THE IMPACT OF WORKFORCE DIVERSITY ON FIRM PRODUCTIVITY
AT SERVICE OFFICE OF STATE PROPERTY AND AUCTION
(KPKNL) MANADO

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ABSTRACT

Workforce diversity is a mix of people within a workforce who are considered to be, in some way different from those in the prevailing constituency. Organizations have recognized the importance of embracing policies and practicing to diversity their workforces because it helps enhance competitiveness, build talent, expand organizational capabilities, and enhance access to markets like diverse customer bases. The benefits of diversity are achieved by acknowledging the strengths diversity can bring to organization. Service office of state property and auction (KPKNL) Manado is one of firm in Manado as one of base of workforce diversity that come not just from Manado but also from outside Manado. KPKNL Manado became representative for firm that haves foundation of workforce diversity. The objective of this research is to analyze factors workforce diversity on firm productivity especially in KPKNL Manado. Research method that had been used for this research is associated with multiple linear regression analysis technique. The population in this research is all employees at KPKNL Manado with sample as many as 36 respondents. This shows that workforce diversity (age diversity, educational diversity and gender diversity) has impact toward firm productivity and age diversity is the most significant factor that affects to firm Productivity at KPKNL Manado.

Keywords: workforce diversity, firm Productivity

INTRODUCTION

Research Background

The benefits of diversity are achieved by acknowledging the strengths diversity can bring to organization. Research shows that organizational creativity and innovation is enhanced by heterogeneity. Because if we need creative thinking, we must think like others or we can think first and after that we can asking help to the people who can help us think differently. Perspectives will available when people bring different world wide, cultural back grounds and personal experiences to the workplaces.

One of the vertical offices under the auspices of the Directorate General of State (DJKN) The Ministry of Finance is State Property Office and Auction (KPKNL). State receivables that managed by KPKNL is state receivables that are not repaid by loan recipients, and to determine the bad debt is not met, since the accounts receivable and the provisions set forth in the credit agreement. Due from countries that have stalled its completion must be submitted on KPKNL, if not then the party is entitled to take over the case KPKNL accounts. KPKNL in this case has the authority because the applicable law and the authority granted by the creditor to be able to resolve bad loans with collateral based credit agreement with security rights.

KPKNL is an institution or firm engaged in the public service in terms of state assets, receivables management and auction. A number of people who work within the institution work together in order to achieve certain objectives as outlined in the vision and mission of the organization. All elements in this agency should be able to get involved and have a strong drive to achieve what the objectives of the State Property Office and
Auction Makassar where they join. Leaders are no exception in that it has a crucial role in moving people including himself subordinates.

Diversity in an organization on KPKNL intended as a trigger for a fight or trying to a higher level towards achieving the goal of KPKNL, with the proviso does not ignore a person’s ability to obtain satisfaction in the fulfillment of personal needs. Diversity also has an identity for KPKNL the Indonesian government is an institution that is part of a country that has a very wide diversity. Diversity in question is a difference that cannot co-exist together but could am alive. No need to think about the origin, language or accent, religion, race, culture or gender. Diversity can be achieved origin can be tolerant and keep the peace that has been agreed upon. In KPKNL, workforce diversity there is always a scope of work in the office and in life. In one section or part of workforce diversity are composed of men and women who have differences of race, accent or religion. But in work, professionalism and tolerance remains high because of the importance to cooperate. It makes KPKNL as organization container which not only take care of accounts but as a model for other companies or institutions that have the diversity, especially in the workforce.

KPKNL core problem is related to the organization of human resources is how to manage workforce diversity so as to bring benefits to the company. In addition, recognition of the importance of workforce diversity for firm productivity should be known by the entire company. Workforce diversity can be seen from something general such as, age, educational background or gender. Different skills and knowledge in the workforce is not a weakness, but a boon for all. Where, the workforce can work together and complement each other. Tolerance and professionalism in KPKNL will also take them to a brighter towards globalization. Current and future, the company no longer sees diversity as a sensitive or destructive. But it can be profitable and build attitudes and corporate culture. Utilization of diversity in the workforce will make the company more familiar with what to do and should be resolved for the benefit of productivity.

Productivity is a state asset servicing, accounts receivable management and the auction is best for the people affected by specific motifs owned by employees, in terms of working on a particular part and in terms of doing a particular job. The higher motivation in the work, it will be better the service provided to the public as a person with high motivation has always had a desire to try your best at work.

Research objectives
This research has several objectives are to analyze the impact of:

1. Workforce diversity to firm productivity at service office of state property and auction (KPKNL) Manado simultaneously.
2. Age diversity to firm productivity at service office of state property and auction (KPKNL) Manado partially.
3. Educational diversity to firm productivity at service office of state property and auction (KPKNL) Manado partially.
4. Gender diversity to firm productivity at service office of state property and auction (KPKNL) Manado partially.

THEORITICAL FRAMEWORK

Organizational behavior
Organizational behavior (OB) is the study of individuals and groups in organization (Osborn, et al 2012:4). A field of study devoted to understanding, explaining, or ultimately improving the attitudes and behaviors of individuals and groups in organizations. Scholars in management departments of universities and scientists in business organizations conduct research on OB. The findings from those research studies are then applied by managers or consultants to see whether they help meet “real-world” challenges. OB can be contrasted with two other courses commonly offered in management departments: human resource management and strategic management.

Workforce diversity
Workforce diversity refers to the ways that people differ that can affect a task or relationship within an organization such as age, gender, race, education, religion, and culture. It is the exploration of these differences in a safe, positive, and nurturing environment. It is about understanding each other and moving beyond simple tolerance to embracing and celebrating the rich dimensions of diversity contained within each individual within
the organization (Carrell, 2006). The workforce is more diverse in terms of gender, race, ethnicity, national origin and comprises people who are different and share different attitudes, needs, desires, values and work behaviors as noted by Rosen and Lovelace (1991).

Greenberg (2004) also defines workplace diversity refers to the variety of differences between people in an organization including race, gender, ethnic group, age, personality, cognitive style, tenure, organizational function, education, background and more. The U.S National Partnership for Reinventing Government (NPR) Diversity Task Force in conjunction with the US Department of Commerce in their sponsored benchmark study of diversity defined diversity as including all the characteristics and experiences that define each of us as individuals. It is clear from these definitions that most scholars concur on the definition of workforce diversity. The main sources of diversity include age, race, gender, ethnicity (culture) and education although there are other sources of diversity like personal demographics; knowledge, skills, and abilities; values, beliefs, and attitudes; personality and cognitive and behavioral style; and organizational demographics. Graen (2003:2) cites other sources of diversity as political favoritism, family connections, educational advantage, friendships, and Leader Member Exchange partnering skills including performance on team skills.

Good workforce diversity practices in the area of human resources are believed to enhance employee and organizational performance (Hall and Parker, 1993). Diversity brings the value of different employee perspectives and varied types of contribution especially when organizational members increasingly reflect the diverse custom base of the organization. This provides a way in which organizations can understand, and therefore meet, their customer needs.

Impact of Workforce Diversity on Firm Productivity

There are different economic forces underlying the relationship between workforce diversity and productivity. As highlighted by Alesina and La Ferrara (2005), these forces may derive from: individual preferences (either people may attribute positive (negative) utility to the well-being of members of their own group (of other groups) or they may value diversity as a social good), individual strategies (even when individuals have no taste for or against diversity, it may be more efficient, notably in the presence of market imperfections, to interact preferably with members of one's own group), or the characteristics of the production function (i.e. the complimentarily in individual inputs). Theoretical predictions regarding the optimal workforce composition are mixed.

More precisely, he demonstrates theoretically that the gains from diversity are greatest when three conditions are fulfilled: a) individuals have completely disjoint skills and information sets, b) the latter are all relevant for the tasks that have to be performed within the firm, and c) individuals are able to communicate and understand each other. For instance, diversity in terms of age, education or gender decreases social similarity and could hamper job satisfaction, communication and firm performance. More precisely, individuals may strive to outperform the members of their comparison group (Pelled et al., 1999), which in turn leads to rivalry and conflicts that could undermine organizational performance. But social similarity can also be beneficial: a decision may be of better quality when it is the outcome of a confrontation between competing views (Grund&Westegaard-Nielsen, 2008). Productivity effects of workforce diversity are likely to vary across work environments (Stahl, et al 2010).

**Conceptual Framework**

- Age Diversity ($X_1$)
- Educational Diversity ($X_2$)
- Gender Diversity ($X_3$)
- Firm Productivity ($Y$)

**Figure 1. Conceptual Framework**

*Source: Theoretical Review*
Research Hypothesis

The hypotheses of this research are, there is a significant influence of:

H₁: Workforce diversity on Firm productivity simultaneously.
H₂: Age diversity on Firm productivity partially.
H₃: Educational diversity on Firm productivity partially.
H₄: Gender diversity on Firm productivity partially.

RESEARCH METHOD

Type of Research

This research is a causal type of research where it will investigate the impact of workforce diversity on firm productivity.

Time and Place of Research

The research lasted for 3 months held on from June to September 2014, from the preparation to the preparation of research reports. The experiment was conducted in Manado at Gedung Keuangan Negara (GKN), precisely KPKNL.

Population and Sample

The population refers to the entire group of people, events, or things of interest that the researcher wishes, it is the group of people, events, or things of interest for which the researcher wants to make inferences (Sekaran & Bougie, 2009:443). The populations in question are all employees of the office KPKNL amounting 36 peoples. The sample was used in part of the population that use as data source. In this research, the sampling technique used is initially saturated sample in which members of the population sampled. The guidelines used to determine the number of samples to be taken, if the subject is less than 100 people, taken all the better, but if the subject is a large amount of the numbers (>100 Peoples), samples to be taken is between 10-15% or 20-25%.

Source of Data

There are two types of data that are used to make an appropriate result, which are: (1) Primary data is data originated by the researcher specifically to address the research problem through the result of questionnaires; and (2) secondary data is data collected for some purpose other than the problem at hand. The secondary data is taken from books, journals, and relevant literature from library and internet.

Operational Definitions and Measurement of Research Variables

1. Age diversity (X₁) is positively correlated with job experience and knowledge about intra-firm structures, relevant markets and networks.
2. Educational diversity (X₂) is sufficient mutual learning and collaboration among workers with different educational backgrounds.
3. Gender Diversity (X₃) is referring to concepts of group efficacy and identity can foster the impact of group efficacy on performance.
4. Firm Productivity (Y) is firm size or capacity to manage workforce diversity and vary across environment.

Workforce Diversity is obtained total scores obtained from respondents' answers to the instrument with the following indicators: 1. Strongly disagree, 2. Agree, 3. Uncertain, 4. Agree, 5. Strongly Agree. Each grain was measured using five-point Likert scale. 1 through 5 is the level score for each. That is, if the respondent chose to answer a statement of the number 5, then the score of the answer is 5. If the respondents chose answer 1 then score the answer is 1, and so on.

Data Analysis Technique

Validity and Reliability Testing

Sekaran & Bougie (2009:157) assumes that validity is a test of how well an instrument that is developed measures the particular concept it is intended to measure. Valid instrument means the measurement tools that used to get the data is valid. The instrument considered as a valid if the correlation coefficient has significant less than 0.5 (r > 0.5).
Reliability is a test of how consistently a measuring instrument measures whatever concept it is measuring (Sekaran & Bougie, 2009:157). Cronbach’s Alpha is a reliability coefficient that indicates how well the items in a set are positively correlated to one another. Cronbach’s Alpha is computed in terms of the average intercorrelations among the items measuring the concept. The closer Cronbach’s alpha is to 1, the higher the internal consistency reliability.

Data Analysis Method

Multiple Regressions

The method of analysis used in this study is multiple regression models to approach the return. To find out the influence of dependent variable with independent variables used multiple linear regression with the formula:  
\[ Y = a + b_1X_1 + b_2X_2 + b_3X_3 + e \]

Whereas:
- \( Y \): Firm Productivity
- \( X_1 \): Age Diversity
- \( X_2 \): Educational Diversity
- \( X_3 \): Gender Diversity

RESULT AND DISCUSSION

Validity and Reliability Test of The Research

Validity test is used to know whether the instrument is valid or not. The validity test of age diversity (X1) 0.907, educational diversity (X2) 0.830, and gender diversity (X3) 0.688, and firm productivity (Y) 0.954 are above 0.3 which mean that all indicator are valid. Reliability test is used to check the consistency of the measurement instrument. The reliability test in this research using Cronbach Alpha that will show the instrument is reliable if the coefficient is more than 0.6. The value of Cronbach’s Alpha is 0.871 which is more than 0.6. Therefore, the measurement instruments used for this research are reliable and the instrument can get the consistent result if used in different times.

Heteroscedasticity

This figure show that the pattern of the data is spreading and do not a clear pattern and the dots is spreading above and below 0 (zero) in the Y axis and this is proved that the model is free from heteroscedasticity.
Normality

Figure 3 shows the dots spread near the diagonal line and follow the direction of the diagonal line. Therefore, the data is distributed normally.

![Figure 3. Normality Results](image)

Multicollinearity
Table 1. Collinearity Statistics

<table>
<thead>
<tr>
<th>Model</th>
<th>Collinearity Statistics</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tolerance</td>
<td>VIF</td>
<td></td>
</tr>
<tr>
<td>Age_Diversity</td>
<td>.441</td>
<td>2.267</td>
<td></td>
</tr>
<tr>
<td>Educational_Diversity</td>
<td>.524</td>
<td>1.907</td>
<td></td>
</tr>
<tr>
<td>Gender_Diversity</td>
<td>.756</td>
<td>1.323</td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Firm_Productivity
Source: Data Processed 2014

Since all the tolerance value is more than 0.2 and VIF value is less than 10, the model concluded to be free from multicollinearity.

Multiple Regression Analysis
Table 2. Output of Regression Result

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std.Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>1.840</td>
<td>1.436</td>
<td>1.282</td>
<td>.209</td>
</tr>
<tr>
<td>Age_Diversity</td>
<td>.513</td>
<td>.109</td>
<td>.505</td>
<td>4.705</td>
</tr>
<tr>
<td>Educational_Diversity</td>
<td>.401</td>
<td>.106</td>
<td>.371</td>
<td>3.768</td>
</tr>
<tr>
<td>Gender_Diversity</td>
<td>.236</td>
<td>.096</td>
<td>.201</td>
<td>2.458</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Firm_Productivity
Source: SPSS Data Analysis, 2014

Multiple regression analysis shows the following equation as follow:

\[ Y = 1.840 + 0.513X1 + 0.401X2 + 0.236X3 \]

Multiple linear regression equation above, it shows the interpretation as follows:
1. Constant value of 1.840, Meaning if Age Diversity (X1), Educational Diversity (X2) and Gender Diversity (X3) is equal to zero then the Firm productivity (Y) is predicted to be 1840 units
2. Coefficient value of 0.513 means that each increase of one unit of X1 then Y will increase by 0.513 units.
3. Coefficient value of 0.401 means that each increase of one unit of X2 then Y will increase by 0.401 units.
4. Coefficient value of 0.236 means that each increase of one unit of X3 then Y will increase by 0.236 units.
Table 3. Coefficient Correlation (R) and Determination (R²) Result

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.915a</td>
<td>.838</td>
<td>.822</td>
<td>1.039</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Gender_Diversity, Educational_Diversity, Age_Diversity
b. Dependent Variable: Firm_Productivity

The result of data calculating the coefficient of determination (R²) show that the contribution of the variable Age Diversity (X₁), Educational diversity variable (X₂) and Gender Diversity (X₃) on work productivity (Y) which indicated the value of R² is equal to 0.838. Table 4.5 shows that Age Diversity variable (X₁), Educational diversity variable (X₂) and Gender Diversity (X₃) were used in the regression equation is able to contribute to the Firm Productivity variable (Y) is 83.8% while the remaining 16.2% is influenced by other variables beyond the independent variables studied.

Table 4. F-test Result

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>178,430</td>
<td>3</td>
<td>59,477</td>
<td>55,055</td>
<td>.000a</td>
</tr>
<tr>
<td>Residual</td>
<td>34,570</td>
<td>32</td>
<td>1,080</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>213,000</td>
<td>35</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Firm_Productivity
b. Predictors: (Constant), Gender_Diversity, Educational_Diversity, Age_Diversity

In table of F-test result, it can be concluded that a significant difference (Sig > 0.05) between workforce diversity with firm productivity. Indicated by significant is smaller than the value 0.000 of probability 0.05. Inferred from the F-test, the calculated value of F_count is greater than the F_table (55.055 > 2.901), it shows that the independent variables simultaneously influence the dependent variable. So, H₁ is accepted and H₀ is rejected.

Table 5. T-test Result

<table>
<thead>
<tr>
<th>Model</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>-1.282</td>
<td>.209</td>
</tr>
<tr>
<td>Age_Diversity</td>
<td>4.705</td>
<td>.000</td>
</tr>
<tr>
<td>l Educational_Diversity</td>
<td>3.768</td>
<td>.001</td>
</tr>
<tr>
<td>Gender_Diversity</td>
<td>2.458</td>
<td>.020</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Firm_Productivity

The partial impacts of each independent variable are explained as follows:

1. T-test for Age Diversity (X1) obtained value of T_count is 4.7 with significant is 0.000. Because T_count is greater than T_table (4.705 > 2.03693) then, it can be said independent variable has impact for dependent variables. In other words, Age diversity has significantly impact Firm productivity at KPKNL Manado.
2. T-test for Educational Diversity (X2) obtained T_count of 3.768, with a significant is 0.001 (0.001 < 0.05). Because T_count is greater than T_table (3.768 > 2.03693), it can be said independent variable has impact for dependent variables. In other words, Educational diversity has significantly impact Firm productivity at KPKNL Manado.
3. T-test for Gender diversity variable (X₃) obtained T_count of 2.4 with a significant is 0.02 (0.02 > 0.05). Because T_count is greater than T_table (2.458 > 2.03693), then it can be said independent variable has impact for
dependent variables. But with the significant 0.02, Age diversity has less significant impact Firm productivity at KPKNL Manado.

**Discussion**

With the multiple regression method, the regression procedures must divide the variable into two variables that are dependent variables and independent variables. To get accurate result from multiple regression method which is purpose of this thesis research, the researcher analyzed the impact of workforce diversity on firm productivity, and selected the firm productivity as the dependent variable to be measured by several independent variables of workforce diversity: age diversity, educational diversity, and gender diversity. Age diversity relates to firm productivity. In Age diversity, job experience and in-depth knowledge about the company especially, the state of the market and the largest and trusted networks can bring more companies increase productivity. Workforce diversity owned companies have a competitive advantage because there is a much greater potential than just having a homogeneous workforce means, have the knowledge and experience of the same work. With workforce diversity, employees can get the knowledge and experience of other employees in the workforce. This variable is the most significant impact firm productivity.

Educational diversity in workforce diversity can be seen from sufficient mutual learning and collaboration among workers. The influence of both can improve workforce diversity. Work by learning and cooperative each other is very important to increase firm productivity. This variable has supported the firm productivity. With group efficacy and identity that are part of gender diversity. Both of these affect the individuality of a person in the workforce. If it is not owned by the employee in the workforce can interfere with productivity as a team. And consequently could interfere with the productivity of the company. Mutual understanding, tolerance and emancipation are an attitude that must be upheld if it is not going to result in losses in the future. This variable has less significant impact firm productivity. It will important to gives attention in gender diversity, because this variables is very sensitive issue in firm productivity because, in terms productivity woman sometimes very capable in working than man.

The result of this research proved that there is positive relationship impact of workforce diversity on firm productivity at KPKNL Manado in terms age, educational and gender. The result also similar with Parotta, et al (2010) that was state that workforce diversity positively affect firm productivity in terms skill and education of employees and also could comes from age and gender.

**CONCLUSION AND RECOMMENDATION**

**Conclusion**

After examining the findings and discussing the results, several conclusions can be draw as follows:

1. There is significant impact of workforce diversity on firm productivity at Service Office of State Property and Auction (KPKNL) Manado simultaneously.
2. There is significant impact of age diversity on firm productivity at Service Office of State Property and Auction (KPKNL) Manado partially.
3. There is significant impact of educational diversity on firm productivity at Service Office of State Property and Auction (KPKNL) Manado partially.
4. There is significant impact of gender diversity on firm productivity in at Service Office of State Property and Auction (KPKNL) Manado partially.

**Recommendation**

The following Recommendations are as inputs that can hopefully be useful as suggestions:

1. In order to increase firm productivity, firm have better to focus on in all aspect of age diversity as the most significant factor that affect firm productivity. Firm needs to focus on job training and knowledge especially in intra-firm structures, relevant markets and networks for employees to spur on the development of workforce for employees.
2. Firm also must not to forgotten about educational background. Education can bring more deeply interaction and mutualism each employee. They can learn together and can know what weaknesses that they have. Productivity not just about working and produce benefits form firm, it’s also about learning and knowledge. Because with learning and interaction, employees can brings more brilliant ideas, implemented the ideas efficiently and effectively, and bring more benefits to company.
3. Although it has less significant factor to firm productivity, gender diversity also is important thing for firm. Gender diversity is just not about emancipation and tolerance. It can bring more competitiveness between man and woman. In terms of skill, woman cannot lose from man. Sometimes, they have more capable in managing skill and communication skill. They know more about market and product from opposite firm more than man. Woman can beat man, so man cannot just to close the eyes to beat by woman. So, talent and competitiveness can bring also by gender diversity.

REFERENCES


