



Measurement of Regional Financial Management Information Systems Success in Denpasar City Government

Ida Ayu Agung Emawati^{a*}, Herkulanus Bambang Suprasto^b, Asri Dwija Putri^c

^{a,b,c}*Department of Accounting, Udayana University, Bali, Indonesia*

^a*Email: dayuema17@gmail.com*

Abstract

SIPKD is a regional financial system that is used by the Denpasar City Government in on financial management activities so as to be able to produce financial reports of local governments. Since the implementation of the SIPKD, the Denpasar City Government had obtained an increase in Audit Board of the Republic of Indonesia's Audit Opinion on Local Government Financial Reports, namely Unqualified Opinion for six years. Based on this phenomenon, this study examined the measurement of SIPKD success in Denpasar City Government. The measurement of the success of SIPKD is based on DeLone and McLean model. This study examines the effect of system quality, information quality, and supervision action on user satisfaction and net benefits, the effect of user satisfaction on net benefits, and the effect of system quality, information quality, and supervision action on net benefits through user satisfaction. The sample determination technique used purposive sampling with the criteria of all SIPKD users in Denpasar City Government, as many as 99 people. Data collection used a questionnaire that distributed to 36 OPDs in the Denpasar City Government. Data analysis used Partial Least Square. The results showed that system quality, information quality, and supervision action had a positive effect on user satisfaction and net benefits. User satisfaction had a positive effect on net benefits. User satisfaction is not able to mediate the effect of system quality, information quality, and supervision action of net benefits.

Keywords: System Quality; Information Quality; Supervision Action; User Satisfaction; Net Benefits.

* Corresponding author.

1. Introduction

The Denpasar City Government has implemented information technology for daily activities in regional financial management in the hope of being able to present accountable financial reports. Information technology is implemented by the Denpasar City Government in supporting regional financial management, namely SIPKD. SIPKD is a form of policy established by the Ministry of Internal Affairs towards regional governments in the area of regional financial management, which aims to improve equality in the delivery and implementation of various laws and regulations in the form of systems and procedures for regional financial management. This program was built to accelerate data transfer and efficiency in collecting regional financial data.

Table 1: Application of Information Systems and Audit Opinions in Denpasar City Government

| Denpasar City Government | | | | | | | |
|---|------|------|------|------|------|------|------|
| Regional Financial Management Information System (SIPKD) | | | | | | | |
| Audit | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| Opinion | QO | UO | UO | UO | UO | UO | UO |

Table 1 explains the regional financial information system used by the Denpasar City Government as well as the audit opinion obtained based on the results of Audit Board of the Republic of Indonesia’s examination in 2011-2017. The Denpasar City Government is the government agency that gets the most Unqualified Opinions since SIPKD is applied as a means of regional financial management. The application of SIPKD began in mid-2010 with the adjustment stage that previously used SIMDA. The Denpasar City Government replaced the SIMDA program into SIPKD with an effort to make regional financial management more effective. After the adjustment phase, the application of the SIPKD was used since the beginning of January 2011 to the present and has been implemented by all regional organizations in Denpasar City Government, as many as 36 organizations.

The SIPKD implementation in the Denpasar City Government is expected to be able to present regional financial information openly to the public and facilitate the process of preparing regional financial statements. Seeing the progress in implementing SIPKD in the Denpasar City Government, it is important to know how to measure the success of SIPKD implementation in the Denpasar City Government. Measuring the success of SIPKD refers to the updated model of information systems success from DeLone and McLean.

2. The Foundation of Theory and Research Hypothesis

2.1. Effect of System Quality on User Satisfaction

The success of the application of information systems is influenced by several factors, one of which is the system quality. The higher of system quality, the information will be generated maximally [3]. Based on the theory of reasoned action, reactions and perceptions of the use of information systems will influence their attitude in the acceptance of the information system. One of the factors that can influence it is the user's perception of the usefulness and ease of use of the system as a reasonable action, so that a person's reason in

seeing the benefits and ease of use of the system makes the person's actions or behavior a benchmark in receiving an information system. System users will be satisfied with the system used if they are sure that the quality of the system and information generated by the system is good and reliable in the decision making process. System user satisfaction has an impact on increasing interest in using the system so users will still use the system to support their performance.

H1: System quality has a positive effect on user satisfaction

2.2. Effect of Information Quality on User Satisfaction

Information quality is the output in the form of information generated by the system used [11]. The higher of information quality produced by an information system, the more satisfaction of SIPKD users will be increased [3]. The measure of user satisfaction in information systems is reflected in the quality of information produced by a system. User satisfaction with an information system is how system users perceive information systems in real terms, not on technical quality systems [5]. If system users believe that the information will generated from the system is optimal, they will feel satisfied using the SIPKD.

H2: Information quality has a positive effect on user satisfaction

2.3. Effect of Supervision Action on User Satisfaction

Supervision action is a planned action of a leader through activity, guidance, direction, observation, motivation, and evaluation to his staff in carrying out daily work activities. Indirect or symbolic actions by senior managers have contributed to the successful implementation of information systems through the motivation given to users of information systems [15]. Supervision actions from the leadership motivate employees to use the system because of the attention and support of financial and non-financial resources and training so employees can understand the use of the system. This supervision action will certainly have an impact on increasing the SIPKD user satisfaction in using information system.

H3: Supervision action has a positive effect on user satisfaction

2.4. Effect of System Quality on Net Benefits

An organization always expects that the application of an information system can run effectively and efficiently so that it can facilitate the achievement of organizational goals. Effectiveness and efficiency in implementation of the information system can be seen from the success of applying the information system. Information systems can be said useful if the information system can have an impact on the user's work environment [4]. These impacts include improving the quality of the user's work, making user work easier, saving users time, and helping meet the needs and requirements of the user's work. A system that displays high quality data and high quality systems can provide benefits for various stakeholders, including organizations, individuals, and groups of individuals [14]. These can make users better understand the content and context in making a decision and increasing productivity on decision-making.

H4: System quality has a positive effect on net benefits

2.5. Effect of Information Quality on Net Benefits

Quality of information is often used as a criterion to assess the performance function of an information system. One reason is that many organizations start computerized programs in an effort to produce better information in terms of decision making. The quality of information is constantly being improved because data can be easily updated, manipulated, and processed at the right time to provide relevant information for decision making. Better information and improved decision making can lead to a general increase in the work environment, increase staff's morale, and make work more attractive. If the quality of information increases, it is more likely that the desired organizational impact will be obtained [17].

H5: Information quality has a positive effect on net benefits

2.6. Effect of Supervision Action on Net Benefits

The Denpasar City Government has utilized information technology, namely SIPKD to improve regional financial management that is increasingly effective and efficient. The better the quality of the system used by an agency, the information system is able to produce quality financial information. If there is a decrease in the quality of the system where this will have an impact on the quality of the information produced, an action of supervision is needed. If the information system used cannot meet the needs of system users, the leader will have the authority to make changes and renewal of a more optimal system [12]. The routine supervision of financial management using information systems, such as SIPKD, is one form of supervision from the leadership that will certainly affect the relevance and reliability of financial information produced so that this will have a positive impact on the performance of individuals and organizations in the decision making process.

H6: Supervision action has a positive effect on net benefits

2.7. Effect of User Satisfaction on Net Benefits

User satisfaction is a feeling of being clean from happy or unhappy in accepting information systems from the overall benefits expected by system users, where those feelings are generated from interactions with information systems. Satisfaction of information system users will have an impact not only on individuals who use it, but also organizations that implement the information system. Net benefits are the benefits perceived by individuals and organizations after implementing information systems [2]. High user satisfaction systems have a positive impact on individuals and organizations.

H7: User satisfaction has a positive effect on net benefits

2.8. User Satisfaction Mediates the Effect of System Quality on Net Benefits

The benefits from the use of information systems will increase if the quality of the system is able to increase the

satisfaction of users of information systems. Previous research examined one component of net benefits, namely the impact of organizations in assessing the effectiveness of SIKD in the Jembrana District Government [19]. The results found that user satisfaction intervened partially in the influence of system quality on system benefits for the organization, which meant that the system benefits would increase if the quality of the system was able to increase satisfaction of SIKD users. Previous research with the location of research in the Denpasar City Government that examined employee performance or individual impact as one component of net benefits found results that user satisfaction partially mediates system quality on employee performance [12].

H8: User satisfaction mediates the effect of system quality on net benefits

2.9. User Satisfaction Mediates the Effect of Information Quality on Net Benefits

The quality of information as a form of output from information systems has an influence on system users as seen from how user satisfaction with output results is generated when using the systems. User satisfaction with information generated from the system has an impact on effective decision making processes so that this will also have an impact on improving individual performance and organizational performance. Previous research explained that user satisfaction intervened in full the effect of information quality on the benefits of the system for organizations which means that the quality of information is only able to increase the benefits of the system if the user is satisfied with the quality of information produced [19]. Similar results were also found in studies that examined one component of net benefits, namely employee performance [12]. The results of his research show that user satisfaction mediates the effect of information quality on employee performance. The higher the quality of information, the higher user satisfaction will have implications for increasing employee performance.

H9: User satisfaction mediates the effect of information quality on net benefits

2.10. User Satisfaction Mediates the Effect of Supervision Action on Net Benefits

Net benefits are an important highlight in assessing the success of the application of information systems as seen from how individuals and organizations perform after implementing an information system. Net benefits are influenced by user satisfaction in running information systems. An information system will be able to provide satisfaction to its users if the information system provides convenience in its use and the information generated is useful for those who need it. Satisfaction felt by system users will be maintained if the leader is able to provide training, monitoring, and motivation for system users. Leaders who provide good supervision actions will certainly have an impact on user satisfaction that is getting better and of course this will have implications for increasing net benefits, which include the impact of increasing individuals and organizations.

H10: User satisfaction mediates the effect of supervision action on net benefits

3. Research Methodology

The research population refers to Government Regulation Number 58 of 2005 concerning Regional Financial Management, which consists of the Regional Head, Regional Secretary, Head of Regional Organization, Head

of Financial Subdivision, Revenue Treasurer, Expenditure Treasurer, and SIPKD Operator. The method of determining the sample used a purposive sampling method with the criteria of all SIPKD users involved in the process of regional financial management, which includes the Head of the Financial Subdivision, Revenue Treasurer, Expenditure Treasurer, and SIPKD Operator. The number of respondents who became the study sample was 119 respondents. Based on 119 questionnaires distributed to 36 organizations, the questionnaire returned was only 99, so this study only used 99 samples.

Table 2: Research Operational Constructions

| Construct | Definition | Indicator | Item Code | Source |
|---------------------------------------|---|--------------------------------|------------------|---|
| System Quality (X ₁) | The quality of information systems is perceived ease of use which is how much computer technology is felt to be relatively easy to understand and use. | 1. Ease of use | X _{1,1} | Davis and his colleagues (1989) |
| | | 2. Response Time | X _{1,2} | |
| | | 3. Reliability | X _{1,3} | |
| | | 4. Flexibility | X _{1,4} | |
| | | 5. Security | X _{1,5} | |
| Information Quality (X ₂) | Output of information system. | 1. Relevancy | X _{2,1} | DeLone and McLean (2003) |
| | | 2. Accuracy | X _{2,2} | |
| | | 3. Timeliness | X _{2,3} | |
| | | 4. Reliability | X _{2,4} | |
| Supervision Action (X ₃) | The planned action of a leader through activity, guidance, direction, observation, motivation, and evaluation of his staff in carrying out daily work activities. | 1. Leadership and Mentoring | X _{3,1} | <i>Issues Statement No.4 (Accounting Education Change Commission)</i> |
| | | 2. Working Condition | X _{3,2} | |
| | | 3. Assignment | X _{3,3} | |
| User Satisfaction (Y ₁) | The response of system users to the use of information system. | 1. Content | Y _{1,1} | Doll and Torkzadeh (1988) |
| | | 2. Accuracy | Y _{1,2} | |
| | | 3. Format | Y _{1,3} | |
| | | 4. Ease of Use | Y _{1,4} | |
| | | 5. Timeliness | Y _{1,5} | |
| Net Benefits (Y ₂) | The benefits felt by individuals and organizations after implementing information systems. | 1. Speed of accomplishing task | Y _{2,1} | Davis and his colleagues (1989) |
| | | 2. Job performance | Y _{2,2} | |
| | | 3. Effectiveness | Y _{2,3} | |
| | | 4. Ease of job | Y _{2,4} | |
| | | 5. Usefulness in work | Y _{2,5} | |

Table 2 describes the research variables regarding definitions, indicators, and sources used in measuring variables. Data analysis was performed using SmartPLS 3 application.

4. Results of Statistical Analysis

4.1. Evaluation of Descriptive Statistics

The quality of SIPKD in Denpasar City Government is high, which is reflected in its ease of use, speed of data access, system reliability, system flexibility, and system security. The information produced by SIPKD is quite

good, where the information produced by SIPKD is relevant, accurate, reliable, and able to be produced in a timely manner. The act of supervision in supporting the success of the implementation of SIPKD has been done well by the leaders in each agency in the Denpasar City Government. Supervision measures are carried out with efforts to improve regional financial management through SIPKD. User satisfaction related to the use of SIPKD and net benefits felt by SIPKD users is high.

4.2. Evaluation of Outer Model

Evaluation of outer model is done to test the relationship of the manifest variables with the latent variables. Evaluation of the outer model is done by using the PLS Algorithm calculation presented in Figure 1.

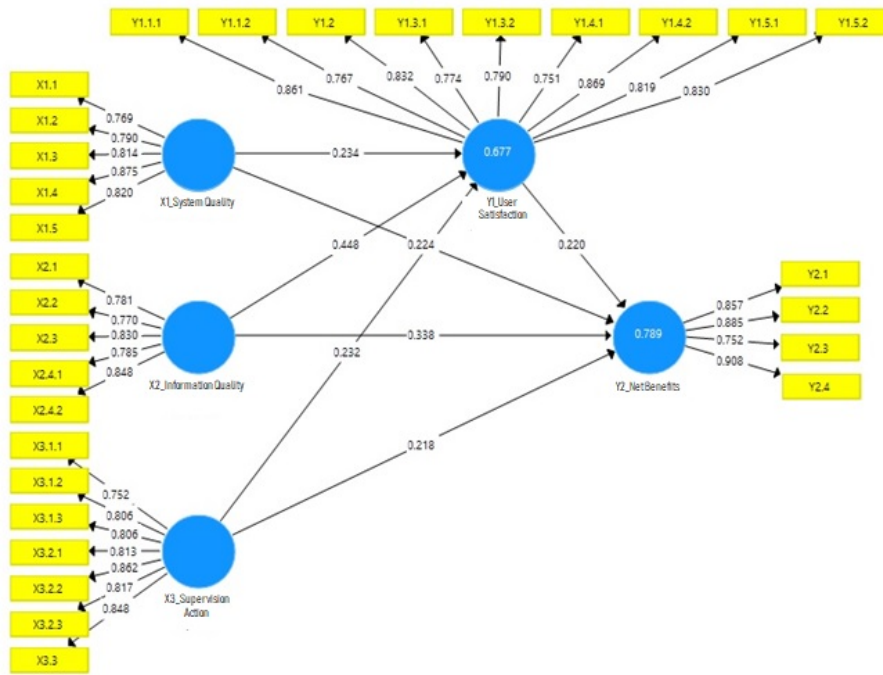


Figure 1: Empirical Model of PLS Algorithm

Convergent validity can be seen from the correlation between indicator scores and variable scores. Based on the results of testing convergent validity, all values of the outer loading indicator have values above 0.50. This means that convergent validity measurements have met the requirements of data validity.

The judgment of discriminant validity is by comparing average variance extracted (AVE) for each variable with a correlation between variables with other variables in the model. The results of discriminant validity test show that the AVE value of all variables is greater than 0.50 so that the model can be said to be valid.

The variable reliability testing is measured by composite reliability and Cronbach's alpha from the indicator block that measures variables. The results of the composite reliability test and Cronbach's alpha show the value of all variables above 0.70 so that it can be explained that all research variables are reliable.

4.3. Evaluation of Inner Model

Testing the hypothesis for direct and indirect effects is done by using probability values and t-statistics on the results of bootstrapping calculations. The results of bootstrapping analysis presented in Figure 2.

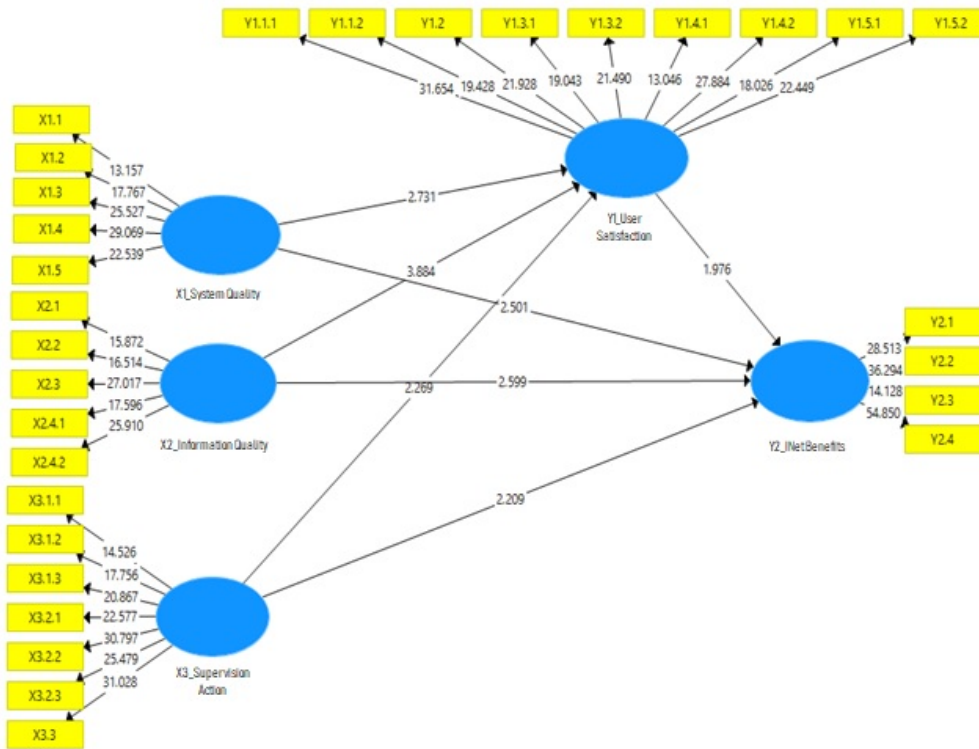


Figure 2: Research Bootstrapping Variable

The test results for direct influence show that the seven hypotheses that explain the direct influence have a positive effect with probability values less than five percent and t statistics more than 1.96. The results of this test prove that hypotheses 1 to 7 are accepted.

The test results for indirect effects indicate that the user satisfaction variable is not able to mediate the effect of system quality, information quality, and supervision actions on net benefits because the probability values are more than five percent and the t statistics are less than 1.96. This means that hypotheses 8 to 10 are rejected.

5. Discussions

5.1. Effect of System Quality on User Satisfaction

Table 3: Test Results for Direct Effects and Effects without Mediation Variables

| Inter-Variable Effects | Path Coefficient | | | Information |
|--|------------------|-----------------|--------------------|-------------|
| | | <i>p values</i> | <i>t statistic</i> | |
| System Quality (X ₁) → User Satisfaction (Y ₁) | 0.234 | 0.007 | 2.731 | Significant |

Table 3 shows that the system quality variable has a positive path coefficient of 0.234 with probability values of

0.007 (p values <0.05) and t-statistics of 2.731 (t-statistics> 1.96) which means the first hypothesis is accepted. These results are in line with the results of previous studies that examined the effectiveness of SIADINDA and SIMAKDA applications in the Jembrana District Government [19]. The results of his research indicate that the implementation of regional financial information system in Jembrana Regency Government based on user perceptions is effective in helping regional financial management. The better the quality of the system, the system users will feel more satisfied.

User perceptions in the Denpasar City Government on SIPKD indicate that SIPKD is easy to use, has high access speeds, is flexible for users in managing regional finances, and user data has been maintained. SIPKD users can also be said to be satisfied with the quality of SIPKD, where this is reflected in the user's assessment of the content displayed by SIPKD, the information produced by SIPKD is in accordance with user needs, as well as ease of use. Information system user satisfaction has an impact on increasing user interest in using information systems so users will continue to use information systems to support their performance.

5.2. Effect of Information Quality on User Satisfaction

Table 4: Test Results for Direct Effects and Effects without Mediation Variables

| Inter-Variable Effects | Path Coefficient | | | Information |
|---|-------------------------|-----------------|--------------------|--------------------|
| | (Bootstrapping) | <i>p values</i> | <i>t statistic</i> | |
| Information Quality (X ₂) → User Satisfaction (Y ₁) | 0.448 | 0.000 | 3.884 | Significant |

Table 4 shows that the information quality variable has a positive path coefficient of 0.448 with probability values of 0.000 (p values <0.05) and t-statistics of 3.884 (t-statistics> 1.96) which means the second hypothesis is accepted. These results are in line with previous studies that have carried out tests on the effect of information quality on user information system satisfaction [7,13,11]. Their test results show that information quality has a positive effect on user satisfaction.

The implementation of SIPKD in the Denpasar City Government has made it easier and faster for regional governments to prepare budgets, administration and financial reporting. Quality information generated from the use of SIPKD is a solution in order to improve regional financial accountability. The application of SIPKD in the Denpasar City Government has produced financial reports that present financial information that is relevant, accurate, timely and reliable. The high quality of information produced by SIPKD has a positive impact on improving the perceived satisfaction of system users, where SIPKD users will feel comfortable in using and using the system.

5.3. Effect of Supervision Action on User Satisfaction

Table 5: Test Results for Direct Effects and Effects without Mediation Variables

| Inter-Variable Effects | Path Coefficient | | | Information |
|--|------------------|-----------------|--------------------|-------------|
| | (Bootstrapping) | <i>p values</i> | <i>t statistic</i> | |
| Supervision Action (X_3) → User Satisfaction (Y_3) | 0.232 | 0.024 | 2.269 | Significant |

Table 5 shows that the supervision action variable has a positive path coefficient of 0.232 with probability values of 0.024 (p values <0.05) and t -statistics of 2.269 (t -statistics > 1.96) which means the third hypothesis is accepted. The Denpasar City Government has implemented the provisions by developing an accrual-based financial management application system from the basis of cash accounting towards the basis of accrual accounting, accompaniment of accrual-based applications of regional organizations financial management information systems, as well as assistance in the preparation of Regional Organizations Financial Reports in the Denpasar City Government [9,10]. Supervision actions carried out by the Denpasar City Government motivate employees by increasing their knowledge and ability to manage finances using SIPKD so that this will have an impact on increasing user satisfaction.

5.4. Effect of System Quality on Net Benefits

Table 6: Test Results for Direct Effects and Effects without Mediation Variables

| Inter-Variable Effects | Path Coefficient | | | Information |
|---|------------------|-----------------|--------------------|-------------|
| | (Bootstrapping) | <i>p values</i> | <i>t statistic</i> | |
| System Quality (X_1) → Net Benefits (Y_2) | 0.224 | 0.013 | 2.501 | Significant |

Table 6 shows that the system quality variable has a path coefficient that is positive at 0.224 with probability values of 0.013 (p values <0.05) and t -statistics 2.501 (t -statistics > 1.96) which means the fourth hypothesis is accepted. These results are in line with the results of previous studies that analyzed the application of SIPKD in the Bali Provincial Government [16]. The results of his research indicate that system quality has a positive effect on the net benefits felt by the organization. This is in accordance with Presidential Regulation Number 2 of 2015 concerning the National Medium-Term Development Plan for 2015-2019 that national priorities for achieving development performance indicators have been established, one of which is the financial reporting indicator with Unqualified Opinion. Achieving Unqualified Opinion requires one of the facilities, namely information technology support or accounting information systems. The Provincial Government of Bali has held financial management using SIPKD and has benefited, namely obtaining Unqualified Opinion on financial reporting produced from SIPKD.

Net benefits that are felt by individuals and organizations when the available system is of good quality, which is able to improve the quality of the user's work, make the user's work easier and save the user's time, and be able to achieve the organizational goals that have been set. Denpasar City's Regional Medium Term Development Plan for 2016-2021 contains the goals and objectives to be achieved by the Denpasar City Government, one of which is an increase in Audit Board of the Republic of Indonesia's Opinion on regional financial management. Since the implementation of the SIPKD, which is from mid-2010 to the present, the Denpasar City Government has succeeded in obtaining an Unqualified Opinion from 2011 to 2017. The acquisition of Unqualified Opinion for up to six consecutive years reflects that the Denpasar City Government has successfully implemented SIPKD effective in managing regional finances.

5.5. Effect of Information Quality on Net Benefits

Table 7 shows that information quality variables have path coefficients that are positive at 0.338 with probability values of 0.010 (p values <0.05) and t -statistics 2.559 (t -statistics > 1.96) which means the fifth hypothesis is accepted. These results are in line with the results of previous studies that examined the Direct Procurement Management Information System (SIMPeL) in the Ministry of Finance Work Unit in the East Java Province [8]. His results show that information quality has a positive effect on net benefits. The increase in the quality of information produced by the Direct Procurement Management Information System (SIMPeL) will increase the net benefits of the decision making process. This is because the information generated can make users better understand the context for making decisions, improve productivity decision-making, and improve the performance of individuals and organizations.

Table 7: Test Results for Direct Effects and Effects without Mediation Variables

| Inter-Variable Effects | Path Coefficient | | | |
|--|------------------|-----------------|--------------------|-------------|
| | (Bootstrapping) | <i>p values</i> | <i>t statistic</i> | Information |
| Information Quality (X_2) \rightarrow Net Benefits (Y_2) | 0.338 | 0.010 | 2.599 | Significant |

Good quality information will make it easy for organizations to make decisions and policies that provide benefits to the organization. The information produced by SIPKD is very important in order to achieve the benefits that individuals and organizations want to feel.

SIPKD users in the Denpasar City Government assess that the information produced by SIPKD is relevant, has information content that is accurate and validated, and can be produced in a timely manner. Quality information produced by SIPKD shows good transparency and accountability in managing regional finances and assets in the Denpasar City Government.

5.6. Effect of Supervision Action on Net Benefits

Table 8: Test Results for Direct Effects and Effects without Mediation Variables

| Inter-Variable Effects | Path Coefficient | | | Information |
|---|------------------|-----------------|--------------------|-------------|
| | (Bootstrapping) | <i>p values</i> | <i>t statistic</i> | |
| Supervision Action (X_3) → Net Benefits (Y_2) | 0.218 | 0.028 | 2.209 | Significant |

Table 8 shows that the supervision action variable has a path coefficient that is positive at 0.218 with probability values of 0.028 (p values <0.05) and t-statistics at 2.209 (t -statistics > 1.96) which means the sixth hypothesis is accepted. The policies that have been implemented by the Denpasar City Government, which as contained in the Denpasar City Regulation Number 5 of 2016 concerning Denpasar City’s Regional Medium Term Development Plan for 2016-2021 have the aim of being able to improve the quality and quantity of HR in order to efficiently, effectively manage regional financial management transparent, accountable and auditable. The actions of supervision with various policies implemented by the Denpasar City Government have an impact on the relevance and reliability of financial information so that this will have a positive effect on the performance of individuals and organizations in the decision-making process. The better supervision measures that can be taken by the Denpasar City Government, the better the net benefits that can be felt by individuals and organizations.

5.7. Effect of User Satisfaction on Net Benefits

Table 9 shows that the user satisfaction variable has a path coefficient with a positive value of 0.220 with probability values of 0.049 (p values <0.05) and t-statistics 1.976 (t -statistics > 1.96) which means the seventh hypothesis is accepted. These results are in line with the results of previous studies evaluating the success of SIPKD in the Yogyakarta City Government [6]. The results of the study show that SIPKD user satisfaction has a positive effect on net benefits. SIPKD user satisfaction has provided net benefits for the Yogyakarta City Government, namely increasing efficiency in work, increasing effectiveness in implementing government regulations related to regional financial management, and improving the quality of budgeting and accountability in the Yogyakarta City Government.

Table 9: Test Results for Direct Effects and Effects without Mediation Variables

| Inter-Variable Effects | Path Coefficient | | | Information |
|--|------------------|-----------------|--------------------|-------------|
| | (Bootstrapping) | <i>p values</i> | <i>t statistic</i> | |
| User Satisfaction (Y_1) → Net Benefits (Y_2) | 0.220 | 0.049 | 1.976 | Significant |

Information system user satisfaction has an impact not only on individuals who use it, but also organizations that implement the information system. The higher the satisfaction of users of information systems will have a positive impact on both individuals and organizations. SIPKD users in Denpasar City Government on average feel satisfied using SIPKD in managing regional finances. SIPKD user satisfaction provides the net benefits that

have been felt by system users, such as completing work more quickly and efficiently, and improving performance in managing regional finances.

5.8. User Satisfaction Mediates the Effect of System Quality on Net Benefits

Table 10: Indirect Effect Test Results

| Inter-Variable Effects | Path | <i>p</i> values | <i>t</i> statistic | Information |
|---|------------------------------------|--------------------|-----------------------|-----------------|
| | Coefficient (Bootstrapping) | | | |
| System Quality (X_1) → Net Benefits (Y_2) | 0.051 | 0.141 | 1.476 | Not Significant |

Table 10 shows that the user satisfaction variable as mediating the effect of system quality variables on net benefits has a positive path coefficient of 0.051 with probability values of 0.141 (p values > 0.05) and t-statistics of 1.476 (t-statistics < 1.96) which means the eighth hypothesis is rejected. Noting the information systems success model from DeLone and McLean (2013), user satisfaction is not an intermediate variable between the system quality variable and net benefits. However, user satisfaction is an exogenous variable investigated for its effect on endogenous variables. This is the fundamental reason that the user satisfaction variable cannot mediate the effect of system quality on net benefits. In terms of actual practice, in the process of regional goods management in Denpasar City Government uses SIMDA BMD, where regional goods are inputted on the system based on Handover Minutes from goods users to regional goods managers [1]. The lack of synchronization of the use of the regional financial system causes the results of financial reporting to be not optimal because it requires adjusting information from SIMDA BMD to SIPKD. SIPKD user satisfaction is not enough to achieve the expected net benefits because in the financial management the area still uses the old system. This is the reason for user satisfaction not being able to mediate the effect of system quality on net benefits.

5.9. User Satisfaction Mediates the Effect of Information Quality on Net Benefits

Table 11: Indirect Effect Test Results

| Inter-Variable Effects | Path | <i>p</i> values | <i>t</i> statistic | Information |
|--|------------------------------------|--------------------|-----------------------|-----------------|
| | Coefficient (Bootstrapping) | | | |
| Information Quality (X_2) → Net Benefits (Y_2) | 0.099 | 0.058 | 1.898 | Not Significant |

Table 11 presents the path coefficient value which is positive at 0.099 with probability values of 0.058 (p

values > 0.05) and t-statistics 1.898 (t-statistics < 1.96) which means the ninth hypothesis is rejected. Information system success model DeLone and McLean (2013) explains that user satisfaction is not an intermediate variable between information quality variables and net benefits. However, user satisfaction is an exogenous variable investigated for its effect on endogenous variables. This is the fundamental reason that the variable user satisfaction cannot mediate the effect of information quality on net benefits.

The financial information contained in SIPKD is not fully accessible to all SIPKD users. Accessing to special financial data, such as the Regional Government Financial Report can only be carried out by BPKAD Denpasar City as a reporting entity, so that if there is an agency that has an interest in the information, it must write and face the Head of the BPKAD Division concerned. Seeing these conditions, the satisfaction of SIPKD users is not able to give maximum contribution when there are limitations in accessing information from SIPKD. Even though the information produced by SIPKD is already qualified, but if the system user cannot utilize the information produced maximally, it certainly will not provide satisfaction to the users of the system so that the net benefits that SIPKD users want to feel will not be realized.

5.10. User Satisfaction Mediates the Effect of Supervision Action on Net Benefits

Table 12: Indirect Effect Test Results

| Inter-Variable Effects | Path | <i>p</i> values | <i>t</i> statistic | Information |
|---|------------------------------------|--------------------|-----------------------|-----------------|
| | Coefficient (Bootstrapping) | | | |
| Supervision Action (X ₃) → Net Benefits (Y ₂) | 0.051 | 0.207 | 1.263 | Not Significant |

The user satisfaction variable as mediating the influence of the supervision action variable on net benefits has a positive path coefficient of 0.051 with probability values of 0.207 (p values > 0.05) and t-statistics of 1.263 (t-statistics < 1.96) presented in Table 12. This means that the tenth hypothesis is rejected. The information system success model DeLone and McLean (2013) explains that user satisfaction is not an intermediate variable between exogenous variables and endogenous variables. However, user satisfaction is an exogenous variable investigated for its effect on endogenous variables. This is the reason that the user satisfaction variable cannot mediate the effect of supervision on net benefits.

The Denpasar City Government in addition to holding technical guidance has also organized an internal control system within the Denpasar City administration. Internal control is a process designed to provide adequate confidence in the achievement of local government goals reflected in the reliability of financial statements, efficiency and effectiveness of the implementation of programs and activities and compliance with laws and regulations. SIPKD user satisfaction is not able to provide maximum contribution in mediating the influence of supervisory actions taken by the leader on the net benefits felt by system users. This is because there are still several factors besides the role of supervision actions that can determine the realization of net benefits that SIPKD users will feel in managing regional finances.

6. Conclusions

Based on the results of data analysis, this study found that system quality, information quality, and supervision actions had a positive effect on user satisfaction and net benefits. User satisfaction has a positive effect on net benefits. User satisfaction cannot mediate the effect of system quality, information quality, and supervision action of net benefits.

7. Recommendations

SIPKD in Denpasar City Government is still not stable and sometimes still damaged. System developers are expected to be able to make improvements and develop better systems so that they can provide convenience for users in using information systems.

The information produced by the SIPKD in the Denpasar City Government is still not yet reliable or in other words has low information reliability. This shows that SIPKD cannot optimally present accurate information. Suggestions that can be given to information system developers are to make improvements to the system so that the information produced by SIPKD is able to provide accurate and reliable information by system users and information users in the decision-making process.

The Denpasar City Government has not maximally conducted coaching and training in implementing SIPKD so it is recommended for leaders who have the authority to be more intensive in organizing coaching and training related to the use of SIPKD.

Satisfaction of SIPKD users in the Denpasar City Government regarding the information content produced by the SIPKD is still not maximized. Information system developers are advised to make improvements so that information or output from SIPKD can be produced in a complete and transparent manner.

8. Limitations

This research is limited to measuring system success from system technical factors only. Further research in assessing the success of information systems can be measured using human psychological factors. Psychological factors can be added to DeLone and McLean's model to evaluate the application of a system. The information technology acceptance theory can be used to measure the success of the application of information technology in terms of its human factor [16].

The sample selection in this study is limited to using only system users. The expansion of research samples can be done by using leaders who include heads of agencies, agencies, departments and sub-districts. This can be done to assess the success of the implementation of the system from the perspective of the executives.

References

- [1] Ajzen, I. and Fishbein, M. "Theory of Reasoned Action/Theory of Planned Behavior". The Journal of

Social Psychology, 1980.

- [2] Badan Pengelola Keuangan dan Aset Daerah. (2017). "Laporan Akuntabilitas Instansi Pemerintah LKJIP 2017".
- [3] Davis, Fred D., Bagozzi, Richard P., and Warshaw, Paul R. "User Acceptance of Computer Technology: A Comparison Two Theoretical Models". *Management Science*, vol 35, pp. 982-1003. Aug. 1989.
- [4] DeLone, W.H. and Mclean, Ephraim R. "Information System Success: The Quest for the Dependent Variable". *Journal of Management Information Systems*, vol 3, pp. 60-95, Mar. 1992.
- [5] DeLone, W.H. and Mclean, Ephraim R. "The DeLone and McLean Model of Information Systems Success A Ten-Years Update". *Journal of Management Information Systems*. vol 19, pp. 9-30. Spring. 2003.
- [6] Direktorat Jenderal Bina Keuangan Daerah Kementerian Dalam Negeri. "Sistem Informasi Pengelolaan Keuangan Daerah (SIPKD)". Internet: <http://keuda.kemendagri.go.id/sipkd>, [May, 5, 2018]
- [7] Hasanati, Akram, and Irwan, M. "Pengaruh Tindakan Supervisi, Kompleksitas Tugas, dan Profesionalisme Auditor terhadap Kepuasan Kerja Auditor". *Jurnal Akuntansi dan Investasi*, vol 18, pp. 13-27, Jan. 2017.
- [8] Jogiyanto. (2007). *Sistem Informasi Keperilakuan* (6th edition).
- [9] Liu, C. and Arnett, K. P. "Exploring the Factors Associated with Web Site Success in the Context of Electronic Commerce". *Information and Management*, vol 38, pp. 23-33, 2000.
- [10] Livari, Juhani, "An Empirical Test of the DeLone and McLean Model of Information System Success". *Database for Advances in Information Systems*, vol 36, pp. 8-27. Spring. 2005.
- [11] Pemerintah Republik Indonesia. (2013). "Peraturan Menteri Dalam Negeri Nomor 64 Tahun 2013 tentang Penerapan Standar Akuntansi Pemerintahan Berbasis Akrua".
- [12] Pemerintah Republik Indonesia. (2010). "Peraturan Pemerintah Republik Indonesia Nomor 65 Tahun 2010 tentang Perubahan Peraturan Pemerintah Nomor 56 Tahun 2005 tentang Sistem Informasi Keuangan Daerah".
- [13] Pemerintah Republik Indonesia. (2010). "Peraturan Pemerintah Republik Indonesia Nomor 71 Tahun 2010 tentang Standar Akuntansi Pemerintahan".
- [14] Pitt, Watson, and Kavan. "Service Quality: A Measure of Information Systems Effectiveness". *MIS Quarterly*, vol 19, pp. 173-187, June. 1995.
- [15] Seddon.P.B. "A Respecification and Extension of The DeLone and McLean's Model of IS Success". *Information System Research*. vol 8, pp. 240-250. Sept. 1997.
- [16] Venkatesh, Morris, and Davis. "User Acceptance of Information Technology: Toward a Unified View". *MIS Quarterly*, vol 27, pp. 425-478. Sept. 2003.