

Table 3. Correlation and Linear Regression Analysis of Perceived Usefulness

Variable	R	R <sup>2</sup>	Line Equation	p value
<i>Attitude</i> (d18-d22)	0,735	0,540	<i>Perceived usefulness</i> = 2,861 + 0,810 ( <i>Attitude</i> )	<0,001
<i>Actual use</i> (f28-f33)	0,519	0,269	<i>Perceived usefulness</i> = 5,346 + 0,486 ( <i>Actual use</i> )	<0,001
<i>Behavioral intention to use</i> (e23-e27)	0,511	0,261	<i>Perceived usefulness</i> = 7,633 + 0,444 ( <i>Behavioral intention to use</i> )	<0,001

Source: Primary Data, 2016.

insufficient to make health attendant to operate the technology, they should be certain, the technology will increase their productivity or make their work more effective (Teo and Zhou, 2014).

TAM model actually adopted from TRA model which is a theory of act reasoned with a premis that reaction and perception to something, will determine the attitude and behavior. Reaction and perception of IT user will affect the attitude in the acceptance of the technology. TAM model developed from psychology theory explains the behavior of computer user based on belief, attitude, intention and user behavior relationship. The purpose of this model is to explain main factors of user behavior to the acceptance of technology. More detail regarding the IT acceptance with certain dimension affecting the IT acceptance by user. This model places the attitude factor of each user behavior with two variables which are the ease of use and the usefulness.

Both variables can describe the aspect of user behavior. Thus TAM model can explain the user perception will determine the attitude in IT usage. This model clearly describes that the acceptance of IT user is affected by usefulness and ease of use and also construct perceived ease of use, perceived usefulness, attitude toward using, behaviour intention and actual usage.

The calculation of attitude variable hypothesis test result p Value = 0.000 then it is statistically significant/real. The result of correlation analysis found out there is strong relation between attitude and *perceived usefulness* (R= 0,735). Based on determination analysis result the R<sup>2</sup> Value (R Square) 0,540 or (54,0%). This indicates the effect contribution percentage of independent variable (attitude) to dependent variable (*perceived usefulness*) is

54.0%. The independent variable variation used in the model can explain 54.0% of dependent variable variation. While the rest 46.0% is affected or explained by other variable. The constant 2.861 states that when attitude value is 0 then perceived usefulness is 2.861. X1 variable regression coefficient 0.810 means when other independent variable has steady value then every 1% attitude increase will increase perceived usefulness 0.810.

From actual use variable hypothesis test result, p value = 0.000 then it is statistically significant/real. The result of correlation analysis found out there is fair/medium relation between actual use and *perceived usefulness* (R= 0,519). Based on determination analysis result the R<sup>2</sup> Value (R Square) 0,269 or (26,9%). This indicates the effect contribution percentage of independent variable (actual use) to dependent variable (*perceived usefulness*) is 26.9%. Or the independent variable variation used in the model can explain 26.9% of dependent variable variation. While the rest 73.1% is affected or explained by other variable. The constant 5.346 states that when actual use value is 0 then perceived usefulness is 5.346. X1 variable regression coefficient 0.486 means when other independent variable has steady value then every 1% actual use increase will increase perceived usefulness 0.486.

From behavioral intention to use variable hypothesis test result, p value = 0.000 then it is statistically significant/real. The result of correlation analysis found out there is fair/medium relation between behavioral intention to use and *perceived usefulness* (R= 0,511). Based on determination analysis result the R<sup>2</sup> Value (R Square) 0,261 or (26,1%). This indicates the effect contribution percentage of independent variable (actual use) to dependent variable (*perceived usefulness*) is 26.1%. The

independent variable variation used in the model can explain 26.1% of dependent variable variation. While the rest 73.9% is affected or explained by other variable. The constant 7.633 states that when behavioral intention to use value is 0 then perceived usefulness is 7.633. X1 variable regression coefficient 0.444 means when other independent variable has steady value then every 1% behavioral intention to use increase will increase perceived usefulness 0.444.

From the correlation test result can be seen that behavioral intention to use with perceived usefulness has medium correlation, with correlation coefficient 0.5 ( $p < 0.001$ ). Sugiyono (2013) stated when R value 0.40 until 0.599 then it refers to fair/medium relation. TAM is an information system theory making a model of how user willing to accept and operate a technology. This model suggests that when the user is offered to use a new system, several factors will affect their decision regarding how and when they will use the system, particularly in terms of usefulness (the user certain by using this system will improve the performance) and perceive ease of use (where the user certain that by using this system will release from obstacle, meaning the system is user friendly).

One of the factor able to affect the IT acceptance is the perception of user upon usefulness and ease to use of it as a reasonable action in the context of technology user, thus the reason of someone in viewing the benefit and friendliness of IT operational become a reference point in the acceptance of a technology. Perceived usefulness also affect the perceived ease of use but not the other way around. The system user will operate the system when it is useful whether it is ease to use or not. System that not ease to use will still be operated when the user feel the system is highly useful.

Based on correlation test result can be seen that attitude has high correlation with behavioral intention to use, as much as 0.6 ( $p < 0,001$ ). Sugiyono (2013) said when R value

0.60 until 0.799 indicates strong/high relation. Tavakoli et. al. research (2013) stated attitude has significant relation with *behavioral intention to use* ( $r = 0,734$ ,  $p < 0001$ ). This can be caused by benefits obtained by respondents when they used the information system. This perceived usefulness has relation with respondent's attitude in operating the information system. Social influence has positive and significant correlation ( $p \text{ value} < 0.05$ ) upon behavioral intention to use. Research indicates positive and significant correlation between facilitating condition with behavioral intention to use (Wahono & Prihatmoko, 2016). Ologeanu-Taddei et al., (2016) found that individual lowly rely on social information in feeling the usefulness and intention, yet continuously consider the usefulness of information system based on benefit potential from the utilization (the relevance with work and the benefit to performance).

The hypothesis test result of behavioral intention to use variable is  $p = 0.000$  then it can be said statistically significant/real. From correlation analysis result can be seen there is strong relation between behavioral intention to use with attitude ( $R = 0,626$ ). From determination analysis, obtain the  $R^2$  value (R Square) is 0.392 or (39.2%). This indicates that effect contribution percentage of independent variable (*behavioral intention to use*) to dependent variable (*attitude*) is as much as 39.2%. Independent variable variation used in the model can explain 39.2% dependent variable variation. While the rest 60.8% is affected or explained by other variable. The constant 6.649 means when behavioral intention to use is 0 then the attitude is 6.649. X1 variable regression coefficient 0.494 means when other independent variable value is steady then every 1% increase of behavioral intention to use will increase the attitude as much as 0.494.

The hypothesis test result of actual use variable is  $p = 0.000$  then it can be said statistically significant/real. From correlation analysis result

Table 4. Correlation and Regression Linear Analysis of Attitude

Variable	R	R <sup>2</sup>	Line equation	p value
<i>Behavioral intention to use</i> (e23-e27)	0,626	0,392	$Attitude = 6,649 + 0,494 (Behavioral \text{ intention to use})$	<0,001

Source: Primary Data, 2016.

Table 5. Correlation and Regression Linear Analysis of *Behavioral Intention to Use*

Variable	R	R <sup>2</sup>	Line Equation	p value
<i>Actual Use</i> (f28-f33)	0,681	0,464	<i>Behavioral Intention to Use</i> = 1,07 + 0,734 ( <i>Actual use</i> )	<0,001

Source: Primary Data, 2016.

can be seen there is strong relation between actual use with behavioral intention to use ( $R = 0,681$ ). From determination analysis, obtain the  $R^2$  value ( $R$  Square) is 0.464 or (46.4%). This indicates that effect contribution percentage of independent variable (actual use) to dependent variable (behavioral intention to use) is as much as 46.4%. Independent variable variation used in the model can explain 46.4% dependent variable variation. While the rest 53.6% is affected or explained by other variable. The constant 1.07 means when actual use is 0 then behavioral intention to use is 1.07.  $X_1$  variable regression coefficient 0.734 means when other independent variable value is steady then every 1% increase of actual use will increase the behavioral intention to use as much as 0.734.

Previous study indicated the main factor of decision to adopt or user acceptance are ease of use, usefulness, anxiety and perceived behavioral control defined as someone believes on the ability to carry out certain task/work by computer, how far an individual believes that infrastructure and technical organization are ready to support the system usage (Venkatesh and Bala, 2008); system quality, information quality, service quality (Petter *et al.*, 2008); and customization or alignment to clinical work flow are consider as main concern in EMR adoption in health service (Vishwanath, *et al.*, 2010; Cresswell & Sheikh, 2013).

### Conclusion

Based on correlation test result can be seen that external variables have high/strong correlation with perceived usefulness; external variables and perceived ease of use have medium/fair correlation; perceived ease of use has medium/fair correlation with attitude; Perceived usefulness has high/strong correlation with attitude; perceived usefulness with actual use have medium/fair correlation; behavioral intention to use with perceived usefulness have medium/fair correlation; attitude has high/strong correlation with behavioral intention to use; behavioral intention to use has high/strong

correlation with actual use.

Based on determination value the effect of perceived usefulness to external variables is higher than the effect of perceived ease of use to external variables; the effect of perceived usefulness to attitude is higher than the effect of perceived ease of use terhadap attitude; the effect of actual use to perceived usefulness nearly equal to the effect of behavioral intention to use to perceived usefulness.

It is advised to the BPJS Kesehatan to consider the factor affecting P-CARE acceptance which are external variables, perceived usefulness, perceived ease of use, attitude, actual use and behavioral intention to use.

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### Reference

- Abramson, E.L., Patel, V., & Malhotra, S., 2012. Physician Experiences Transitioning Between an Older Versus Newer Electronic Health Record for Electronic Prescribing. *Int J Med Inform*, 81(8), pp.539–48.
- Aghazadeh, S., Aliyev, A., & Ebrahimnezhad, M., 2012. Review the Role of Hospital Information Systems in Medical Services Development. *Int J Comput Theory Eng*, 4(6), pp.866.
- Aghajari, P.E., Hassankhani, H., & Shaykhalipour Z., 2013. Healthcare Information System: The Levels of Computerization. *Intl. Res. J. Appl. Basic. Sci*, 7(9), pp.536–540.
- Bloomrosen, M., Starren, J., Lorenzi, N.M., Ash, J.S., Patel, V.L., & Shortliffe, E.H., 2011. Anticipating and Addressing the Unintended Consequences of Health IT and Policy: A Report from the AMIA 2009 Health Policy Meeting. *J Am Med Inform Assoc*, 18(1), pp.82–90.
- Chen, R.F., & Hsiao, J.L., 2012. An Investigation on Physicians' Acceptance of Hospital Information Systems: A Case Study. *Int. J.*

- Med. Inform*, 81(12), pp.810–820.
- Cresswell, K., & Sheikh A., 2013. Organizational Issues in The Implementation and Adoption of Health Information Technology Innovations: An Interpretative Review. *International Journal of Medical Informatics*, 82, pp.73-86.
- Davis, F.D., 1989. Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, 13(3), pp.319 -340.
- Ehteshami, A., 2017. Barcode Technology Acceptance and Utilization in Health Information Management Department at Academic Hospitals According to Technology Acceptance Model. *Acta Informatica Medica, Journal of Academy of Medical Science of Bosnia and Herzegovina. Acta Inform Med*, 25(1), pp.4-8.
- Ekeland, A.G., Bowes, A., & Flottorp S., 2010. Effectiveness of Telemedicine: A Systematic Review of Reviews, *Int. J. Med. Inform*, 79, pp.736–771.
- Fichman, R.G., Kohli, R., & Krishnan, R., 2011. Editorial Overview-The Role of Information Systems in Healthcare: Current Research and Future Trends. *Inform Syst Res*, 22(3), pp.419–428.
- Fontaine, P., Ross, S.E., Zink, T., & Schilling, L.M., 2010. Systematic Review of Health Information Exchange in Primary Care Practices. *J. Am. Board Fam. Med*, 23(5), pp.655– 670.
- Halbesleben, J.R.B., Wakefield, D.S., & Wakefield B.J., 2008. Work-arounds in Health Care Settings: Literature Review and Research Agenda. *Health Care Manage Rev*, 33, pp.2–12.
- Holden, R.J., & Karsh, B.T., 2010. The Technology Acceptance Model: Its Past and Its Future in Health Care. *J Biomed Inform*, 43(1), pp.159-172.
- Hu, P., Chau, P., Sheng, O., & Tam, K., 2015. Examining the Technology Acceptance Model Using Physician Acceptance of Telemedicine Technology. *Journal of Management Information Systems*, 16(2), pp.91-112.
- Humaidi., 2014. *Aplikasi P-Care Perkuat Layanan JKN*. Info BPJS Media Internal Resmi BPJS Kesehatan Edisi X Tahun 2014.
- Humaidi., 2016. *Pentingnya Dukungan Pemda untuk Mencapai Universal Health Coverage*. Info BPJS Media Internal Resmi BPJS Kesehatan Edisi X Tahun 2014.
- Kementerian Kesehatan RI., 2013. *Peta Jalan Menuju Jaminan Kesehatan Nasional 2012-2019*. Dewan Jaminan Sosial Nasional.
- Krishnan, A., Nongkynrih, B., Yadav, K., Singh, S., & Gupta V., 2010. Evaluation of Computerized Health Management Information System for Primary Health Care in Rural India. *BMC Health Services Research*, 10, pp.310.
- Maksum, U., Baridwan, Z., & Subekti, I., 2017. The Determinant of Acceptance of SIMDA (Information System of District Management) Implementation on the Government of Batu City. *Journal of Accounting and Business Education*, 1(2), pp.298.
- Meier, C.A., Fitzgerald, M.C., & Smith, J.M., 2013. E-Health: Extending, Enhancing, and Evolving Health Care. *Annu Rev Biomed Eng*, 15, pp.359–382.
- Mulyati, S., Suwarsa, O., & Arya, I.F.D., 2015. Pengaruh Media Film terhadap Sikap Ibu pada Deteksi Dini Kanker Serviks. *Jurnal Kesehatan Masyarakat, Kemas*, 11(1), pp.16-24.
- Nykanen, P., Brender, J., Talmon, J., de Keizer, N., Rigby, M., Beuscart-Zephir, M.C., & Ammenwerth E., 2011. Guideline for Good Evaluation Practice in Health Informatics (GEP-HI). *International Journal of Medical Informatics*, 80, pp.815-827.
- Ologeanu-Taddei, R., Morquin, D., & Vitari, C., 2016. Perceptions of an Electronic Medical Record (EMR): Lessons from A French Longitudinal Survey. *Procedia Computer Science*, 100, pp.574-579.
- Patel, V.L., & Kannampallil, T., 2014. Human Factors and Health Information Technology: Current Challenges and Future Directions. *Yearb Med Inform*, 9(1), pp.58.
- Petter, S., DeLone, W., & McLean, E., 2008. Measuring Information Systems Success: Models, Dimensions, Measures, and Interrelationships. *European Journal of Information Systems*, 17, pp.236-63.
- Rostami, S., Sarmad, A., Mohammadi, M., Cheleie, M., Amiri, S., & Zardoei, G.S.H., 2015. Evaluating Hospital Information Systems from the Point of View of the Medical Records Section Users in Medical-Educational Hospitals of Kermanshah 2014. *Journal of Medicine and Life*, 8(4), pp.232-240.
- Sugiyono., 2013. *Metodologi Penelitian Kuantitatif, Kualitatif, dan R&D*. Cetakan Kedua Belas. CV. Bandung: Alfabeta.
- Suki, N.M., & Suki, N.M., 2011. Exploring The Relationship Between Perceived Usefulness, Perceived Ease of Use, Perceived Enjoyment, Attitude and Subscribers' Intention Towards

- Using 3G Mobile Services. *Journal of Information Technology Management*, 22(1), pp.1-7.
- Tavakoli, N., Jahanbakhsh, M., Shahin, A., Mokhtari, H., & Rafiei, M., 2013. Electronic Medical Record in Central Polyclinic of Isfahan Oil Industry: A Case Study Based on Technology Acceptance Model. *Acta Inform Med*, 21(1), pp.23-25.
- Teo, T., & Zhou M., 2014. Explaining the Intention to Use Technology among University Students: A Structural Equation Modeling Approach. *J Comput High Educ*, 26, pp.124-142.
- Vishwanath, A., Singh, S.R., & Winkelstein, P., 2010. The Impact of Electronic Medical Record Systems on Outpatient Workflows: a Longitudinal Evaluation of Its Workflow Effects. *International Journal of Medical informatics*, 79, pp.778-91.
- Venkatesh, V., & Bala, H., 2008. Technology Acceptance Model 3 and a Research Agenda on Interventions. *Journal Decision Sciences*, 39, pp.273-315.
- Wahono, B.B., & Prihatmoko D., 2016. Analisis Faktor-Faktor yang Mempengaruhi Penerimaan dalam Menggunakan Sistem Informasi BPJS Di Kabupaten Jepara. *Jurnal Maklumatika*, 3(1).