert et al., 2014). Beneath, all structures will be discussed.

### 3.1 Functional organizational structure

As the name already suggests, this type of structure groups the positions into departments based on the function of the position. In such departments, similar skills, expertise and resources will be used (Daft and Marcic, 2006). The departments are mostly divided into basic business functions like marketing, operations, finance, etc., which is highly dependent on the market the organization is in (Ebert et al., 2014). The benefit of such a structure is that the coordination within one department can flow smoothly. Also, the functions can be highly specific, which can be beneficial for a high-tech company (Galbraith, 1971).

The communication between different departments, however, as well as between hierarchical levels can be challenging (Daft and Marcic, 2006; Ebert et al., 2014). Thus, teamwork within a division can be good, while teamwork between different divisions can be problematic. Furthermore,

whenever an organization using this structural approach grows, the management control can become difficult. The reason for this is that there are many layers between the management making the strategic decisions, and the lower layers executing it; it is easy to see that coordinating such an organization can become problematic (Joseph, nd). For the organizational chart, see Figure 1.

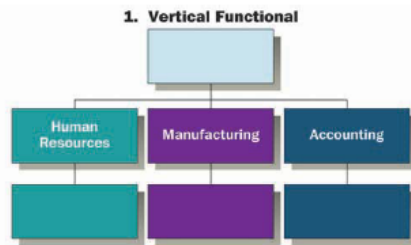


Figure 1: **Organizational chart of a (vertical) functional structure.** Source: Daft and Marcic (2006), p.251.

### 3.2 Divisional organizational structure

In this type of structure, the departments are based upon the output it delivers. The most common type of division known is a divide based on product output; which is the reason this type of organizational structure can also be called the product structure (Daft and Marcic, 2006). This is especially relevant in larger organizations which have multiple different products. The advantage of such a structure is that each division can be independently evaluated, sold or bought without disrupting another division (Ebert et al., 2014). Each division has all functions represented inside, which enables good coordination within one division. The organizational chart can be seen in Figure 2.

Currently, only the product structure has been evaluated. However, there can

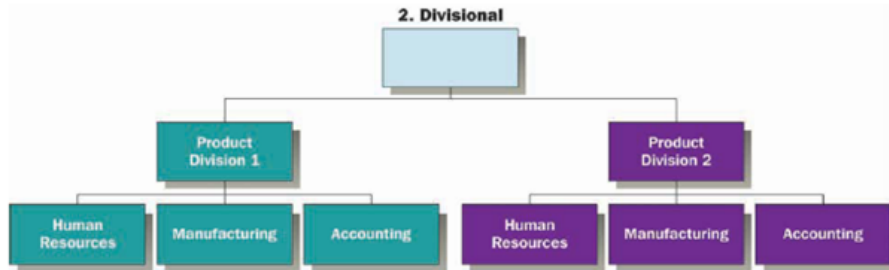


Figure 2: **Organizational chart of a divisional structure.** Source: Daft and Marcic (2006), p.251.

also be divisions based on other outcome. For instance, grouping can take place based on geographic region or customer group (Daft & Mercic, 2006). These subtypes of the divisional structure are sometimes also seen as fully different organizational structures, as is the case in (Ebert et al., 2014). For the sake of clarity, in the finalizing table at the end of this chapter, the subtypes will not be addressed.

### 3.3 Matrix organizational structure

As earlier mentioned, the matrix structure is a combination of both the functional and divisional approach (see Figure 3). As mentioned in earlier sections, both a functional and divisional approach have certain advantages and disadvantages. However, by choosing either the functional (technical orientation) or the divisional (coordination) approach, one suppresses the benefits yielded by the other approach. However, by implementing a matrix organization, the benefits of both types of structures can be captured in one structure (Galbraith, 1971).

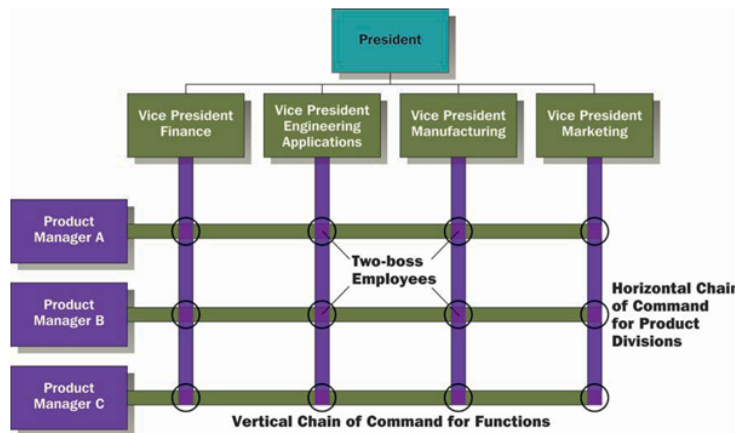


Figure 3: **Organizational chart of a matrix organizational structure.** Source: Daft and Marcic (2006), p.254.

Of course, the implementation of a new type of structure brings new challenges and opportunities with it. A unique feature of the matrix structure is the fact that there are two lines of command; one functional and one divisional, which is also dubbed as the two-boss employees (Ebert et al., 2014). This type of structure finds its origins in the necessity to handle the international market. As is shown in the below figure, one vice president of finance (functional) is responsible for the finances of all the products. Accordingly, a product manager (divisional) is responsible for the results of that product as a whole. The matrix approach demands significant people management skills, due to the multiple lines of command, which can also result in - for instance - competing goals.

### 3.4 Team organizational structure

This type of structure is implemented mostly due to the fact that it takes quite long to move information along the vertical lines back up again (Daft and Marcic, 2006). This problem can mainly be tackled by delegating responsibility and authority down the vertical ladder. This is done by implementing a team structure (see Figure 4). Each team is given a task (project) which they have to perform autonomously. Typically, it still is necessary to report to functional departments. The composition of the team can be chosen differently. The most common type is a cross-functional team, in which multiple functional departments are represented (Daft and Marcic, 2006). These type of teams are mostly of temporary nature. Another approach is to work with permanent teams. Also here, the employees of the team come from multiple functional departments, but have to continuously solve problems of common interest (Daft and Marcic, 2006).

Since compensation is often determined based on individual achievement, this type of structure can give difficulty with that. Given the advantage that team based working stimulates the employees' feeling that they are part of the total organization, the disadvantage of such a system is that individual performance is often overlooked (Gray, nd).

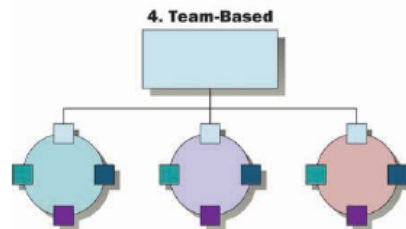


Figure 4: **Organizational chart of a team structure.** Source: Daft and Marcic (2006), p.251.

### 3.5 Virtual organizational structure

The virtual network cannot easily be visualized by means of an organization chart (Ebert et al., 2014), unlike the ones mentioned until now. This type of structure is relatively new, which is also due to the fact that such an organizational approach is made possible by means of technological advances (Bell and J., 2002; Daft and Marcic, 2006). A virtual organization might be best defined as “groups of geographically and/or organizationally dispersed co-workers that are assembled using a combination of telecommunications and information technologies to accomplish an organizational task” (Townsend et al., 1998). The key word in this type of organization is outsourcing. This can in fact be captured by an organizational chart, see Figure 5. In a virtual organization, typically everything is outsourced except for the most fundamental activities of the organization. A virtual organization can also be called a boundaryless organization since the collaborations go beyond the boundaries of the organization. The idea behind such a structure is that the company can really focus on its core activities, and outsource every other activity to other companies (Daft and Marcic, 2006). Although there are clear advantages of using a virtual organization, it also has some disadvantages. For instance, since the boundaries of the organization are vague, it can seem to the employees as if there is a lack of control. Furthermore, since almost every department is outsourced, this organizational approach can face low employee commitment (Daft and Marcic, 2006).

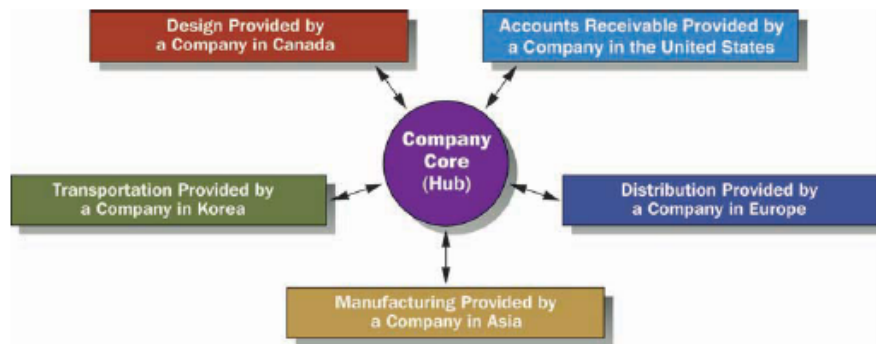


Figure 5: **Organizational chart of a virtual organizational structure.** Source: Daft and Marcic (2006), p.257.

### 3.6 Learning organizational structure

A learning structure is meant to facilitate continuous employee improvement and development. The idea here that these improvements can be implemented into the organization, making the organization constantly transforming. However, the advantage of these continuous improvements is that this type of organization is very well suited to respond to changing demands and needs. Although the learning organization can be seen from multiple perspectives and can hardly be captured in an organizational chart (an attempt to make an organizational

chart can be seen in an example of Kirkwood Community College, see Figure 6), some aspects remain constant. These are to achieve improved quality, continuous improvement, and performance measurement (Daft and Marcic, 2006). In order for an organization to be considered learning, some contextual factors also need to be taken into account. According to Fiol and Lyles (1985), a learning organization needs to ensure that the organizational culture and strategy, the structure as well as the environment are all enabling or promoting a learning environment.

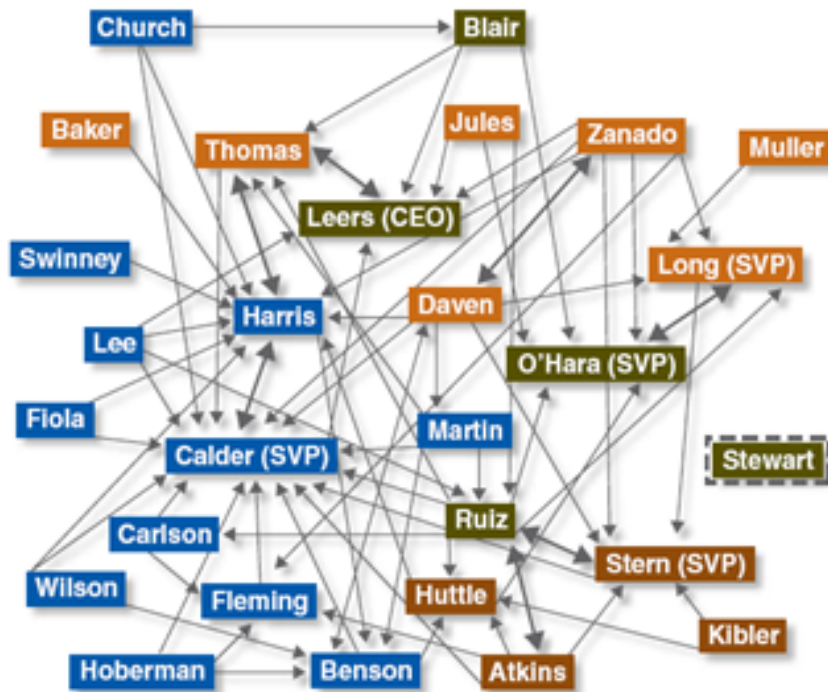


Figure 6: **Organizational chart of a learning organizational structure.**  
 From: <http://shaungreenlee.blogspot.nl/2010/10/chapter-9.html>

### 3.7 Overview

At this section, an overview of all the different organizational structures will be given. Although there are many advantages and disadvantages of each different approach, this report will only focus on the characteristics of the structure with regards to the appraisal method. Each of the below mentioned advantaged and disadvantages are also mentioned in the previous sections. This overview can be seen below in Table 2.

**Table 2: Systematic overview of the structural organizations.**

Structure	Advantages	Disadvantages
Functional	<ul style="list-style-type: none"> <li>• Clear supervisor</li> <li>• Clear tasks</li> </ul>	<ul style="list-style-type: none"> <li>• Difficulty coordinating</li> <li>• Poor teamwork between departments</li> </ul>
Divisional	<ul style="list-style-type: none"> <li>• Clear supervisor</li> <li>• Clear tasks</li> <li>• Easier communication due to differentiation within the teams</li> </ul>	<ul style="list-style-type: none"> <li>• Poor coordination across divisions</li> </ul>
Matrix	<ul style="list-style-type: none"> <li>• Better efficiency than in single hierarchy</li> </ul>	<ul style="list-style-type: none"> <li>• Two-boss employees</li> </ul>
Team	<ul style="list-style-type: none"> <li>• Clear supervisor</li> <li>• Better morale; employee involvement</li> </ul>	<ul style="list-style-type: none"> <li>• Relatively unclear task division</li> <li>• Difficulty to evaluate individuals</li> </ul>
Virtual	<ul style="list-style-type: none"> <li>• Highly flexible and responsive</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of control due to weak boundaries</li> <li>• Weakened employee loyalty</li> </ul>
Learning	<ul style="list-style-type: none"> <li>• Employee empowerment</li> </ul>	<ul style="list-style-type: none"> <li>• Unclear supervision</li> </ul>



## 4 Analysis

Since we have both the organizational structures as well as the appraisal method, it is now possible to integrate the two in order to look for matches between them. In the Table 3 beneath, we have visualized this. However, it is apparent that whether or not there is a match between an appraisal method and the organizational structure, is dependent on how exactly the decisions are made. Mostly, it is important how we see have evaluated each organization. Firstly, for each organization a description will be given on how it is used for the analysis phase. Following this description, Table 3 should follow logically and should also be reproducible independently. Thereafter, it is analysed to what extent the results are according to our earlier predictions.

Table 3: **Visualization of the integration between the appraisal methods and the organizational structures.** The colours give an indication of the goodness of fit between the organizational structure and the appraisal method. Green indicates a good fit; orange a moderate fit and red a bad fit.

		Appraisal Methods								
		Ranking method	Graphic/Trait Rating Scale	Critical Incident Method	Narrative Essay	Management by Objectives (MBO)	Behaviourally Anchored Rating Scales (BARS)	Assessment Center	360 Degree	720 Degree
Organizational Structure	Functional	Green	Green	Green	Green	Orange	Green	Green	Red	Red
	Divisional	Orange	Green	Green	Green	Orange	Green	Green	Red	Red
	Matrix	Orange	Orange	Green	Orange	Green	Orange	Green	Red	Red
	Team	Orange	Orange	Red	Red	Orange	Orange	Orange	Green	Green
	Virtual	Red	Red	Green	Green	Green	Red	Green	Red	Red
	Learning	Red	Red	Green	Red	Red	Red	Green	Green	Green

### 4.1 Demarcation

In this section, all organizational structures will again be addressed. No new information will be given with regards to the structure, but some insights will be given on how the current analysis is approached.

- **FUNCTIONAL STRUCTURE.** With this approach, the organizational chart, as depicted by Figure 1, is very relevant. In such a structure there are multiple (managerial) hierarchical layers. At the lowest hierarchical levels there are departments consisting of functionally equal members. So,

within the departments, it is assumed that there is (almost) no difference in function.

- **DIVISIONAL STRUCTURE.** This can be approached in almost exactly the same way as the functional structure. Again, the starting point is the organizational chart as depicted by Figure 2. The main difference between the functional and divisional structure is at the lowest hierarchical levels. With a divisional structure, each separate division consists of multiple, different functions. This is the most essential difference with regard to the functional structure.
- **MATRIX STRUCTURE.** This structure is a little bit more complicated than the previous ones. One crucial assumption which is made is that each node in the matrix organization consists multiple people. However, the way these people are structured remains a black box. That being said, we rely on the organizational chart of the matrix structure (Figure 3). This way, each node has two managers.
- **TEAM STRUCTURE.** The team approach can be captured relatively easy in an organizational chart. This chart is again used as guideline (Figure 4) for the analysis. With this type of structure, it is assumed that the organization considers each team as one individually operating unit. Also, it is also considered that how the team is performing is of more importance than individual contributions.
- **VIRTUAL STRUCTURE.** This structure is quite hard to evaluate, due to the fact that there are many black boxes. As to decide how to analyse a virtual matrix in a proper way, the organizational chart in figure 5 serves as guideline. Here, one central, core hub can be identified with many (outsourced) hubs around it. Each hub is considered a black box; it can basically have every possible known structure. Instead, it is chosen to see every outsourced hub as an employee of the central hub. Basically the result of the analysis with regards to this approach states how the central hub should evaluate the outsourced companies, as a whole.
- **LEARNING STRUCTURE.** A learning organization can hardly be captured by an organizational chart. However, having an organizational chart seems to be of essence for the analysis. Therefore, also here, we rely on the chart displayed by Figure 6. This chart shows that the organization seems quite random. Two points are relevant for the analysis, which are that there seems to be 1) no supervision and 2) no management. Due to the random structure, further specifications for the analysis of this organizational approach are also taken into account. Namely that with the analysis of learning organizations, the philosophy (continuous employee improvement and development) is considered of special importance.

## 4.2 Textual addition to the matrix

The matrix presented above shows a lot of decisions made by the authors based on their interpretation of the different appraisal methods and different organizational structures. As the demarcation of this paper already shows how we perceive different organizational structures this section will provide an explanation for the choices made while cross-referencing the appraisal methods with the organizational structure. The ‘Team’ organizational structure will be explained via a case study of the company Valve because almost all appraisal methods can be applied but with some side notes.

The section will work around the appraisal methods for practical reasons and will describe the different choices made. The choices were made based on the application of the method in the organization i.e. whether or not the appraisal method is possible to use taking into account organizational structure, expected organizational culture and practical implementation.

## 4.3 Ranking method

This classic method can very well be used in functional organizations because it is easy to rate employees relative from each other. For example, in the accounting department of an organization with 20 employees, the lot can be ranked relative of their performance. This is not quite applicable for a divisional organizational structure because one team exists of different functions so it is hard to rank them relatively from each other. However, the managers of these teams can be ranked relative from each other. As mentioned in the demarcation the matrix nodes remain a black box since we do not know if these nodes are individuals or teams. We assume that these nodes are divisional teams which makes the appraisal method only applicable for managers. However, if the nodes are individuals then the ranking method could be a suitable appraisal method. The ranking method can definitely not be used in a virtual or learning environment. First of all because both organizational structures are lacking a direct supervisor. Second the virtual organization is seen as different ‘teams’<sup>3</sup> which cannot be ranked relatively from each other because comparing a logistics company with a marketing company is rationally seen not really possible only on a few points. In the learning organization the purpose is feedback and learning from your positive and negative traits which is not established by a ranking method. Furthermore, there is not one single person who ranks the employees so the ranking method cannot be used in a learning organization.

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<sup>3</sup>The teams are the outsourced company’s. So there is one central hub which outsourced every activity that they are not good at. For example, a computer factory is not specialized in pay-roll administration, fabrication of the chips, shipping the PC’s etc. These activities are outsourced and the outsourced companies are seen as teams.

#### **4.4 Graphic/trait rating scale**

This classic method can very well be used in functional organizations because it is easy to rate employees relative from each other. For example, in the accounting department of an organization with 20 employees, the lot can be ranked relative of their performance. This is not quite applicable for a divisional organizational structure because one team exists of different functions so it is hard to rank them relatively from each other. However, the managers of these teams can be ranked relative from each other. As mentioned in the demarcation the matrix nodes remain a black box since we do not know if these nodes are individuals or teams. We assume that these nodes are divisional teams which makes the appraisal method only applicable for managers. However, if the nodes are individuals then the ranking method could be a suitable appraisal method. The ranking method can definitely not be used in a virtual or learning environment. First of all because both organizational structures are lacking a direct supervisor. Second the virtual organization is seen as different ‘teams’ which cannot be ranked relatively from each other because comparing a logistics company with a marketing company is rationally seen not really possible only on a few points. In the learning organization the purpose is feedback and learning from your positive and negative traits which is not established by a ranking method. Furthermore, there is not one single person who ranks the employees so the ranking method cannot be used in a learning organization.

#### **4.5 Critical incident method**

The critical incident method is highly applicable in most organizational structures. This is because the individual in an organization has the possibility to act on a higher level than his/her colleagues. However, how this is perceived within the organization is dependent of the organizational structure. In a functional, divisional and matrix organization the individual will most likely be promoted while the rest of the team stays at the same level. This is because the employee has shown that he/she has magnificent skills on critical moments or shows a high potential to grow in the organization. In a virtual organization whenever a team, so the outsourced organization, delivers a great quality product and provides a good cooperation the organization is most likely to be contracted again whenever the central hub is going to outsource its activities again. Finally, in a learning organization whenever an employee acted strong in critical moments the rest of the team will, most likely, complement the employee and the employee get a higher ‘status’ or respect within the team. It must, however, be noted that the appraisal method in a learning organization comes from the team and not from a direct supervisor or contractor.

#### **4.6 Narrative essay**

Let us first state that the narrative essay is a time-consuming qualitative appraisal method which we can only recommend when there is a small team and a

single manager or contractor. Therefore, in the functional and divisional organizational structure this appraisal method is suitable but only if there is a small team. In addition, the virtual organization can use a narrative essay to give feedback or write a reflection on the cooperation with the organization that was contracted by the central hub. In the matrix organization the narrative essay can be used but there is a problem who is writing the essay. If there are 2 different essays from the 2 managers this can cause trouble. Furthermore, if every node is a team the managers have to write a great number of essays which is very time-consuming. It is of course possible but the authors think that this method of appraisal is not suitable for this type of organizational structure. The narrative essay is definitely not applicable in a learning organization because there is no supervisor who assesses every employee. Moreover, it would be quite inefficient that every employee writes a narrative essay about his/her colleague when the team exceeds more than let's say 5 people since it is very time consuming.

#### **4.7 Management by objectives (MBO)**

MBO suits perfectly well in an organization which floats between the traditional and modern organizational structures. Giving the employee more influence in the decisions of the management and the objectives of the organization. This idea will less often be used in functional or divisional organization because the organizational culture does not allow it to be implemented. For example, when looking at a cannery. The individual working at the assembly line most probably does not have the vision and strategic insight of the organization to make a good decision on what the objectives of the cannery should be<sup>4</sup>. Nevertheless, he/she can be asked to give his/her opinion on the matter. In a matrix organization this type of appraisal method is very well applicable because the managers can include the teams from the nodes to set their objectives which they must reach. The theory has shown that the more inclusion of the employee the most likely he/she is to reach the set objectives. Finally, in a virtual organization the contractor must discuss with the one being contracted what the objectives should be for a good cooperation. Since this style of appraisal needs a manager the learning organization does not comply for this method.

#### **4.8 Behaviourally anchored rating scales (BARS)**

The BARS method actually has the same criteria as the Graphic/Trait Rating Scale which is not very surprising because it practically is the same method. Because the dimensions in the BARS method remain fuzzy and ill-defined, maybe even more ill-defined than in the Graphic/Trait Rating Scale due to the fact that it is dependent on the Critical Incident method, the BARS method suffers from the same critique as the Graphic/Trait Rating Scale and is thus applicable in

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<sup>4</sup>This phrase is stereotyping people working on an assembly line. There are of course enough cases where an assembly line employee might have a vision and a strategic insight.

the same organizational structures based on the arguments of the Graphic/Trait Rating Scale.

#### **4.9 Assessment center**

The Assessment Center is highly applicable to multiple organizational structures. This is because it is more than just an appraisal method, it can also be used for training, development or analysis of the individual. Therefore, the organizational structure where the individual is assessed can be seen as good indicator for the Assessment Center. This is in particular the case in the Functional, Divisional and Matrix organization where the latter is strongly dependent on the Critical Incident method. Whenever an employee stands out of the group in a matrix organization, the managers can decide to send the employee to an assessment center to test whether he can be promoted to a higher position in the organization. In a learning organization the Assessment Center can also be used to train an employee in a particular trait when the team cannot give the person more feedback on which the employee can develop him/herself. In a virtual organizational the central hub cannot decide for one of the contracted to go to an Assessment Center because the central hub can only assess the organization as a whole instead of the individual.

#### **4.10 360-degree and 720-degree feedback**

This type of appraisal method can almost only be used in organizations where the team is central to the organization. Because the co-workers provide the employee with feedback, a process which is led by a specialist instead of a manager, the lack of a supervisor is a pro for this kind of method. The Virtual organization cannot use a 360-degree or 720-degree feedback because this is method is also focused on the individual and not on the cooperation with an external organization. The likeliness that this method is used in a Functional, Divisional or Matrix organization is very small because the organizational culture does not allow for such a method. Furthermore, there is a clear manager who might steer the process in such a way that the colleagues of the one being rated may be affected by the opinion of the supervisor.

#### **4.11 The team organization: a case study of Valve**

The Team organizational structure is an exemption on the other organizational structures because this organizational structure sees a team of individuals as one big individual. The idea is that projects are given to a team and in a natural way people find their way around the project. There is no direct supervision but natural leaders will stand up and keep track of the bigger picture whereas others focus on the details of the project and give feedback to each other so they keep developing themselves. One particular company that has really mastered this strategy is Valve Software (henceforth Valve) founded by Gabe Newell and Mike Harrington which are renowned for their pioneer work on flat organizations and

teamwork.

## Structure and philosophy of Valve

Based on the Valve Handbook For New Employees (henceforth: Handbook) they state the following:

### WELCOME TO FLATLAND

”Hierarchy is great for maintaining predictability and repeatability. It simplifies planning and makes it easier to control a large group of people from the top down, which is why military organizations rely on it so heavily.

But when you’re an entertainment company that’s spent the last decade going out of its way to recruit the most intelligent, innovative, talented people on Earth, telling them to sit at a desk and do what they’re told obliterates 99 percent of their value. We want innovators, and that means maintaining an environment where they’ll flourish.”

### Welcome to Flatland

Hierarchy is great for maintaining predictability and repeatability. It simplifies planning and makes it easier to control a large group of people from the top down, which is why military organizations rely on it so heavily.

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Source: Valve Handbook for New Employees (n.d.), p.4.

The idea of Valve is that you pick your own projects, project your own ideas, spread your own philosophy and make sure that the people around you keep growing. Decision-making within Valve is done whenever someone feels like decision making or whenever the team sees it as their obligation to make a decision<sup>5</sup>

The third chapter of the Handbook is titled ‘How am I doing?’ which shows how appraisal methods within Valve work. Once a year Valve gathers a group of people who perform a 360-degree feedback on every employee. This team conducts interviews, gathers additional data, anonymizes the feedback of each employee and redirect this to the person for who the feedback was intended. Valve employees are noted in the Handbook to take into account the categories used in the Stack Ranking process.

The Stack Ranking process is something one should not expect in such an innovative flat organization but this proves that although your organization is flat

<sup>5</sup>To remain focused on the topic of this paper we skip the other inspirational organizational structures of Valve. For the Valve Handbook see [http://www.valvesoftware.com/company/Valve\\_Handbook\\_LowRes.pdf](http://www.valvesoftware.com/company/Valve_Handbook_LowRes.pdf)

and everyone is pretended to be equal this is not the case whenever it comes to salary. Stack Ranking is based on the principle that every employee rates the other employees that he/she worked with that year. Based on this ranking the salaries of the employees is determined. However, there is of course the danger of strong bias i.e. ranking someone not on his qualities or value to the organization but just because one likes the other more than the other. Valve states in its Handbook:

”The removal of bias is of the utmost importance to Valve in this process. We believe that our peers are the best judges of our value as individuals. Our flat structure eliminates some the bias that would be present in a peer-ranking system elsewhere. The design of our stack-ranking process is meant to eliminate as much as possible of the remainder. Each project/product group is asked to rank its own members. (People are not asked to rank themselves, so we split groups into parts, and then each part ranks people other than themselves).”



Source: Valve Handbook for New Employees (n.d.), p.29.

The employees are asked to rank their colleagues on skill level/technical ability, productivity/output, group contribution, product contribution. Through this process salaries and feedback is given to the employees. So the salary is set based on the value you have for the organization in the opinion of your coworkers. Whenever an employee does not agree with the ‘verdict’ of his/her colleagues he/she needs to speak up and discuss this with each other to see whether something can be done about the problem that this particular employee has.

#### 4.12 The team organization: the matrix

Now that it is much more clear how the team structure look like it is needed to look at the matrix and expand on the topic of appraisal method. What kind of methods can and could be implemented in such a flat organization?



Overall we first stated that every appraisal method can be implemented in a team because the team decides which appraisal method to use. As can be seen in Valve the Ranking Method and Graphic/Trait Rating Scale are both implemented in this organization with some tweaking on some places. Nevertheless, it is not impossible to implement this in a team organization.

However, only two appraisal methods cannot be implemented in a team organization because of the absence of a supervisor and because of the efficiency of such a model. First, the critical incident model cannot be implemented because there is not a single employee should stand out of the team for his or her personal benefit. An employee is always working for the benefit of the whole team and the whole organization. You will get your pat on the back when the Stack Ranking process takes place. This differs from the learning organization where an employee is encouraged to live up to its full potential with the help from the team. In the team organization an employee should live up to its full potential as long as the team also benefits from it. Second, the narrative essay simply just takes too much time in such an organization. Even if narrative essay should be implemented in a team organization it would be a mixture of different appraisal methods, which of course is possible, but still would be incomplete or biased because the ones conducting interviews and/or questionnaires do not get all the information a coworker of that particular employee has.

With regard to the modern appraisal methods the MBO, BARS and Assessment Center methods could all be implemented but also with some tweaking in the methods so it will support the team or the individual in such a way that it would benefit the team. In our humble opinion, we think that the 360- and 720-degree Methods are the most suitable options for a team organization. These methods are performed at the right level, the team level, and give the opportunity for employees to give a structured evaluation of their co-worker and provide feedback which could be used by the one being evaluated to improve the individual and the team at the same time. This is possible because every employee has the team at the first place and after that the individual. Moreover, they know what kind of feedback is needed to let someone grow in order to let the team grow because they are part of the same team.

## 5 Conclusion and Discussion

The aim of this paper was to make a cross comparison between academic literature and performance appraisal methods. The questions that were posed in the introduction was which performance appraisal methods were known in academic literature and whether certain performance methods are dominant in a particular organizational structure. The paper shows that there are a lot of performance appraisal methods described in the literature. For this paper we used the literature of Shaout and Yousif (2014) to structure and categorize the performance appraisal methods. This resulted in ten different appraisal methods

after we left out the fuzzy methods that they describe because of the inaccuracy and invalidity of these methods. Furthermore, the paper would become too extensive when adding these fuzzy methods, which are conjoined methods of traditional, modern, and entirely new methods. Further research could look at these fuzzy methods and expand on them with regard to validity, accuracy and effectiveness but also the methodological discussion on the instrument or method itself could be an interesting topic. In line with this paper, further research could also use the fuzzy methods to see whether these methods fit in certain organizational structures.

The second question of this paper was whether there is a dominant performance appraisal method for a specific type of organizational structure. From the analysis and the matrix that was derived from the analysis we can state that there is no dominant performance appraisal method applying to one particular organizational structure. When turning the question around there is an appraisal method which does apply to most organizational structures. The assessment centre can be applied to almost every organizational structure. In this paper we also state that Human Resource Accounting cannot really be seen as performance appraisal method because this is a financially induced method related to the organization itself instead of on the individual. Although, the argument can be raised that this method contributes to the analysis of the value of an individual eventually no feedback or evaluation is given to the individual but a sum of costs is communicated towards the organization how they can reduce costs or how much they can spend on which employee.

The paper has certain flaws in its structure and method which offer insights for further research. First, the analysis of the research is very subjective. By our personal reasoning and discussion between the two authors we tried to structure this research. There are methods to test whether this research is valid by using statistical data or by interviewing interviews with HR managers. Nevertheless, because this type of comparative research has not been done before, as far as we could find, this is a good first step in the direction of performing this type of comparative research. Second, the selection that we made of appraisal methods from Shaout and Yousif (2014) and the organizational structures from Daft and Marcic (2006) is a demarcation that we have made because of practical reasons. Further research could focus on more and different appraisal methods and organizational structures to expand on this topic.

When approaching this on a macro level the research conducted does definitely contribute to the academic literature because this comparison is scarce in academic research and is relevant since it combines different theories into one piece of research. Focusing on the valorization of this research managers and HR-employees could use this research to critically look at their organization and see whether the appraisal method that they use is the most suitable for their organization. Relating on falsification this research is quite hard to be falsified. In our opinion, reproducing this research will lead to different outcomes since the

research is quite subjective and based on the perspective and perception on the two authors. Methods to improve falsification are discussed earlier as statistical testing or qualitative methods which will improve the validation, accuracy and falsification of this research.

In short, this is a good first attempt to combine two theories to set up an instrument which can be used to see whether appraisal methods and organizational structures can be compared to each other. We think that this is definitely possible only the methods used could be made more reliable. Moreover, the systematic approach gives a good insight in the great variety of performance appraisal methods and organizational structures. Although this could be expanded on this first attempt provides an interesting starting point for further research.

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