

To Classify the Employees of Corporate World using Data Mining

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Abstract: Bad cultures are also bad for career, Successful employees tend to work for achievers, and a good culture has been shown to drive long term financial performance. Work for a happy place, and employee'll likely do better in life. How can anyone know anything about a company's culture when they only go for a single interview. Believe it or not, there are signs. In a software company they do interviews with dozens of candidates every year, it always surprises how few candidates interviewing at company ask about their culture. A company's competence and ability to manage employee – to a considerable degree overlapping organizational.Culture is not easy to imitate. Even to describe and analyse culture is difficult, as indicated by all the management texts providing only superficial and trivial descriptions of culture, such as norms about 'market-oriented' behavior. The concept of organizational culture has drawn attention to the long-neglected,

Subjective or 'soft' side of organizational life. Accordingly, much research on corporate culture and organizational symbolism is dominated by a preoccupation with a limited set of meanings, symbols, values, and ideas presumed to be manageable and directly related to effectiveness and performance. Organizational culture calls for considerations that break with some of the assumptions characterizing technical thinking, i.e. the idea that a particular input leads to a predictable effect. Good cultures are characterized by norms and values supportive of excellence, teamwork, profitability, honesty, a customer service orientation, pride in one's work, and commitment to the organization. Culture provides meaning, direction, and mobilization – it is the Social energy that moves the corporation into allocation. The energy that flows from shared commitments among group members. More precisely, it is the norms that guide the behavior and attitudes of the employee in the company that are of greatest interest and significance, because they have a powerful effect on the requirements for its success – quality, efficiency, product reliability, customer service, innovation, hard work, loyalty, etc.

Norms and behaviors are affected by many dimensions other than culture. Within a culture there are a number of norms related to the enormous variety of different behaviours. The point with culture is that it indicates the meaning dimension, i.e. what is behind and informs norm.'Corporate culture' a company-wide set of norms and values can be affected by the same external forces, and be the cause of behaviour and performance. This is problematic because, among other things, work norms are probably closely tied to a variety of circumstances in the workplace rather than being organization-wide. The kind of job and organization, the reward structure, and the employee's age, gender, qualifications, and interests are

I. INTRODUCTION

Data Mining, *the extraction of hidden predictive information from large databases*, is a powerful new technology with great potential to help companies focus on the most important information in their data warehouses. Data mining tools predict future trends and behaviors, allowing businesses to make proactive, knowledge-driven decisions. The automated, prospective analyses offered by data mining move beyond the analyses of past events provided by retrospective tools typical of decision support systems. Data mining tools can answer business questions that traditionally were too time consuming to resolve. They scour databases for hidden patterns, finding predictive information that experts may miss because it lies outside their expectations.

Data, Information, and Knowledge:

Data are any facts, numbers, or text that can be processed by a computer. Today, organizations are accumulating vast and growing amounts of data in different formats and different databases. This includes:

- Operational or transactional data such as, sales, cost, inventory, payroll, and accounting
- Nonoperational data, such as industry sales, forecast data, and macro economic data
- Meta Data - data about the data itself, such as logical database design or data dictionary definitions

Information

The patterns, associations, or relationships among all this *data* can provide *information*. For example, analysis of retail point of sale transaction data can yield information on which products are selling and when.

Knowledge

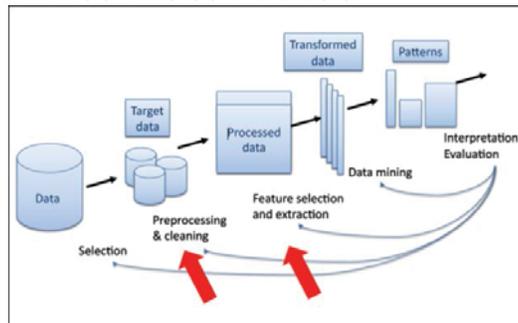
Information can be converted into *knowledge* about historical patterns and future trends. For example, summary information on retail supermarket sales can be analyzed in light of promotional efforts to provide knowledge of consumer buying behavior. Thus, a manufacturer or retailer could determine which items are most susceptible to promotional efforts.

Knowledge Discovery Process

The term Knowledge Discovery in Databases, or KDD for short, refers to the broad process of finding knowledge in data, and emphasizes the "high-level" application of particular data mining methods. It is of interest to researchers in machine learning, pattern recognition, databases, statistics, artificial intelligence, knowledge acquisition for expert systems, and data visualization.

The unifying goal of the KDD process is to extract knowledge from data in the context of large databases.

It does this by using data mining methods (algorithms) to extract (identify) what is deemed knowledge, according to the specifications of measures and thresholds, using a database along with any required preprocessing, sub sampling, and transformations of that database



II. TECHNIQUES OF DATA MINING

There are several major *data mining techniques* have been developed and used in data mining projects recently including association, classification, clustering, prediction and sequential patterns.

1. Association

Association is one of the best known data mining technique. In association, a pattern is discovered based on a relationship of a particular item on other items in the same transaction. For example, the association technique is used in *market basket analysis* to identify what products that customers frequently purchase together. Based on this data businesses can have corresponding marketing campaign to sell more products to make more profit.

2. Classification

Classification is a classic data mining technique based on machine learning. Basically classification is used to classify each item in a set of data into one of predefined set of classes or groups. Classification method makes use of mathematical techniques such as decision trees, linear programming, neural network and statistics. In classification, we make the software that can learn how to classify the data items into groups. For example, we can apply classification in application that “given all past records of employees who left the company, predict which current employees are probably to leave in the future.” In this case, we divide the employee’s records into two groups that are “leave” and “stay”. And then we can ask our data mining software to classify the employees into each group.

3. Clustering

Clustering is a data mining technique that makes meaningful or useful cluster of objects that have similar characteristic using automatic technique. Different from classification, clustering technique also defines the classes and put objects in them, while in classification objects are assigned into predefined classes. To make the concept clearer, we can take library as an example. In a library, books have a wide range of topics available. The challenge is how to keep those books in a way that readers can take several books in a specific topic without hassle. By using clustering technique, we can keep books that have some kind of similarities in one cluster or one shelf and label it with a meaningful name. If readers want to grab books in a topic, he or she would only go to that shelf instead of looking the whole in the whole library.

4. Prediction

The prediction as it name implied is one of a data mining techniques that discovers relationship between independent variables and relationship between dependent and independent variables. For instance, prediction analysis technique can be used in sale to predict profit for the future if we consider sale is an independent variable, profit could be a dependent variable. Then based on the historical sale and profit data, we can draw a fitted regression curve that is used for profit prediction.

5. Sequential Patterns

Sequential patterns analysis in one of data mining technique that seeks to discover similar patterns in data transaction over a business period. The uncover patterns are used for further business analysis to recognize relationships among data.

III. LITERATURE SURVEY

A survey is detailed study of a market or geographical area gather data on attitudes to, impressions, opinions, satisfaction level, etc., by polling a section of the population. A survey helps the researcher to build background on the survey problem. This type of research is required when the research problem is new or when the information available about the problem is limited. The 21st century demands increasingly more of the organizational process and of the employees.

LaRue, Bruce, and Robert R. Ivany. "Transform Your Culture." *Executive Excellence*, December 2004, 14–15.
Zennouche, M. and Zhang, J. (2014) Evolution of Leadership and Organizational Culture Research on Innovation Field: 12 Years of Analysis. *Open Journal of Social Sciences*, 2, 388-392..

Finally, Belias and Koustelios (2013) studied the organizational culture of Greek banking institutions. They showed that the dominant organizational culture of the institutions were hierarchical while employees preferred the clan type.

The culture of an organisation can be defined as the embodiment of its collective systems, beliefs, norms, ideologies, myths and rituals. They can motivate employee and can become valuable source of efficiency and effectiveness (Sudarsanam, 2010).

Wright, Gordon. "Realigning the Culture." *Building Design & Construction* 46, no. 1 (January 2005): 26–34.

Employees represent the backbone of organizations, and therefore behaviors demonstrated by them at the workplace can have serious effects on the success or failure of organizations (Mathias, 2006). In marketing, market-oriented culture is frequently defined as the key to strong performances (Harris and Ogbonna, 1999), culture here implying certain behaviours.

A 'clear sense of collective competence' – to connect to the citation above – does in itself sound positive and is good for self-esteem and commitment, but a high level of self-confidence may be a mixed blessing as it easily forms a part of, or leads to, fantasies of omnipotence, and may obstruct openness, reflection, willingness to listen to critique and take new external ideas seriously (Brown and Starkey, 2000).

Victor Tan, "Benefits of Corporate Culture," *New Straits Times* (20 July 2002). (Obtained from Factiva).

14 Tim Garmager and Lynn Shemmer, "Rich In Culture, Rich In Profits," *HR Focus* (October 1998). (Obtained through Factiva).

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Many practitioners and academics endorse the view that, individual innovation helps to attain organizational success (Amabile, 1988; Smith, 2002; Unsworth & Parker, 2003).

Hofstede et al. (1990), for example, found age, educational level, and hierarchical position to predict work values.

Bass, B. M., 1985, "Leadership and performance beyond expectations" Free Press, New York.

IV. PROBLEM FORMULATION

- ❖ Lack of knowledge about what the company was buying.
 - ❖ Learning objectives influences the planning of workshop facilities.
 - ❖ The managerialization of organizational Culture immediately appears appealing; but arguably deeper, less conscious aspects of culture.
 - ❖ Work norms are probably closely tied to a variety of circumstances in the workplace rather than being organization-wide.
 - ❖ Psychological, personal, family, alcohol dependency, and financial problems causes to lower the quality of work.
- Negative attitudes and destructive behaviors creates problem in work

V. OBJECTIVE

This study aims to identify the following aspects that are associated with corporate world working:

- ❖ To model the interaction between organizational culture.
- ❖ The Need of technical trainings, assembling resources, planning structures and explaining collecting data.
- ❖ An Employee report high levels of job satisfaction, effectiveness, and performance, uncertainty, commitment.
- ❖ To determine the organizational culture and the current level of employee commitment at the company. Empirical.
- ❖ To investigate the influence of organizational culture and worker autonomy on employee innovativeness.
- ❖ Classification analysis will be applied on the data to form the set of data.

VI. METHODOLOGY

The primary goal is to research the methodology is the basic framework action plan adopted in carrying out the research. ...

Following will be the steps involved during the research:-

- ❖ Selection of a study sample organizational culture mediates between leadership and organizational performance,
- ❖ To Measuring the customer needs and expectations; involve customers in quality improvement; determine customer satisfaction.
- ❖ The moderating role of employee feel valued, companies can better drive business results through their human capital.
- ❖ To develop a questionnaire consisting of various questions/parameters.
- ❖ To interact with the organization & employees in acquiring their views based on questionnaire.
- ❖ To analyse the collected response by using various statically test & data mining techniques.

REFERENCES

- [1] Belias, D., and A.Koustelios, 2013, "Organizational Culture of Greek Banking Institutions: a Case Study. International Journal of Human Resource Management and Research, 3(2), 95-104
- [2] Crawford, J., 2013, Strategy for Change management, (2d ed). Mitchell, Rebecca & Meacheam, David - Knowledge worker control: understanding via principal and agency theory, 2011
- [3] Cheng, B., Ioannou, I. and Serafeim, G. 2011. Corporate Social Responsibility and Access to Finance. HBS Working Paper Series 11-130
- [4] Schein, Edgar H. – Organizational Culture and Leadership, 2010

- [5] Hunt, S. D., Kieker, P. L., & Chonko, L. B. (1990). Social responsibility and personal success: A research note. *Journal of the Academy of Marketing Science*, 18: 239-244.
- [6] Barnhart, R.K. (1988) 'Entries for 'Structure' and 'Culture'', *Chambers Dictionary of Etymology*, Edinburgh:Chambers cited in Watson, T.J. (2006).
- [7] Bradley, L. and R. Parker (2001) *Organisational Culture in the Public Sector*, Report for the Institute of Public Administration Australia(IPAA), Australia: IPAA National.
- [8] Carnall, C. A. (2003). *Managing change in organizations* (4th ed.). Harlow, England: Prentice Hall. Joseph, Joshua (2004). *How Peers Influence Ethical Decision-Making in Work Organizations: Revisiting the social dimension*. Washington, DC: American University.
- [9] Holt, D. T., Armenakis, A. A., Field, H. S. & Harris, S. G. (2007). Readiness for organizational change: The systematic development of a scale. *Journal of Applied Behavioral Science*, 43, 232–255.
- [10] S. K. Johnson, "I Second That Emotion: Effects of Emotional Contagion and Affect at Work on Leader and Follower Outcomes," *The Leadership Quarterly*, vol. 19, pp. 1-19, 2008.