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Research Article

CRITERIA OF CLASSIFYING MANAGEMENT THEORIES AND ITS RECONSTRUCTION USING AVICENNA'S THEORY IN SCIENTIFIC CLASSIFICATION

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ABSTRACT
This paper presents a review of classification for management theories and criteria used for making classifications. In this paper the evolution of theories and their history is presented with particular attention to the Iranian educated elite and the ideas of Avicenna on classification of the Sciences. A selection of prominent management theories are reclassified according to topic, issues, methods and goals and other distinctions between theories. Avicenna's theory on division and classification of sciences, in addition to having features and positive points such as classification's being sensible inductions' being total, contrast between categories, precision and recall, has a certain kind of discipline, normality and considering values. Identifying and applying some advantages of these classification systems of theories can provide a clear approach to the discipline of management theories. As civilization and development networks have progressed and become more complicated, the human sciences have also developed and made marvelous progress. Due to extensive proliferation of the human sciences, classification of science has also become more diverse. According to Kurt Lewin, has paid special attention to the value and usefulness of sciences, and the goals that they target. Application of Avicenna's classification in this study has led to value- oriented theories. To apply Avicessn'a theory a questionnaire was designed according to three criteria to evaluate durability of a theory over time, these were, efficiency of a theory for human and human needs, its validity and reliability. The questionnaire was sent electronically to 300 available professors and doctoral students in management. Finally, 35 completed questionnaires were collected. Construct validity was assessed using confirmation factor analysis and Cornbrash's alpha coefficient, and an evaluation greater than 0.962 for various constructs of the questionnaire confirmed its validity. The K-mean cluster analysis technique was used for data analysis. Following data analysis, 20 management theories were experimentally put in to two categories; judgmental and non- judgmental theories and ANOVA analysis was used to determine significant difference between clusters. In order to determine appropriateness and effectiveness of the method of classification of Internet customers, Diagnostic Analysis was used. In the following, implications for each cluster are given and some recommendations are provided from the study.

Keywords*: Classification of Management Theories, Avicenna, Clustering Theories, K-mean*

INTRODUCTION
Different schools of thought have developed within the social sciences, each with a different point of view regarding organization. Each has its own principles and assumptions and particular views and theories about how managers can best dominate and control social groups (Lee and Terrence, 1984). There is no formalized organization theory as such, but there are many theories that attempt to predict and explain behaviors of organizations and their members, as well as culture and structure of organizations (Shefritz and August, 1995). Each of these views has some partly obvious, and other easily recognizable assumptions, vocabularies and supporting theorists (Joe, 2006). Theories tend to be structured in terms of school, tradition, framework, model and dominant thought field for analysis and comparison and to make predictions and explain important aspects and assumptions of an organization; the world that they have created and to determine efficient and effective methods. In each class of theory, similar vocabularies, expressions and technical language are used (Shefritz, 1995).

Currently, evaluations and classification of social sciences are discussed under methodology, "in scientific issues that is sometimes interpreted as "philosophy of science". "Philosophy of science is knowledge of science's nature and their various principles and classification and so on "(Filisin, 1987). Methodology has systematized sciences by taking an introductory look at all of them and 'discusses and investigates appropriate methods and techniques of research in various fields of science' (Jafari, 1998). Classification is one of the most important topics in methodology. This subject has been addressed by Muslim thinkers a long time ago and great men such as Farabi and Ibn Torch and many other intellectuals have commented on it. Avicenna has also presented two appropriate schemes in the field. One of Avicenna's classification schemes is similar to Aristotle's model, and one of these schemes is his own innovation described in the valuable book 'Eastern Philosophy' and 'Dissertation of Kinds of Intellectual Sciences' and 'Metaphysics of Healing' are other studies on this issue (Mostaghimi, 2008).

Some reasons for the importance and necessity of classifying management theories are as follows;

- Recognizing trends of theories of development and their transposition and relation to other sciences and circumstances.
- Facilitating theories considered by researchers.
- Showing bases of inputs and outputs of ideas in relation to each other to accelerate better understanding of the identity of each one.
- Facilitating classification of books related to management theories in libraries.

Theories show realities and some theories have better potential application than others. The main objective of this paper was to determine the point at which theories stand correct. This issue is an important question for many enthusiasts in the area of management. This study has been conducted by investigating some classifications made in the field of management theory and with emphasis on distinction criteria in segmentation of theories, and value-orientation of Avicenna's criteria that stresses terms of divisions.

Short History of in Classification of Management Theories

Organization theory is evolution oriented; the term theory is used to describe a proposition or set of propositions that seek to explain or predict something, in this case, that thing is behavior of individuals and groups in organizational structure and such conditions (Shefritz, 1995). Throughout history, the main pillars of an organization have remained relatively constant. An organization has goals, employs people, gains resources, allocates methods, achieves some of its goals and uses a structure to separate, divide and coordinate its activities; relies on certain individuals and members to lead and manage others. Although the foundations have remained relatively constant, the goals, structure, style of doing tasks and the way of coordinating tasks has become more diverse. This diversity of activities reflects the organization with environmental factors extensively but these features are not unique (Shefritz, 1995)

By reviewing the past we can understand that origins of science must be sought in the history of primitive humans; science has been developed and extended continuously from the Ice Age through Palaeolithic, Neolithic, Bronze, Iron, and Desert ages until the advent of civilization and the Middle Ages and the Renaissance era to the scientific philosophy of the 20th century. And its classification is difficult because of multiplicity (Dumpy, 1992). It is no exaggeration to claim that the world at present is run according to assumptions and theories and it has been this way since the first time humans worked in a collective way to hunt, to wage war and for family life. What's new is discussion on the way people work together and organize themselves, a trend that has emerged as a field of research (Shefritz, 1995).

Regardless of the definition of science, it is clear that scientific discourse at its beginning was simple but over the centuries it has developed many ramifications and human logic, the brightest and the most precious gift that God has bestowed, has resulted in the emergence of many branches of science (Mostaghimi, 2008). Just as spacecraft engineers need to think in terms of Newtonian ideas, those who want to plan and manage an organization should begin the work by Taylor and Fayol; the future is based on something that has been in the past and has continued until now (Shefritz, 1995). Each theory involves giving a clear explanation of some obvious aspect of our world, while it is a small step for explaining reasons for events in order to find a solution for changing such events (Mac Cooley and others, 2007).

Research Article

Several schools of thought have shaped management theory. that are as reasonable structures and are as network of organization theorists who mutually confirm each other, each school has a basic goal, that of organizing and expanding knowledge about organizations and methods of research or study (Shefritz, 1995). This exponential increase of management theories makes classification particularly important 'there is an order in each of these classifications, each method is based on the acceptance of an order without which that method is free of certitude' (Descartes, 1963).

Various different classifications have been proposed for management theories according to the following reasons:

1. Extension of subjects that can be studied and discussed in each science or scientific issue.
2. Circumstances of scientific progress.
3. The differences of the philosophical foundations of science.
4. Inter-relations between sciences.
5. Difference in terms of worldview and infrastructure; ideologies of sciences.
6. Difference in terms of views on value of instruments used in sciences and their values.
7. Difference in terms of scientific classification.
8. Difference in terms of views on trends in sciences.

In an historical approach to the matter of organization and management, besides discussing the evolution of management, various schools and specific theories of each school are stated and a historical and thematic survey is presented. Many writers have applied this classification, many divisions have been made by this approach, each of which usually has three main schools of scientific management, human relations management and systems' administration (Alwani, 2009).

Organizational theorists belonging to one school, usually quote from each other, but often they do not appreciate theorists and theories of other schools, and sometimes refer to them in not such a good way (Shefritz, 1999). In the following, there are examples of ways in which scholars have classified schools of management theories:

Table 1: Variables in market segmentation from previous studies

Author	school	Author	school
WJ Scott(1961)			
Organization theory, principles and Review	Classical school		The traditional school of management science
	Neoclassical theory	CS Gorge(1972)	School of Behavioral
Academy of management journal	Modernization theory	History of Management Thought	School of management process
	School of management process	Englewoodclifs, NJ:prentice-hall	quantitative School
H Kuntz (1961)	quantitative School (math)		
Forest management theory	Empirical approach (case study approach)	C. Pro(1973)	Scientific Management
Academy of management journal	School of Human Behavior	Short history of organization theory.	Human Relations
	School of social systems		Bureaucracy
	School of decision theory	Organizational Dynamics	Power, conflict and decide
	Quantative school		Technological features
J.G.Hachinsen(1967)	Scientific Management		Objective, environmental factors

The classical theory and principles of organization New York Holt, Rinchart & Winston	School of Human and Environmental Affairs Human as a decision-maker		and systems Rational choice models Bureaucratic decision-making patterns
	Management theory: in the present 1. The Operational school 2. Experimental school 3. School of human behavior, 4. Social systems school. 5. School of Decision Theory 6. quantitative School (math)	J.Fefer(1981) Power in organization Marshfield, MA:Pitman	Models of decision process Political models
WJ Scott(1961) and T.R. Armichel(1972) Organization theory (Reprinted) Homewood, IL: Dorsey Press	Scientific management movements Human relations and industrial humanism Classical theory Critique of neoclassical Concept of Systems Motivation, personality dynamics, attitude dynamics Organizational processes Organization as a machine Organizations as organisms Organizations as holographic brains	L.Ballman and T.Deal (1984) Modern approaches to understanding and managing organizations San Francisco: Jossey Bass.	Structural framework of systems Human Resources Framework The power Framework Symbolic framework Process or task management school Empirical School of Management School of Human Behavior School of social systems School of Decision making Theory
Gareth Morgan (1986) Beverly hills;SAGE publications	Organizations as Cultures Organizations as political systems Organization as a prisons of the soul Organizations as fluid flow Organizations as instruments of domination	Harold Kuntz (1961) Joural of the academy of management 4 Roberts and others, 1978 San Francisco: Jossey Bass.	quantitative School Industrial and organizational perspective Human factors perspective Social psychological perspective Sociological perspective

Overview of Criteria and Basis of Management Theory Classification

Theories do not create vacuum in organization and reflect what is going on in the world, what has the role in presenting theory of organization changes by passing time and various cultures and sub- cultures. Emergence of manufacturing systems, World War II, America's boom in the 1960s, information-based community and computers in the 1960s, intensification of uncertainty in 1980; have all contributed greatly to the evolution of organization theory. In order to truly understand organization as it is today, attention needs to be given to its historical context and the cultural conditions that have contributed to its formation (Shefritz, August, 1995). Arthur Kari Lof says that any school opposes other schools and tries to defend its position, each one claims that the others have major shortcomings.

The reason for most differences and distinctions created in different schools is the way they regard organizations, Graham Estelle and Andrea Van Do Van in 1983 state; the problem is that various schools of thought about organization only consider a unique aspect of the problem and use different logic and style of expression or vocabulary and this prevents direct discussion between them. In formation of each of these schools some basic assumptions are considered as the foundations of new developments. According to Terence and Ball (1984) different schools of thought have developed within social sciences, each of which has a unique perspective on organization, each has its own principles and assumptions and particular views about how managers can take control of social groups. What has caused different classifications on management theory throughout history is that each of the scientists has selected a specific criterion regarding division of knowledge and sciences and each of these criteria has been selected according to its specific aims and objectives.

Just as there is not complete agreement on the basic components of organizations among different schools, there is no consensus on how organizational theories can be fitted to various schools. Despite differences, most of the known methods can be classified in a group of different schools of thought, they have a lot common features, such as the following:

A) They are classified with respect to views on organization, in other words they are placed in a group given the assumption they have about individuals and organizations.

B) Theories are grouped according to the period that has played the greatest role in (Shefritz, August, 1995).

Sometimes classification of the sciences is designed on the basis of the degree of human mental faculties and the variety of activities that a human is able to perform is a criterion for division, but most philosophers and intellectuals consider the reason for distinctions among sciences in terms of 'subjects differences' (Avicenna, 1994). And some of the things and ends can cause distinction of the sciences and their integration in a specific class. The decedent Akhund Khorasani Sahen Kefaye considered distinction of the sciences according to their different ends (Khorasani, 1985); Ayatollah Sadr has identified the natural points of sciences that may be an appropriate for each science (Sadr, 1626). The real value of subjects and objectives of sciences is also is one of the criterion of ranking the value of sciences. Research methodology and the study of sciences can also be used as a criterion for classification of sciences. Of course many other criteria have been mentioned for science classification in the history of human thought.

Avicenna's Theory on Sciences' Classification

Avicenna in 'Metaphysics of Healing' and 'Eastern Philosophy' has presented divisions for science classification. Avicenna, given the multiplicity of sciences and their goals, provides two major criteria for initial classification of sciences.

1) One of the criteria for classification of sciences in his view is durability, efficiency and need to that science, or lack of durability and efficiency that is value oriented.

2) The second major criteria for classification of sciences is that of the ultimate goal of a science in theory or practice.

On the basis of these two above-mentioned criteria, sciences are divided into judgmental and non-judgmental sciences; those sciences whose needs are current in the entire universe are called 'wisdom'

and the other sciences are 'non-judgmental'. According to Avicenna, the fact that human needs to one science is not cross sectional indicates the importance of that science because all science and human knowledge have been enacted for meeting his needs and if, in all times and places need to a science is stable and consistent this shows that the science can ensure happiness, perfection and salvation of human more than other sciences. And each of these is divided into subdirectories using the second criteria, this great philosopher divided sciences into theoretical and practical sciences. Another point that can be said here about Avicenna's division is that it is value-oriented classification.

In value-oriented classification, one of the three axes can be chosen as a criterion for division;

1) Classification based on subject values
2) Classification based on value of objectives and ends
3) Classification based on value of functions and external concrete results (Mostaghimi, M, 2008).

Perhaps in the first division by Avicenna, the third axis has been more involved since equality of human needs to a science shows efficiency and transcendental results throughout the history of this science. Today, in the system of science classification, sometimes paying attention to results of science is a criterion. Pragmatism and application-oriented type attitudes tend to fit this type of classification, because in weak fundamentals, some of their results can be wrong (Mostaghimi, 2008). Avicenna focused on an objective result of science, in his view, special interest of a science is a service through which that science is presented, but the benefit that is achieved through a noble science and its nobility doesn't equal the science itself, it cannot be regarded as a service because the servant should benefit a client as the client benefits from a servant (Avicenna, 2011).

The second criterion for division of Avicenna is that science is theoretical and practical. Theoretical science (may be considered as the most important theoretical knowledge) has always been directed to achieve absolute certainty and claims that through reason a set of rules governing the existence and creatures of the world can be gained, but in practical science practical wisdom enters the field and plays a role besides theoretical wisdom (Mostaghimi, 2008). He has included physics, mathematics and theology in general classification of theoretical science, and thus has created a particular affection between them. He has also considered practical science consisting of ethics, residence wisdom, wisdom of Medina and prophecy.

An important question is to determine to what extent the old classification and Avicenna's model is acceptible? The answer is that wherever there is a theory based on rational criteria, it is possible that its basis is safe from damage by gradual change although it progresses apparently. 'in fact Even Scientific Revolution in its early stages has been created because of regular changes in way of rational thinking and kind of questions raised, rather than it is a result of increased technical equipment' (Garoosi, 1994). And Sinai and Aristotelian classifications are such, that they have a fixed rational foundation, so although sciences develop, the foundation of these classifications does not see any serious damage. Ranking sciences according to value of subjects and the aims or value of applications and external objective results are the most common rankings for science among the scholars of the East (Mostaghimi, 2008) that are not stated in this section.

In a discussion of distinctions between sciences Avicenna emphasizes that the advantage existence over something that does not have natural existence cannot be discussed in terms of its distinctive aspect and distinctions of sciences should be based on distinctions in terms of issues. In Avicenna's view, goals and issues are both external realization of sciences. The goal is ultimately the same is achieved following the realization of interaction with the outside world.

Advantages and Features of Avicenna's Classification

In Avicenna's classification, other than necessity conditions of division, following characteristics can be observed, and therefore Avicenna's classification will be an acceptable:

1. Discipline: some kind of order is necessary in every classification, without which classification would lack discipline.
2. Rationale: division established according to illusion, imagination and emotions will not be a comprehensive classification and a classification is only strong and stable if it is rational.

3. Avoidance of presuppositions: mental presuppositions sometimes deviate classification from its main axis and avoidance of presuppositions makes a classification system strong.
4. Realism: one of the characteristics of acceptable classification is that it is as realistic as possible and appreciates current facts including examples of areas of natural sciences of divisions and advantages.
5. According to the issues and objectives of science: any classification that makes larger dimensions and clarifies sciences majors will be higher and more sublime classification.
6. value-orientedness of classification: if a classification can separate sciences and rank them according to value, then it would be a better classification. Although science has made enormous progress this has brought about new classification systems that increased the number and instances of sciences seem more plausible than the old classifications, it should be admitted that offering respectable features of Avicenna's classification to world of Science philosophy is appropriate and necessary and valu-orientedness of this division is very important, (Mostaghimi, 2008). Although classification of Avicenna does include many sciences because they had not been identified at his time, his divisions have a rational basis and they can be considered as exceptional rational divisions; they have the potential to include all knowledge that now exists in fields of science and thinking. Avicenna's classification may also be used to classify sciences that may appear in the future in a subset (Mostaghimi, 2008).
Avicenna, in one of his divisions, considers main criteria as emergence of objective results and external goals of that science (in kinds of belongings). Avicenna's classification is strongly influenced by thoughts on epistemology and ontology. In selecting more than anything considered objective result and, (Mostaghimi, 2008).

MATERIALS AND METHODS

Research Methodology

The present study was done as a descriptive survey (cross sectional) in terms of purpose. The goal of this study was classification of management theories selected by the researcher in homogeneous and similar groups.

Reconstruction of Management Theories Using the Theory of AVICENNA

Harold (1961) described management as a forest of meanings. In this paper, due to diversity and plurality of management theories, a few of these have been investigated; three criteria have been applied to the theories, including: A) value of a theory B) interest of researchers and scholars, that is a reference and underlying rock of organization theory C) sources for the theories considered in this paper from scientific books and articles and the writer's background. The selected theories have been classified according to Avicenna's classification that can be applied to all theories of management. The theories discussed in this paper are as follows:
Specialsim of Adam Smith, Principles of administration science of Henry Fayol, Taylor's scientific management, bureaucracy of Marx Weber, Gilbert's movement sensing, stages of personality development of Ericsson, Pavlov's classical conditioning, studies of Hawthorne, Maslow's hierarchy of needs, ERG theory of Alderfer, motivation - health theory of Frederick Herzberg, Likert's management systems, network management of Mutant and Blake, contingency theory of Fiedler, situational leadership life cycle model of Hersey and Blanchard, Wiener's Cybernetics, general systems theory of Bertalanffy, Bolding's complexity hierarchy based systems, classification technology of Charles Peru, organization and environment of Lawrence and Lorch, Hofstede's cross- cultural studies, the relationship between structure and strategy of Chandler, brainstorming of Osborne, TQM of Deming, Drucker's Management based on Purpose, Z Theory of William Takeuchi, ten roles of director by Mintzberg, learner organization of Peter Senge, reverse engineering of Hamro Chemchy.

Design of the Questionnaire

In the present study, the required measures of criteria for the classification of Avicenna's management theories were selected according to the study of Mostaghimi (2008) and the literature that includes three prominent groups. The data set of research was collected by a questionnaire containing 60 questions and

three questions were considered for each theory. And 7-items Likert Scale (1 totally disagree to 7 totally agree) was used. Measures used in the questionnaire are outlined in Table 2.

Table 2: Criteria for classification of customers

No	Criterion
1	Durability of Theory over time.
2	Efficiency of the Theory for Human
3	Human's Need to the Theory

Based on extracted criteria, a preliminary questionnaire was designed and to assess their validity and for clarification, necessary changes were made with the participation of experts and their perceptions from the answered questions and what was regarded by the researcher was compared, and necessary modifications were made to the questionnaire. Given the small sample size of the study, it wasn't possible to measure reliability and validity of the survey instrument quantatively, and these investigations were performed after collecting questionnaires from the research sample for further confidence. No item was deleted from the questionnaire.

Statistical Population and Sample and Data Collection Method

The statistical population of this research was available to only a few teachers and students of management with relative dominance in the field of management theory. The sample size was calculated based on Cochran's sample size formula and was determined as 30. Due to the unavailability of sample, available sampling was chosen. In this study, data were collected by an online questionnaire. For this purpose 300 questionnaires prediction of irreversibility of many of them, were sent via email. Finally, 35 questionnaires were answered and responses were analyzed.

Data Analysis Method

In this research, after investigation and examination of validity and reliability by assessment tools, K-mean hierarchical cluster analysis technique and SPSS19 software were used to organize the units in to groups. Then ANOVA analysis and F statistics determination were used to show the difference between clusters of management theories, and at the final step, in order to determine appropriateness and effectiveness of management theory classification, discriminative analysis was used. Clustering is the dividing of a heterogeneous group into several homogeneous subgroups to seek to maximize differences between groups and to minimize differences within groups, (Punch and Stewart, 1983). Cluster analysis includes a set of algorithms and methods for grouping similar objects in related classifications. Cluster analysis can be used to explore structures among data without explanation or interpretation. In other words, this method simply discovers structures in data without explaining why they exist. Three conventional clustering methods include; hierarchical methods (such as Ward Variance minimum), non-hierarchical methods (such as k- means) and Artificial Neural Networks (Hosseinqoli *et al.*, 1386).

The k-mean method is the most practical method for clustering data, it is a taxonomy method. This method was first proposed by McQueen in 1967; the number of clusters is fixed and predefined in this method, and the first the objects are randomly divided into k clusters. In the next step, calculations are made for the distance of each object to its cluster center. If distance of a desired object from the mean of the cluster is high and close to another cluster, it is moved to the closer cluster and this is repeated until the error function is minimized or cluster members no longer change (Momeni, 2011).

RESULTS AND DISCUSSION

Findings

Reliability and Validity

Convergent validity was used to investigate validity of one –dimensionality of components and internal structure of the relationships among measures of management theory. Convergent validity indicates agreement between the results obtained and theoretical construct (Pooya and Azar, 2011). Confirmatory factor analysis was used for this purpose, it was found that all its values were meaningful for all items of

the questionnaire. Significant level determined by Bartlett's test was an indication that factor analysis can be used to identify constructs. The minimum value of the KMO index is 0.5 and Bartlett's maximum level is 0.5 (Das, 2007). Confirmatory factor analysis results are given in Table 3. To assess reliability, Cronbach's alpha was 0.962 for all values.

Table 3: Results of Confirmatory factor analysis for questionnaire items

Theory	criterion	Factor bar	KMO	Bartlett	Variance	theory	criterion	Factor bar	KMO	Bartlett	Variance
1.specialisim, Adam Smith	DK	.839	.674	.000	79.474	2.Principles of management, Henry Fayol	DK	.600	.326	.000	54.356
		.939						.942			
	N	.894					N	.620			
3.Scientific Management, Taylor	DK	.480	.498	.000	67.039	4.bureaucracy, Max Weber	DK	.987	.583	.000	90.209
		.960						.955			
	N	.927					N	.905			
5.Movement sensing, Gilbert	DK	.982	.710	.000	92.436	6.classical conditioning, Pavlov	DK	.902	.711	.000	89.406
		.957						.971			
	N	.946					N	.962			
7. Hierarchy of Needs, Maslow	DK	.783	.570	.000	78.551	8.Theory ERG, Alderfer	DK	.305	.332	.000	55.053
		.962						.939			
	N	.904					N	.823			
9. Theory of Motivation - Health, Frederick Herzberg	DK	.755	.495	.000	77.609	10.Management Systems, Likert	DK	.955	.499	.000	61.316
		.901						.950			
	N	.973					N	.159			
11. Contingency theory, Fiedler	DK	.941	.627	.000	89.814	12. The life cycle model of situational leadership, Hersey and Blanchard	DK	.976	.773	.000	95.016
		.918						.967			
	N	.984					N	.981			
13. Based on the	DK	.787	.650	.000	64.936	14. Classification of	DK	.720	.512	.000	75.064
		.860						.896			
	N	.767					N	.964			

complexity of the systems hierarchy, Bolding					Technology, Charles Peru					
15. The relationship between structure and strategy, Chandler	D K N	.860 .946 .964	.678	.000	85.508	16. Total Quality Management, Deming	D K N	.935 .957 .825	.658	.000	82.308
17. The objective-based management, Drucker	D K N	.933 .944 .956	.761	.000	89.226	18. Theory of Z, William Takeuchi	D K N	.935 .957 .963	.759	.000	90.553
19. The ten roles of managers, Mintzberg	D K N	.945 .944 .941	.771	.000	88.983	20. Learning Organization, by Peter Senge	D K N	.938 .970 .979	.734	.000	92.630

Cluster Analysis by K-Mean Method

K-mean cluster analysis was used for segmentation of management theories. To determine the number of clusters based on the Avicenna theory, two clusters were identified, ANOVA analysis also was used to investigate difference in dimensions of service operations strategy between two clusters. Value of F-statistics showed difference between all clusters in the two taxa.

Table 4: Naming and typology of clusters

cluster	Cluster name	Number of respondents (percent)	Theory durability over time	Efficiency of Theory for Human	Human Needs to Theory
1	Non-judgmental theories	11	4.03 a(3) b(2)	3.88 (2) (2)	3.68 (2) (1)
2	judgmental theories	9	3.19 (1) (3)	2.98 (1) (2)	3.08 (1) (1)

a) Rank in each cluster b) rank in comparison with other clusters (n = 7, range: 1 the best status and 7 the worst status)

In Avicenna's view, those sciences and theories, whose needs are current in all universe is called judgmental others are non- judgmental. According to Avicenna, human need is not cross sectional to one science shows its importance because all human sciences and knowledge have evolved to meet human need and if the need for the science is stable and consistent over time place, it shows that the science can cause happiness, perfection and salvation for humans, more than other sciences that show change and inconsisteny. According to the results obtained, 20 theories under study were put in two groups as follows:

Judgmental theories: scientific management of Taylor, Motivation – health theory of Frederick Herzberg's, management systems of Likert, Fiedler's contingency theory, situational leadership life cycle model of Hersey and Blanchard, hierarchy systems based on the complexity of Bolding, TQM of Deming, Drucker's purpose -based management Peter Senge's learning organization. Non-judgmental theories: specialism of Adam Smith, Henry Fayol's Principles of administration, bureaucracy of Marx Weber, Gilbert's movement sensing, classical conditioning of Pavlov, Maslow's hierarchy of needs, ERG theory of Aldefer, Charez Peru's classification of technology, the relationship between structure and strategy of Chandler, Z theory of W. Takeuchi, ten roles of managers of Mintzberg.

Discriminant Analysis

Discriminant analysis is a method for separating independent variables of groups whose data are nominal or ordinal in the best way. Through linear combination of independent variables determines variables that appropriately separate groups. This method shows a qualitative grouped variable and several independent variables that explain aspects that showing the best difference between groups. This is done through maximizing variance between groups relative to the variance within groups, based on a statistical decision making rule of the ratio of variance between groups to the variance within groups.

According to the three clusters, two diagnostic functions were calculable. In the present study the number of clusters of statistical sample was considered as a grouping variable and grouping criteria of management theories were considered as independent variables. Values of Wilks Lambda and Chi square, respectively indicated appropriateness of the differentiating equation and significance of the discriminat function. This statistic can be used to show effectiveness of classification or cluster analysis. Table (5) is Wilks's lambda coefficient. This table tests the null hypothesis and since the P value was less than 0.05, the null hypothesis was rejected and this represents significance of the discriminant function and determined its distinction power as good.

Table 5: Wil'ks' Lambda

Function test	Wil'ks' Lambda	Chi square	Degree of freedom	significance
1	0.309	19.360	3	0.000

Discussion and Conclusion

Minimum interpretation from this paper has determined that the foundation and characteristics of Avicenna's classification has illuminated the field of science philosophy. Of course we do not claim that classification is same as this that is presented, but the aim was to identify advantages of this classification system and to consider them in management theory classification to present a better understanding of Avicenna so that the West can benefit from the views of this Iranian scientist. Any type of classification that could be more systematic and answer more fundamentally important questions is a good one. However, it must be stressed that only a higher number of answers that are provided in proposing a system of science classification, is not criteria for advantages of that classification but fundamentality of those responses is the condition of the advantage. Avicenna's classification has the feature that answers basic questions (Mostaghimi, 2008). Perhaps one of the questions of management researchers is to identify theories that have the most potential application and that meet human needs in line with high goals of management theories.

In this paper, beside an overview of the classification of theories of organization and management, thematic segmentation of theories were discussed and described. Avicenna's ideas on value-oriented

classification of judgmental and non-judgmental theories were presented. These two theories can be placed in one of the two mentioned groups according to three criteria. Management evolution progress is continuous and new ideas are generated daily. According to Drucker, current knowledge has replaced manual labor in ancient times of management and classical theories should be viewed from a different perspective.

However, dynamics of science requires design and development of new theories and the unknown aspect of organization to be explained for this period and for the future. That certainly includes the new needs and requirements. Theories are important because they affect what happens to people, they are used to describe and explain the degree of importance attached to things, and how they are applied, so application of a particular theory needs careful consideration (Mac Cooley *et al.*, 2007). The proposed value-oriented classification method seeks to filter theories according to two value-oriented groups, and so seeks to answer questions related to determination of the most valuable theories. Many scholars such as Farabi, Mollahadi Sabzevari Akhund Khorasani, Allameh Tabatabai in the Muslim world, have presented different classifications of science that researchers can use as reference and that relate to studies conducted on Intangible Heritage of these scientists and use Islamic thoughts of these great treasures, offer dramatic and presentable results.

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