

INFORMATION SYSTEM SUCCESS MODEL ANALYSIS - ENHANCING USER SATISFACTION IN VIDEO STREAMING PLATFORMS USING VIDEO STREAMING ANALYTICS FEATURES



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Abstract

The swift expansion of Subscription Video on Demand (SVoD) platforms in Indonesia is resulting in user retention challenges; data indicates that 23% of users plan to terminate their subscriptions. This research study examines the determinants of user happiness with the objective of giving pragmatic methods to mitigate subscription cancellation rates. The foundational principle of this research study is the Delone & McLean Information System Success Model. This theory elucidates the quality of the system, the quality of information, and the quality of service, which are identified as critical factors of user satisfaction and will ultimately influence the net benefits. This study employed a quantitative methodology, gathering data from 186 Indonesian SVoD respondents and analysing it by Partial Least Squares Structural Equation Modelling. The analysis results indicate a substantial beneficial impact of system quality, information quality, and service quality on user happiness. User happiness influences net benefits, which can lead to user retention and market expansion. To address the problem of subscription cancellation business, this research study proposes a Video Streaming Analytics (VSA) system. The proposed VSA solution is a surveillance system to collect real-time information about video streaming KPIs. VSA uses machine learning models to improve network performance and can be used for personalization. The next step after implementing VSA is to use the information collected to create licenses and partnerships according to Indonesian user trends and preferences. By implementing VSA and personalized campaigns, SVoD platforms and telecom service providers can improve their user satisfaction and further reduce churn rates and tap into the potential of Indonesia's entertainment content market. This research study emphasizes analytics-based strategies to create competitive advantage and long-term sustainability in the industry.

Keywords: SVoD, User Satisfaction, Delone & McLean ISSM, Video Streaming Analytics, Indonesia, PLS-SEM

INTRODUCTION

The development of digital technology has revolutionized the global entertainment industry, including in Indonesia. The shift from conventional media such as television and cinema to internet-based digital content has created significant changes in people's consumption patterns. One form of this evolution is the emergence of *Subscription Video on Demand* (SVoD) services such as Netflix, Disney+ Hotstar, and Amazon Prime that offer flexibility and personalization of content. Consumers are now demanding experiences that fit their personal preferences and schedules, fueling the growing popularity of SVoD services (Smith & Telang, 2016; Statista, 2025). Amid this trend, Indonesia is showing positive growth in the number of users, SVoD industry revenue, and varied genre preferences, making it a promising potential market.

Although the growth of the SVoD industry in Indonesia looks promising, there is a significant challenge that threatens the sustainability of the business, namely the high intention of users to unsubscribe. Based on Statista data in 2024, as many as 23% of respondents stated that they would cancel their subscriptions in the next three months. This phenomenon raises concerns about the potential for a decline in revenue and *average revenue per user* (ARPU) in the future. Additionally, the top reasons for canceling subscriptions include prices that are considered too high, unsatisfactory content quality, and a sub-optimal user experience. Therefore, this research is important to understand the fundamental factors that lead to subscription cancellations so that the SVoD industry can formulate a more effective customer retention strategy.

This study aims to analyze the root causes of the high rate of cancellation of SVoD service subscriptions in Indonesia. Specifically, the purpose of this study was to identify and categorize the key factors influencing cancellation decisions, evaluate the relationship between variables such as price, content quality, and user experience to those decisions, and formulate data-driven strategies to improve customer retention. Thus, this research is expected to make a practical contribution to the SVoD industry and the telecommunications sector to improve the competitiveness and sustainability of their services in the Indonesian digital market.

In addition to focusing on the SVoD sector, the study also highlights the close linkage between the video service provider industry and the telecommunications industry. In the digital ecosystem, telecommunication service providers are not only distributors of internet access but also strategic partners for SVoD platforms in reaching consumers. Data from Statista shows that some SVoD subscriptions in Southeast Asia are done through telecom providers, indicating the potential for closer business collaboration. Therefore, the results of this research can be used by both parties to create synergies in the preparation of service packages that are more attractive and relevant to user needs, so as to reduce the rate of subscription cancellations while increasing overall business value.

RESEARCH METHOD

Research Design

This research begins by identifying a real and ongoing business issue within the industry. To validate the existence of the business problem, secondary data is utilized to

ensure the phenomenon is not merely based on the researcher's assumptions or curiosity. Upon confirming the issue, specific research questions are developed to investigate the underlying causes, subsequently leading to the formulation of research objectives that define the study's aims. Once the research questions and objectives are clearly defined, data collection is conducted to support the development of a business solution and an actionable implementation plan aimed at resolving the identified issue. Figure 1 shows Research Design in this research.

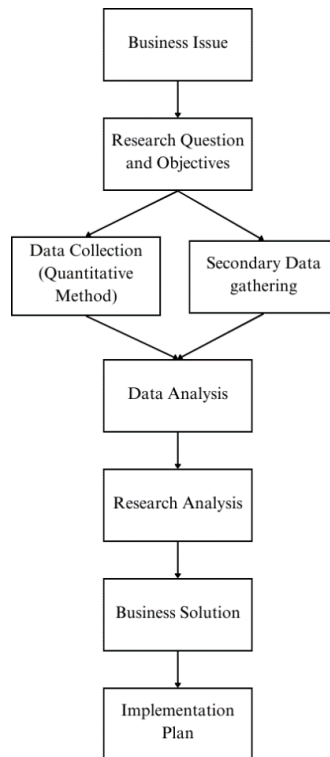


Figure 1.
Research Design

Data Collection Method

This research employs a quantitative methodology to analyse the relationships among the variables specified in the DeLone and McLean Information System Success Model (ISSM). Partial Least Squares – Structural Equation Modelling is utilised to assess the impact of each variable. Primary data is collected from users of Subscription Video on Demand (SVoD) platforms in Indonesia. Data analysis is conducted through PLS-SEM to assess validity and reliability prior to hypothesis testing, utilising essential metrics including R-squared, F-squared, and T-statistics.

Quantitative Research

Quantitative research is a methodical strategy to evaluate objective hypotheses by analysing the links between observable variables through statistical analysis (Creswell & Creswell, 2022). This study employs a quantitative method to analyse the correlations between factors derived from the DeLone and McLean Information Systems Success Model (ISSM). The principal data collection is executed using an online survey aimed at Indonesian SVoD users. This research modifies the indicators to align with the SVoD industry's context

while preserving the goal of measuring the ISSM components. Hair et al. (2022) assert that the minimum sample size in PLS-SEM research should be established by analysing the smallest route coefficient in the model, as illustrated in Table 1.

Table 1.
Minimum Sample Sizes (Hair et al, 2022)

p_{min}	Significance level		
	1%	5%	10%
0.05-0.1	1,004	619	451
0.11-0.2	251	155	113
0.21-0.3	112	69	51
0.31-0.4	63	39	29
0.41-0.5	41	25	19

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0.31-0.4	63	39	29
0.41-0.5	41	25	19

Data Analysis Method

This research utilises PLS-SEM to evaluate the relationships among constructs. The PLS algorithm, originally developed by Wold (1982) and refined by Lohmöller (1989), utilises iterative regressions with weight vectors that converge to fixed-point solutions. The initial analysis focusses on the external influences of indicators. Increased external loadings indicate significant correlation with the concept. A commonly acknowledged criterion is 0.708 or higher (Hair et al., 2022). Indicators with loadings between 0.40 and 0.70 may be considered for removal only if this step improves internal consistency or convergent validity. The next phase entails assessing internal consistency via Cronbach’s Alpha and Composite Reliability (ρ_c). Cronbach’s Alpha assesses inter-item correlation, while Composite Reliability accounts for the differing outer loadings of items, offering a more accurate evaluation in PLS-SEM. Reliability values between 0.70 and 0.90 are considered acceptable; however, coefficients over 0.95 may indicate redundancy (Hair et al., 2022).

$$\text{Cronbach's } \alpha = \left(\frac{M}{M-1} \right) \cdot \left(1 - \frac{\sum_{i=1}^M s_i^2}{s_t^2} \right).$$

Cronbach's Alpha Formula
 (equation 1)

$$\rho_c = \frac{\left(\sum_{i=1}^M l_i \right)^2}{\left(\sum_{i=1}^M l_i \right)^2 + \sum_{i=1}^M \text{var}(e_i)},$$

Composite Reliability Formula
 (equation 2)

Convergent validity refers to the degree of correlation between a construct and its indicators. The assessment is conducted through Average Variance Extracted, which is determined by the average squared loading of indicators. An AVE of 0.50 or higher suggests that the construct explains more than half of the indicator variance (Hair et al., 2022).

$$AVE = \left(\frac{\sum_{i=1}^M l_i^2}{M} \right),$$

Average Variance Extracted Formula
 (persamaan 3)

Discriminant validity evaluates the extent to which a construct is empirically separate from other constructs. This research utilises the Heterotrait-Monotrait Ratio to assess discriminant validity. Threshold values are established at 0.90 for conceptually analogous notions and 0.85 for divergent constructs (Hair et al., 2022). The R-squared (R²) number signifies the proportion of variance in a dependent variable explained by its predictors. Although elevated R² values indicate enhanced explanatory capability, interpretation should take into account the model's context. The F-squared (f²) effect size measures the influence of excluding a predictor from the model, providing insight into the contribution of each construct (Hair et al., 2022). Figure 2 illustrates the research hypotheses in this study.

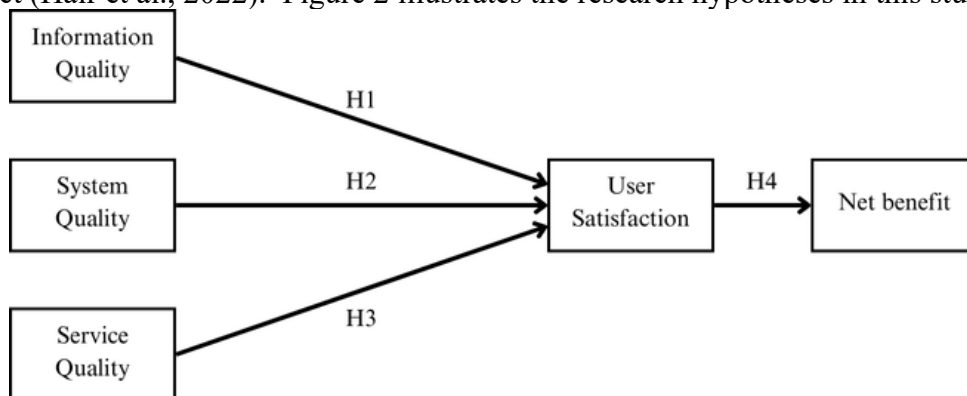


Figure 2.
Research Hypotheses

Hypothesis Description:

- H1:** Information quality in SVoD services positively influences users' satisfaction.
- H2:** System quality in SVoD services positively influences users' satisfaction.
- H3:** Service quality in SVoD services positively influences users' satisfaction.
- H4:** Users' satisfaction with SVoD services positively influences perceived net benefits.

RESULTS AND DISCUSSION

Analysis

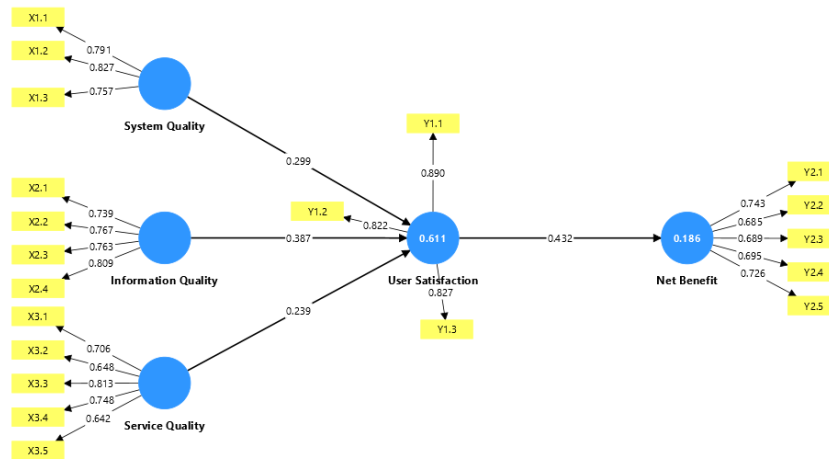


Figure 3.
Graphical Result of Adjusted D&M ISSM Model

Figure 3 illustrates the relationships among the independent variables of system quality, information quality, and service quality in relation to the mediating variable of user satisfaction, ultimately leading to net benefit. Figure 3 was created by using SmartPLS 4.0 software, with blue circles representing variables and yellow squares representing indicators.

Minimum Sample Size

Table 2.
Path Coefficient

Variables	Information Quality	Net Benefit	Service Quality	System Quality	User Satisfaction
Information Quality					0.387
Net Benefit					
Service Quality					0.239
System Quality					0.299
User Satisfaction		0.432			

The lowest path coefficient of this research is 0.239, and according to Table 2, the minimum sample size with a significance level of 5% is 69. And this research managed to gather 217 respondents, and after eliminating the non-user and invalid data, this research managed to gather 186 valid data.

Validity and Reliability

The first part of the analysis is to determine the validity and reliability of the questionnaire conducted by the researcher. The validity and reliability of the questionnaire can be determined by examining several criteria.

Table 3.
Outer Loadings

Indicators	Information Quality	Net Benefit	Service Quality	System Quality	User Satisfaction
X1.1				0.791	
X1.2				0.827	
X1.4				0.757	
X2.1	0.739				
X2.2	0.767				
X2.3	0.763				
X2.4	0.809				
X3.1			0.706		
X3.2			0.648		
X3.3			0.813		
X3.4			0.748		
X3.5			0.642		
Y1.1					0.890
Y1.2					0.822
Y1.3					0.827
Y2.1		0.743			
Y2.2		0.695			
Y2.3		0.689			
Y2.4		0.726			
Y2.5		0.685			

Table 3 indicates that several outer loadings are below 0.708. Hair et al. propose that outer loadings between 0.40 and 0.708 should be considered for removal only if it improves internal consistency reliability or convergent validity beyond the established threshold. This thesis demonstrates that efforts to reduce the outer loading below 0.708 led to a decline in the internal consistency reliability score instead of an improvement. The outer loading value of 0.708 should be retained.

Table 4.
Construct Reliability and Validity

Variables	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Information Quality	0.774	0.793	0.853	0.593
Net Benefit	0.760	0.759	0.834	0.501
Service Quality	0.762	0.784	0.838	0.510
System Quality	0.704	0.705	0.834	0.627
User Satisfaction	0.802	0.802	0.884	0.717

Table 4 shows the result of Cronbach's alpha, composite reliability, and AVE of the primary data gathered by the questionnaire. The internal consistency reliability can be examined via Cronbach's alpha value of > 0.7 , and as shown in Table 4, the data exceed the threshold. Composite reliability also has the same threshold as Cronbach's alpha, and the result of the data calculation also exceeds the threshold. To examine the convergent validity of the data, AVE needs to be calculated. The threshold of AVE is > 0.50 ; if the result passes the threshold, it means that the construct represents more than half of the variance of its indicators. As shown in Table IV.2, all variables pass the AVE threshold and can be considered valid.

Table 5.
HTM

Variables	Information Quality	Net Benefit	Service Quality	System Quality	User Satisfaction
Information Quality					
Net Benefit	0.610				
Service Quality	0.806	0.722			
System Quality	0.731	0.514	0.619		
User Satisfaction	0.875	0.517	0.773	0.824	

To check the discriminant validity of a construct of this research, the HTMT value of each variable needs to be examined. The threshold of HTMT is < 0.90 , and as shown in Table 5, all variables pass the HTMT threshold and can be considered as valid, and each construct represents a unique construct not represented by other constructs in this research model.

**Table 6.
R Square**

Dependent Variables	R-square	R-square adjusted
Net Benefit	0.186	0.182
User Satisfaction	0.611	0.604

Based on Table 6, it can be concluded that the independent variables influenced 61.1% of user satisfaction and 18.6% of net benefit. This finding indicates that the independent variables of this model (system quality, information quality, and service quality) play a major role in defining users' satisfaction with SVoD platform usage.

**Table 7.
F square**

Variables	Information Quality	Net Benefit	Service Quality	System Quality	User Satisfaction
Information Quality					0.193
Net Benefit					
Service Quality					0.084
System Quality					0.154
User Satisfaction		0.229			

Table 7 explained the F-squared value that represents the individual effects of each variable. As shown in Table IV.6, the most significant variable that affects user satisfaction is information quality, followed by system quality and service quality.

**Table 8.
P Values**

Relationships	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
Information Quality -> Net Benefit	0.167	0.171	0.042	3.955	0.000
Information Quality -> User Satisfaction	0.387	0.381	0.081	4.803	0.000
Service Quality -> Net Benefit	0.103	0.110	0.038	2.729	0.006
Service Quality -> User Satisfaction	0.239	0.244	0.075	3.164	0.002
System Quality -> Net Benefit	0.129	0.138	0.037	3.515	0.000
System Quality -> User Satisfaction	0.299	0.305	0.061	4.888	0.000
User Satisfaction -> Net Benefit	0.432	0.450	0.062	7.005	0.000

Based on the T value of each hypothesis (Table 8), which is > 1.96 , it can be concluded that there is a meaningful positive influence for all the hypotheses, and all hypotheses (H1–H4) are accepted.

Business Solution

After identifying the factors that cause subscription cancellations and testing hypotheses using quantitative methods based on the DeLone and McLean models that have been adjusted, a business solution is needed to address this problem. The study noted that 23% of SVoD users in Indonesia are likely to unsubscribe. The main goal of this business solution is to lower the level of user intent to stop using the service.

One of the proposed solutions is the implementation of a surveillance system, adapted from the CDC concept, both at the level of the SVoD platform and telecommunications service providers. For telecom providers, the system is integrated into the customer's network infrastructure to monitor and analyze user data flows using dedicated machine learning modules. The information collected reflects the user's experience in accessing the SVoD service.

Video Streaming Analytics (VSA) is the ultimate solution that combines the concept of surveillance to measure video Key Performance Indicators (KPIs) such as resolution, initial buffering time, and stalling events. With the help of machine learning algorithms, the network team can monitor the quality of the video service system in near real-time as well as historically through a dedicated dashboard.

As part of operational awareness, the VSA module will deploy adaptive sensors across the service provider's network. These sensors collect data to calculate a unified metric of system quality called the video Mean Opinion Score (vMOS). Adapted from multinational telecom vendors, vMOS is built on video KPIs and allows network teams to objectively assess the quality of user experience against SVoD services. With this approach, service providers can ensure that the quality of service meets user expectations and contributes to lowering subscription cancellation rates.

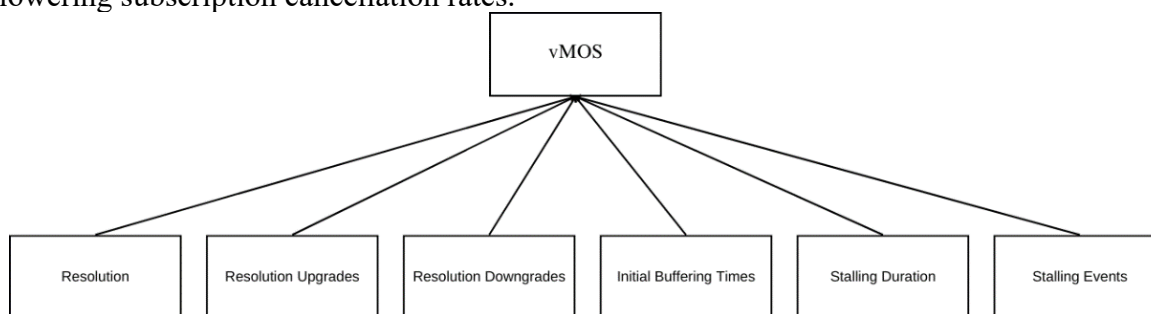


Figure 4.
Video Mean Opinion Score (vMOS)

Based on the mentioned hypothesis in the previous chapter, this research study stated that there is a positive influence of system quality in SVoD services on SVoD users' satisfaction. And by using the vMOS metrics, a telecommunication company can improve its system quality and increase its user satisfaction (Table 9).

Table 9.
vMOS metrics

vMOS Metrics	Metrics purpose
Resolution	VSA needs to examine the resolution of the content in the SVoD platform. By checking the resolution, VSA can analyze the network performance of telecommunication service providers.
Resolution Upgrades and Downgrades	By examining the resolution upgrades and downgrades of the user, VSA can analyze the network performance and consistency when the user is using the SVoD platform. These metrics can also represent the performance of the SVoD platform's server.
Initial Buffering Times	Initial buffering times represent the time needed to load an initial amount of data before the video starts. This metric also represents the network performance of a telecommunication service provider.
Stalling Duration	Stalling duration, or buffering duration, refers to the time needed in the middle of streaming a video. This metric represents the network performance of a telecommunication service provider.
Stalling Events	Stalling events or buffering events refer to the number of buffering situations experienced by a user. This metric represents the network performance of a telecommunication service provider.

Once the *Mean Opinion Score* (vMOS) video metric is identified, the network team of the telecommunications company can responsively detect and resolve issues related to system quality. This completion mechanism can be upgraded to an instant fix method, thus providing a smoother experience for users as well as increasing their satisfaction.

In terms of accuracy, *Video Streaming Analytics* (VSA) relies on *machine learning modules* to track the behavior of SVoD service users. This machine learning model needs to be trained to be able to detect users who have the potential to unsubscribe, especially based on the quality of service. This study shows that the quality of service has a positive influence on user satisfaction. Two important factors that the model must recognize are the frequency of complaints and payment-related complaints. Complaint frequency refers to the number of

technical or content complaints, while payment complaints refer to issues in the billing process. In addition, a decrease in viewing duration or a change in user habits is also an important indicator that reflects a deterioration in system quality.

In terms of representativeness, the ideal VSA not only detects video KPIs, but is also capable of capturing the quality of information from users of the SVoD platform. This information is important for telecommunications companies to recognize customer trends and preferences, which can be leveraged for marketing campaigns and business collaborations. VSA must be able to analyze user viewing patterns by device and region to generate a targeted strategy. For example, as many as 56.7% of SVoD users in Indonesia prefer the drama genre. This fact confirms that content preferences are a variable of information quality in the DeLone and McLean models of information system success, and contribute positively to user satisfaction.

Finally, in the face of the challenges of the digital age, VSA must also be able to detect large-scale threats, including fraud attempts and cyberattacks that can disrupt the user experience. This capability is important to ensure the overall security and convenience of users in using SVoD services.

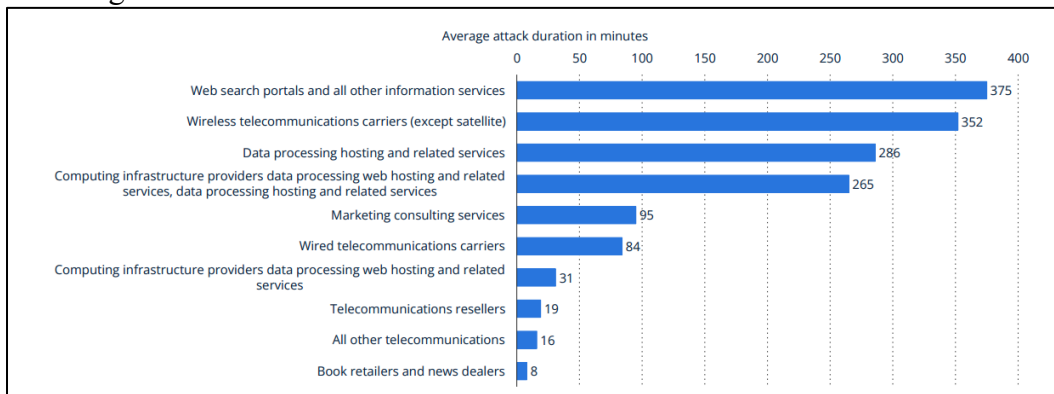


Figure 5.
Average length of DDoS attacks in Indonesia H1 2024, by sector (Statista 2024)

In Indonesia (Figure 5), there are an average of 352 DDoS attacks in the wireless telecommunications sector, equivalent to more than half a million attacks per day. This shows the importance of threat detection systems such as *Video Streaming Analytics* (VSA) that can alert network teams to respond to an outage immediately. Within the Information System Success Model proposed by DeLone and McLean, threat detection is categorised under service quality, which has been demonstrated to positively influence user satisfaction according to the findings of this research analysis.

Furthermore, the VSA not only serves as a monitoring tool, but also as a basis for strategic decision-making. With SVoD service revenue in Indonesia reaching 354.15 million USD in 2024, and 17% of it comes from sales through telecommunication providers (around 60.21 million USD), if the subscription cancellation rate reaches 23%, the potential revenue loss reaches 13.85 million USD. Therefore, data-driven interventions are essential.

One strategy that can be implemented is content personalization based on user preferences. Data shows that 56.7% of Indonesian users like the drama genre. By leveraging VSAs, service providers can tailor content promotions and form strategic partnerships with

drama content producers. If this strategy is able to retain 56.7% of potential unsubscribed users, then the potential loss can be reduced to 7.85 million USD. To implement VSA effectively, it is necessary to pay attention to technical integration with the operator's network, implementation schedule arrangements, and periodic monitoring to measure its effectiveness in reducing cancellation rates and increasing net benefits. Figure 6 shows the Implementation of VSA.

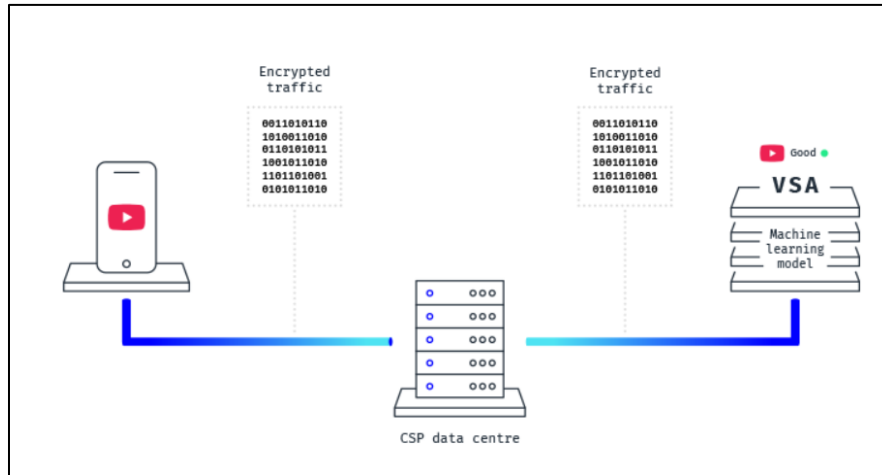


Figure 6.
Implementation of VSA

The concept of video streaming analytics as a surveillance system solution is by tapping into a telecommunication service provider's data center to gather the aggregated data of their network and classify the flows based on the SVoD platform, duration of watch, time of watch, network performance, and content genre.

Research Man-days

The initial steps of creating a video streaming solution are starting from a new feature that is requested by the customer. To accommodate the customer request, the first thing to do is to analyze the customer needs. The proposed solution needs to have the ability to solve customers' problems. In this research study, the problem faced by the SVoD and telecommunication service providers is the intention to unsubscribe, the proposed solution must have the ability to suppress the user's unsubscribe intention. Video streaming analytics is suitable for this solution since it can provide real-time information on users' behavior that can be used as justification for further action.

Table 7.
Research Man-days

People in Charge	Activity	Days
VP of Product	New feature request	1
	Research for the video streaming analytics concept	30
Data scientist	Initial coding	14
	Testing	60
	Staging push	7

People in Charge	Activity	Days
	Production push	1
	Total	120

Table 7 illustrates the flow of activities in the research process of developing new modules that can be used by telecommunication service providers. This process begins with a customer request submitted to the team by the vice president of product. The data scientist team then began research to formulate solutions that can be developed into new modules and features, by analyzing trends and related industry conditions. Once the concept of video streaming analytics is formulated, the initial coding process begins, where the team builds the code, scripts, and other necessary technical elements. The next stage is the testing process, which aims to collect initial data and test the performance of the solution in various user experience scenarios.

After passing the test, the module is tested in a staging environment to ensure compatibility with existing products as well as avoid system interference. If validation is successful, the module is then moved to a production environment and ready to be implemented on the customer's system. In the context of implementation, if there is a new telecommunication service provider that approves the use of this solution, then the system installation process will be carried out. The purpose of this installation is to build an appropriate environment to access customers' networks in order to analyze their users' network activity.

Table 8.
System Installation Man-days

People in Charge	Activity	Days
Purchasing	Purchase Order	1
	Delivery of software license package (Including software image, license certificate, and software license activation key)	5
	Site Survey	7
	Hardware purchase	20
Project Manager	Hardware delivery	3
	Site preparation	2
	Power On, installation	2
	Integration and testing	2
	Video streaming analytics enablement	5
	Unit testing	1
	User acceptance testing	1
	Release	1
	Total	50

Table 8 explains the steps of system installation for new telecommunication service provider clients. The first thing needed after the purchase order is to deliver the software

solution and license to the customer. After the license and software delivery process finishes, a site survey needs to be conducted to calculate the hardware needed for the system. After the site survey for hardware is finished, the next step is to purchase the hardware for the system. After all the hardware needed is ready, the installation on the site can be conducted, and after all the hardware is installed properly, the new module of video streaming analytics can be implemented. After all hardware and modules are installed, unit testing and user acceptance testing need to be conducted before release.

Discussion

Figure 3 illustrates the interrelationship between independent variables—system quality, information quality, and service quality—and the mediating variable of user satisfaction in relation to net benefits. Analysis of the model using SmartPLS 4.0 software revealed a minimum path coefficient value of 0.239, indicating a required sample size of at least 69 respondents. This study effectively gathered data from 217 respondents, resulting in 186 valid data points after the exclusion of invalid responses.

The evaluation of the instruments' validity and reliability was conducted using several indicators, such as outer loading value, composite reliability, Cronbach's alpha, and average variance extracted. Despite certain outer loading values falling below 0.708, subsequent analysis indicated that the removal of the indication diminished internal dependability; thus, the indicator was retained. All variables demonstrated Cronbach's alpha and composite reliability values exceeding 0.7, along with an AVE greater than 0.5, indicating that the study instrument was valid and reliable. The validity discriminant test employing the HTMT approach yielded results within the 0.90 threshold, confirming that each construct represents a distinct variable within the model.

The R-square value demonstrates that independent variables account for 61.1% of user satisfaction and 18.6% of net benefits, highlighting the significant influence of system, information, and service quality on user satisfaction within the SVoD platform. The F-square value indicates that the information quality variable exerts the most significant influence on user satisfaction, with the system quality and service quality following in importance. All hypotheses were evaluated using a T-statistical value greater than 1.96 and a p-value less than 0.05, resulting in the acceptance of all research hypotheses.

After identifying the factors causing subscription cancellation and confirming the hypothesis of the DeLone and McLean models that have been adjusted, the proposed business solution focuses on decreasing the rate of user unsubscribe intent. One of the main solutions is the implementation of a surveillance system adapted from the CDC concept, which is integrated into the network infrastructure of telecommunication service providers to monitor and analyze user data flows with the help of machine learning modules. The system uses Video Streaming Analytics (VSA) to measure the video's Key Performance Indicators (KPIs), such as resolution, initial buffering time, stalling duration, and stalling events.

VSA also implements adaptive sensors that collect data to calculate a unified metric of system quality called Mean Opinion Score (vMOS) video. vMOS metrics allow network teams to objectively assess the quality of the user experience and take corrective action responsively. With real-time and historical monitoring through a dedicated dashboard, service providers can improve system quality and user satisfaction, thereby lowering subscription cancellation rates.

In addition, the machine learning model is trained to detect user behavior that has the potential to unsubscribe, by identifying the frequency of technical and payment complaints, as well as changes in viewing duration as indicators of declining service quality. VSA is also able to capture the quality of user information, such as viewing genre preferences by device and region, which can be leveraged for marketing strategies and business collaborations. In a challenging digital era, the ability of VSA to detect cyber threats and fraud is also important to maintain user safety and convenience. Thus, the implementation of VSA and vMOS-based surveillance systems can be an effective solution in improving the quality of SVoD services, increasing user satisfaction, and significantly reducing subscription cancellation rates.

CONCLUSION

This study reveals that the phenomenon of shifting entertainment consumption patterns in the digital era triggers the problem of canceling subscriptions on the Subscription Video on Demand (SVoD) platform in Indonesia. Analysis utilising the tailored DeLone & McLean model indicates that system quality, information quality, and service quality are the primary determinants influencing SVoD user satisfaction. User happiness enhances the net advantages accrued by telecommunication service providers. The implementation of streaming video analytics modules is an effective solution to monitor user experience in real time, so that it can increase satisfaction and increase customer growth potential. Through strategic partnerships with content producers and the use of exclusive rights, service providers can execute more targeted and personalized campaigns, strengthening their competitive position in a dynamic industry.

Suggestion

The recommendations from the results of this study are as follows:

1. Telecom service providers need to optimize the monitoring of user trends and behavior in real time by adopting streaming video analytics technology to continuously improve user experience and satisfaction.
2. Based on the data and information obtained, service providers must develop adaptive business strategies, including the acquisition of exclusive content licenses and the execution of personalized marketing campaigns, to maximize benefits and expand market share in the digital age.
3. To maintain business sustainability and competitiveness, the integration between the quality of systems, information, and services must continue to be holistically improved by being responsive to changing consumer behavior and technological innovation.

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