

Challenges and Strategies for Employee Adaptation in Face Digital Transformation in the Shipping Industry

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Abstract

Digital transformation in the shipping industry represents a strategic move toward efficiency and global competitiveness in the Maritime 4.0 era. PT XYZ, an international container shipping company, has implemented various digital innovations within its operational and management systems. However, these changes impact not only the technological aspects but also the human resources involved. This study aims to explore in depth the employees' experiences in facing the challenges of digital transformation, as well as the adaptation strategies they have developed within the workplace. A qualitative approach using a case study method was employed; data were collected through in-depth interviews with five employees from departments directly affected by digitalization, such as operations, documentation, and customer service. A thematic analysis was conducted to identify patterns regarding experiences, challenges, and adaptation strategies emerging from the respondents' narratives. The results indicate that the primary challenges faced by employees include a lack of digital technology literacy, resistance to changes in work culture, increased workloads during the transition period, and limited internal training. This study contributes to managerial understanding regarding the importance of a humanistic approach to the digital transformation process. Furthermore, the findings can serve as a basis for policy decisions when designing more inclusive and effective training and change management programs within the shipping industry.



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INTRODUCTION

Shipping industry is one of the vital sectors in support activity trading international (Lun, Lai, Cheng, & Yang, 2023). As a strategic maritime country, Indonesia has potential big in development sector transportation deep sea global context, industry cruise middle experience transformation large scale marked with digitalization operational, automation system logistics and integration chain supply based technology. Transformation This is part from revolution industry 4.0 which also giving birth to a new era in the sector maritime, known as Maritime 4.0. In this era, digitalization No Again choice (Shahbakhsh, Emad, & Cahoon, 2022), but rather become inevitability in increase efficiency, transparency, and power competition company voyage.

PT XYZ as part from global network, has start step transformation digital with integrate various system information cloud- based, tracking container in real-time (Riyadi, 2022), as well as automation in the documentation and service process customers. This effort in line with global trends where companies cruise sued For more fast, accurate, and responsive in service logistics maritime. However, changes big in systems and culture Work No can released from readiness and role as well as source Power humans in it. Technology can adopted, but it is humans who determine success transformation the.

Digital transformation in the environment company often cause pressure psychology and adaptation high social for employees. Changes method work, demands digital competence, as well as speed implementation technology often causes tension, resistance, and even decline performance in term short (Trenerry et al., 2021). For employees who have long been accustomed to with manual or semi-digital systems, adaptation to system new Can become challenge independently. Not infrequently, employees experiencing technostress due to gap skills, lack of adequate training, and high work target pressure during the transition period. Phenomenon This show that digital transformation is not solely affairs technology, but also concerns aspect humane needs understood in a way deep. Therefore that 's important For study How employees in the industry cruise respond and adapt to change this, especially in context company such as PT XYZ which has system operational global scale but still face challenge local in management source Power human beings. Research This done For explore experience employee in face digital transformation, including the challenges they face experience and the adaptation strategies implemented. With this approach qualitative research This expected can give greater understanding deep and contextual about internal dynamics that occur during the change process the.

Digital transformation in companies cruise bring impact wide to structure work, system communication, up to culture organization. In this process, employees become actor the main thing that is experienced in a way direct pressure and demands adaptation. Based on phenomena that occur in the field, there are a number of issues that can identified: Lack of readiness digital competence in some employees who are accustomed to with manual system. Limited training of a nature practical and sustainable For support digital transformation. The emergence resistance to change technology Because afraid will lost work or failure in use system new (Almatrodi, Li, & Alojail, 2023). Mismatch between speed implementation system new with time adaptation required by employees. The lack of internal communication and approach managerial that supports the adaptation process in a way psychological and cultural.

Formulation Problem

Based on background back and identification the problem above, the formulation problem in study This is as following:

- Anything challenges faced PT XYZ employees in the digital transformation process?
- How are adaptation strategies developed by employees? in respond change systems and culture Work?
- What factors only those who support or hinder success adaptation employee to digitalization operational?

Benefits of research

Theoretical Benefits

Study This expected can give contribution to development theory management changes and behavior organization in context digital transformation, in particular in the sector maritime and shipping.

Practical Benefits

Research result can made into reference for management of PT XYZ and the company cruise other in designing training strategies, internal communications, and policy supportive managerial success digital transformation in sustainable.

Academic Benefits

Study This can become reference for student or researchers interested in the study source Power human, per deep, but rather more emphasizes human resource aspects, such as perception, attitude, behavior adaptive, as well as support organizations that influence the adaptation process.

Digital Information in the Shipping Industry

Digital transformation is a process of integration digital technology to in all over aspect

organization with objective change method organization operate and provide mark to customers (Westerman, Tannou, Bonnet, Ferraris, & McAfee, 2012). In industry shipping, digital transformation includes automation of operational processes, utilization of the Internet of Things (IoT) for tracking ships and containers, use system information logistics, up to digitalization service customer.

According to Accenture (2020), companies global shipping today This face pressure big For optimize efficiency operational and improve transparency logistics. Changes This reinforced by global market demands, competition prices and expectations increasing number of customers tall to service based technology. Therefore that is, digitalization considered as an important strategy For sustainability and excellence competitive.

In Indonesian context, efforts digital transformation is also driven by government programs such as the Sea Toll Road, the INSW (Indonesia National Single Window) system, and modernization port. However, the implementation Still faced with limitations infrastructure, inequality HR competencies, as well as resistance organization to change. Challenge This No only technical, but also concerns readiness source Power man as actor main in change the.

Challenge Digital Transformation towards Human Resources

Digital transformation brings consequence big to structure work and roles individual in organization. According to (Davenport & Westerman, 2018), the challenges main digital transformation for employee is change method work, learning repeat technology new (reskilling), and uncertainty towards the future work they. This is can cause pressure psychological, confusion, to emergence technostress phenomenon. Technostress is defined as stress that arises consequence inability individual For face technology new (Tarafdar, Tu, Ragu-Nathan, & Ragu-Nathan, 2007). In place work, symptoms of technostress can in the form of mental fatigue, frustration, productivity decreased, even absence. In industry famous voyage with system hierarchical and procedural work, transition to digital systems often make things worse pressure the.

A study by (Iman, Amanda, & Angela, 2022) identified five dimensions of technostress: (1) techno-overload, (2) techno-invasion, (3) techno-complexity, (4) techno-insecurity, and (5) techno-uncertainty. dimensions this is very relevant in understand resistance and difficulties adaptation employees in the company ongoing voyage experience digital transformation.

Employee Adaptation Strategy to Change Organization

In face changes, including digital transformation, adaptation employee become element important for success organization. According to Individual Adaptation to Technological Change theory (Beaudry & Pinsonneault, 2005), response employee to technology new can categorized to in four types: (1) avoidance, (2) acceptance, (3) exploration, and (4) transformation. Response This influenced by perception benefit technology, level competence, as well as support organization.

Employees who have high self-efficacy, namely confidence in his abilities Alone For learn matter new, tend to more fast adapt (Bandura, 1997). In addition, success adaptation is also very much determined by the existence of proper training, communication open, and role leadership in give support psychological.

According (Goltz, 2018), adaptation process in change organization covers three stages: awareness, acceptance, and commitment. If employees No through third stages the in a way consciously and gradually, then adaptation that occurs tend nature surface and not sustainable.

Theory of Change Organizational Change

Study this also refers to the theory change organization, especially the change model developed by Kurt (Lewin, 1951). This model share the change process become three stage main: Unfreezing The stage at which the organization realize the need change and begin to "soften" old habits. Changing Stage implementation changes, including training, introduction

system new, and process restructuring. Refreezing Stage strengthening results changes to become part from culture new organization.

This model relevant in context study Because describes the process that must be traversed by individuals and organizations in accept digital transformation. In practice, success the refreezing stage is highly dependent on the involvement of employees and support systemic from management.

Besides Lewin's model, Kotter's 8 Steps for Leading Change theory can also be used. used as framework For evaluate management strategies change. One of the step key in Kotter's model is empowering employees for broad-based action, which underlines importance empowerment employee as agent change, not only as object change.

Approach Qualitative in Digital Adaptation Studies

In understand experience and adaptation strategies employees, approach qualitative become the right choice. According to (John W. Creswell, 2018), the approach qualitative allows researchers dig meaning subjective, perceptual, and narrative that is not can explained in a way quantitative. Type of approach qualitative used in study This is studies case, namely exploration deep to phenomena that occur in One organization or context certain.

Case study give room for researchers For understand context change from insider 's view, and not only depend on theory from outside. inside matter this, experience PT XYZ employees become focus main, so that method interview in-depth and analytical very relevant thematic For used.

In data analysis, researcher will use help device NVivo software, which enables the process of coding, grouping themes (nodes), as well as search pattern or connection between issue based on narrative data. The use of NVivo also supports validity and transparency analysis in study qualitative.

Study Previously

A number of study previously has discuss issue similar, although with different contexts and approaches. For example: (Iman et al., 2022) researched impact digitalization to efficiency operational ports in Indonesia, however Not yet discuss aspect adaptation employees. (Masyhuri, Sudiro, Prabandari, & Kurniawati, 2024) researched digital readiness of HR in companies logistics, and find that training sustainable become key success transformation. (Zeng, Chen, Xu, Chan, & Li, 2025) in studies they are in the company South Korean shipping stated that obstacle the biggest in digitalization not on technology, but on resistance culture organization. (Septian, Wulandari, & Pratama, 2022) conducted approach qualitative to digital adaptation in companies cruise national and suggest importance approach based empathy in management change.

From the review mentioned, it can be seen that there is gap in research that is specific discuss experience employee company cruise multinational in Indonesia in face digitalization, especially in context culture Work local.

Framework of thinking

Based on review library above, framework thinking in study This can depicted as following: changes organization, and digitalization in industry transportation sea.

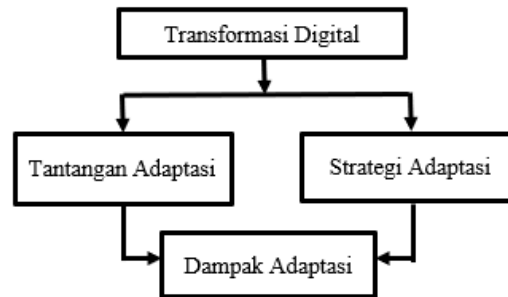


Figure 1.

METHOD

Types and Approaches Study

Study This use approach qualitative with type studies case intrinsic. The goal is For understand in a way deep How PT XYZ employees face and adapt self towards the ongoing digital transformation process ongoing. Case study chosen Because researchers want to explore specific, contextual, and complex phenomena with use narrative experience employee as source main information.

Location and Subject Study

Research location conducted at the PT XYZ office, a company global shipping operating in Indonesia. Subject study is employee from various divisions (operational, documentation, customer service, IT, and management) medium) who experienced direct impact from the digitalization process with criteria subject as following: Minimum work for 1 year. Ever or currently use new digital system in operational. Ready interviewed and reflected his experience

Data collection technique

Data collection techniques were carried out through 1. Interview In -depth Interview, Main Method data collection is semi- structured interview. Questions developed based on framework thinking, but nature open For allows exploration In-depth. With Examples the question among others: How your experience at the moment first time using new digital system? What is the most difficult challenge you face? What strategy do you use? For adapt? 2. Documentation, relevant documents like guidelines training, guide digital systems, or internal minutes about digital transformation will used as material data supplement. 3. Observation Participatory (If Possible), Researcher will observe in a way direct activity work in the environment company For understand dynamics interaction between employees and technology.

Data Analysis Techniques

The data will be analyzed use approach analysis thematic with help device NVivo software. Analysis process includes: Transcription – results interview transcribed verbatim, Coding – units of meaning labeled or Theme Development – codes grouped to in theme main and sub- themes. Interpretation - explaining relatedness between theme and composition narrative findings.

Example of initial node:

- Challenge adaptation (technostress, lack of training, resistance)
- Individual strategies (learning independent, ask help)
- Support organization (training, coaching)
- Impact (motivation, efficiency work, satisfaction)

Data Validity Test

For ensure data validity, researchers use technique triangulation and member checking: Triangulation source: compare results interview from various respondents and documents company. Member checking: researcher confirm results interpretation to respondents For

ensure accuracy meaning.

Research Ethics

Researchers uphold tall principle ethics research, including: Requesting agreement informant (informed consent), Maintain confidentiality identity and data, Using data only For interest academic

Research Limitations

Study This own a number of limitations: Focus on one company (study cases), Number respondents limited, Interpretation depends on perception subjective respondents and researchers

Research result

Study This find that the digital transformation process at PT XYZ brings impact significant to dynamics psychological, social, and structural in the environment work. Through analysis thematic NVivo- assisted, identified three group big findings main: challenge adaptation, strategies implemented, and role organization in facilitate change.

Challenge Psychological and Technical Barriers

Most of the employee feel pressure inner moment manual system that has been they master for years must replaced by a foreign digital system. Words like "confused", "scared", and "stressed" dominate the word cloud and become marker anxiety of a nature deep, especially among senior employees. One of them informant describes, "I'm afraid of making a wrong input, because if Already enter system, it says it ca n't deleted. So I more often ask questions Formerly to more friends young."

Obstacle technical also becomes challenge real, especially for those who were previously Not yet Once touch with digital platforms such as EDI. The lack of systematic training and approach limited communication make things worse anxiety and uncertainty.

Adaptive Strategies that Emerge Organic

Although faced with challenges, the majority employee show attitude adaptive growth in a way organic. In Lots case, appears initiative Study independent - start from read repeat SOPs, watch video tutorials, and so on. observe direct practice Work other colleagues.

Senior employees in general active build informal relations with their juniors For exchange knowledge. One of the respondents said, "Children young That fast responsive. If I I'm confused, I said just, 'Teach me this, okay? Where do I click first?' It's done after a while usual." This mentoring pattern show that collaboration cross generation become bridge important in overcome digital divide.

On the other hand, the team documentation and customer service acknowledges that even though system initially confusing, digitalization make work more efficient along time. However success This No happen with itself — necessary existence room learning, tolerance to mistakes, and atmosphere supportive work.

HRD, Managerial, and Internal Communication Roles

Hierarchy Chart shows the role of HRD as actor central in transformation this, in particular in create digital onboarding and provide mentoring psychological. E-learning modules, WhatsApp groups, and PDF materials are proven help employee understand channel Work new with more believe self.

However, the challenge the biggest precisely lies in communication managerial. The transition process is assessed too fast and minimal socialization cause resistance at the start implementation. A informant from team operational convey, "We know There is system new, but not all explained from beginning. Just understood after it's wrong."

Active manager conducting informal mentoring is able bridge this gap. The presence of leaders present personally, not only instructional, to be factor dampening key stress employees and build solidarity team.

In Figure 3, we can see results interpretation from the Hierarchy Chart which displays frequency most frequent topics appear in interview. One of the the most dominant topic is HRD's contribution in Onboarding and Support Transformation Psychological Employee to New Technology. This is show that the role of HRD is very crucial in the digital adaptation process, especially through provision e-learning modules, guides practical, and mentoring psychological to employees who experience afraid or resistance to change technology. This HRD initiative assessed effective in build trust self and readiness technical, as well as strengthen climate supportive work during the transition period.

On the contrary, the Challenge Psychology and Adaptation Technology by Staff Operational in Implementation Digital System instead become rare topics discussed, although still relevant. The lack of frequency This can reflect that challenge psychological experiences staff operational Still not enough get attention or Not yet lifted in a way explicit in discussion organization. In fact, they is groups most affected by change system Work from manual to digital, especially Because limitations literacy technology. Therefore that, the result This become input it is important that the approach organization to front more inclusive and touching group that during This not enough facilitated in a way emotional and technical.

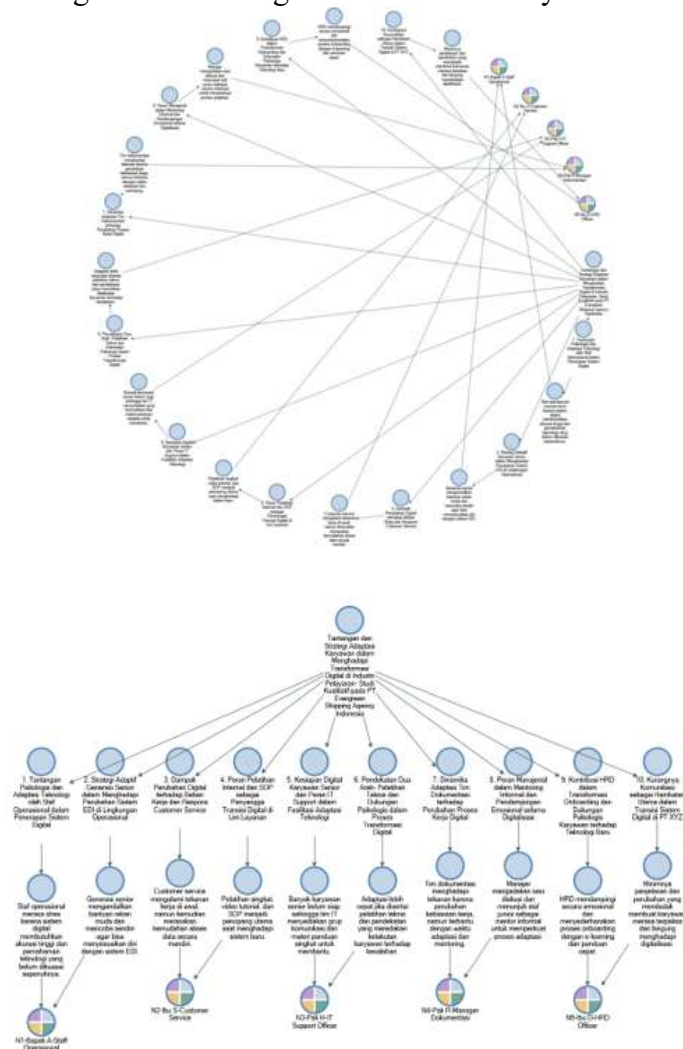


Figure 4. Project Map of Challenges and Employee Adaptation Strategies in Face Digital Transformation in the Shipping Industry - A Qualitative Study at PT XYZ

The Project Map image shows that challenges and adaptation strategies employee in face digital transformation at PT XYZ Indonesia is not only dwelling on aspects technical, but also greatly influenced by factors psychological, managerial, and internal communications. One of them challenge main identified is pressure psychological impact on staff operational consequence demands accuracy high digital system, even though part from they Not yet own literacy adequate technology. In addition, the changes made in a way sudden without clear communication add confusion and a sense of coercion among employees, reflecting weakness aspect coordination in the digitalization process.

On the other hand, adaptive strategies appear in various form, especially from group senior generation who are trying adapt self through informal assistance from colleagues young and learning process Independent. The role of internal training, technical tutorials, and SOPs is very important. as support transition, especially in line service such as customer service and documentation. Not only training technical, practical approach emotional and supportive also become key, as shown by the role active manager in informal mentoring as well as provision room discussion open For accommodate complaint or confusion team.

The image above also highlights strategic HRD contribution in create digital onboarding system as well provide module easy learning accessible. HRD plays a role as connector between management and employees, especially in give support psychological for those who are afraid to technology new. In Overall, the Project Map depicts ecosystem complex adaptation However each other connected between challenge individual, policy organization, as well as support structural, so that can become material reflection important in designing a more digitalization strategy humane and sustainable in industry voyage.



Project map image Part 1: Challenges Psychology and Adaptation Technology by Staff Operational in Implementation Digital System

Project Map topic image Challenge Psychology and Adaptation Technology by Staff Operational in Implementation Digital System shows that challenge the biggest come from pressure psychological experiences staff operational moment face system Work digital- based. Change from manual system to digital systems demand accuracy tall in data input and capabilities use device technology, which has not yet fully owned by a group this. This thing cause emergence stress and anxiety that impact directly on performance daily they.

Condition the worsened with lack of digital literacy that makes staff feel No believe themselves. They are afraid do errors that can occur recorded permanent in system. Therefore that, the adaptation process No only need training technical, but also mentoring psychological that can help reduce pressure emotional, especially for those who have used to with method Work conventional.



Project map image Part 2: Adaptive Strategy Senior Generation in Face Change EDI Systems in the Environment Operational

Project Map image of Adaptive Strategy topic Senior Generation in Face Change EDI Systems in the Environment Operational show that senior group has challenge special in understand system new, but still show initiative adaptive. They are active request help from colleague more work young and trying learn system with method they alone, like try direct through trial and error method.

This matter reflect that although There is limitations in matter digital literacy, the senior generation remains own motivation For adapt. Informal strategies such as This show that culture Work collaboration is very much needed For bridge gap between generation in face transformation technology in the environment Work



Project map image Part 3: Impact Digital Transformation of Customer Service Workload and Response

Project Map topic image Impact Digital Changes to Customer Service Workload and Responses Show that implementation digital systems have an impact directly on the increase pressure work, especially at the stage beginning implementation. Customer service must adapt self with running system in real-time and must understand channel Work new demands accuracy tall.

However along time, the digital system actually give convenience because the data becomes more easy accessed and managed. Transformation This Finally increase efficiency and responsiveness in service customers. This means that even though the adaptation process at the beginning Enough weight, benefits term long from digitalization become Power push in maintain system the.



Project map image Part 4: The Role of Internal Training and SOPs as Buffer Digital Transition in Service Lines

Project Map image topic Role of Internal Training and SOP as Buffer Digital Transition in Service Lines show that internal training becomes a main pillar in help employee understand new digital system. Training short, video tutorial, and SOP provided functioning as guidelines helpful basis employee overcome confusion technical beginning.

Even though training This No nature intensive, its existence is very important as form support organization towards the adaptation process. With clear SOPs and guidelines practical, employees feel more Ready in face changes, especially in situation work that requires accuracy and speed in use digital system.



Project map image section Part 5: Senior Employees' Digital Readiness and the Role of IT Support in Facilitation Adaptation Technology

Project Map topic image Senior Employees' Digital Readiness and the Role of IT Support in Facilitation Adaptation Technology show that Lots senior employees yet fully Ready face digital system. This is seen from limitations they in understand channel Work new and use device soft based technology.

For overcome matter This time, the IT Support team took initiative with provide communication media like WhatsApp groups as well material learning in PDF and short video formats. Help direct and practical technical This be an effective strategy For build trust self employee in operate fearless digital system or Confused excessive.



Project map image section Part 6: Two-Way Approach: Technical Training and Support Psychological in the Digital Transformation Process

Project Map topic image Two-Way Approach – Technical Training and Support Psychological in the Digital Transformation Process shows that success adaptation employees are highly dependent on balance between training technical and support emotional. Training technical give understanding about system, while support psychological reduce anxiety will mistakes and pressure Work.

Many employees feel Afraid make error in documented digital system automatically. Therefore that, two- way approach become solution it is important that employees No only Ready in a way competence, but also calm and confident self in a way psychological moment face change big in pattern Work.



Project map image section Part 7: Dynamics of Documentation Team Adaptation to Digital Work Process Changes

Project Map topic image Dynamics of Documentation Team Adaptation to The Changes in Digital Work Processes Show that team documentation experience challenge big in adapt self with method more work systematic and digital. Manual habits that have long lasting making they feel stressed moment must follow channel new based system.

However, with existence time sufficient adaptation and informal mentoring approach, adjustment process walk more effective. This team start show improvement performance and comfort in work, show that flexibility and internal support play a role important in success digital transformation.



Project map image Section Part 8: Managerial Roles in Informal Mentoring and Assistance Emotional during Digitalization

Project Map Image of Managerial Roles topic in Informal Mentoring and Assistance Emotional during Digitalization show that approach personal and informal managerial skills have proven to be very helpful in speed up adaptation employees. Through session regular discussions and spaces vent, manager can identify obstacle more beginning.

In addition, the strategy points junior staff as informal mentors for senior employees encourage creation atmosphere collaborative and mutual work support. This effort No only speed up understanding technical, but also building solidarity and trust interpersonal in team.



Project map image section Part 9: HRD's contribution in Onboarding and Support Transformation Psychological Employee to New Technology

Project Map topic image HRD's contribution in Onboarding and Support Transformation Psychological Employee to New Technology shows that HRD has role strategic in ensure the onboarding process runs smoothly effective in the middle digital

transition. Use e-learning modules and guides fast become tool help main For speed up understanding system Work new.

On the other hand, HRD is also active give support psychological to employees who feel Afraid with technology. This role is very important in guard Spirit work and prevent resistance to change. Thus, HRD becomes connector between need organization and comfort employee in face digitalization.



Project map image section Part 10: Lack of Communication as Major Obstacles in Transition Digital System at PT XYZ

Project Map topic image Lack of Communication as Major Obstacles in Transition The Digital System at PT XYZ shows that lack of effective communication between management and employees become factor inhibitor main in success digital transformation. The changes made in a way suddenly make Lots employee feel No ready and forced follow system that has not been they understand.

As a result, it appears confusion, misunderstanding, and even resistance to system new. Condition This show that clear, consistent and open communication is essential in every change process organization. By improving pattern communication, company can create atmosphere more work open and supportive sustainable adaptation.

Cluster analysis



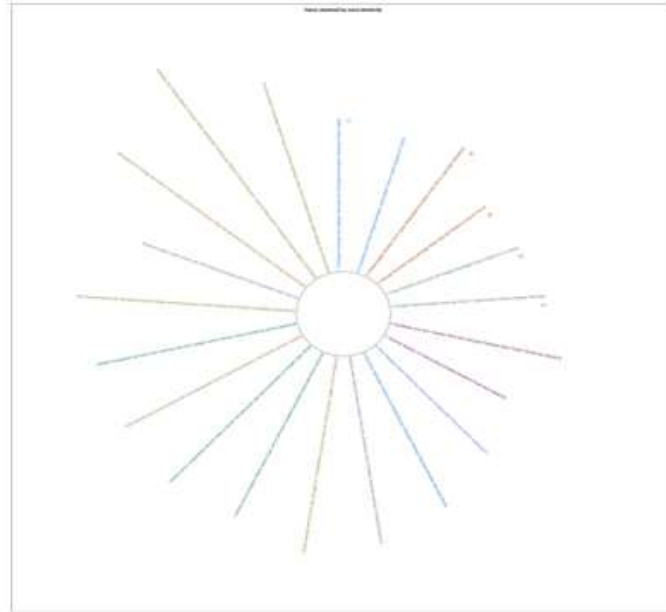


Figure 5.

Cluster analysis image topic Challenges and Strategies for Employee Adaptation in Face Digital Transformation in the Shipping Industry A Qualitative Study at PT XYZ discusses grouping findings based on similarity of words in response informant towards the digital transformation process. Cluster This show that there is a number of issue main mutual related close, like challenge psychological, obstacles communication, role internal training, as well as adaptation documentation work. As example, cluster blue young show group related issues with readiness employees and their importance training and SOP in support the transition process. This show that internal factors such as competence technical and mentoring emotional become key For push adaptation to system new.

Temporary that, cluster green and purple leading to a deeper dimension strategic and managerial, such as role leadership, approach two- way communication, and HRD's contribution in build culture supportive work. Issues like pressure to team documentation and lack of clarity in change the system is also visible form One cluster alone, which highlights the need management more changes structured and communicative. In other words, the image This confirm that success digital transformation in industry cruise No only depends on technology, but also on readiness source Power humans and adaptive strategies organization in manage change in a way holistic.

Challenges main issues faced employee in face digital transformation in the environment Work they

Challenge main issues faced employee in face digital transformation a lot sourced from pressure psychological consequence change drastic in system work. The staff operational, in particular senior group, experienced anxiety, stress, and confusion moment must adapt self with demanding digital systems accuracy high. This is aggravated with lack of digital literacy, which causes fear do documented errors automatic in system. Pressure This hinder comfort Work as well as lower trust self employee in use technology new.

Besides the challenges psychological, obstacles technical also becomes constraint significant. Many employees Not yet used to use system new such as EDI and other internal applications, especially the previous ones Work manually. Transition sudden and minimal communication from party management cause lack of readiness in face digital systems. As a result, some big employee feel forced to follow procedures that have not been understood,

without existence time Enough For Study in a way gradually.

Obstacle internal communication also increases challenge adaptation. Ambiguity information, no the existence of a discussion forum open, and limitations explanation moment socialization system new cause resistance. As shown in project map results, changes that are not accompanied by systematic explanation make things worse mental stress. Lack of two- way communication cause emergence miscommunication and lack of bait come back from employees who are actually really needed For perfecting the digital transformation process.

Adaptation strategies undertaken by employees Good in a way individual and collective

Employee do various adaptation strategies in a way individual and collective For face digital transformation. At the level individuals, especially senior employees, they try adapt self through trial and error method and learning independent. Some from they also active request help colleague more work young, creating informal mentoring relationships that accelerate the learning process. This strategy show that although own limitations in technology, passion For adapt still high and proven capable build trust self in a way gradually.

In a way collective, company develop approach internal training as effort systematic in assisting the transition process. SOPs, video tutorials, and e-learning modules are available. tool help important to use in a way massive in the environment work, especially in line service such as customer service and documentation. Training This although nature short, proven capable give foundation adequate technical for employee For operate system new in a way efficient. Existence training also helps suppress fear to previous error become burden psychological.

Collective strategy other is involvement managerial and HRD. The managers play a role as an informal mentor who regularly holds session discussion open, while HRD is active in provide digital onboarding system and support emotional. HRD does not only focus on aspects training technical, but also provides attention to needs psychological employees, especially those who show resistance to change. Two- pronged approach this - technical and emotional - becomes foundation strong in build sustainable adaptation in the environment Work.

Factors that influence success or failure of the adaptation process to digitalization

The success of the digital adaptation process is largely determined by the combination factor psychological, technical, and structural. Psychological factors be one of key, where employees feel supported in a way emotional more capable adapt self with change. Sense of trust self - construction through informal mentoring, strengthening positive from managers, as well as HRD support in handle stress and fear to technology has a big influence success individual in face new digital system.

Technical factors are also very important. The existence of SOPs, training technical, and tutorials provide a sense of security in use system new, so that reduce level errors and improve efficiency work. Employees who get adequate training tend more fast adapt. However, the irregularity in delivery training or too much material technical without customized with background behind participant can become reason failure adaptation. So, it is important For adapt design training with needs and levels ability employee.

Structural factors like communication organization and readiness Management is also very influential. Organizations that fail convey change in a way open and gradual often face resistance from employees. On the other hand, organizations that implement approach two - way communication and paying attention to feedback from employee will more success in apply digitalization. The role of HRD as facilitator change and managers as agent change must optimized For ensure that digital transformation is not only walk in a way system, but also accepted and executed with good by all element organization.

RESULTS AND DISCUSSION

transformation at PT XYZ shows that change based technology No only impact on the system work, but also touching dimensions psychological, social, and structural employee in a way in-depth. Research results show that challenge the biggest in this process No lies in technology That alone, but rather on the unpreparedness man in face it — well from aspect skills, mental, and support available systemic.

Challenge Psychology and Inequality Digital Literacy

Anxiety experienced senior employees reflect existence gap between speed change organization and capacity adaptation individual. Phenomenon This in line with the concept of technostress (Tarafdar et al., 2007), especially in the techno-insecurity dimension (fear will failure technology) and techno-complexity (difficulty understand system new). In context this, digital literacy is not just question ability technical, but regarding trust self and control on task changing jobs.

Afraid make "recorded" error permanent "in digital systems create pressure significant psychological impact. This is aggravated with lack of internal communications and training an unexpected beginning comprehensive, which according to (Lewin, 1951) indicates a less than optimal unfreezing process.

Adaptation: Initiatives Micro in Unready System

Response adaptive actions carried out by employees, such as Study independent, informal mentoring, and asking help junior colleagues, reflecting active individual coping strategies. This is in accordance with User Adaptation Model theory from (Beaudry & Pinsonneault, 2005), where adaptation influenced by perception uses and levels support organization. However interestingly, the initiative adaptation precisely more strong come from bottom-up, not from structure formal organization. This is show that organization Not yet fully present in manage change in a way structured.

Success adaptation in the customer service and documentation division, for example, more caused by culture collaborative work than design training official. In fact, in change complex organizations, adaptation strategies must designed systemic and involving all levels (Kotter, 2012).

The Role of Organizations: The Disparity Between Formal Strategy and Real Dynamics

HRD's contribution in provide e-learning modules, digital onboarding, and support emotional show there is good intention from organization. However Thus, the findings show that the success of this strategy Still Not yet evenly distributed. The operational divisions are the ones that are most affected digitalization it turns out get more attention A little compared to the service division. Inequality This show that implementation of organizational strategy Not yet inclusive and inclined focus on more "visible" work areas or documented.

In addition, internal communication is of a nature One direction and not open room discussion open cause resistance and confusion. Such as indicated by the informant, many decision implementation system new that is not explained with Good to staff field. This is contradictory with principle base in management changes that emphasize the importance of communication for engagement (Armenakis & Bedeian, 1999). Weak communication make employee as object change, not subjects involved in the process.

A Model of Change Stuck in the Middle of the Road

If seen from perspective theory change Kurt (Lewin, 1951) organization, the digital transformation process at PT XYZ seems to be Still is in the "changing" stage, but Not yet enter to "refreezing" phase. Not all old habits are "melted" with good, and habits not even new yet fully take root. This is cause inconsistency behavior work, where some team already digital, while other Still endure with manual way.

Condition This signify that organization need building shared understanding and shared ownership of change, not only introduce system new. Without that, change will still nature

administrative, not transformative.

CONCLUSION

Transformation at PT XYZ has change method Work employee in a way significant, good from side technical, psychological, and social. Based on results analysis thematic, research This conclude three findings main: Challenges the biggest originate from inequality digital literacy and stress psychological feelings that are felt especially by senior employees. Changes fast system, minimal socialization, and pressure For quick adapt creating disruptive technostress comfort work and reduce trust self. Adaptation strategies appear in a way organic, both individual and collectively, through learning independent, informal cross-disciplinary mentoring generation, and collaboration inter-divisional. Employees show motivation For survive and adapt self although support organization Not yet fully evenly. Success adaptation is highly dependent on the role of HRD and management, especially in create supportive environment in a way technical and emotional. However, it is still there is gap between the formal strategy of the organization and the dynamics field, especially in matter communication, ongoing training, and alignment perception to change.

Digital transformation carried out moment This Not yet fully touch the "refreezing" phase in the change model organization. Change Not yet become culture new, because Still Lots old practices that are maintained consequence weak socialization and habituation processes.

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AUTHOR CONTRIBUTIONS

The author fully contributes to the formulation of the main idea, conducts library research, analyzes and interprets the main text of the characters, and prepares the script. All authors have agreed on the final version of the manuscript

GENERATIVE AI STATEMENT

The author (s) declare that no generative artificial intelligence (AI) tools were used in the writing, analysis, interpretation, or preparation of this manuscript.

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