DIGITAL TRANSFORMATION IN KITE MANAGEMENT (EASY IMPORT FOR EXPORT PURPOSES): VIEWED FROM ADMINISTRATIVE PROCESS, TECHNOLOGICAL ASPECTS, AND HUMAN READINESS

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Abstract

The Indonesian government is trying to increase export activities through community involvement, especially local entrepreneurs. Digital transformation is the main foundation for optimizing business, especially in the management of Ease of Import for Export Destinations (KITE). This research, using qualitative descriptive methods, explores the impact of digitalization on KITE management through the KITE Application. The research focus includes administrative process changes, technology usability, application effectiveness, data integrity, data security management, training policies, internal evaluations, fine policies, and user perceptions of the transition to the digital era. International trade, especially through ASEAN and AFTA, is an important focus for stimulating economic growth, with DJBC playing a key role in providing fiscal incentives and investment protection. KITE facilities provide important support for entrepreneurs in increasing production and managing company finances. Digital transformation, especially through the Ceisa application, is considered a step forward in customs services. Despite an increase in user satisfaction, further efforts are needed to achieve service stability and optimization. This research, through a qualitative approach and NVivo analysis, provides valuable insights regarding the implementation of the KITE Application and its impact on Indonesian exports, with the hope of providing recommendations for improving implementation, data security, and user response in the era of digital transformation.

Keywords: Indonesian Government, Exports, Digital Transformation, KITE, Impact of Digitalization, Ceisa Application, Customs Services, User Satisfaction, Data Security, Digital Era

INTRODUCTION

Before digitalization, the government and users of the Ease of Import for Export Purposes (KITE) facility had great difficulties in terms of management from the administrative side which required piles of printed documents with a very high risk of data being lost and also human resources having to go into the field more so that they were ineffective and efficient (Adisaksana, 2022). With the existence of this renewable technology, the government finally decided to implement a policy using digital transformation where KITE management is expected to be easier, namely by starting to publish the CEISA (Custom Excise Information System and Automation) application system, the result of the evolution of the Customs Fast Release System (CFRS) application in 1990 which where this generation is still said to be quite manual because they still use hardcopy and diskettes to go to the customs office.

CEISA in 2012 has not been properly transformed because the system has not been integrated, many application items must be used to use CEISA even though it is quite easy compared to CFRS. Finally, the government developed a webform-based application called CEISA 4.0 in 2018. From here the public quite welcomed the application because online management could be accessed anywhere without having to come directly to the Customs and Excise head office. The purpose of the CEISA 4.0 application was made by the government as a policy basis to facilitate imports to increase exports of the Republic of Indonesia.

Therefore, if the public does not actively promote and support domestic exports, then the government's efforts to increase domestic exports will not be successful. Domestic entrepreneurs are very concerned about the nature of the policies implemented when deciding on their company's export and import policies (Endrawati et al., 2022). Digital transformation has become the main basis for optimizing business processes in various sectors, including the management of Ease of Import for Export Destinations (KITE). Technological advances have provided a significant boost in efforts to increase efficiency, effectiveness, and managerial skills in carrying out import and export processes (Isbahi et al., 2022; Cakranegara et al., 2022; Zuana & Sopiah, 2022).

In this context, the KITE Application appears as a technological solution that can speed up, simplify, and increase transparency in KITE management. This research descriptively uses qualitative research methods. This research aims to conduct a thorough investigation of the impact of digitalization on KITE management through the implementation of the KITE Application. The main focus of this research is on several key aspects, including changes in administrative and regulatory processes, obstacles that may arise, technology usability, effectiveness and efficiency of application use, data integrity, data security management, training policies, internal evaluation, fines, and reporting policies, as well as user perceptions of the shift from manual to the digital era.

Indonesian entrepreneurs can anticipate that the government will consider domestic economic conditions when formulating strategies to increase exports (Wardani et al., 2023). The emphasis is placed on the industrial environment that exports goods abroad. Although export and import policies can increase economic growth, they also have the potential to reduce the flow of funds to local distribution and exacerbate economic instability.

The export and import process is very important for countries involved in international trade. Therefore, the government must provide the necessary infrastructure and support for such efforts, especially for export activities, to increase domestic economic growth. The state offers facilities to support domestic entrepreneurs in their manufacturing ventures, to improve the country's economic standing, especially in the export industry.

The Directorate General of Customs and Excise (DJBC) plays an important role in the country's overall economy. This role is realized in several ways, for example by providing financial incentives to encourage investment and improve the economy (AlBram, 2013). This effort aims to protect society from the world economic downturn. It is a heavy responsibility and difficult to provide resources to help this sector grow. To amend PMK 254/PMK.04/2011 which regulates exemption from import tariffs on products and materials for processing, assembly, or installation on other goods for export purposes, the Ministry of Finance issued Regulation Number: 176/PMK.04/2013, also known as PMK 176. The regulation currently being revised is PMK 254/PMK.04/2011, abbreviated as PMK 254. Officially known as PMK 177/PMK.04/2013, this regulation is usually referred to as PMK 177/PMK.04/2013. KITE Exemption Facility Regulations. Amendment Number 177 to Amendment Number

253/PMK.04/2011 regulates procedures for reimbursement of import tariffs on imports of raw materials and finished products intended for export. PMK 253, the original regulation, is also known as PMK 253/PMK.04/2011. This rule is commonly known as restrictions on KITE Return facilities. As of March 6th, 2014.

The logistics procedures for the import and export of commodities in Indonesia are currently inefficient, according to the data in Table 1.

Table 1.

Logistics Costs for Asian Countries

No	Country	Logistics Costs/GDP (%)
1	Indonesia	24
2	Vietnamese	20
3	Thailand	15
4	China	14
5	Malaysia	13
6	Philippines	13
7	India	13
8	Taiwan	9
9	South Korea	9
10	Singapore	8
11	Japan	8

Source: Katadata.co.id (2019)

Through an in-depth study of various aspects covering the implementation of the KITE Application, it is hoped that significant insight for stakeholders can be provided through this research, including customs agencies, application user companies, and technology developers. By understanding the impacts and challenges faced, strategic steps can be designed to optimize the KITE system and increase business competitiveness in this digital era.

RESEARCH METHOD

The approach used in this research is a qualitative method approach equipped with secondary data, where this qualitative approach will later use an in-depth interview method (in-depth interview) with sources from the actors of Import Ease of Export Purposes (KITE), Shipping Operations, and Customs in obtaining data and input. In the research conducted, stakeholders will provide perceptions of various alternative policies and strategies in seeing the impact of implementing KITE related to digitalization.

Meanwhile, secondary data was obtained from the Customs and Excise website, PMK, and legislation obtained from the Directorate of Customs and Excise as additional material for presenting the results of qualitative research methods from interviews processed by Nvivo.

The results of the interview activities will be analyzed by carrying out coding activities on the transcripts of each informant involved in the interview. After that, further analysis was carried out to draw out themes in the interviews which were stated in the form of coding nodes. In carrying out coding and analysis, researchers were assisted by NVivo software. Analysis that can be carried out is hierarchical, comparison diagrams, project mapping, matrix codes, up to word frequencies (word clouds).

A thorough review of all available data from various sources, such as interviews, field notes, personal documents, government documents, etc., is the first step in data analysis. According to Moleong (2010), Creswell (1994), and Creswell (2008), these sources are read, researched, and then analyzed in great detail. Moving on to the next stage, data reduction is carried out using abstraction.

The attempt to reduce anything to its essential features, processes, and questions is what we mean when we talk about abstraction. Next, the next action involves organizing them into different entities and then classifying them. Categories were created simultaneously with coding. The research design aims to make it easier for researchers to collect data, analyze data, and obtain results that follow the research objectives.

RESULTS AND DISCUSSION

NVivo Results and Analysis

10 informants were involved in data processing, with details of informants. Ten informants were involved in data processing, where informants 1-3 were KITE application users who discussed more problems related to changes to the digitalization system using the CEISA application. Informant 4, from Customs and Excise, is categorized as a regulator who implements KITE facility policies digitally to create effectiveness and efficiency.

Informant 5, from Shipping Services, as the KITE application operator, revealed problems related to export goods. Informant 6-10, as a shipper, conveyed obstacles with regulations from regulators and shipping services, as well as the positive and negative impacts of changes to the digitalization system. KITE Application Policy node mapping can be seen clearly in the NVivo - Project Mapping - KITE Application Policy folder.

First, the results of the mapping of the nodes coded in the KITE Application Policy will be displayed (the next image can be seen in the NVivo folder - Project Mapping - KITE Application Policy). As follows:

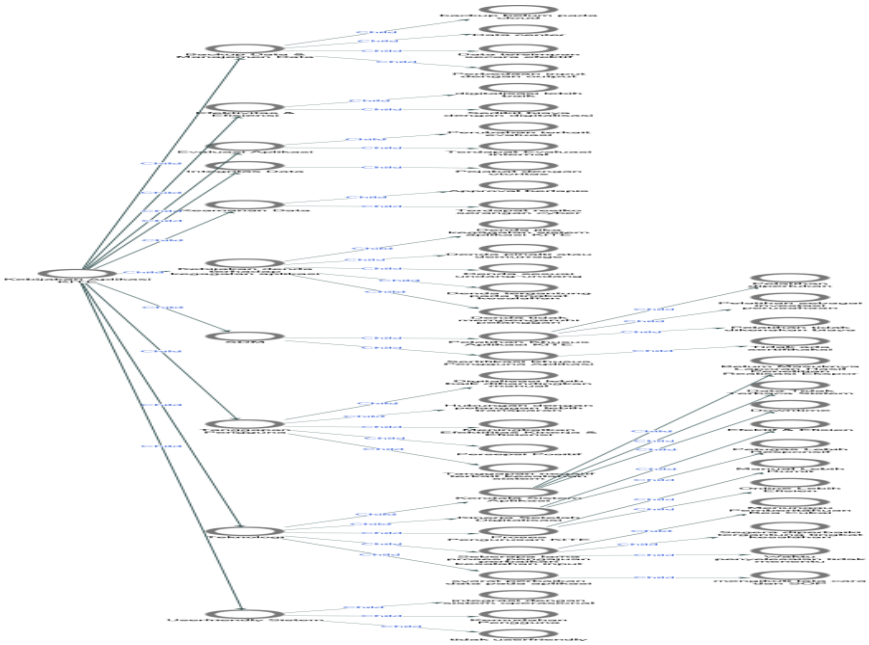

Figure 1.

KITE Application Policy Project Mapping

Source: NVivo (2023)

These results show a connecting line to indicators related to the advantages and disadvantages of the KITE application. The following are the total nodes based on the results of interviews with 10 subs based on the problem formulation.

Table 2.

Nodes "KITE Application Policy"

No	Category	Nodes	References
1	Administrative Aspects	Online is more efficient	9
		Effective & efficient	5
		Few costs with digitization	8
		Follow procedures and SOPs	9
		The manual is more complicated	8
		The data cannot be read by the system	6
		Negative feedback related to system errors	5
		The export realization research report has not yet been submitted	3
		Downtime	2
		Correct immediately depending on the level of error	4
		Waiting for customs notification	4
		Completion time is uncertain	3
		Fines if the KITE application system fails	4
		Fines according to law	4
		Fines depend on the degree of error	3
		The fine does not affect customers	2
		Penalties or demurrage	1
		Positive perception regarding application system errors	3
		Digitalization is better than manual	3
		Increase performance effectiveness & efficiency	2
		Relationships with customers are more efficient	2

No	Category	Nodes	References
2	Technological Aspects	User convenience	4
		Integration with operational systems	2
		Not user friendly	2
		Better digitalization	7
		Officials with authority	7
		Layered approval	5
		There is a risk of cyber attacks	3
		Datacenter	6
		Data is stored effectively	5
		Backup is not yet on the cloud	1
		Difference between input and output	3
		There is an internal evaluation of the KITE application	5
		Changes related to the KITE application evaluation	1
3	Aspects of HR readiness	Training is required	9
		No certification	8
		Training is free of charge	4
		Training as a company investment	2
		Officers are more responsive	2

Source: NVivo (2023)

Nvivo Results

a. Administrative Aspects

90% of the sources stated that online is more efficient than manual in terms of managing import kites. All the sources were represented by Mr. Janawi who said "The performance is more effective and efficient in terms of performance and costs because we don't need to submit documents or collect hardcopy documents, because all "It has been integrated directly from the PIB document (or from the Ceisa application), even if it isn't there, we can communicate directly with the regional office admin." 50% of respondents stated that the online system was efficient and effective. 80% of respondents said there were few

costs with digital, as many as 90% of interviewees said that KITE management using a digital system had followed the procedures and SOPs as stated by 1 resource person, "The import procedures have been regulated in detail, everything has procedures and SOPs..” (Tarwi, 2023) however, 80% of respondents said that the KITE management manual was felt to be more complicated, even 60% of respondents said that the realization report data was not read by the system or received a negative response.

As many as 50% of respondents said that there were system errors such as data often being illegible and not properly consolidated, which resulted in 30% of respondents confirming that the system error resulted in the research results not being included in the Import Realization Research Report. Sometimes system errors cause the application to experience downtime for around 1 day, confirmed by 20% of respondents.

From the previous problem, if an error occurs in entering data in the application during an error or system error, the error can be corrected immediately, confirmed by 40% of the sources. However, 40% of the sources also said that if there is an error, you have to wait for Customs notification and the time for resolution of the error is uncertain, confirmed by 30% of respondents and explained by Mrs. Maulida, "it's a bit of a hassle to take care of it, it depends on the error, if there is an error regarding the data, the processing center has to come straight to the customs head office. If you go to the center, it takes a long time to take care of it and you can't be sure. It could take about a month." Sometimes if there is an error, it also results in a fine and the fine is determined according to applicable law, confirmed by 40% of respondents.

30% of the sources explained that the imposition of fines also depends on the level of error, in terms of the relationship with customers by each business entity. 20% of the sources said that fines do not affect or have a direct impact on customers, it could be said that KITE users are more focused on fines or demurrage on goods. it is imported, but only 10% of the interviewees discussed this because there was still a positive perception from the interviewees regarding the KITE Application system error and it was emphasized again that digitalization is better than manual, 30% of respondents strongly agreed with this. 20% of respondents also strongly agree that the KITE Application greatly increases performance effectiveness and efficiency because work is faster and can provide clear

reports to customers so that contact between KITE Application users and customers becomes more transparent.

b. Technological Aspects

In the context of KITE application development, several technological aspects need to be considered. From 40% of the sources, ease of use was the main focus, considering the importance of easy application use in working on LHRPE in the KITE Application, however, in terms of integration with operational systems, 20% of the sources stated that there was still room for improvement so that the application could be better integrated with the existing system. . Significant challenges emerged in the aspect of user unfriendliness, as many as 20% of interviewees stated that the KITE application must be improved to ensure wider adoption of the KITE application. As many as 70% of interviewees stated that the digitalization within the scope of Customs and Excise was sufficient for the needs of KITE application users in supporting export and import activities.

As many as 70% of interviewees stated that the involvement of authorized officials shows that digital transformation supported by the appropriate authorities is the key to success in making more transparent decisions. So, the multi-layered approval process from 50% of sources stated that it needs to be optimized better to ensure time efficiency in decision-making so that KITE application users are not charged with applicable fines.

As many as 30% of interviewees stated that the threat of cyber attacks is a serious concern for protecting data and systems so software security must be improved and continuously updated so that data integrity and quality continue to be maintained. Apart from software that must be protected, the hardware aspect is of course an equally serious concern, based on 60% of sources who stated that the data center must be in optimal condition to avoid the threat of fire due to short circuits so that it can continue to operate and provide effective data storage that has been installed. confirmation by 50% of sources is an important basis for application performance. Even though the data center is well protected and in optimal condition, force majeure such as natural disasters is something that cannot be avoided, so cloud backup is needed to mitigate these problems.

As many as 30% of sources stated that the difference between input and output that occurs in applications due to unstable internet networks is a concern for Customs and Excise so that they can make better regulations. Therefore, 50% of the sources stated that internal evaluation was needed to identify system limitations, and changes were needed regarding the evaluation by 10% of the sources regularly so that the regulations set were in line with the system limitations.

c. HR aspect

In dealing with the readiness aspect of a company's human resources (HR), several points need to be considered to ensure smooth and effective operations. First, the importance of training, 90% of interviewees agreed that investment in developing employee skills and knowledge is a top priority. However, 80% of interviewees mentioned the absence of certification, this is a challenge that needs to be overcome to ensure that employees have recognized legitimacy in their skills. However, 40% of respondents said that training on using the KITE Application was free of charge. This could reduce the financial burden, but it is necessary to consider whether the quality of the training remains optimal. Furthermore, 20% of respondents view training as a company investment and that using the KITE Application is a wise step, showing awareness of the long-term benefits of human resource development. Also, the presence of more responsive officers according to 20% of respondents can increase training efficiency and ensure a quick response to employee needs. By detailing each of these aspects, companies can design a comprehensive HR readiness strategy to support long-term growth and success.

Nvivo Analytics

a. Administrative Aspects

Based on the analysis of the administrative aspects of the KITE Application, it can be concluded that the use of an online system, which is efficient and complies with the Procedures and SOPs, received major support from 90% of the interviewees. Even though effectiveness and efficiency received positive recognition of 50%, this reflects high approval for efficiency and procedural compliance in managing KITE online. The explanation above follows Fayol's Management Principles (1916) which explains that the application of Management principles can help organizations achieve operational

effectiveness and efficiency. The Principles of Management, together with the concept of management functions, provide a holistic framework for management.

On the other hand, manual processing raises concerns of 80%, showing the perception that managing manually tends to be more complicated as Mr. using diskette or flash disk media, now it can be done directly on a computer and it is easier to find related data. From there, you can immediately get information from customs directly about where the process has reached with the tracking code from the portal." The system's inability to read data is also a serious issue, with 60% of sources stating that the data was unreadable due to errors in the KITE Application. According to James E Anderson, as quoted by Islamy (2009), a policy is "a deliberate and strategic action carried out by an individual or group of individuals to overcome a particular problem or important issue." In this case, although 60% of sources stated that the data was unreadable if the error was due to the reconciliation and data exchange between servers not being optimal, with the latest CEISA KITE Application Policy this will be resolved by evaluating the Application and how the Policy will be updated.

There is also a negative response to system errors on a similar scale. Issues such as fines, positive perceptions, advantages of digitalization over manual, impact on customers, performance effectiveness, and transparency of customer relations were more or less discussed, with only between 30% and 20% of interviewees paying attention to these aspects. Sub-topics such as fines or demurrage were only discussed by 10% of interviewees, showing variations in the level of attention to various aspects of KITE Application administration. According to research by Mahmud and Tesnawati (2023), the effectiveness of digital performance and excellence can be explained because "The research results of adaptive culture and work patterns have a strong influence on digital transformation in improving organizational performance, especially the value of stakeholder focus, collaboration and self-development. Digital transformation can mediate adaptive culture and work patterns to achieve better performance".

According to research by Tivara Merliana Putri and Muhammad Anshar Syamsuddin (2021) entitled "Effectiveness of using the customs-excise information system and automation (CEISA) outward manifest at the main customs and excise service office type

A Tanjung Priok" stated that from the empirical results it can be concluded that the application of the CEISA Outward Manifesto at the Tanjung Priok Type A Customs and Excise public service office based on the theory of success of the information system model by DeLone and McLean, including information quality, service quality and system quality, significantly influences the level of satisfaction users of the CEISA Manifest Outward system, as well as increasing the number of CEISA Manifest Outward users. So it can be said that if the use of the CEISA application is maximized, the effect on the service will be faster, but the customer is not directly involved in KITE facility management activities because several sources explained that LHRPE reporting is done after the goods arrive in the hands of the customer.

b. Technological Aspects

Based on the analysis above, several important conclusions can be drawn regarding KITE Application management. First, digitalization in managing the KITE Application is considered to provide cost efficiency, with 80% of interviewees feeling that there are significant savings in the costs of managing KITE facilities. Second, around 70% of interviewees believe that digitalization is better than manual management, and having access to authority for officials who use the KITE Application is considered important in making appropriate and transparent decisions. According to the Innovation Theory by Everett Rogers (1962) explains that in the context of digital and efficiency, "This theory views innovation as spreading through a social system. In the context of digital transformation, innovation theory helps understand the adoption of new technologies and how these innovations can spread and be accepted by individuals and organizations." As confirmed by the results above, digital transformation is very well received by the public due to cost savings and ease of work using the KITE Application.

In terms of technology, the use of data centers has been confirmed by 60% of sources, and as many as 50% of sources highlighted the importance of layered approval, effective data storage, and internal evaluation in using the KITE Application. User-friendliness was a concern for around 40% of interviewees, while the risk of cyber-attacks and input-output differences were acknowledged by around 30% of interviewees.

Overall, the implementation of the KITE Application is influenced by an understanding of the financial benefits of digitalization, the need for authority in access, the importance of data center infrastructure, and challenges related to HR training. Thus, the development of the KITE Application can be further optimized by paying attention to these aspects to increase the effectiveness and sustainability of the system.

Regarding the explanation above, according to the slow growth theory, where technological growth will influence technological growth, this is following previous research by Md Reza Sultanuzzaman, Hongzhong Fan, Elyas Abdulahi Mohamued, Md Ismail Hossain, and Mollah Aminul Islam (2019) explaining that "Empirical evidence shows that several countries gain and others lose to take advantage of international trade opportunities and technological innovation to compete in global markets." So there is a huge need for application development and human resource training so that Indonesia can successfully compete globally.

c. HR aspect

From the analysis, it can be concluded that training is the main focus, with 90% of interviewees stating the need for training in using the KITE Application to improve skills. Even though training is considered important, around 80% of resource persons do not have certification related to workshops or training. Only around 40% of interviewees discussed the possibility of free training, indicating concern for cost efficiency in developing skills related to the KITE Application.

Meanwhile, only around 20% of interviewees saw training as a company investment, indicating that this perception has not become the main focus in using the KITE Application. Overall, the conclusion emphasizes the importance of training as an effort to increase skills, but challenges related to certification and the view of training as a company investment need to be considered in the future development of the KITE Application. According to the Technology Acceptance Theory by Fred Davis (1986) in the context of digital transformation, this theory helps understand user responses to technological change and what factors can increase digital adoption.

On the other hand, according to the research results of Utami and Kusumawati (2021), "High-quality Human Resources (HR) is an important capital and a determining factor for

the success of digital era transformation. The quality of human resources in the employment sector needs to be improved to face the challenges in the era of the Industrial Revolution 4.0. The government is expected to have a strategy for mapping new professions and industrial transformation. Up-skilling and re-skilling are needed for the workforce to face changes in the character of business and the emergence of new jobs. The maritime industry, including sea transportation, needs to adapt human resources to technological developments. "Vocational education and training following the character of industry in the 4.0 era is needed to improve the quality of human resources."

This analysis according to previous research, follows the theory of national advantage, which according to Michael Porter (1990) states that government support is an important factor influencing a country's competitiveness. In other words, from the theory and research above, it can be concluded that increasing competency in human resources during digital transformation is very necessary to compete globally.

Classification of Largest Sub-Nodes

The biggest problem when processing the Nvivo application is as follows:

The node results above show that the 6 largest sub-nodes have a dominant role in mapping the problems of changes in KITE facility management before and after digitalization. The nodes are, in order, “More Efficient Online”, “Follows Procedures and SOPs”, “More Complicated Manuals”, “Fewer Costs with Digitalization”, “Training required”, and “No Certification”.

The following is an aggregate coding hierarchy to see which nodes are most dominantly mentioned, either implicitly or explicitly as follows:

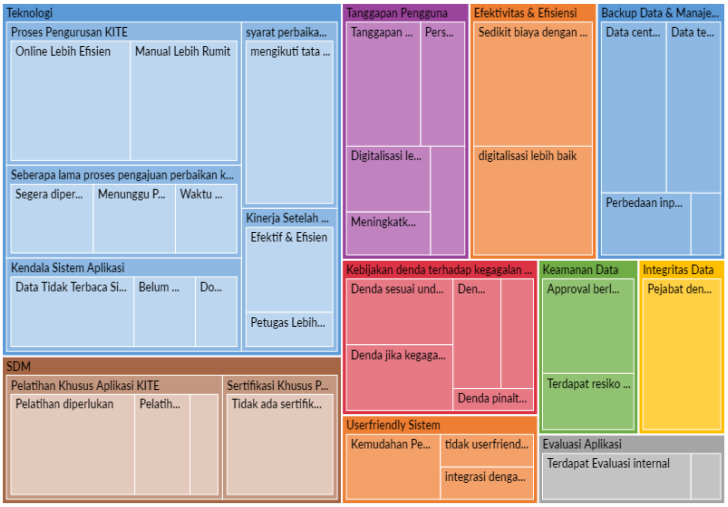

Figure 2.

Aggregate Hierarchy

Source: NVivo (2023)

These results show that the categories "Technology" and "HR" have the largest contribution in the overall hierarchy. This indicates that overall (from the four categories of informants), both implicitly and explicitly, they touched on the issue of changes in the KITE management process before and after digitalization. Apart from that, these two categories have nodes and sub-nodes which have different contribution amounts. The sub-nodes that have the greatest contribution to the hierarchy of nodes "KITE Management Process" are "Online is more efficient", while for nodes "Requirements for Correcting Data in Applications" is "Following Procedures and SOPs".

Next, to see the relationship (qualitatively/statement); either explicitly or implicitly, it can be seen from matrix coding. In this case, matrix coding is divided into 2 categories, namely single and cross-border. The single category refers to one perspective aspect only, for example, the Regulatory Perspective (in the row) will also be matched with the Regulatory Perspective itself (in the column), where this is done to see whether there is a relationship or connection; either implicitly or explicitly, at each node from the Regulator's perspective.

Meanwhile, the cross-border category applies to matches between perspectives, for example between KITE Application Users and Regulators, and so on. This aims to be able to see the relationship or linkage of nodes/statements in each category of informant. Matrix

coding will be shown in a single category. Starting from the KITE Application User perspective, there is a relationship between the "Training as Company Investment" nodes and "User Convenience". This is related to human resources and the user-friendliness of the KITE application system, where users consider the KITE application easy to understand and receive benefits from the training provided by the regulator, namely Customs and Excise. Apart from that, there is a relationship between "System Unreadable Data" and "Differences between Input and Output". This is related to the obstacles faced by users after using the KITE application.

Furthermore, from the Shipping Operations perspective, there is a relationship between the nodes "Penalties or demurrage" and "Waiting for Customs Notification". This is related to the policy of fines for application failures and waiting times for repairs if there are input errors, which shipping services experience as ship operations due to the problems faced when errors occur in using the KITE application.

From the Shipper's perspective, there is a relationship between the "Layered Approval" nodes and the "More Complicated Manual". This is related to data security and the KITE management process after the application changes to the digitalization era, where the implementation of the KITE application is at risk of cyber attacks or the company's internal data management.

Meanwhile, from the Regulator's perspective, there is no relationship with each other, due to little coding activity. Apart from the small number of informants available, this little coding activity can also be caused by the absence of urgent matters on the upstream side (policymakers) related to this policy. The regulator directly carries out policies and operations aimed at users. Meanwhile, the factors/coding stated by other categories have met the needs for responses to changes in the digitalization of KITE applications.

Second, it will be shown in the cross-border matrix coding table, starting from the perspective of KITE Application Users and Regulators. There is a relationship between the nodes "Fine Depends on Error Level" and "Uncertain Completion Time". This relates to the fine policy for application failures and the waiting time for the application process for correcting input errors. Additionally “Training Required” with “Integration With Operational

Systems". This is related to HR who will use the application and the application is considered user-friendly with an integrated system.

Next, it will be shown in the cross-border matrix coding table, from the perspective of Shipping Operations with Regulators. There is a relationship between "More Efficient Online" and "There is a Risk of Cyber Attack". This is related to changes in the KITE management process to the digital era with data security as a risk of digitalization. It will be shown in the cross-border matrix coding table, from the perspective of KITE Application Users with Shipping Operations. There is a relationship between "Waiting for Customs Notification" and "Penalty or demurrage". This is related to the waiting time for the application process for correcting input errors with fines received if there is an input error which has an impact on shipping services in loading goods onto the ship and also has an impact on customers who receive delayed goods.

CONCLUSION

Based on research on digital transformation in managing the convenience of Imports for Export Destinations which is presented using the NVIVO method, it can be concluded into three categories of aspects, namely Administrative Aspects, Technological Aspects, and HR Readiness Aspects as follows:

1. Administrative Aspects

   From the results and analysis using NVivo regarding the use of the KITE Application in import processing, several key conclusions can be drawn. In general, 80% of interviewees stated that using the online system was more efficient than manual processing of imported KITE. As many as 50% of respondents also stated that the online system had been proven to be efficient and effective. However, several challenges need to be overcome, such as 80% of respondents think that the KITE management manual still feels more complicated. A high percentage (90%) of sources stated that KITE management with a digital system had followed procedures and SOPs showing compliance with established procedures.

   However, 60% of respondents complained that the realization report data was not read by the system or received a negative response, indicating that there were technical

issues that needed to be corrected. There were significant system errors, such as data not being read and not properly consolidated, which 30% of respondents admitted had resulted in the results of the Import Realization Research Report (LHPRE) not yet been included. This error can even cause the application to experience downtime for approximately one day, as confirmed by 20% of respondents. Although there is confirmation that data input errors can be corrected immediately (40%), the wait for notification from Customs and the resolution time for such errors is uncertain, according to 30% of respondents. In addition, these errors can have an impact on fines, which was acknowledged by 40% of respondents.

The positive aspect that needs to be noted is that 20% of respondents stated that the KITE Application increases performance effectiveness and efficiency, provides clear reports to customers, and makes the relationship between KITE Application users and customers more transparent. in a management context, the results of this research reflect the successful implementation of management principles, especially in achieving operational efficiency and effectiveness. However, several technical challenges need to be addressed immediately to ensure the sustainability and successful implementation of the KITE Application. This conclusion is also consistent with Fayol's (1916) management principles, which provide a holistic framework for achieving operational effectiveness and efficiency.

From a customer's perspective, although the majority of respondents gave positive responses to digitalization, there were still several sources who believed that the use of the KITE Application had not had a direct impact on customer service, especially about LHRPE reporting which was carried out after the goods arrived in the hands of customers. Therefore, continuous evaluation and improvement need to be carried out to improve service quality and ensure customer satisfaction. Overall, the NVivo research results provide a comprehensive view of the use of the KITE Application in import processing, by illustrating successes, challenges, and potential improvements that can be taken to increase efficiency and customer satisfaction.

2. Technological Aspects

From the results and analysis using NVivo regarding the application development of KITE, several important conclusions can be drawn to improve the effectiveness and

sustainability of the system. First, in terms of use, user-friendliness was the main focus for 40% of interviewees, indicating the importance of an intuitive interface in the KITE Application, especially in working on LHRPE. However, 20% of interviewees indicated that there is still room for improvement in integration with operational systems, demonstrating the need for optimization and uniformization of data so that applications can be better integrated.

Digitalization was considered efficient by 70% of interviewees, indicating strong support for digital transformation in the Customs environment. The involvement of authorized officials stated by 70% of interviewees and the multi-layered approval process stated by 50% of interviewees were considered crucial in transparent decision-making, so it is necessary to optimize time efficiency in the multi-layered approval aspect to prevent fines that may be imposed. Software and hardware security is a serious concern, with 30% of interviewees expressing concern about the threat of cyber attacks which are widespread and increasingly sophisticated, and 60% of interviewees underlining the importance of optimal data center conditions to prevent the risk of fire. Backup to the cloud is considered important for mitigating force majeure.

The difference between data input and LHRPE output, which is mainly caused by an unstable internet network, was a concern for 30% of interviewees, indicating the need for improvements related to customs applications and increasing bandwidth quality to 5G. Of the 50% of sources related to internal evaluation 10% of sources stated that changes related to evaluation were deemed necessary to identify system limitations and adjust regulations periodically. In a technological context, the need for authority in access, the importance of data centers, and challenges related to HR training are the main concerns. The overall implementation of the KITE Application can be improved by understanding the financial benefits of digitalization, the role of data center infrastructure, and challenges in HR training. Along with Solow's growth theory and the concept of international trade, the importance of adopting technological innovation to compete in the global market is also emphasized. Therefore, developing the KITE Application and massive HR training is considered important to ensure Indonesia can compete globally.

3. Aspects of HR Readiness

From the results and analysis using NVivo regarding the readiness of the company's human resources (HR) to face digital transformation, several key conclusions can be drawn. First of all, the main focus of the interviewees was on the importance of training, with 90% of respondents stating that investment in developing employee skills and knowledge, especially regarding the KITE Application, was a top priority. However, there are significant challenges related to certification, with 80% of interviewees stating there is no certification related to workshops or training. However, around 40% of interviewees see free training as an alternative that can reduce the company's financial burden. The perception of training as a company investment is also only shared by around 20% of interviewees, indicating that this aspect still needs to be strengthened in HR development strategies.

According to 20% of respondents, a more responsive role of officers is recognized as a factor that can increase service efficiency and ensure a quick response to the needs of KITE application users. In this way, companies can design a more comprehensive HR readiness strategy by paying attention to training needs, certification and the perception of training as a company investment. From the perspective of the theory of technology acceptance and national superiority, this conclusion is in line with the view that high-quality human resources are important capital in facing the transformation of the digital era. The government's role in providing support, mapping new professions, as well as up-skilling and re-skilling the workforce is key in increasing a country's competitiveness as a recommendation, companies need to strengthen training programs.

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