



## International Journal of Applied Business and Economic Research

ISSN : 0972-7302

available at <http://www.serialsjournal.com>

© Serials Publications Pvt. Ltd.

Volume 15 • Number 17 • 2017

### The Influence of the Authentic Leadership, School Culture, Information and Communication Technology Acceptance on the School Management Effectiveness in the Public Accredited Vocational High School in West Java

Daryanto<sup>1</sup>, Sumarto<sup>2</sup>, Aan Komariah<sup>3</sup> and Dedy Achmad Kurniady<sup>4</sup>

<sup>1</sup> Universitas Negeri Jakarta (UNJ), Jakarta, Indonesia

<sup>2</sup> Universitas Pendidikan Indonesia (UPI), Bandung, West Java, Indonesia

<sup>3</sup> Universitas Pendidikan Indonesia (UPI), Bandung, West Java, Indonesia.

Corresponding Author: Komariah., Aan, Univeristas Pendidikan Indonesia, Jl. Dr. Setiabudi No. 229 Bandung 40154, Indonesia

E-mail: [aan\\_komariah@upi.edu](mailto:aan_komariah@upi.edu)

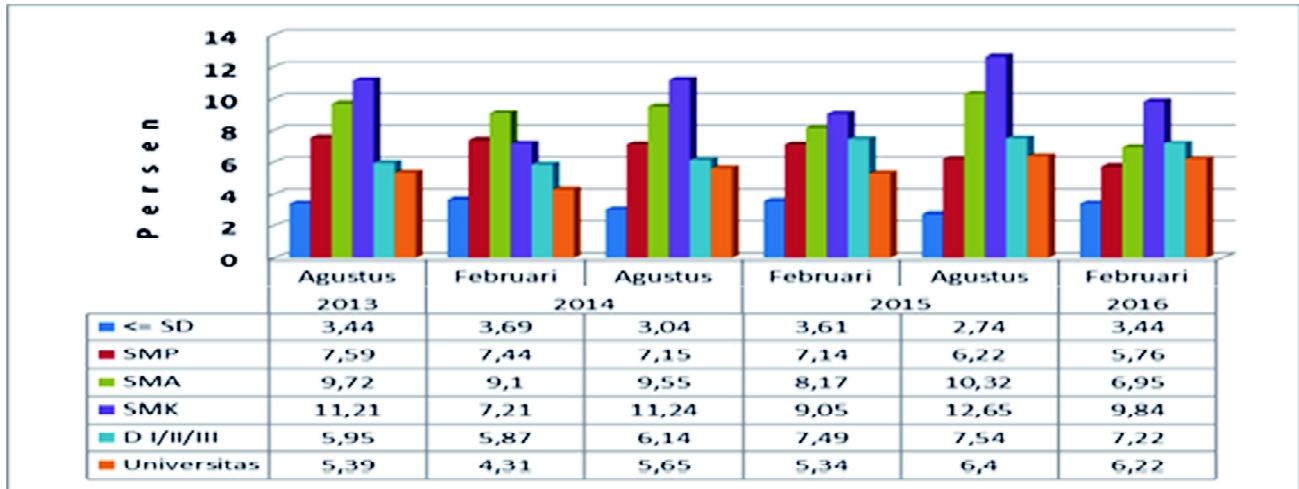
<sup>4</sup> Universitas Pendidikan Indonesia (UPI), Bandung, West Java, Indonesia

**Abstract:** Objectives of this research are to find out the influence of authentic leadership, school culture, information and communication technology acceptances, on the school management effectiveness. Causal survey with proportional random sampling is used in this research. Path analysis, descriptive statistic, and inferential statistic are used to analyze the data. The results show that authentic leadership, school culture, and information and communication technology (ICT) acceptance have effects simultaneously and significantly to school management effectiveness.

**Keywords:** Authentic Leadership, Information and Communication Technology, School Culture, School Management.

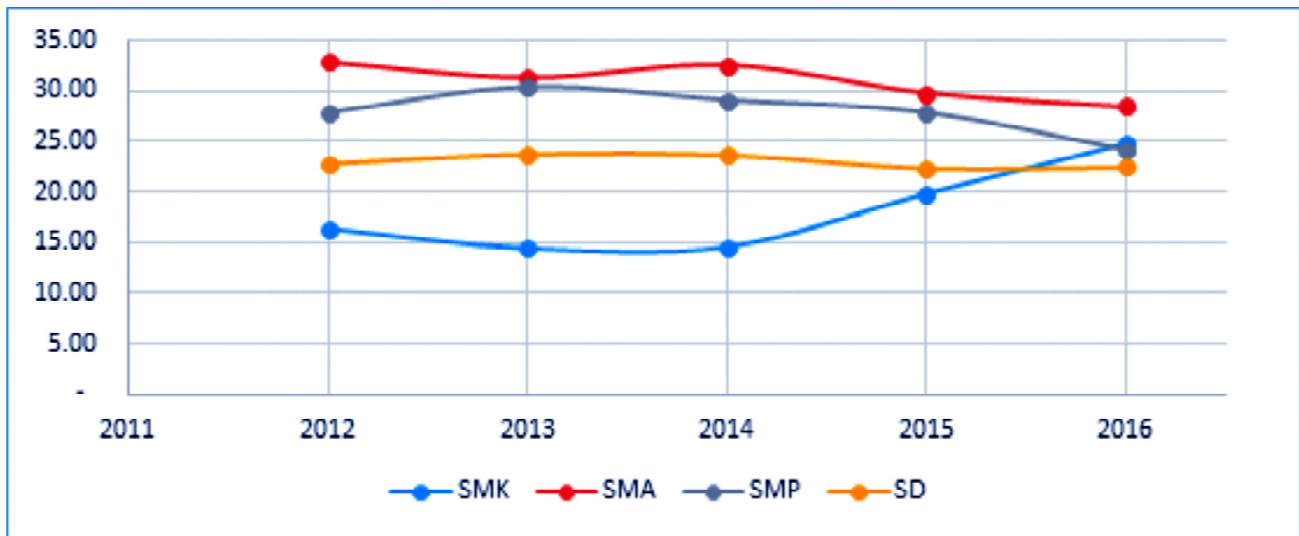
In Indonesia, vocational school is addressed to prepare graduates become the labours. This goal is in accordance with the National Educational System Law No. 20 Year 2003 article 15 which states that vocational education is a secondary education which prepare students to become a worker on specific field even though the vocational schools students are allowed to go to the higher education. Based on this regulation, vocational school is the main source of the middle-level workers. The Central Agency of Statistic Indonesia's (BPS) data show that the largest percentage of the population in Indonesia is population age  $\geq 15$  years old which contributes from vocational school graduates. It can be shown in table 1.

Table 1  
Age populations percentage ≥ 15 years old based on educational level



Sources: BPS November 2013, May and November 2014, February and August 2015, and May 2016

Due to the limitation number of the job vacancy on industrial field for the primary and secondary education graduates, the number of unemploy people which graduated from the primary secondary education are increase. It can be shown in graph 1.1.



Graphic 1: Unemployment percentage from primary and secondary education graduates

Currently, vocational school in Indonesia (SMK) tends to decrease in quality of students input and output. It can be illustrated from several conditions as follow: (1) SMK has only preparing the student to become a worker; (2) SMK does not prepare the student to become an entrepreneur; (3) SMK slow on response to economic development; (4) SMK has less adjust to industrial field requirement; and (5) SMK has not guaranteed to get a job [Slamet, 2013]. These are SMK's problem from the student side.

Meanwhile, from the management side, some of common problems on SMK's management have not been solved properly. These are: (1) financial limitation from the government and society; (2) deficiency of productive teachers; (3) weakness of learning process; (4) difficulties of obtaining partner from industrial field; (5) SMK's graduates have a long period to obtain the first job; and (6) SMK's governance is not managed properly. World bank report states that weakness of vocational education management are on: (1) partnership with other institutions; (2) rigid curriculum; and (3) school management. [arvil *et al.*, 1990]

In order to increase the SMK quality, the school principal is the main actor to manage all resources in school. The main function of leadership is to produce transformation and movement, while management is to provide regularity and organization consistency. Both of them are process. Therefore, anyone can execute as a leader or manager at the different time. Authentic leadership model is a model which require self discipline and awareness to plan, do, and evaluate school programs. This model required to realize management school effectiveness. Authentic leader never serve pretend to delight others and obtain specific goal. This leader shows the original leadership, lead with the heart authenticity, and native [Northouse, 2013]. Authentic leader effectiveness are ability to engage communities to pursue the goals. Therefore, authentic leader involves inspiration and motivation to encourage the organization members to obtain the common goals.

A specific pattern which relating to a particular culture appears in a school. This caused by the pattern and position in school are different with pattern and culture in society. Each school shows their own culture. Therefore, understanding of school communities to their own culture is required to increase the schools quality. School functions and experiences are reflected on this understanding. Moreover, school culture is formed by school history as well as the real product. This culture is produced by an integration of various forces into school. Spirit of integrity, fairness, sincerity, responsibility, and respect with others are the main key to mold the condusive school culture. These attitudes affect on school regulation implementation such as policy, procedures, and ceremonial. School culture describes school management effectiveness.

School management effectiveness also affected by the information and communication technology's (ICT) utilization. ICT utilization in education is an obligation for all parties in the national, province, district/city, and school level. This obligation is regulated in the Government Regulation No 17 Year 2010. ICT is addressed to produce an accountable education management. ICT also provides an access to obtain information of the education management resources. Furthermore, ICT is intended to build the education governance becomes efficien, effective, and accountable.

ICT utilization in school is determined by school communities competencies and attitudes, school culture, the principal leadership, and infrastructure. The role of ICT in school management is serve a tool. ICT also has an important role to develop the school leadership in the future. The school principal is the "main actor" to encourage all of school resources to manage the school. The principal which technology oriented is affected by eight indicators. These are the existence of technology committee, budget, financial supports from the government, the school principals email, the school principals time to study the ICT, policy of the staf development, policy of intellectual property, and other policies.

## **RESEARCH METHOD**

The casual survey with path analysis approach is used in this research. The target populations are the school principal, school committee, teachers, and staff in accreditedpublic vocational school in West Java.

Number of population is 365 people. Sample is selected using proportional random sampling. Total sample is 191 people. Typical performance with four variables is used to conduct the instrument. The variables are school management effectiveness, authentic leadership, school culture, and ICT acceptance.

Instrument development consists of several steps. These are: (1) determination of dimension in each variable, (2) dimensional development, (3) instrument predictions development, (4) instrument development, (5) reliability and validity tests, (6) instrument standardization.

Inferential and descriptive statistics are used to analyze the data. Descriptive statistic is used to characterize spread of mean, median, modus, varian, and standard deviation in the table and graph. Whereas, inferential statistic is used to examine the research hypothesis. Requirement test consist of: (1) the estimated regression error normality test and (2) the regression coefficient significance-linearity test. Path analysis is used to analyze the data using SPSS software version 24.

### RESEARCH RESULTS

Table 2 and 3 show the ANOVA calculation and Path coefficient using SPSS software version 24.

**Table 2**  
**ANOVA for Simultan Hypothesis Test**

<i>Model</i>	<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>
1 Regression	21012.441	3	7004.147	62.132	.000 <sup>b</sup>
Residual	21080.481	187	112.730		
Total	42092.921	190			

a. *Dependent Variable:* School management effectiveness.

b. *Predictors:* (Constant), ICT acceptance, authentic leadership, school culture.

**Tabel 3**  
**Path Coefisein for Individually Test**

<i>Model</i>	<i>Unstandardized Coefficients</i>		<i>Standardized Coefficients</i>		<i>t</i>	<i>Sig.</i>
	<i>B</i>	<i>Std. Error</i>	<i>Beta</i>			
1 (Constant)	19.154	13.829			2.385	.016
Authentic leadership	.378	.041	.541		9.300	.000
School culture	.156	.062	.146		2.504	.013
ICT acceptance	.222	.070	.183		3.189	.002

a. *Dependent Variable:* School Management Effectiveness

Results show the value of  $F_{\text{calculated}}$  is 62,132 and  $\text{sig} = 0,000 < 0,05$ . These values indicates that hypothesis of the authentic leadership, school culture, and ICT acceptance have an effect on school management effectiveness simultaneously and significantly is **accepted**. Moreover, calculated value of  $F$  is 84,013 and  $\text{sig} = 0,000 < 0,05$  show that the second hypothesis which states authentic leadership and school culture have an effect on school management effectiveness simultaneously and significantly is **accepted**. Meanwhile,  $F$

value is 34,339 dan  $\text{sig} = 0,000 < 0,05$  indicates that a hypothesis which states school culture and ICT acceptance have an effect on school management effectiveness simultaneously and significantly is **accepted**. Acalculated value of Sig is  $0,000 < 0,05$  shows that the fourth hypothesis which states authentic leadership has an effect on school management effectiveness significantly is **accepted**. Furthermore, the calculate value of  $\text{sig} = 0,013 < 0,05$  indicates thatthe hypothesis which states that school culture has an effect on school management effectiveness significantly is **accepted**. A calculated value of  $\text{sig} = 0,002 < 0,05$  shows that the hypothesis which states that ICT acceptance has an effect on school management effectiveness is **accepted**. The last hypothesis which states that authentic leadership has an effect on the school management effectiveness is accepted due to the calculated value of  $\text{sig} = 0,000 < 0,05$ .

From the value of path coefficient (p), which more than 0,05, constellation between variables in this research is fixed. The final constellation between variabels is shown in Figure 1.

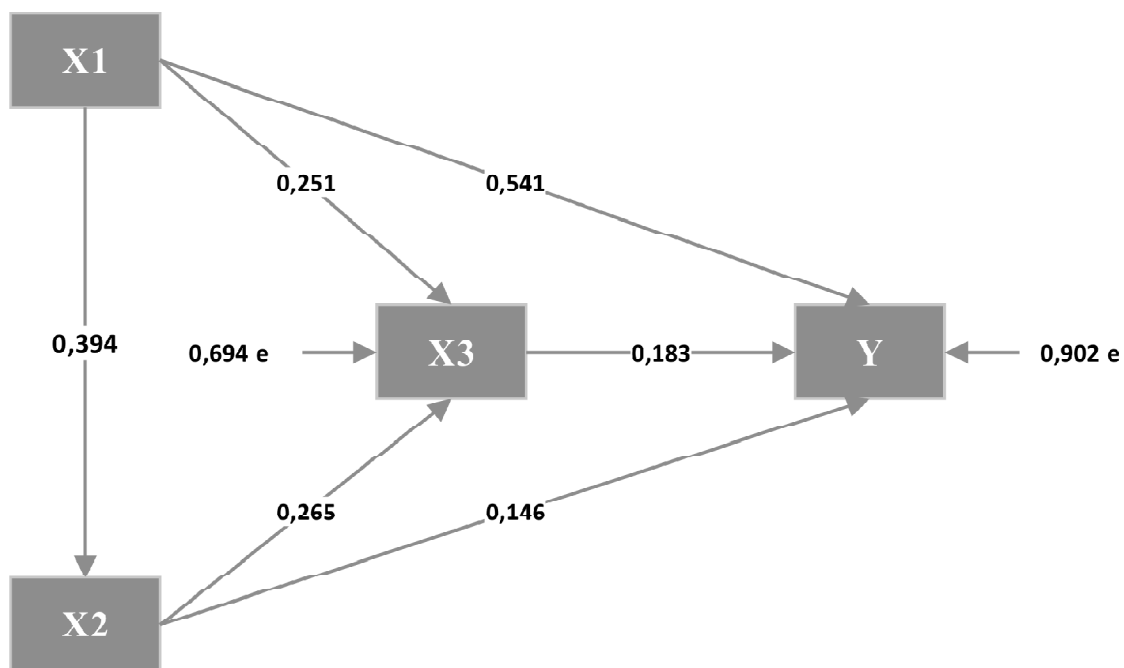


Figure 1: The final structural path model

## DISCUSSION

**First**, This research found that authentic leadership, school culture, and ICT acceptance have an influence on school management effectiveness simultaneously and significantly. These three independent variables contribute positive effect and significant to school management effectiveness. These independent variables provide 51.9 % to dependent variable. In the other word, school management effectiveness can explained by these independent variables. While, other effects at 48.1 % is given by unobserved variables. These contributions can be realized because school management effectiveness is depend on the performance of school communities including the school principals authentic leadership, school culture, ICT acceptance and infrastructure.

These facts show that the authentic leadership encourages teachers and staff to give their best performance. Development of school culture reinforce the positive leadership, otherwise that the weak

leadership reduces the positive school culture. ICT which use to communicate school management simplifies teachers and staff to provide services to the student and other stakeholders. ICT is required in school management systems in order to increase learning and school management effectiveness [Manduku et.al., 2005]. Therefore, quality of education is determined by ICT in the school. ICT also support the school principal to decide the policy quickly and accurately. To obtain the decision properly, the school principal should have the data and information accurately. This can be found by ICT.

School culture has an influence on school management effectiveness significantly. This culture can be realized in trust, values, and attitudes of the school members. Nwagwu states that the right organization culture indicate by two attributes. These are : (1) dynamic and adaptive cultures which integrate the school with the communities; and (2) organization culture using language. School culture stimulates innovation, creativity, and regulation.

Good management aims to invite all school members to obtain the common goals. Robin, 2010, states that a leader is a people which understood other people abilities to obtain the schools vision. While, a manager has responsibility to realize vision, mission, and goals. Authentic leadership effectiveness is an ability to engage their community to obtain the goals. These involve inspiration, motivation, encouragement, and organization readiness which support their work. Therefore, school management effectiveness requires authentic leadership which works collaborative and sharing vision with their staff.

**Second**, Authentic leadership and school culture have an influence directly on school management effectiveness simultaneously and significantly. School management effectiveness variable in public accredited vocational school in West Java is significantly affected by authentic leadership and school culture. Authentic leadership and school culture contributes 47.2 % on school management effectiveness simultaneously. This result can be accepted due to the condition that performance of the staff in public accredited vocational school in West Java depend on the school principals exemplary.

The school principal, as an authentic leader, should understand the effects of school culture and role of school communities on school management effectiveness. Contributing all live dimensions in the school determine individual requirement, create a formal structure, and decide a way to solve the problems. Understanding school culture specifically provide the school principal performs external reformation using several activities in the school. Efanga and Ifejiagwa [2014] conclude that the strong organization will improve the performance. Kandula [2006] states that there is a relationship between organization culture and performance. Kandula also states that within different organization cultures produce the same output in two organizations in the same location. These mean that positive and strong cultures create the people to perform something to obtain success, while negative and weak cultures reduce the work spirit where finally without achievements.

Edgar H. Schein (2004) states that “*These dynamic processes of culture creation and management are the essence of leadership and make one realize that leadership and culture are two sides of the same coin*”. This means that culture and management are the core of leadership which produce from dynamic process. Both of them could not divided separately, likewise leadership and management are needed to each other. Leadership effects on a people to do something to obtain the goals, otherwise management is a process to involve some people to do the activities to obtain the goals. In the school context, management refers to optimization on service to the student.

Related to the research results that authentic leadership and school culture have an effect on school management effectiveness, the main factors on the authentic leadership are self awareness, moral perspective, balanced processes, and relationship transparence. Other factors on authentic leadership are positive psychological capacities, moral consideration, and critical incident which influences authentic leadership. [Northhouse 2013]. These are effects on the school management.

School has different several cultures depends on the history and culture development. School culture has attention in organization studies and educational management to show that social uniqueness from the organization is different to each other. These uniqueness are identity which describes the school management has duties and roles to educate the societies.

A school is an organization in the social context which has transform process, complex, and limitations. Leadership function has the role player in the communication between people to fulfill the life necessities in the specified community. Authentic leadership grow properly in the good school, otherwise positive culture grow under the authentic leader. Both of them create the good performance which in turn school management effectiveness in the public accredited vocational school in West Java.

**Third**, authentic leadership and ICT acceptance have an influence directly on the school management effectiveness simultaneously and significantly. Authentic leadership and ICT acceptance contributes 34.6 % on school management effectiveness simultaneously. This because authentic leadership variable is more dominant affects on school management effectiveness than ICT acceptance. Eventhough ICT is used on several activities in the school management, ICT still difficult for some people which not accept to the renewal of the ICT easily.

School communities acceptance to the ICT depends on the usabilitys and convenience which used in the school management. A person whose a good perception on ICT tend to intention to use ICT to support his job. Eventhough ICT has a small effects on the school management, but still has a significant effect to the school management. Manduku [2013] found that ICT can increase school management efficiencies and effectiveness, improve decision making, and repair the school data.

**Fourth**, school culture and ICT acceptance have an influence directly on the school management effectiveness simultaneously and significantly. School culture and ICT acceptance contributes 53.9 % on school management effectiveness simultaneously and significantly. While, other effects at 48.1 % is given by unobserved variables. These contributions can be realized because school management effectiveness is depend on the performance of school communities including the school principals authentic leadership, school culture, ICT acceptance and infrastructure. Culture has relationship to user behavior of ICT.

Environmental effects on the usage of the ICT is bigger than effects on develop the new environment. While a new environment is a environment which transform organization character and community members. ICT integration on the school management is a complex process and multi-dimension including ICT infrastructure, teachers, student, school program, school leadership, and school culture. ICT implementation is learned in socio-cultural context. Tchaicha and Davis [2005] states that “*lack of understanding about the dynamics of culture can ultimately lead to negative business outcomes*”. Therefore, school communities should understood the culture in each school before learn about ICT.

**Fifth**, authentic leadership and school culture have an influence directly on the school management effectiveness simultaneously and significantly. Authentic leadership and school culture contributes 18.6 % on school management effectiveness simultaneously. Due to the ICT potential to community including school organization, therefore the role of the school principal in guiding teacher, staff, student, and stakeholders is needed. School culture involves all dimensions life in school. Varner (Tchaicha dan Davis, 2005) expands the definition of culture which is states how culture can receive and promote innovation. Technology burderning to environment which use this technology. Interaction between culture and technology effect on school management strategy which in turn interact one to each other. Meanwhile, an authentic leadership is needed to manage the school. ICT has a role to help the school management such as student recruitment, schedulling, learning, evaluation, library services, and other resources management. Technology assist school communities to solve several tasks to maximize productivity. Therefore, ICT should spread in the school communities in their all activities.

**Sixth**, authentic leadership have an positive effect and significant on the school management effectiveness with path coefisien 0,541 and contribution 29,27 %. This result shows that authentic leadership drives school community to become the best workers. In addition, teacher and staff provide the good services to the student and other stakeholders. Edmonds states that effectivity involves: (1) strong leadership, (2) human relationship atmosphere, (3) progress monitoring, (4) high expectations of all organization members, and (5) focus on the need of costumers or organization members. Effectivity also involves with goals achievement and organization target. School effectivity relates on school attempts which assigned by all of part involves in school management.

Daft states that leadership means the use of influence to motivates employee to achieve the organizational goals. Management means the achievement of organizational goals effectively and efficiently through the planning, management, leadership, and control of the resources of the organization [2010]. Leadership is the core of the management. Therefore, a person whose become a leader of an organization should be able to empower all of school resources efficient, effective, and productive. Besides these, a leader also should be a able to understand staff, vission, mission, and goals. The role of a leader in the planning is assisted to problems anticipation, succes contribution, priority setting, and focus on teachers, staff, and other school communities. Correlation between leadership and management can not be separated.

The school principals attitudes influence on school success because their attitudes play on conducting teachers, staff, and other school communities attitude. Hence, the leaders originality on school management is needed. In line with that, Shamir dan Eilam (Northouse, 2013) states that authentic leader shows an original leader and lead with the authenticity heart. This perspective emphasizes a life experience as an important part to develop an authenctic leader. Shamir dan Eilam (2005) also states that authentic leadership tends to recline in relevances meaning which is close to the life experiences. Luthans dan Avolio (Northouse, 2013) describes authentic leadership as a development process which consists of four components leadership development. These are: (1) *self-awareness*; (2) *internalized moral perspective*; (3) *balanced processing*; and (4) *relational transparency*.

Jim Collins (Daft, 2010) found that a leader needs to transfrom the organization from the great to become the really great. The fifth grade leader means a leader whose build eternal greatness through humility and professional embroidery. This leader is a characteristic of the authentic leader. Esther S. Uko, (2015) concluded thata correlation between the school principals ability to increase academic performance.



The school principal which has good relationship with other people can solve the school problems, conduct the school programs, help teachers, student, and other school communities. [Abdikadir Issa Farah, 2013]. These research results, literature review, and previous research show that school management effectiveness in public vocational school on West Java are affected by authentic leadership of the school principal.

**Seventh**, school culture has a positive influence on school management effectiveness significantly with the path coefficient is 0.146 and contribution 2.13 %. In fact, these are used to analyze the comprehension of organization culture. Lack of school culture contribution to the school management effectiveness caused by lack of school culture in public vocational school in West Java. It can be shown from the average value of each dimension which constructs the school culture. The value is 3.36 which is classified in the middle class. Standard deviation of this value is high. It shows that variation in respondent's choice spreads on several values. These mean that school culture has not been uniform. Understanding of school culture could not be separated from the basic concepts of school culture. Culture has not only been seen on static and rigid, but also dynamics parts. Culture is not only on the goods but also everything that is associated with the human labor. School culture still has a small contribution on school management effectiveness.

**Eighth**, ICT acceptance (X3) has an influence significantly and positive on school management effectiveness (Y) with the path coefficient is 0.183 and contribution 3.35 %. These results show that some factors influence the effects of ICT acceptance on school management effectiveness. These are: (1) management of SMK in West Java has not been completely conducted by ICT, (2) infrastructure limitation, (3) access limitation of the school communities, (4) lack of human resources abilities on ICT, (5) the role of technology as a tool. These results are appropriate with the previous research [Sang et.al, page 6]. Therefore, school administrators must be trained to ensure that administrators have been able to operate ICT. ICT implementation in the school management can be used to store and analyze several data such as curriculum, learning process, evaluation, and human resources management. ICT implementation also enables to develop the virtual laboratories for educational purposes.

## CONCLUSIONS

1. Authentic leadership, school culture, and ICT acceptance have an influence on school management effectiveness simultaneously and significantly in public accredited vocational school in West Java.
2. Authentic leadership and school culture have an influence directly on school management effectiveness simultaneously and significantly. School management effectiveness variable in public accredited vocational school in West Java is significantly affected by authentic leadership and school culture.
3. Authentic leadership and ICT acceptance have an influence directly on the school management effectiveness simultaneously and significantly.
4. School culture and ICT acceptance have an influence directly on the school management effectiveness simultaneously and significantly.
5. Authentic leadership has a positive effect and is significant on the school management effectiveness.
6. ICT acceptance has an influence significantly and positive on school management effectiveness.

## BIBLIOGRAPHY

- Avolio, Bruce J. and Luthans, Fred J. (2006). *The High Impact Leader: Moments Matter in Accelerating Authentic Leadership*. New York: McGraw-Hill.
- Arvil Van Adams, dkk.(1990). *Skills Training For Productivity Strategies for Improved Efficiency in Developing Countries*. Manila: Asian Development Bank.
- BPS. (2016). *Penduduk Berumur 15 Tahun Ke Atas Menurut Pendidikan Tertinggi yang Ditamatkan dan Jenis Kegiatan*. [Online]. Tersedia di: <https://www.bps.go.id/linkTabelStatis/view/id/1909>. Diakses 25 Desember 2016.
- Daft, Richard L. (2010). *Era Baru Manajemen, Edisi 9, Buku 1*. Jakarta: Salemba Empat.
- Efanga dan Ifejiagwa. (2014), Influence of Organizational Culture on Performance Management Practices in Secondary Schools in Akwa Ibom State, Nigeria. Nigeria : *International Journal of Humanities and Social Science*, Vol. 4, No. 6; April 2014.
- Esther S. Uko. (2015). Principalship And Effective Management Of Facilities In Secondary Schools, Nigeria: *International Journal of Academic Research and Reflection Vol. 3, No. 1, 2015*.
- Farah, Abdikadir Issa. (2013). "School Management: Characteristics of Effective Principal". *International Journal of Advancements in Research & Technology*, Vol 2, No 10, page 168 – 174, ISSN No 2278-7763.
- Kandula, R.S. (2006). *Performance Management: Strategies, Interventions, Drivers*. Prentice-Hall of India, New Delhi.
- Manduku, J, Koskey, A & Sang, H. (2012). *Adoption and use of ICT in enhancing management of public secondary schools: A survey of Kesses Zone secondary schools in Wareng District of Wasini County, Kenya*.
- Northouse, P. G. (2013). *Leadership Theory and Practice*. (2nd ed.). Thousand Oaks, CA: Sage.
- Robbins, Stephen P & Coulter, Mary. (2010). *Management*. Jakarta: Erlangga
- Schein, Edgar H., (2004). *Organizational Psychology*, New Delhi: Prentice Hall of India Private Limited.
- Shamir dan Eilam. (2005). "What's Your Story?" *a Life-Stories Approach to Authentic Leadership Development*. *The Leadership Quarterly*. 16, hlm. 395-417
- Slamet. (2013). *Pengembangan SMK Model untuk Masa Depan*, Cakrawala Pendidikan, Februari 2013, 27 (1), hlm. 14-26.
- Tchaicha, J.D., & Davis, M. M. (2005). *The Impact of Culture on Technology and Business: An Interdisciplinary, Experiential Course Paradigm*. *Journal of Management Education*, 29(5), 738-757.