Analyzing the Relationship between the Competencies and Wage Level: A Case Study in a Telecom Company

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**Abstract**

Competency can be defined as the observable behavior including knowledge, talent and attitudes critical to reach the desired performance. Hence, competencies are behaviors the employees must meet and present in order to make a business enterprise successful.

The main objective of this study is to analyze the relationship between competencies and wage level. We hypothesized that there is a positive, linear correlation between the competencies and wage level.

In order to test this hypothesis we have collected data from a Telecom Company. The research findings revealed that competencies significantly and positively affect level of wages.

**Key words**: Competencies, Wage Level,Telecom Company

**Introduction**

The rise of knowledge economy and socio-economic transformation of the societies have led knowledge to be the fundamental means of wealth and prosperity. From the business perspective, knowledge seems to be a key factor for organizations’ success in the long run. Due to that, leveraging the knowledge resources effectively and efficiently appears to be a vital issue in order to gain the competitive advantage and to ensure the sustainable development for the societies, as well as for the organizations (Drucker, 1993; Davenport and Prusak, 1998; Bozbura, 2007).

In the knowledge economies there is a shift from task-based approaches to competency-based approaches. Therefore there the popularity of competency management systems has gained a special concern both from practitioners and academicians (Clardy, 2008). Competency management can contribute to organizations knowledge base and increase the knowledge utilization capability of an organization. Hence, it became an important research object in the more general area of knowledge management and is often integrated with learning management systems (Gold, 2001). Recent studies in this field, clarified that individual competency management is an area of research attracting efforts to leverage personal development, knowledge generation (Abou-Zeid, 2002), development (Bhatt, 2000), sharing (Sveiby, 2001), and utilization (Bender and Fish, 2000), organizational learning, innovation and effectiveness (Malhotra, 2000). In addition to being regarded as a focal point for planning, organizing, integrating and improving all aspects of knowledge management and human resource development systems, competency management modeling is also regarded as an approach focused on improving organizational performance (Qiao and Wang, 2009).

The main objective of this study is to analyze the relationship between wages and competencies. Our hypothesis was that, there is a positive, linear relationship between the individual competencies and wages. Data collected from an International Telecom company in Turkey. The company has defined seven individual competencies. The results indicated that five of these competencies have directly influence wage levels.

**Skill and Competency**

The concept of “competency” is a confusing term and is particularly mixed up with “skill”. However, competency does not merely refer to having certain skills. It also refers to how those skills are applied and how the use of such skills affects performance. Although there are a number of definitions of competency, in one definition it has been described as “a way of looking at jobs and job holder’s performance that relates specifically to the quality and quantity of the action undertaken in the job” ([www.csp.org.uk](http://www.csp.org.uk), 2001). In another definition, it has been stated as "demonstrable characteristics of the person, including knowledge, skills, and behaviors, that enable performance”. In other words, it is the set of abilities, behaviors, and attitude needed by an employee to achieve effective job performance. Hence, the competency framework enables employees to be clear about what is expected of them in terms of their behavior and specific job roles Dessler, 2003).

In most of the other definitions, the term competency is linked by efficient work and performance (of individuals) as carrying out work to a given standard. However, the details and comparison of different definitions are out of the scope of this study. The most important core of understanding is that competency points out at how skills and knowledge are applied ([www.csp.org.uk](http://www.csp.org.uk), 2001).

In the literature, a distinction is generally made between skills and competencies. There is no consensus among the scholars on how these concepts should be exactly defined. However, it is agreed upon that both concepts focus on the individual rather than the job itself and both of them have to be demonstrable and measurable. Moreover, the discussions between skill and competency usually center around two different types of skills. These are:

* the technical or “domain” skills : those skills and knowledge required to succeed in a particular job
* the enabling or “personal” skills : those behaviors and skills that people use to accomplish their work.

Skill refers to the technical skills and competency refers to enabling skills. ([www.opm.gov](http://www.opm.gov), 2004). In this study, the concept of competency or competency based pay systems comprised of both kinds of skills.

**Competency and Wage Relationship**

## It has been argued that while deciding the wage levels of the employees’ competencies should be taken into consideration. Hence, one of the most rapidly growing pay innovations in the last two decades is competency -or skill- based pay (Lee, et.al, 1999). The increasing popularity of CBP in the recent years is due to the strong emphasis on streamlining and reengineering business processes and on strategically aligning business with human resource management systems (Burke and NG, 2006). That is why companies are seeking compensation policies that reinforce the organizational change necessary for survival in the rapidly changing and turbulent market conditions.

Today, certainly a large number of organizations are using or moving towards CBP systems including governments and other public and private organizations ([www.uottawa.ca](http://www.uottawa.ca), 2004). It is also stated that there is convincing evidence of CBP to become a vital component of many companies’ pay systems. The field studies demonstrate that it provides positive benefits to the organizations in most cases. Nevertheless, research describing how it works and under what conditions it is effective is limited (Murray and Gerhart, 2000).

The main objective of CBP is to develop an employee with diverse skills in a given operational area. For that reason, CBP system is based on relevant competencies possessed and needed by employees on the job and seeks to provide more flexibility to management with an efficient, knowledgeable and multi-skilled work force. It is assumed that CBP system can positively influence and enhance the human capital which leads to improve the performance and contribution of employees and the value that they provide to the organization ([www.doh.dot.state.nc.us](http://www.doh.dot.state.nc.us), 2004).

**Case Study**

The case study is conducted in an international tele-communication company. The company is one of the leading communication and convergence technology group in Turkey, provides integrated telecommunication services. Group companies have a modern network infrastructure covering the whole country and offer a wide variety of services to residential and commercial customers all over Turkey.

**Competency Model**

The core competencies are described transferred to the employees as following. The company has defined seven competencies for all employees. Competencies that all personnel are expected to exhibit and that are critical in establishing and supporting the targeted company culture are:

1. Building Trust
2. Team Work
3. Customer Focus (Internal / External)
4. Adaptability
5. Continual Learning and Development
6. Decision Making
7. Initiating Action

**Statistical Analysis of the Relation between Wage and Competencies**

In order to find a correlation between compensation and competencies we have to find a firm that relates these two items in an integrated human resource system.

So the selected company must have;

* A grade system depending on job sizes
* A compensation system
* A competency model

When we analyzed the company, we saw that the company has a pay structure based on grade system depending on the job evaluation. However, the company has a competency model that is linked to the grade system. This structure leads us to analyze if there is a relationship between the pay and the competencies of the company.

A sample of 205 data is taken for the regression analysis. The data has the information of net wages and the scores of core competencies of employers who have grades above 6.

We assume that there is a positive linear relationship between competencies and wages. In order to test these hypotheses a linear model is constituted and a regression analysis is performed using “Ordinary Least Squares Estimates” technique. In the model written below, dependent variable (Y) is wage, independent variables are determined as in orderly trust (X1), teamwork (X2), customer focus (X3), adaptability (X4), continual learning and development (X5), decision making (X6), and initiating action (X7). In addition before performing multiple regression analysis all the assumption of linear regression was tested and no problem occurred.

 Y = 0+1X1+2X2+3X3+4X4+5X5+6X6+7X7

The next step is assessing the significance of the model using ANOVA (F) Test that shows the combined effects of all the independent variables in the regression model. In order to consider the model to be significant, the general acceptance is that the significance level should be equal or less than %5 (  0.05).

Table 1 ANOVA Test

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Model |   | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | 52646409 | 8 | 6580801 | 8,464213 | 0,00 |
|  | Residual | 1,52E+08 | 196 | 777485,3 |  |  |
|  | Total | 2,05E+08 | 204 |  |  |  |

Finally, using “t-test”, partial regression coefficients that explains the effects of independent variables on the dependent variable separately, have to be analyzed. The standardized regression weights some of the variables are significant. Accordingly these results indicate that there is a positive linear relationship between trust (X1), teamwork (X2), customer focus (X3), adaptability (X4), and wages. Nonetheless, the analysis show that there is no meaningful relationship between continual learning and development (X5), decision making (X6), initiating action (X7), and wages at 0,05 levels.

The regression analysis results indicated that there is a positive linear correlation between trust, teamwork, customer focus, adaptability and decision making with wage levels. However, we could not able to figure out a meaningful relationship between learning and development, initiating action and wages (table 2).

Among these competencies, trust was found to be the most important criterion with the value of its scandalized regression weight being 0,363 (p<0.01) followed by adaptability (0,233), and customer focus (0,229). In contrast teamwork and decision making have comparatively less impact on wages with regression weight 0,185.

Table 2 Coefficients

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Model |   | Unstandardized Coefficients |   | Standardized Coefficients | t | Sig. |
|   |   | B | Std. Error | Beta | B | Std. Error |
| 1 | trust | 486,947 | 106,985 | 0,363 | 4,552 | 0 |
|   | teamwork | 269,705 | 117,792 | 0,185 | 2,29 | 0,023 |
|   | Customer focus | 321,788 | 102,556 | 0,229 | 3,138 | 0,002 |
|   | adaptability | 337,468 | 108,598 | 0,233 | 3,108 | 0,002 |
|   | Learning and development | 170,484 | 111,089 | 0,116 | 1,535 | 0,12 |
|   | Decision making | 224,206 | 126,558 | 0,148 | 1,772 | 0,04 |
|   | initiative | -14,968 | 117,674 | -0,01 | -0,127 | 0,899 |

Dependent variable: Wage levels

**Conclusion**

The telecom company uses competencies in recruitment, training and development, career planning and performance management processes. However, a job based payment system is used within compensation management. But we can say competencies have an indirect effect on compensations of white collars through performance premiums reflected on wages depending on grade and performance criteria. The regression analysis results also show that there is a positive correlation between compensation and competencies. Particularly trust, adaptability, customer focus, teamwork and decision making have positive impacts on wage levels. Nonetheless, we could not find any meaningful relationship between learning abilities, initiative taking and wages.

Among the competencies “trust” has the most significant impact on wage levels. It is mainly because trust is one of the most important and comprehensive competencies and considered to be the base for effective communication. Adaptability has also significant effects on wage levels. This finding can be explained by the fact that company has been restructuring in the last few years and the organizational culture and structure have changing dramatically. Hence adaptability became a critical competency in this process. Similarly, customer focus is emphasized as a core value in the new organizational culture after this restructuring process.

The most important limitation of this study is that the data was collected from one company. Hence, the findings cannot be generalized. Moreover, similar studies should be conducted in different companies to compare the results and findings of this research. For further studies the effects of competencies on individual and organizational performance should also be analyzed.

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