



## Research article

# Factors influencing the digital transformation of sales organizations in Indonesia

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## ABSTRACT

A model that can elaborate the interaction between research variables influencing digital transformation, especially on the performance of sales organizations in Fast-Moving Consumer Goods companies, is fundamental. It allows the decision-makers to take proper action for their companies' optimization. By using Partial Least Squares Structural Equation Modeling (PLS-SEM) to build a model that can describe the interaction between Leadership Model, Organizational Citizenship Behavior, and Sales Management in 346 respondents working in various Fast-moving Consumer Goods companies in Indonesia, the present study found the most respondents were from the Special Capital Region of Jakarta (40.7%). It was found that the Sales Director (50.0%) was the most responsible for digital transformation implementation within the sales organization. Most respondents answered that effectiveness in the company's Internal Business Processes was the primary goal of digital transformation (28.1%). Concerning the success parameters of the digital transformation, Business Processes were the prominent expression of successful implementation (19.4%), with Sales Automation (37.4%) as the main activity in their digital transformation. Three hypotheses with the variables of leadership models, organizational citizenship behavior (OCB), and sales management control, had proven to affect digital transformation positively. Later, in four hypotheses where sales organization performance was set as the dependent variable, it was found that the leadership model influenced organization performance with digital transformation as a mediator. Finally, the last three hypotheses, with variables of sales management control, organizational citizenship behavior, and leadership model, positively influenced organization performance through digital transformation as a mediating variable. Leaders in organizations who carry out digital transformation must ensure that their organizations can respond to disruptions related to the use of digital technology in order for an organization to achieve proper performance.

## 1. Introduction

Consumer Packaged Goods (CPG), used daily by the masses, require complete or partial replacement through new purchasing or refilling. According to Zhang et al. [1], CPG is consumable as it has a short life span, consisting of food, beverages, clothing items, tobacco, makeup, and household products spread over various brands. According to the Indonesian Food and Beverage Entrepreneurs

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Association, the Indonesian Retailers Association, and the Indonesian Employers' Association, industries engaged in the CPG sector in Indonesia account for 9% of total household consumption, with economic value reaching IDR 1800 trillion. Besides, Indonesian households have allocated around 20–30% of total household expenditure for Fast-Moving Consumer Goods (FMCG) products since 2018. Furthermore, to encourage economic growth by 5–7% in 2023, the investment must be increased by around IDR 1200–1500 trillion [2]. Such a vast number has made business actors in the CPG sector highly competitive, causing many business actors to grow and fail in running their businesses back and forth.

This research aims to provide the novelty concerning the current situation of sales organization's supervision, appearing in several models such as transactional, transformational, and digital leadership within digital transformation. In addition, it will also investigate how the behavior of organizational members and sales management influence the digital transformation process and the performance of sales organizations. Several studies [3–5] have investigated the effect of leadership models and organizational citizenship behavior (OCB) on organization performance, yet they only focused on the impact of digital transformation on sales management in the general scheme. Therefore, this study digs into how the leadership model on digital transformation as a mediating variable influences sales organization performance. Furthermore, the limitations of previous studies will also be resolved, such as how the digital transformation process can improve the performance of sales organizations, primarily through the simultaneous influence of several variables such as the leadership model, OCB, and sales control management as new variables; digital and agile leadership under the leadership variable.

The importance of present study contributes to developing theories and applying digital transformation in management domains such as change management, leadership model, organizational citizenship behavior, sales management control, and sales organizational transformation processes in FMCG companies in Indonesia. Data provided by respondents in all sales levels from several regions of Indonesia when carrying out digital transformation are believed to have a reciprocal favorable impact on the performance of sales organizations. Therefore, this research is expected to provide a comprehensive understanding of the ongoing digital transformation process in sales organizations for those working in FMCG companies.

## 2. Literature review

### 2.1. Leadership theory

The capability to influence one's perspective is an essential skill for a leader in a sales group [6]. Therefore, speculation that the leadership model in sales management can positively or negatively affect sales team performance appears in various research findings. Sales managers are responsible for the team they lead in ensuring the success of organizational activities by encouraging and facilitating the maximum sale of goods and services. Burns & Martin [7] argued that the leadership model could be divided into two main categories: transactional leadership and transformational leadership. Transactional leadership is characterized by the creation of cooperation between leaders and followers driven by mutual benefits or reciprocal relationships. This leadership model generally requires good adaptability, where the leader will define what their followers want and try to fulfill those needs as quickly as possible. The responsibility of fulfilling these requests often causes the relationship between leaders and followers dominated by quick calculations regarding costs and benefits [7]. On the other hand, transformational leadership requires leaders to identify the changes needed by developing strategies and providing company solutions so that the planned goals can be optimally achieved.

### 2.2. Organizational citizenship behavior theory

Organizational Citizenship Behavior is employee behavior constructed through a discretionary process that can determine organizational effectiveness. Such behavior has been widely recognized as a potentially important variable in sales operations management. Therefore, actions and strategies in sales organizations are also influenced by the attitudes and aptitudes of members, in addition to sales management controls. Precisely, Piercy et al. [8] succeeded in uncovering the gender dimension as a crucial additional variable in the performance of OCB, which was not previously investigated by previous research. Therefore, it seems essential to identify the relationship between the sales manager and the OCB formed by the sales team because the effectiveness of the sales unit is a complex issue.

### 2.3. Sales management theory

In the last two decades, research related to sales management has provided much knowledge on how leaders can influence sales force performance. However, the predictors of sales team performance investigated were usually weak [9]. As a result, understanding of the impact between sales teams and sales performance on sales organizational effectiveness is remarkably limited. On the other hand, the characteristics of the organization, environment, and sales force have been proven to be the driving forces that have a significant positive effect on the effectiveness of a sales organization [10].

### 2.4. Sales organization performance theory

As the main profit generator in every company, the sales team is always vital and gets more attention in company assessments. Because the company's income is generated from sales, intense business competition in all industries makes the sales team pay attention to cost-effectiveness [11]. The inability of a company to achieve sales effectiveness will significantly harm the company's

**Table 1**  
Operational research variables.

	Variables	Code	Variable Indicators	References
<b>Independent Variables</b>	1. Transformational Leadership	KTF	My boss can make me feel proud I fully believe in my boss My boss has visions that give me support My boss can develop ways that motivate me My boss can help me find new ways My boss advises me to find solutions intelligently	Dubinsky et al. [19]
	2. Transactional Leadership	KTS	My boss assures me that I could get what I want in return for the work I do My boss allows me to negotiate about what I could get for what I achieve My boss talks a lot about compliments and promotional opportunities for every achievement I could achieve My boss tells me what to do to get rewarded My boss gives me what I want in return for what I did as support	Bycio et al. [20]
	3. Digital Leadership	KDI	My boss is arduous in dealing with a bullish market or competition My boss has the creativity and innovation to construct ideas into solutions My boss is orchestrating digital information and can give directions My boss has always been curious about a complex and dynamic ecosystem (VUCA) and has great learning ability My boss has a deep knowledge and understanding of the interpretation, assumption, and information synthesis in the decision-making process	Mihardjo et al. [21] Abbu et al. [22]
	4. Civic Virtue	CIV	I follow the company's business development well I attend and actively participate in every company meeting	Ahmadi et al. [23]
	5. Altruism	ALT	I helped new salesperson even when I was not assigned to I am always willing to help those in need in my surrounding	Piercy et al. [8]
	6. Sportsmanship	SPO	The people I work with would never think that I spend much time complaining about trifles The people I work with would not think that I like to find business loopholes in my company	
	7. Conscientiousness	CON	I sincerely follow the company's rules and procedures I submitted my documents earlier than the expected deadlines I replied to a phone call and immediately responded to messages and requests for information or anything	
	8. Courtesy	COR	I consult with others before starting actions that may affect anybody I take steps to prevent problems with salespeople or other coworkers	
	9. Cheerleading	CER	I encourage others when they feel belittled I encourage other salespeople on my team to work well in their jobs	
	10. Peacemaking	PEC	I act as a 'peacemaker' when others on the sales team have dissent. I also will give the influence to stabilize the situation when disputes and conflicts occur	
	11. Monitoring	MON	I always allocate time to the field sales team I regularly overview the sales call reporting I monitor the daily operations report of the sales team I always closely monitor the performance of the field sales team I always pay attention to the financial issues of the customers	Piercy et al. [8] Piercy et al. [24]
	12. Directing	DIR	I always encourage sales teams to improve their sales by preparing certain reward schemes I always actively participate in training salespeople to improve their performance I always allocate coaching sessions for the sales team I always discuss several matters related to the performance evaluation of sales team I always help sales teams develop their true potential	
	13. Evaluating	EVA	I always evaluate the number of sales call reporting I always evaluate the profit contribution achieved by each sales team I always evaluate the sales performance performed by each sales team I always evaluate the quality of sales presentations made by each sales team I always evaluate the professional development of the sales team	
	14. Rewarding	RWD	I always provide feedback on the sales team's performance regularly I always give rewards to the sales team based on their sales I always use incentive compensation as a means to motivate the sales team I also always use non-monetary incentives to motivate the sales team I always provide compensation for the sales team based on their sales performance	
<b>Mediator Variables</b>	1. Customer Orientation	CUS	The transformation process is carried out to build a competitive advantage by understanding customer needs The transformation process is carried out to improve the after-sales service/assess customer satisfaction The transformation process is carried out to keep building and finding supplemental needs of our customers that they have never imagined	Yu & Moon [25]
	2. Competitor Orientation	COM	The transformation process is done to ensure the team regularly shares information about competitors The transformation process is carried out to ensure the team always discusses the	

(continued on next page)

**Table 1** (continued)

	Variables	Code	Variable Indicators	References
			behavior and activities of competitors in the market The transformation process is done to ensure the team regularly discusses the strategies of competitors	
	3. Technology Orientation	TOR	The transformation process is done using advanced technology in its development The transformation process is carried out to ensure the business process is done properly The transformation process is carried out to ensure the technology application is acceptable to the current	
	4. Digital Infrastructure	DIF	The transformation process is carried out to ensure that the digital infrastructure can satisfy the business process The transformation process is carried out to ensure that digitization can satisfy business process The transformation process is carried out to ensure that the digital infrastructure can seamlessly support the business process	
	5. Digital Integration	DIT	Integrating business strategies into digital strategies using digital platforms Integrating all data in various departments using database platforms Easily share and benefit from other departments' data, including partners and customers	
	6. Digital Management	DIM	Digital staff learn and apply new digital technology swiftly The digital framework is doable to overcome the company's internal and external affairs	
<b>Dependent Variables</b>	1. Sales Achievement	SCH	Maintain a personalized digital system for other processes when needed Achievement of sales performance compared to major/largest competitors Achievement of sales performance compared to targets that have been set by company management	Baldauf et al. [26] Wang et al. [27]
	2. Sales Growth	SGR	Achieved sales growth compared to major/largest competing companies Achieved sales growth compared to the targets set by the company's management	
	3. Profitability Target	PRO	Achieved company's profits compared to the targets that the company's management has set Achieved company's profits compared to previous periods	

management in the long run. The study by Anderson & Oliver [12] found that the sales team significantly affects sales effectiveness. Besides, on a large scale, the sales manager has an influential role in the organization's effectiveness in sales and other managerial duties.

### 2.5. Digital transformation

Digital transformation is a serious topic that has become a concern at the top management level in various companies. Although digital transformation was mostly seen as a technique in digitalization, attention by managerial positions has been directed to digital transformation in sales management as a constant activity. According to Wengler et al. [13], a well-done digital transformation will keep the company thriving in global market competition. Discussion of digital transformation in the 1980s and 1990s talked a lot about strategic dimensions, which were limited to the information technology sector [14–16] since the process of digital transformation in various research objects was still focused on technological aspects but business optimization [17]. Digital transformation in a more comprehensive manner in the business field is a tool to increase effectiveness and trigger significant changes in organizations through information management, technology computation, advanced communication, and combined connectivity [18]. Therefore, digital transformation must be applied clearly and broadly to the supported object, the scope covered, the tools used, and the expected results.

## 3. Research methods

### 3.1. Research framework

This study desires to assemble a model describing the interaction between research variables to formulate a sales organization development strategy in Fast-Moving Consumer Goods companies in Indonesia. The main variables used in this study include the leadership model, Organizational Citizenship Behavior (OCB), and sales management control. It will also discuss how the above variables influence digital transformation and sales organization performance of Fast-Moving Consumer Goods companies in Indonesia. Furthermore, there will be tests of the leadership model, OCB, and sales management control toward sales organization performance by employing digital transformation as the mediating variable.

This research constructed a model describing the interaction between research variables, such as Leadership Style, Organizational Citizenship Behavior, and Sales Management. It will also discuss how these variables affect digital transformation, which affects the performance of FMCG sales organizations in Indonesia. The measurement model refers to indicators that cannot be directly observed with a single metric measured by observation variables in which each item is conceptually unidimensional. The present study had 66 indicator items and produced 346 valid questionnaires from human respondents measured using an even Likert scale, ranging from one (1) depicting strongly disagree to five (6) depicting strongly agree. The measurement model was tested through several steps: Outer

Model Testing, Convergent Validity, Discriminant Validity, Composite Reliability, Structural Model Test, Inner VIF (variance inflation factors), and Coefficient Value Determination. The coefficient of determination results helped define the research construct, and the hypotheses analysis of the direct and indirect effects was conducted through the *t*-test. Operational research variables can be seen in [Table 1](#) below:

The hypotheses tested in this study are arranged as follows:

⇒ Hypothesis 1: There is a positive relationship between the Leadership Model and Digital Transformation

Given that the leadership model dramatically influences the direction of the organization, primarily when the organization deals with the complexity of changes in the digital transformation process, a leadership model that can implement the norms, expectations, and desired results during large-scale complex transformative projects is a must [28]. Leaders who support digital transformation will always do the proper duties for a successful digitalization strategy as they would think uniquely about decisions related to business strategy, business models, enterprise platforms, mindsets, and skill sets related to the information technology function [29]. Moreover, leaders in the digital era must improve their vision, communicate effectively, and provoke ideas from the team members involved. Besides, leaders who pay attention to digitalization will find that increased support and cooperation will significantly impact digital transformation. According to Kazim [30], the digital era requires leaders to communicate ideas well to increase collaboration, create added value, and perform cross-functional collaboration. While a digital transformation can seem disorganized and confusing, any hurdles can be overcome through adjustments and a suitable leadership model.

⇒ Hypothesis 2: There is a positive relationship between Organizational Citizenship Behavior (OCB) and Digital Transformation

MacKenzie & Wajcman [4] investigated the relationship between OCB and Organizational Innovation (OI) as they found that OCB was an essential antecedent to organizational effectiveness and other positive activities, including innovation. Although Chang et al. [5] found that OCB could not significantly influence OI, a digital transformation effort can appear as OI because companies usually do innovation for good in their business processes by maximizing technological innovation. Therefore, a significant positive effect between OCB and digital transformation does represent OI.

⇒ Hypothesis 3: There is a positive relationship between Sales Management Control and Digital Transformation

Sales management control consists of several main activities by a sales manager, such as monitoring, directing, evaluating, and rewarding. According to Oliver & Anderson [31], monitoring, directing, evaluating, and rewarding must be considered inseparable within sales activities. Considering that collective decisions define the sales management control system, the role of the sales manager is critical in ensuring the sales organization's effectiveness so that the target as the leading benchmark can be achieved. Furthermore, sales management control activities should be critically examined and further developed [26]. The present study believes that the decent relationship between sales management control and digital transformation variables is appropriate for ensuring a digital transformation process's success, which ultimately affects a sales organization's effectiveness.

⇒ Hypothesis 4: There is a positive relationship between the Leadership Model and Sales Organization Performance

Popular leadership models include transactional, transformational, agile, and digital leadership. The four leadership models are indicators of leadership that positively and significantly influence organizational performance in sales. Furthermore, the transactional leadership model strongly influences organizational performance because it involves feedback, expectations, and rewards [32]. The type of approach usually carried out in leadership is the exchange of rewards from leaders to followers to achieve goals and the use of discipline to correct undesirable behavior from followers with or without waiting for mistakes to occur; it was mostly running through transactional leadership [32]. Meanwhile, a leadership model that gains respectful compliance has to be such a transformational breakthrough, and such leadership happens through the process of identifying, internalizing, and motivating employees to go beyond their self-interest. Transformational leadership is the most effective one because the vision and mission of the organization will be seen as belonging to all members of the organization [3,33,34].

⇒ Hypothesis 5: There is a positive relationship between Organizational Citizenship Behavior (OCB) and Sales Organization Performance

MacKenzie et al. [3] found that OCB is a vital group behavior represented by sales managers and has a significant positive effect on the overall performance of sales members. Furthermore, Podsakoff & MacKenzie [35] argued that OCB as a discretionary process could directly affect the effectiveness of an organization without changing sales force productivity goals.

⇒ Hypothesis 6: There is a positive relationship between Sales Management Control and Sales Organization Performance

The effectiveness of a sales organization's performance is influenced by organizational factors, the sales force, and the organizational environment [36]. According to Anderson & Oliver [12], salespeople who work under a behavior-based sales management strategy are expected to be more likely to achieve organizational goals/performance than results-oriented ones. Companies that use

behavior-based sales management produce higher levels of effectiveness even though the impact is not immediately apparent. Therefore, behavior-based control through the characteristics of salespeople on their performance and the effectiveness of sales organizations require further study [26].

⇒ Hypothesis 7: There is a positive relationship between Digital Transformation and Sales Organization Performance

An organization’s ability in digital transformation is represented by digital competence, which is the foundation for forming company resources in a digital environment. In minimizing the gap between customer needs and innovation, digital competence must be implemented by increasing the company’s ability to use flexible digital infrastructure. Besides, digital integration of human resources and strengthening of digital management to improve company performance must also be carried out [37].

⇒ Hypothesis 8: There is a positive relationship between the Leadership Model, Digital Transformation, and Sales Organization Performance

According to Benlian & Haffke [38], organizational leaders must work to ensure that their organizations develop a digital mindset in digital transformation. In addition, they must also be able to respond to disturbances related to the use of digital technology. For this reason, studies that highlight the creation of new leadership roles encompassing the creation of positions are necessary since those positions can represent strategic traits in digital transformation, such as the position of Chief Digital Officer (CDO) assigned to ensure that digital technology can truly be utilized and aligned with organizational goals. Within the company, CDOs act as boundary breakers who can help translate digital business strategies into concrete actions that influence the logic of organizational members and encourage close collaboration between business and information technology functions [18].

⇒ Hypothesis 9: There is a positive relationship between Organizational Citizenship Behavior (OCB), Digital Transformation, and Sales Organization Performance

Managing employee antagonism to change is one of the toughest challenges for managers [39]. However, according to Greenhalgh et al. [40], innovation has been proven to be the key to the survival and growth of companies in an ever-changing and competitive business environment because change is unavoidable. Studies by Katz [41] found that coordination can stimulate spontaneous innovative behavior when employee goals do not overlap or are antagonists to organizational goals. Furthermore, MacKenzie & Wajzman [4] viewed OCB as an antecedent to organizational effectiveness and other positive outcomes such as innovation.

⇒ Hypothesis 10: There is a positive relationship between Sales Management Control, Digital Transformation, and Sales Organization Performance

Digital transformation strategies, including business development and business models, must be assessed from a management

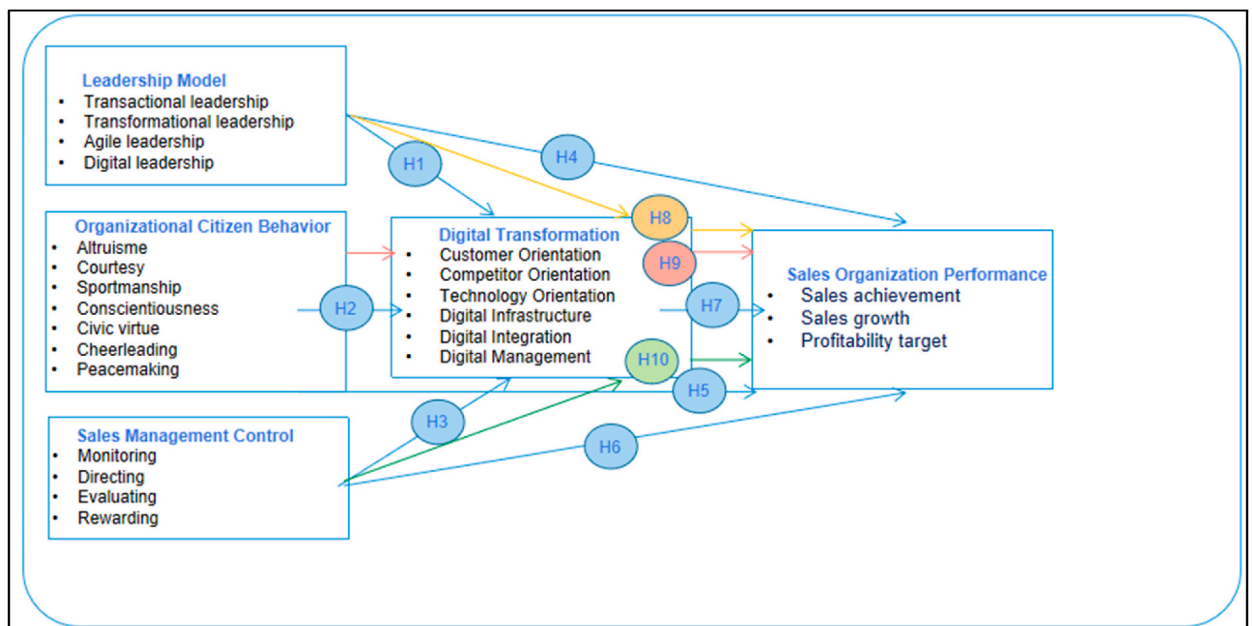


Fig. 1. The research framework constructing the research hypothesis.



perspective [42]. Because digital transformation strategies can embrace a variety of plans, complex coordination efforts are required to oversee the digital transformation process. Thus, several activities focusing on monitoring, directing, evaluating, and rewarding will experience efficiency because digitalization has touched their sales organization's sales management control section. The research framework constructing the research hypotheses is presented in Fig. 1 below.

### 3.2. Data collection techniques

According to Cravens [11], the power of a sales organization within a company is determined by how well the company can manage some attributes: selling situation, frequency of selling, type of sales force control system, field management activities, salesperson characteristics, salesperson performance, and sales organization performance. Research examining these attributes is very useful in analyzing sales management more profoundly.

Choosing similar characteristics allows researchers to explore data more deeply [43]. This method is appropriate for the present study because the samples taken can be adjusted to the research objectives to provide a more representative value. As stated by Bernard [44], the purposive sampling technique was chosen as a non-probability sampling technique because it can solve the problem of ambiguous sample size.

Data collection and acquisition were carried out through questionnaires and interviews with online and offline professionals who worked in various positions, such as Directors (C-Level), Managers, and Supervisors at local and foreign FMCG companies in Indonesia for three months (July–September 2022) in 14 major cities (Jakarta, Bandung, Semarang, Yogyakarta, Solo, Surabaya, Medan, Padang, Palembang, Balikpapan, Banjarmasin, Samarinda, Makassar, and Manado). Specifically, the sampling method used is homogeneous sampling, which focuses on one particular sub-group. This technique does not set binding rules; researchers were asked to ensure a logical relationship between sample selection techniques, objectives, and research focus [45].

According to Hair et al. [46], if the population size is unknown, the recommended minimum sample size is 5–10 times the number of indicators used in the questionnaire. Since this study used 66 indicator items in the questionnaire, the minimum sample size must be 330 respondents. By distributing 380 questionnaires, 346 valid questionnaires were ideally collected and analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) so that the research gets a more comprehensive picture of the organizational situation. In addition, interviews were conducted with FMCG organizations, leadership experts, organizational behavior experts, and organizational performance experts to provide input on a development strategy model of a sustainable FMCG organization.

### 3.3. Ethical approval

A consent form containing a confidentiality statement is guaranteed as this study adheres to the requirements of data protection, storage, and security determined by IPB University Rector Regulation 27/IT3/PP/2019 (4th ed., C.01/12.2019), approved by Chairun Nisa through book of guidelines in conducting research, published by School of Business at IPB University. Furthermore, before obtaining consent from all respondents, participants were informed during the introductory stages that all data would be stored, analyzed, and reported securely and confidential. Therefore, each interview case/focus group was fully confidential, making nobody able to trace the participants through data analysis. There is no disclosure of identification that threatens the respondents' welfare because the interviews were conducted separately for each participant, ensuring they were aware that an audio recorder was being turned on. For convenience, participants were also provided with the researcher's contact details for any queries. In addition to maintaining an encouraging setting for the benefit of everyone, all participants in the study were offered access to the findings and resulting recommendations appearing in a short and accessible report. Finally, no conflict of interest could compromise the integrity and independence of the present research.

### 3.4. Data processing and analysis techniques

Descriptive analysis is an analytical method used to describe the collected data. In facilitating further interpretation, data is generally presented in tables, graphs, pie charts, pictographs, standard deviation calculations, and percentage estimations [47]. Structural Equation Modeling (SEM) combines two statistical approaches, Exploratory Factor Analysis and Structural Path Analysis, allowing simultaneous assessments to be carried out from measurement and structural models [48]. There are two types of SEM methods: Covariance-based SEM Model (CB-SEM) and Partial Least Squares SEM Model (PLS-SEM) [48].

In processing data collected from respondents (actors) in the digital transformation process in FMCG sales organizations, this research employed the SEM Model (PLS-SEM) method since this model prioritizes a predictive and exploratory-oriented approach [49]. The PLS-SEM method is expected to have high prediction accuracy because it is based on good development of previously formed theories.

According to Hwang et al. [50], PLS-SEM is suitable if the latent variable of concern is combined to predict or identify the main construct. PLS-SEM is an appropriate model for studies with complex models consisting of many different constructs, indicators, and relationships. Apart from that, the perspective promoted by the PLS-SEM model is compatible with most of the business research, which aims to test existing theories (confirmatory analysis) while trying to offer recommended solutions to business/management practices (predictive analysis) [51]. Since this study used 66 indicator items with 346 valid questionnaires, PLS-SEM provides accurate estimates with a small sample size and is useful for small populations such as investigations within one organization [51].

According to Lenberg et al. [52], the increased interest in PLS-SEM is due to the increasing analysis of human factors as research objects. In fact, as in the present study, several studies [52,53] also involved experts to deepen the discussion of psychometric measures

because they have the knowledge and wisdom to represent the actual situation. This effort was made with the hope that the research findings could truly explain the phenomena that occur in FMCG sales organizations in Indonesia.

#### 4. Results and discussions

##### 4.1. Descriptive analysis

The quantitative descriptive analysis in this study described the interactions between the leadership model, organizational citizenship behavior, and sales management in a systematic, factual, and accurate way [54]. Quantitative descriptive analysis is a conscious and systematic effort to provide answers to one situation. This endeavor sought more in-depth and broader information about a phenomenon [55]. Therefore, the descriptive analysis in this study is used in the initial interpretation process to understand the situation and business model of a sales organization in FMCG companies in Indonesia. Questions through questionnaires were submitted to respondents who work in FMCG companies. Like the present study, an exploratory survey on digital transformation was conducted in 2017 with 90 people from 30 medium-sized companies in Germany [13]. Until now, this research has become a source of inspiration in further exploration concerning digital transformation within an organization.

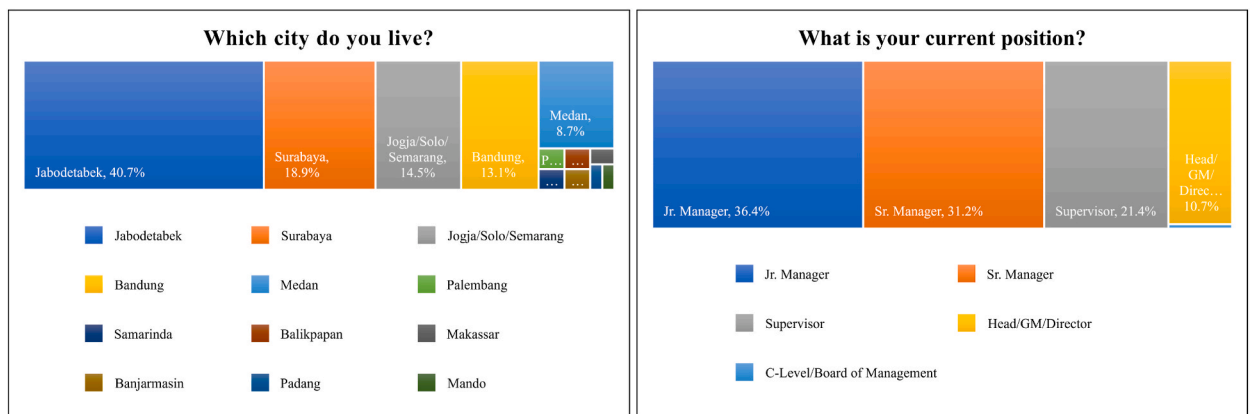
Questions from several previous studies inspired some of the questions employed in the present study. Although many companies have started to change business models using digital technology to increase competitiveness [56], assurance regarding what type of sales, role responsibility, and kind of business model is responsible for the entire digital transformation process in sales is still unclear [42]. Furthermore, obstacles in the transformation process, such as knowledge and readiness of companies for digital transformation in sales, are still under-explored [18].

As of this writing, research on steps to understand the digital transformation process has been carried out through a more theoretical approach [57]. In contrast, the present study was conducted through direct exploratory surveys of FMCG employees in sales organizations because they were the main actors in the digital transformation process. Therefore, an exploratory study in the present study addresses deficiencies that previous researchers have not resolved.

Most of the questionnaires distributed in this study were spread online through several social media such as Facebook, LinkedIn, and WhatsApp Messenger. Besides, some data were collected directly through offline interviews with several respondents. Altogether, data collection was carried out in stages from July to September 2022. Experimental results were presented in a Tree Diagram because visualized results make it easier for everyone to understand the cases in question [58].

After 380 questionnaires were distributed, 346 questionnaires met the requirements to be further processed and analyzed. The survey, as shown in Fig. 2a, proved that most respondents were from two major cities in Indonesia: the Special Capital Region of Jakarta/Jabodetabek (40.7%) and Surabaya (18.9%), followed by cities in Central Java, such as Yogyakarta, Solo and Semarang (14.5%), Bandung (13.1%), Medan (8.7%), and the remaining 1.2% represented Padang, Palembang, Balikpapan, Banjarmasin, Samarinda, Makassar, Manado. In terms of job positions, the present study covers almost all levels of management; 36.4% of respondents worked as Junior Managers, 31.2% as Senior Managers, 21.4% at the Supervisor level, 10.7% served as Head/General Manager/Directors level, and the remaining 0.3% answered others (Fig. 2b).

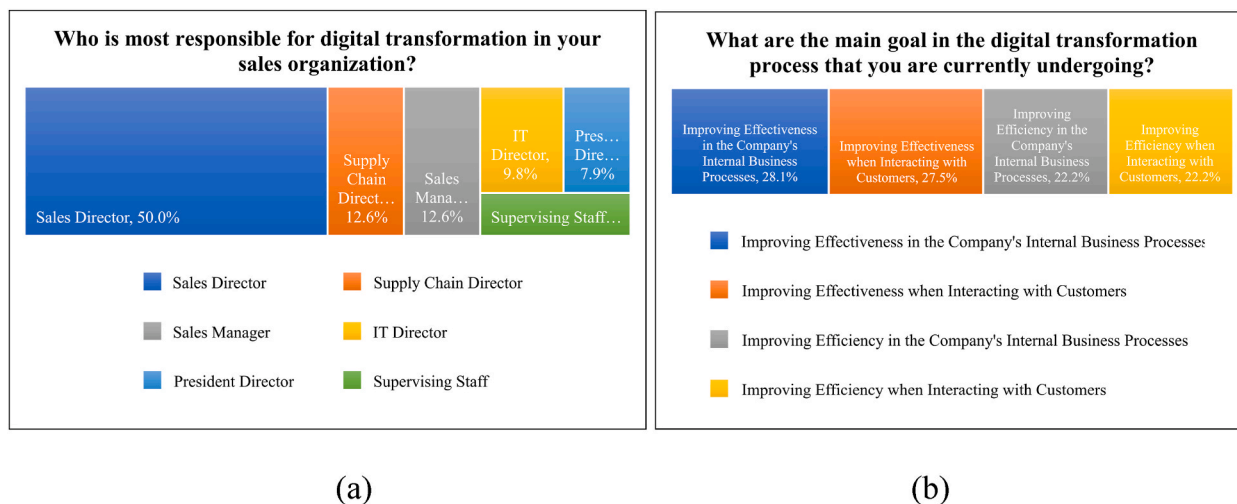
When the survey raised questions about whose role is responsible for digital transformation within the sales organization (Fig. 3a), the questionnaire revealed that the Sales Director (50.0%) is the most responsible for digital transformation, followed by the Director of Supply Chain (12.6%), Sales Manager (12.6%), Director of Information Technology (9.8%), President Director (7.5%), and Supervising Staff (7.1%). The Sales Director is responsible for adopting digital technologies that focus on increasing sales through



(a) (b)

Fig. 2. Respondent's characteristics: (a) company base; (b) job position.





**Fig. 3.** Responsibilities and goals: (a) role's ranking responsible in sales digital transformation; (b) goals of digital transformation in sales organization.

developing the sales team under his direction, such as people readiness, work culture revitalization, and full support from top management. In this course, the sales director leads will receive support in their digital transformation activities. Regarding people readiness, sales directors must ensure that the digital transformation they are carrying out aligns with the company's goals holistically. In addition, the readiness of the individuals involved in digital transformation schemes must be linear with the readiness of the sales organization and the company. Both of these require approval from top management in the form of support; ultimately, the sales director and his subordinates will achieve an absolute advantage in digital transformation.

In renewing work culture, sales directors must comprehensively understand the work culture in their organization. According to Tienken et al. [59], the sales director plays an important role in sales targets and is crucial in developing digital culture. Sales directors at FMCG in Indonesia need to understand that implementing a digital culture is a challenge that requires special attention, considering that forming a digital culture at work will overhaul conventional activities that previously provided comfort. According to Mkoba & Marnewick [60], renewal of work culture requires attributes that can provide overall transformation both in terms of material and immaterial. In addition, studies by Buvat et al. [61] in the Capgemini report on the Digital Culture Challenge: Closing the Employee-Leadership Gap found that key factors in digital culture consist of innovation, data-driven decision-making, collaboration, digital-based mindset, orientation on the customer, and flexibility.

Sales in FMCG companies are internal drivers that directly impact profits, determining a company's ability to compete in a fierce market. In its external role, sales interacts with customers with various approaches to answer the needs and desires of the masses. Therefore, the director of sales in digital transformation will have flexibility in breaking down the complexities between internal relationships and customer interactions.

Li et al. [62] found that sales teams and digital transformation cannot be separated if the adoption of digital transformations is to increase profits. Furthermore, amid market uncertainty, the two elements merge to achieve solid efficiency and effectiveness. Therefore, to achieve maximum digital transformation advantages, sales directors must understand that investment in materials and people is crucial to achieve sustainable digital transformation. Sales directors must not only follow trends in leading but decisions must be made based on facts and a digital-based mindset so that proper planning in creating a renewable digital work culture will provide beneficial results in the long run. The Director of Supply Chain in digital transformation must be able to work integratively with other job areas in carrying out company operations, including distribution, procurement, inventory, logistics, and sales. Digital transformation is fundamentally a simplification of conventional activities. Therefore, the supply chain director must understand that digital transformation in their department will simplify interactions between the company, suppliers, and customers.

The study by Groover [63] stated that digital transformation in its application touches various main elements such as data, products, systems, production processes, people, and materials. Combining these elements allows the human aspect to integrate directly with technology and creates a dynamic work atmosphere. Therefore, the absence of one element will not provide advantages for digital transformation. A study by Gattiker et al. [64] found that a company's ability to adapt to the environment affects the extent to which it survives in its supply chain activities. The supply chain flow conventionally moves from products and materials distributed to certain companies and consumers. This distribution then widens its network to various consumers, along with the variations in each person's needs. Conventionally, the reach of a product to consumers runs without considering the specific network too much. Therefore, the presence of digital transformation can map product distribution patterns, market demand, and trends in the need for a product in a certain season. In addition, digital transformation can simplify how companies interact with suppliers, intermediaries, and end customers.

According to Singh et al. [65], digital transformation in the supply chain for FMCG companies is greatly assisted by digital analytics, digital interactions, simplified communications, integrated enterprise resource planning systems, and cognitive computing

projects. The presence of this technology allows sales organizations to incorporate other strategic departments in decision-making besides viewing digital data to be analyzed to create improvement initiatives. In terms of security, digital transformation strengthens cyber security in supply chain management so that information sharing and collaboration between companies, suppliers, and customers is measured and sustained.

A study by Lee [66] found that companies implementing a digital supply chain can apply digital-based work processes and ways of thinking in looking at products, markets, and customers. This more advanced way of thinking makes it easier for organizations to prepare work processes to triumph in the market and competition, ultimately providing long-term victory. The director of the supply chain usually leads the supply chain. However, according to several studies, the role of the president director in digital transformation is no less important [42,67]. They found that the roles and responsibilities of top management in digital transformation are very relevant to any activities carried out by companies because they have superior strength in providing the resources needed so that digital transformation can be carried out. These findings are supported by Rodrigues et al. [68], who found that the board of directors significantly influences digitization and company performance because they have superior power in all types of decisions, such as increasing resource efficiency, certainty over internal communication, and strengthening coordination between departments. Organizational members generally believe that the president director in digital transformation can better make decisions regarding funds and risks to achieve digitization in the supply chain. In psychological terms, the director of supply chain integrated with the president director can be a reliable role model for members of the organization in supply chain management because they will understand that the work they do is safer and simpler, which in turn can encourage workers to want to try and work reliably.

A study by Gallo Orjuela & Ortega Camacho [69] found that the initial strategy for companies that desire to take advantage of digital transformation to the fullest must comprehend that training related to new technology should follow the company stage. Companies with an immature phase should pay more attention to employees who will work directly with digital transformation. In other words, the rest of the teams that are not in direct contact with digital transformation are out of priority. Even though the thoughts of previous studies are relatively controversial, the interview results in the present study found that priority training related to the basic concepts of digital transformation for those who have a direct connection with digital transformation is believed to be able to accelerate technology adoption for companies. Furthermore, a study by Bogner et al. [70] found that introducing new technology must be accompanied by relevant knowledge. Therefore, digital transformation will be adopted more quickly by those directly referring to digital skills, such as information technology teams, who then develop themselves in digital sales and management. To conclude, the human aspect is a key element in digital transformation besides technology and data.

A study by Zhang et al. [71] found that support from top management solely in information technology is not enough to achieve successful digital transformation if there are still members of the organization who feel disapproval of the transformation they are carrying out, especially in the work culture. Therefore, involving humans in digital transformation must consider stages that embrace individual work culture into a technology-based communal work culture. Work culture is closely related to experience. Companies that previously did not apply technology in their work processes will find it difficult to see information technology as a promising experience. This problem causes many organizational members to think technology only brings false success because it does not correlate with their previous activities, especially for companies that have successfully operated conventional methods. The adoption of technology by the director of IT requires fresh but easy-to-accept strategies. Hopefully, this strategy will at least encourage organizational members to join and try the digitization process, which voluntarily touches their work processes and work culture.

Given that digital transformation takes up pricey resources, the director of IT must understand that the effectiveness and efficiency of the company are also influenced by how members of the organization adopt digital transformation. The IT Director must know that a member's rejection of something new is nothing to worry about. Therefore, the challenges faced in adopting digital transformation must be understood using a digital concept in mind, where digitization, which will overhaul aspects of the process and work culture as a whole, takes time. Besides, a facility dedicated to digital transformation is a waste if it is not properly utilized. The top management responsible for digitization must be able to read the compatibility between the availability of technology, human resource capabilities, and the ability to make a change. The results of this thought process are expected to be able to see how the use of technology is genuinely absorbed by the right people, resulting in according to expectations.

Furthermore, a study by Huber [72] found that top management in information technology is expected to have basic intelligence in preparing resources that can act as a bridge between companies and organizational members who will be prepared for the digital transformation journey. The quality of IT directors as negotiators to C-level in preparing for digital transformation greatly influences the extent to which the success of digital transformation can be achieved. Therefore, the application of technology is a common goal. Responsibility in implementing digital transformation will produce maximum impact if top management and organizational members collaborate to execute technology they trust. To be able to survive in digital transformation, a study by Oliveira & Rozenfeld [73] found that companies must be able to identify, adjust, and integrate technology from basic company processes to complex tasks that require integration between fellow organizational members, members, and managers, and members, managers, and top management altogether. Such integration requires an effective relationship that does not burden certain parties to achieve harmony. When companies achieve harmony in the digital transformation strategy, motivation and dreams of successful technology implementation will be created. Therefore, as the dominant actor, top management must commit that digital transformation is a collaborative project in which all actors have an equally meaningful role.

The present study shows different results from Wengler et al. [13] regarding the actors responsible for digital transformation, as they found that the President Director was the primary driver of the entire digital transformation process. Several previous studies [74, 75] believed that the president director, as one of the top management, has a major role in decision-making in digital transformation. Besides, several other investigations [76–78] found that the president director is responsible for company innovation efforts directly related to technology.

Since digital transformation changes conventional activities to be digitized, the president director in the decision-making process must employ a digital mindset comprehensively. However, a study by Simons [79] found a significant relationship between the board of directors and the company's commitment to strategic change. They also found that a company's commitment to digital transformation is as important as the technology it adopts. This finding is supported by Fernandez-Vidal et al. [80], who found that top management, especially the president director, as an important person winning the digital transformation, must consider the organization's interests and how an organization views digital transformation. It is hoped that the president director will not be sightless to technology alone since technology without proper operation will not produce good results.

Several concerns often arise from organizational members when a company is faced with digital transformation in Indonesia: 1) organizational members are reluctant to expect great benefits from implementing digital technology; 2) organizational members doubt whether company officials are truly serious about digital transformation; 3) organizational members doubt whether digital transformation can be sustainable with their work processes; 4) organizational members doubt whether changes can be made because their previous work processes are not relevant to digitization. Considering that the doubts that arise are predominantly due to ignorance, the president director is expected to use all the resources at his disposal to ensure that organizational members receive guidance through transition management. According to Downey & Slocum [81], change management must systematically accommodate the doubts and potential of organizational members.

Companies must be able to communicate persuasively to organizational members who want to be involved with concrete and convincing plans. The entire process of winning followers' trust must be carried out intensely and comprehensively by ensuring that what the president director believes is truly on the same page by all members involved. The same principles will result in solid coordination, creating joint commitment. When all parts of the company believe in a uniform commitment to digital transformation, the potential for digitization that touches all company activities is expected to produce maximum results [82].

A study by Dziekan & Kottenhoff [83] found that the ease of information has led to more dynamic consumer behavior because technology has made it easier for consumers to explore various products based on their needs. In a sales organization's digital transformation, the president director as a leader should understand that the method of exchanging information through social media is a phenomenon that must be anticipated. Today's consumers have many options with the emergence of various reactions to a product. Trust and concern for a product tend to be unpredictable because the exchange of information is truly unstoppable. Therefore, the strategy by the president director that allows the sales organization to switch from product-oriented to customer-oriented needs to be considered.

In terms of the ability to understand the market, the president director must master and understand that the experience, knowledge, and attitude of the president director himself greatly influences market competition in the world of FMCG. The president director must be able to position himself to understand external information analyzed internally by the company to be considered in decision-making. The president director should not use assumptions based on his experience because dynamic digital transformation requires collective considerations. These thoughts align with the findings by Hambrick [84], who found that high-ranking officials in companies that can entice conclusions in digital transformation must have fundamental knowledge before forming perceptions and strategic choices that determine the company's future.

Fundamental knowledge by the president director is influenced by professional background. President directors with a background in digitization are considered to have more relevant experience than those without any idea about digital transformation. Therefore, choosing leaders for companies that will transform into digital schemes is a step that demands attention. According to Schwartz & Davis [85], president directors who have experience with the process of change in digital transformation will have a more brilliant sense of responsibility and be able to provide strategic solutions based on intellectuality. These capabilities make it easier for companies to survive, compete, and win the market. When the president director can accurately understand the internal and external conditions of the company, various decisions that will lead to concrete actions become more measurable. In addition, the president director, who has a clear outlook on digital transformation, finds it easier to coordinate with the members of the organization they lead, and those who are led can also understand what is conveyed clearly.

The president director with excellent knowledge regarding digitization in their company has great potential to execute digital transformation successfully. Besides, according to Eby et al. [86], leaders in sales organizations with an attitude of change and knowledge related to digital transformation are the right combination. The president director with this intelligence will always try to answer challenges through inward reflection. The study by Verhoef & Bijmolt [87] argued that internal and external reflection and contemplation are important activities, especially when a company is experiencing a process of transitioning towards digitization. Challenges in digital transformation require technological insight, and the willingness of organizational members to study digital transformation-themed topics depends on the environment formed by company leaders. Companies must actively coordinate with members of the organization to increase their insights into digital transformation through various means, such as brainstorming with digitization experts so that each member can be familiar with what the company is trying to accomplish.

Still related to inward reflection, the president director is responsible for creating an atmosphere where every member of the organization feels included in activities affected by digital transformation. The involvement must also be accompanied by a competitive culture that hones the creativity of organizational members. The study by Shetty [88] found that contesting how digital transformation is operated within companies is one of the steps so companies can quickly adopt digital transformation. The president director can use it to map the domains that are the strengths and weaknesses within the company's internals. When a department experiences a weakness in a particular area, the leadership can fill the gap by substituting a superior department. In this way, companies will get used to complementing each other, coordinating, and communicating for mutual progress. In terms of external reflection, the role and responsibilities of the president director are very influential in exploring the company's internal capabilities and aligning them externally. Companies must not be satisfied with their internal capabilities and pay no heed to the existence of

competitors. When companies are willing to seek and explore inspiration and knowledge with a wider reach, innovation in the company will continue to grow. The president director must be able to break down barriers that limit space so that organizational members can gain new experiences and be able to compete in a complex environment.

When the question proposed the main goal in the digital transformation process (Fig. 3b), most respondents answered that Improving Effectiveness in the Company’s Internal Business Processes was the main goal (28.1%), followed by Improving Effectiveness in the Process of Interaction with Customers (27.5%), Improving Efficiency in the Company’s Internal Business Processes (22.2%), and Improving Efficiency in the Interaction Process with Customers (22.2%). The findings of the present study resonate with what is meant by digital transformation according to Paavola et al. [89], as they found that digital transformation is the method of new digital technologies enabling significant improvements in business processes, such as improving customer experience, streamlining business operations, and creating new business models. Furthermore, Morakanyane et al. [90] found that digital transformation, complemented by the utilization of digital capabilities and advanced technology, gradually enables the renewal of business models, simplifies business operations, and enhances customer experience. Such profits will ultimately create added value for the company. The digital transformation carried out optimally, focusing on efficiency and innovation, will increase the added value of goods that become commercial products for generating profit.

Digitization is a concept to get the best benefits from simplification. The study by Schwarzmüller et al. [91] found that digital transformation is very useful in simplifying production systems and inter-organizational collaboration. Therefore, effective collaboration is needed when digital transformation is carried out. In many cases, the sales organization is a group that is sensitive to what is happening in the company because they are individuals who are expected to come up with creative ideas to achieve company profits.

The sensitive and strategic position of the sales organization requires them to collaborate intimately with other departments that also intersect with the company, such as the production and finance departments. Therefore, decision-making by company officials should not override the sales organization because they are trusted to provide useful fact-based opinions regarding products, marketing, consumer demand, new product development, prices, and even market competition in the exact industry. Even though the sales organization seems to play a major role in the company’s success, which can be measured by the efficiency and effectiveness of the company’s internal business, the role of other departments should not be ruled out, including in determining who will lead the company. To succeed in the company’s internal business, all departments, from the top management level to members of the organization, must understand the current state of the company’s internal relations. Companies must be willing to create, maintain, and enhance mutually beneficial relationships between members. The harmony that appears will then positively impact how companies deal with customer needs [92].

A study by El Khatib et al. [93] found that digital transformation to impact the effectiveness and efficiency of a company’s internal business requires a process of strategic and tactical evolution. Therefore, leaders who have power are expected to be able to maintain long-term strategic relationships so that designs related to how companies work in digital transformation can provide benefits to the fullest. With top-level management, organizational members must instill the principle of cooperation in managing business-to-business relationships, which means that deficiencies that may arise in other departments must be considered as part of the evolutionary working process. This situation requires awareness from every organization member to complement, teach, and guide fellow members to continue to move in a growing digital transformation.

According to Gorla et al. [94], successful relationships between departments and organizational members will thoroughly improve functional aspects, service quality, product value, price position, the company’s internal trust in leaders and vice versa, and customer loyalty. These attributes can then lead companies to understand the data provided through digital transformation, such as the company’s internal business processes, budget effectiveness, workgroup efficiency, market movements, market offers, the most

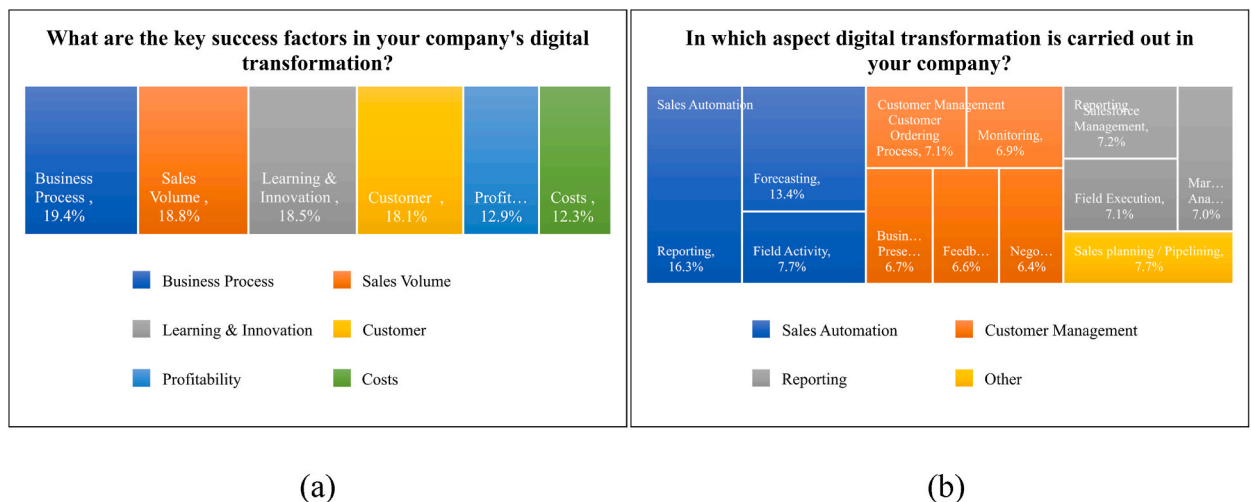


Fig. 4. Key success and set of tools; (a) parameters for a successful digital transformation; (b) main activities adopted through digital transformation.

appropriate information technology for business processes, and other relevant information needed when a company wants to evaluate an existing internal business. Several previous studies [95–97] found that trust, commitment, and customer satisfaction influence successful relationships between companies and customers. When a company can position itself as part of all solutions to market demand, it is unnecessary to question its image in market competition. Such a strategic position requires companies to acknowledge that customer needs will always be based on product quality that technology can complement.

A study by Kane et al. [98] on “strategy, not technology, drives digital transformation” found that 80% of respondents said that increasing efficiency and customer experience is the goal of digital strategy. Furthermore, they found that developed companies use technology more to achieve strategic goals. Therefore, the simplification offered by digital transformation has an important role in the company’s internal business processes in formulating strategy, triggering innovation, and making practical decisions. Naturally, companies that have just adopted digital transformation see digitization as an effort to speed up obtaining profits that intersect directly with increased sales. However, a company’s ability to be successful in sales cannot be separated from how the company develops a sales strategy, which includes making decisions related to price, distribution, and sales concepts. Therefore, if technology in digital transformation is placed first to increase the efficiency and effectiveness of the company’s internal business, it will ultimately positively impact sales value and customer experience. As a result, digital technology can transform businesses to win the market.

It was found that Business Processes (19.4%) demonstrating the accomplishment of the business are the highest parameters for a successful digital transformation (Fig. 4a). Other responses: Sales Volume (18.8%), indicated by the achievement of targets and profit growth compared to the previous period; Learning & Innovation (18.5%), indicated by the process of developing the capabilities and capacities of members within the organization; Customer (18.1%), indicated by the level of customer satisfaction with the company; Profitability (12.9%), indicated by the company’s profit level; and Costs (12.3%), indicated by the cost of the digital transformation process according to the plan.

In order to deduce how companies should make decisions about digital transformation processes within sales organizations, companies should be able to analyze, classify, and extract some practical implementation of digital transformation processes wholesomely. The procedure for generating prescriptive models appearing in flowcharts can be used as a reference for managers in digital transformation processes. Therefore, the parameters for the success of a digital transformation process consist of five parameters: (a) profit level (bottom line/profitability), (b) costs, (c) business processes, (d) customer aspect, and (e) learning and innovation aspects. However, the key to success is not always foolproof because it depends on the character and fundamental objectives of the digital transformation process adopted. Guenzi & Habel [99] stated that several combinations and consistency of activities carried out by managers could ensure the success of a digital transformation process.

Concerning aspects of digital transformation that the respondents were working on, it was found that Sales Automation (37.4%) was the main activity in their digital transformation, followed by Customer Management and Reporting (Fig. 4b). The present findings align with Guenzi & Habel [99] as they found that digital transformation can be done by adopting digital solutions to simplify administrative/back-office processes, such as reporting procedures for managing customer discounts and extra discounts. In addition, digital transformation is also carried out for reporting sales force activities, pre-call activities (preparation for visits, training, and development of sales force), customer interaction processes, and cross-functional reporting activities. The next activity that has undergone a digital transformation process found in this study is Customer Management (33.7%), consisting of several activities such as Customer Ordering Process (7.1%), Customer Monitoring (6.9%), Customer Feedback (6.6%), Business Presentation (6.7%), and Negotiation (6.4%). Digital technology for digitizing the interaction process with customers can increase effectiveness and unique experiences that have never been imagined before, such as the availability of digital interaction channels, additional digital services, online portal channels with personalized content, remote monitoring, and other activities to improve service to customers through Simplification of activities [99].

This study also found that Reporting (21.3%) and Sales planning/Pipelining (7.6%) are activities running in digital transformation. Reporting is essential in decision-making because the data contained in reports is crucial in making decisions related to operational activities. A study by Bonnet and Westerman [100] found that reporting activities have shifted from conventional reports to reports that provide real-time data. Therefore, digital transformation in reporting activities greatly determines a company’s agility. The FMCG business is inseparable from the strategy where retailers utilize technology in promoting products to consumers. Furthermore, technological advancements have provided opportunities for retailers to offer specific products according to consumer needs, along with the growing popularity of mobile devices and applications. Although technology can track consumer activities and purchasing habits while providing personalized offers, respecting the data and privacy of customers when exercising promotional strategies is vital in global competition [101].

## 4.2. Structural equation modeling analysis

The SEM (structural equation model) method was carried out using SmartPLS, consisting of two stages: testing the measurement model (outer model) and testing the structural model (inner model). Model evaluation was conducted to determine the model’s suitability. The measurement model (outer model) showed the relationship of each indicator with its latent variable. The outer model was evaluated on the construct reflected by its indicators, testing the validity and reliability of each latent variable indicator. By assessing the outer model, the researcher can trust that the latent variables or constructs that form the basis for assessing the relationship in the structural model are measurable and accurate [49].

### 4.2.1. Outer model testing

SEM-PLS was processed by running the data with iterations to fulfill the validity and reliability values. Three measurement criteria



to assess the outer model are Convergent Validity, Discriminant Validity, and Composite Validity.

#### 4.2.2. Convergent validity

Hock et al. [102] stated that convergent validity is measured from the Outer Loadings and Average Variance Extracted (AVE) values, with a cut-off for each outer loading/loading factor of 0.7. However, a value of 0.5–0.7 is still asserted to have passed the convergent validity test for early-stage research [103]. Furthermore, Hair et al. [46] stated that Convergent Validity is considered fulfilled if the Average Variance Extracted (AVE) value is  $>0.5$ . Convergent validity can be seen from the correlation between indicators and their construct values. An indicator with a loading factor value is said to be valid/reliable if it has a correlation value above 0.7. However, a loading value of 0.5–0.6 is considered sufficient [104].

In the first stage of data processing, there were three indicators found to have an outer loading value ( $\lambda$ ) below standard ( $<0.7$ ), implying that the three indicators were invalid. Therefore, they must be excluded from the research model. Furthermore, the remaining indicators must be processed (running data) again. The results of re-running data resulted in all the indicators having an outer loading value ( $\lambda$ ) above the standard ( $>0.7$ ), implying that all of these indicators were valid and can be continued in the following process. In addition to evaluating the value of the loading factor, construct validity can also be assessed by looking at the AVE (Average Variance Extracted) value, as it can demonstrate the ability of latent variable values to represent the original data scores; the more significant the AVE value, the higher its ability to explain the indicators that measure latent variables. The AVE cut-off value used is 0.50 to show a good measure of convergent validity. The AVE value is presented in Table 2 below:

Table 2 above shows that the AVE value of each variable can be said to be good because it meets the requirements ( $>0.5$ ). Therefore, it can be concluded that all indicators and constructs in the model have met the Convergent Validity test criteria because latent variables can explain more than 50% of the variance of the indicators.

#### 4.2.3. Discriminant validity

Discriminant validity describes the true confidence of one construct and another. Several approaches, such as Fornell & Larcker, Cross Loading, and HTMT, can determine discriminant validity. Fornell Larcker is the first criterion that needs to be confirmed for discriminant validity. In this process, the AVE's square root of a construct must be higher than the intercorrelation value in each construct. Furthermore, a construct must be able to represent more variants than other items in the model. As presented in Table 3 below, the square root of AVE in all constructs is greater than the intercorrelation. Therefore, evaluating validity and reliability suggests that the model's measurements are acceptable.

As presented in Table 3 above, the highest value is shown by the Digital Transformation (0.821), followed by the Leadership Model (0.750), Organizational Citizenship Behavior (0.784), and Sales Management Control (0.798). The table above also shows that each statement indicator has the highest loading factor value in the latent construct tested compared to other latent constructs. Therefore, it can be said that the discriminant validity criteria have been met.

#### 4.2.4. Composite reliability

The composite reliability test is a better method than the Cronbach alpha value in testing the reliability of the SEM model. Composite reliability, which measures a construct, can be evaluated with internal consistency and Cronbach's Alpha. Composite reliability interpretation is the same as Cronbach's Alpha, where values of  $>0.7$  are acceptable. The results of Composite Reliability and Cronbach's Alpha are presented in Tables 4 and 5 below:

Table 4 shows that the Composite Reliability value for all variables is  $>0.7$ . Therefore, data reliability is fulfilled, and further data processing can be carried out. To estimate latent constructs, the study by Marzi et al. [105] recommended that researchers use the Congeneric Latent Construct Estimator (CLC Estimator) to overcome the problem of estimating unidimensional latent constructs. The congeneric approach using the CLC Estimator resonates with the suggestion by McNeish and Wolf [106] through the Maximum Likelihood method for factor extraction via latent construction calculations based on each factor loading. However, the present study specifies the standard by comparing Cronbach's Alpha and Composite Reliability between Original PLS and CLC Estimator, as presented in Tables 6 and 7.

The difference in the estimated coefficients between Original PLS and CLC Estimator on Organizational Performance, Sales Management Control, Organizational Citizenship Behavior, Leadership Model, and Digital Transformation are small and insignificant. Therefore, it can be inferred that reliability bias is not a serious problem in the present study, as there were no significant differences found between CLC and PLS estimates. Consequently, researchers can report PLS estimates with confidence.

**Table 2**  
AVE (average variance extracted) value.

Variables	AVE	Critical value <sup>a</sup>	Result
Organization Performance	0.71	$>0.5$	Valid
Sales Management Control	0.618	$>0.5$	Valid
Organizational Citizenship Behavior	0.595	$>0.5$	Valid
Leadership Model	0.555	$>0.5$	Valid
Digital Transformation	0.522	$>0.5$	Valid

<sup>a</sup> A critical value of 0.50 shows a good convergent validity.



**Table 3**  
Discriminant validity of Fornell & Larcker.

Variables	Organizational Performance	Sales Management Control	Organizational Citizenship Behavior	Leadership Model	Digital Transformation
<b>Organizational Performance</b>	0.842				
<b>Sales Management Control</b>	0.68	0.786			
<b>Organizational Citizenship Behavior</b>	0.733	0.707	0.772		
<b>Leadership Model</b>	0.428	0.501	0.577	0.745	
<b>Digital Transformation</b>	0.807	0.635	0.703	0.651	0.722

**Table 4**  
Composite reliability.

Variables	Composite Reliability <sup>a</sup>	Rule of Thumb	Result
<b>Organizational Performance</b>	0.936	>0.70	Reliable
<b>Sales Management Control</b>	0.951	>0.70	Reliable
<b>Organizational Citizenship Behavior</b>	0.954	>0.70	Reliable
<b>Leadership Model</b>	0.963	>0.70	Reliable
<b>Digital Transformation</b>	0.934	>0.70	Reliable

<sup>a</sup> Composite reliability of all variables is >0.7, emphasizing that data reliability is fulfilled.

**Table 5**  
Cronbach's alpha.

Variables	Cronbach's Alpha <sup>a</sup>	Rule of Thumb	Result
<b>Organizational Performance</b>	0.917	>0.7	Reliable
<b>Sales Management Control</b>	0.943	>0.7	Reliable
<b>Organizational Citizenship Behavior</b>	0.948	>0.7	Reliable
<b>Leadership Model</b>	0.96	>0.7	Reliable
<b>Digital Transformation</b>	0.925	>0.7	Reliable

<sup>a</sup> Cronbach's Alpha for all variables is >0.7, emphasizing that data reliability is fulfilled.

**Table 6**  
Cronbach's alpha comparison of original PLS and CLC estimator.

No	Variable	Original PLS	CLC Estimator	Status	Result
1	Organizational Performance	0.917	0.885	PLS Superior	Not fit CLC
2	Sales Management Control	0.943	0.956	CLC Superior	Fit CLC
3	Organizational Citizenship Behavior	0.948	0.96	CLC Superior	Fit CLC
4	Leadership Model	0.96	0.804	PLS Superior	Not fit CLC
5	Digital Transformation	0.925	0.822	PLS Superior	Not fit CLC

Note: CLC: Congeneric Latent Construct; PLS: Partial Least Squares; Cronbach's Alpha for all variables is >0.7, emphasizing that data reliability is fulfilled.

**Table 7**  
Composite reliability comparison of original PLS and CLC estimator.

No	Variable	Original PLS	CLC Estimator	Status	Result
1	Organizational Performance	0.936	0.95	CLC Superior	Fit CLC
2	Sales Management Control	0.951	0.961	CLC Superior	Fit CLC
3	Organizational Citizenship Behavior	0.954	0.835	PLS Superior	Not fit CLC
4	Leadership Model	0.963	0.824	PLS Superior	Not fit CLC
5	Digital Transformation	0.934	0.821	PLS Superior	Not fit CLC

Note: CLC: Congeneric Latent Construct; PLS: Partial Least Squares; Composite reliability of all variables is >0.7, emphasizing that data reliability is fulfilled.

#### 4.2.5. Structural model test (inner model)

Structural model testing was carried out to see the predictive ability of a model and the relationship between latent variables in the model. There are several stages in evaluating the relationship between constructs, and one of them can be done by looking at the relationship from the path coefficient, which describes the proximity of the relationship between constructs. The sign in the path

coefficient must follow the hypothesized theory, and the *t*-test (critical ratio) obtained from the bootstrapping process (resampling method) can be used to see the significance of the path coefficient.

4.2.6. Inner VIF

The first stage was carried out by testing the collinearity of latent variables. The results of the collinearity test demonstrate the Inner VIF values for all combinations of endogenous latent variables and exogenous variables (<5), which are presented in Table 8 below:

According to Table 8, it can be concluded that collinearity was not found in the structural model. Therefore, further analysis was carried out by looking at the significance of the path coefficient of each path that connects the latent variables through the Bootstrapping procedure.

4.2.7. Determination coefficient value

The data analysis results are presented for the first time from the structural model test (inner model) results on the coefficient of determination (R<sup>2</sup>). In determining the coefficient of determination, the value of the requirement should range from 0 to 1, which is divided into three assessment criteria: (1) R<sup>2</sup> of 1–0.75 is categorized as substantial/strong; (2) R<sup>2</sup> of 0.74–0.5 is categorized as moderate; and (3) R<sup>2</sup> of 0.49–0.25 is categorized as weak. The coefficient of determination generated in this study is presented in Table 9 below:

The coefficient of determination results explain the definition of the research construct presented as follows:

1. The influence of the leadership model, organizational member behavior, and sales management control on the sales organization’s digital transformation variable was 0.571 (57.1%). While variables outside this study influenced the remaining 42.9%.
2. The influence of the leadership model, organizational member behavior, sales management control, and sales organization’s digital transformation on the sales organization performance variable was 0.613 (61.3%). In contrast, variables outside the study influenced the remaining 38.7%.

4.3. The direct effect hypothesis

4.3.1. Hypothesis results through *t*-test

Test results of hypotheses 1 to 7 through *t*-test are presented in Table 10. Decision-making regarding rejecting or accepting the hypothesis on 346 data was set with a significance level of 5%. With the *t*-table formula =  $t(\alpha/2; n-k-1) = t(0.05/2; 346-4-1) = (0.025; 341)$ , the *t*-table obtained was 1.9669. By comparing values of *t*-statistics and *t*-table, the decisions are presented as follows:

- 1) If *t*-statistic <1.9669; H<sub>0</sub> is accepted and H<sub>1</sub> is rejected (no effect).
- 2) If *t*-statistic >1.9669; H<sub>0</sub> is rejected and H<sub>1</sub> is accepted (there is influence).

4.3.1.1. Leadership model → digital transformation. There was a positive and significant influence between the Leadership Model and Digital Transformation, indicated by the *t*-statistic > *t*-table (8.880 > 1.9669) and a significance of 0.000 < 0.05. Leadership is the number one factor determining the success of a company’s digital transformation. Because good leadership is needed in a transformation process, a leader must act as an administrator who can bring change, provide inspiration, and deliver motivation so that each member can be actively involved in the digital transformation process. According to Cichosz et al. [107], in addition to creating change, leaders must be able to manage, execute, and organize resources if they want to keep moving in current and future transformations. Leaders supported by members within the organization need to create an open organizational culture through real and impactful actions [108]. Furthermore, Cichosz et al. [107] found that the leadership model will strengthen the involvement of employees of all levels in a digital transformation through training, digital capability development, and empowerment that can encourage them to collaborate across work boundaries. The urgency to develop digital leadership with which a firm can transform its dynamic capabilities and adaptability to change. Digital leadership directly and significantly impacts organizational innovation management since constant innovation in the management center will make leadership dynamic and enable organizations to always carry out continuous learning. Furthermore, innovation in the organization can be accelerated when the leader focuses on market development [21].

**Table 8**  
Inner VIF values.

Variables	Organization Performance	Sales Management Control	Organizational Citizenship Behavior	Leadership Model	Digital Transformation
<b>Organization Performance</b>					
<b>Sales Management Control</b>	2.948				2.888
<b>Organizational Citizenship Behavior</b>	3.576				3.242
<b>Leadership Model</b>	1.826				1.507
<b>Digital Transformation</b>	2.455				

**Table 9**  
Coefficient of determination.

Variables	R-Squared
Organization Performance	0.889
Digital Transformation	0.593

**Table 10**  
Hypothesis results through *t*-test.

Code	Hypothesis	Original Sample	t-statistics	P-values	Conclusions
H1	Leadership Model → Digital Transformation	0.36	8.88	0	Accepted
H2	Organizational Citizenship Behavior (OCB) → Digital Transformation	0.368	5.988	0	Accepted
H3	Sales Management Control → Digital Transformation	0.157	2.432	0.015	Accepted
H4	Leadership Model → Organizational Performance	0.329	9.528	0	Accepted
H5	Organizational Citizenship Behavior (OCB) → Organization Performance	0.201	5.963	0	Accepted
H6	Sales Management Control → Organizational Performance	0.112	4.058	0	Accepted
H7	Digital Transformation → Organizational Performance	0.899	33.779	0	Accepted

**4.3.1.2. Organizational citizenship behavior (OCB) → digital transformation.** The present study found a significant positive effect between Organizational Citizenship Behavior and Digital Transformation variables because of the t-statistic > t-table ( $5.988 > 1.9669$ ) with a significance of  $0.000 < 0.05$ . Research on how organizational citizenship behavior interacts with digital transformation directly is still extremely limited because the most relevant studies were only found regarding the interaction of OCB with Organizational Innovation (OI). Daft [109] found that OI can be identified into three capabilities: product, process, and service. Furthermore, Betz [110] also found that every company will try to embrace those three capabilities in Organizational Innovation. Although Chang et al. [5] found that OCB could not significantly influence OI, the present finding tried to stand the opposite because it found a significant positive effect between OCB and digital transformation that could represent OI.

In many cases, shoppers, retailers, employees, and suppliers encounter challenges when incorporating new technology. Furthermore, instead of benefiting the entire company, technology adoption is seen as non-profitable as it increases financial expenditure, slows down work processes, increases learning costs, and weakens the network. Considering that the fundamental aspect of vendor technology adoption is employee approval, the employee's approval emerges as a problem that ultimately affects delays in technology implementation, not to mention the adaptation of each individual once implementation is carried out. Some employees even find their internal technology is far more user-friendly than the vendor's because retail technology seems clunky and obsolete due to generational dissimilarities. Therefore, stakeholders must overcome adoption barriers in implementing digital transformation for their excellent [111].

**4.3.1.3. Sales management control → digital transformation.** The present study found the effect of Sales Management Control on Digital Transformation variables with t-statistic > t-table ( $2.432 > 1.9669$ ) at a significance of  $0.015 < 0.050$ . Considering that decisions collectively define the sales management control system, the role of the sales manager is critical in ensuring the sales organization's effectiveness so that the target as the leading benchmark can be achieved. Through this study, the relationship between sales management control and digital transformation variables was found because sales management control activities are appropriate for ensuring the success or failure of a digital transformation process, which ultimately affects the effectiveness of a sales organization. According to Kane et al. [112], leaders must develop personal and team abilities and skills to lead effectively by optimizing directions related to beliefs and actions. Therefore, leaders in digital transformation leadership must have the ability to innovate (experiment), execute (empower people), collaborate (across organizational boundaries), inspire (make people follow), and have business judgment skills (make decisions in uncertainty). The present finding strengthens the positive relationship of leaders in giving directions to organizational members in digital transformation leadership, as there was a positive influence between Sales Management Control and Digital Transformation.

**4.3.1.4. Leadership model → organizational performance.** This study found a positive and significant influence between the Leadership Model and the Sales Organization Performance due to the t-statistic > t-table ( $9.528 > 1.9669$ ) with a significance of  $0.000 < 0.05$ . The leadership model significantly impacts management effectiveness and organizational performance [113]. Furthermore, an agile leadership model will ensure company goals are achieved through good planning because agile leaders always learn about customer expectations, market trends, product improvements and innovations, and service optimization. An agile leadership model will motivate team members to continue to be creative and goal-oriented, especially when faced with VUCA (volatility, uncertainty,

complexity, and ambiguity) situations that can come from the organization's internal and external environment [114].

As of this writing, research directly linking the influence of digital leadership on organization performance is still limited because digital leadership is more associated with innovation management. Digital leadership directly and significantly impacts innovation management within an organization because constantly innovative management will make leadership dynamic and enable organizations to learn continuously [21]. In line with the findings in the present study, Li et al. [115] also agreed that innovation within an organization significantly impacts product innovation as a whole. These innovations ultimately affect the position of products in the market and new businesses, which ultimately lead to the performance of the company/organization holistically.

**4.3.1.5. Organizational citizenship behavior (OCB) → organizational performance.** There was a positive and significant influence between the Organizational Citizenship Behavior (OCB) and the Sales Organization Performance through the t-statistic > t-table (5.963 > 1.9669) with a significance of 0.000 < 0.05. These findings are supported by Walz & Niehoff [116], who found that transformational leadership positively relates to OCB and sales productivity. The relationship between OCB and sales productivity in the present study is also consistent with studies by Zacher & Jimmieson [117], who found that OCB positively relates to unit performance in 116 insurance companies. Some sales organizations have seen OCB as variables to consider, especially when a group of workers needs solid teamwork and collaboration. As an indicator of "extra" behavior from employees/members of the organization, OCB will contribute positively to organizational effectiveness. Piercy et al. [8] found that female sales managers' team achieves a significantly higher level of effectiveness in their sales unit due to conscientiousness and courtesy that positively affect the performance of OCB. Therefore, work, when oriented towards team rather than individual success, accompanied by moral conscientiousness and courtesy, could lead to the best OCB [118].

**4.3.1.6. Sales management control → organizational performance.** There was a positive and significant influence between Sales Management Control and Sales Organization Performance because of t-statistic > t-table (4.058 > 1.9669) with a significance of 0.000 < 0.05. Sales management is closely related to how the sales team manages themselves. Managing and controlling a sales organization is difficult because sales management control is closely related to the effectiveness of the sales force and the sales organization itself. Using the right approach, the sales organization can improve its performance in critical activities such as monitoring, directing, evaluating, and rewarding. Several possible new variables, such as adaptive sales behavior, customer relations management, efforts in the sales process, salesperson knowledge, and learning, are also essential activities that increase the effectiveness of a sales organization [119].

**4.3.1.7. Digital transformation → organizational performance.** This study also found a positive and significant influence between Digital Transformation and the Performance of Sales Organizations, where it was found that the value of t-statistic > t-table (33.779 > 1.9669) with a significance of 0.000 < 0.05. An organization's ability in digital transformation is represented by digital competence, which is the foundation for forming company resources in a digital environment. In minimizing the gap between customer needs and innovation, digital competence must be implemented by increasing the company's ability to use flexible digital infrastructure. Besides, digital integration of human resources and strengthening of digital management to improve company performance must also be carried out [37]. Digitalization encompasses the company's organizational and operational activities to create a collaborative atmosphere, ignite agile business processes, facilitate intelligent management decision-making, and develop an integrated industrial ecosystem. Because digital transformation is a company transformation by developing new business models to achieve added value, companies must implement a new business architecture using information technology. Thus, the company's activities will be transformative and lead to positive changes in business processes. In improving company performance, digital transformation must bring changes in strategic business models, including entering new markets or stepping back from current markets by considering market needs.

#### 4.3.2. Hypothesis test results of indirect effect

A comparison of the t-statistic with the t-table was made to determine the effect between variables obtained through the bootstrapping stage. Decision-making in rejecting and accepting hypotheses at a 5% level was done by the formula:  $t\text{-table} = t(\alpha/2; n-k-1) = t(0.05/2; 346-4-1) = (0.025; 341)$ . Therefore, the t-statistic comparisons are presented in Table 11 below:

**4.3.2.1. Leadership model → digital transformation → organization performance.** There was a positive and significant influence between the Leadership Model and the Performance of Sales Organizations through Digital Transformation variables as the first mediator as it

**Table 11**  
Bootstrapping result.

Code	Hypothesis	Original Sample	t-statistics <sup>a</sup>	P-values	Conclusions
H8	Leadership Model → Digital Transformation → Organization Performance	0.331	5.982	0	Accepted
H9	Organizational Citizenship Behavior → Digital Transformation → Organization Performance	0.141	2.462	0.014	Accepted
H10	Sales Management Control → Digital Transformation → Organization Performance	0.323	7.805	0	Accepted

<sup>a</sup> t-statistic > 1.9669, therefore H1 is accepted.

was found  $t\text{-statistic} > t\text{-table}$  ( $5.982 > 1.9669$ ) and a significance of  $0.000 < 0.050$ . Performing a suitable leadership model, be it transactional leadership, transformational leadership, digital leadership, or agile leadership, can ensure the success of the digital transformation process that will positively impact the sales organization's performance. The study by Chen et al. [120] found that the complex mechanisms of transformational leadership can benefit or hinder company performance. Furthermore, they found that the curvilinear mediating role of innovation influences the positive or negative effects of leadership on company performance. Regarding leadership contingency, they also found that when a company operates in an environment with high uncertainty of technology and low-demand uncertainty, leadership harms exploratory innovation and overall company performance.

According to Bassellier et al. [121], top management must possess a leadership model that understands the strengths and weaknesses of digital technology and knows how it can positively impact organizational performance. The study by Kane et al. [98] with Deloitte of more than 4800 business executives, managers, and analysts in 129 countries and 27 industries of various sizes found that at least one person or group should lead the digital transformation agenda in an organization or company. Two-thirds of respondents stated that the leader was at the C-suite or vice president level. Interestingly, 34% of respondents stated that they have at least one executive as a role model in digital leadership. Therefore, digital leadership in organizations, especially sales organizations, is vital in holistically influencing the success of digital transformation and organizational performance. According to Warner & Wäger [122], a leader in digital transformation provides concrete examples of how digital transformation can add value to the company. Leaders who do not have a digital concept are believed not to have a good impact on the envisioned digitization. These thoughts were reinforced by Kane et al. [98] in an interview with Disney senior president Steve Milovich, who stated that "a leader in digital leadership must be a leader who is influential in the physical, virtual, and virtual worlds."

In terms of skills, digital leadership models need careful thought regarding how digital transformation can make organizational members skilled. These skills are important tools for companies to develop digital strategies and understand digital trends/technologies (universally and specifically). The skills leaders possess will usually shine when the knowledge is transferred to members of the organization. Leaders with adequate capabilities in processing the attributes of digital transformation are certainly more able to win the trust of organizational members, which in turn creates a work atmosphere that truly believes in digitization. Kane et al. [98] found that only some executives from Mondelez International deeply understand digital technology. Lack of resources with experience as a digital native often makes companies lack confidence in transforming. Therefore, a digitally talented workforce, especially those at leadership levels, is needed.

The quality of a leader is determined by how much experience the leader has. In many cases, leaders tend to be rigid, hesitant about modernization, and comfortable with conventional concepts that have long been adopted. Therefore, a leader with rich experience and willingness to digitally integrate with organizational members is a must for digital transformation to run smoothly. A study by Kane et al. [98] found that the participation of top management in digital communication, such as "commenting" on a post by employees, can reflect the willingness of leaders to want to "mingle" in the digitization of the basic class. Things that are digital and that unite top management with members of the organization are believed to increase internal bonding within the organization to create a digitized work environment. Furthermore, the active role of top management in this leadership model strengthens digital commitment and shows the support of a leader to organizational members.

In terms of the responsiveness of a leader in expressing his leadership model, a study by Decady Guijarro & Bourgeault [123] found that a willingness to listen and learn from the internal organizational environment is the preferred form of leadership. A trusted leader needs to be able to listen to new ideas, filter talents, and rejuvenate people's undercover capacities. This capability has a very positive impact on digital transformation's success, ultimately improving organizational performance. These findings were strengthened by Beer et al. [124], who found that when top management wanted to listen to members of the organization through an internal platform, the company's internal coordination and integration became more effective. Top management can then determine what is happening, what advantages are hyping, and what actors should get attention. Integration with sincere intentions is facilitated by digitization, and in the end, every member of the organization within the company feels involved and is willing to learn from each other to create a peaceful and productive organizational atmosphere. The presence of a nurturing leadership model has a very positive impact on the fate of digital transformation in the long term. In addition, organizational performance is an aggregate value of how digital transformation is viewed by top management and members of the organization. Therefore, leaders must be willing to express their ideas, collect ideas, listen to feedback, and learn together through digitization being pursued. Furthermore, the existence and contribution of all parties involved are valuable to achieving the company's goals when no member feels left out.

**4.3.2.2. Organizational citizenship behavior → digital transformation → organization performance.** This present study found a significant positive effect between Organizational Citizenship Behavior and Sales Organization Performance through the Digital Transformation variable as a mediator, with  $t\text{-statistic} > t\text{-table}$  ( $2.462 > 1.9669$ ) at a significance of  $0.014 < 0.050$ . OCB, which represents the social connections within the organization, emanates from the voluntary behavior of members within the organization. OCB can be noticed more when organizational members are willing to work beyond the limits of work responsibilities for more significant organizational goals. Organizations with members implementing high OCB values will be more likely to succeed in the digital transformation, ultimately affecting the sales organization's performance. In addition, OCB was also found to positively impact a company's ability to construct open innovation.

Therefore, executives at the Indigenous Peoples Production Organizations (IPPO) as policymakers in the public sector believe that the transformation mechanisms between organizational citizenship behavior, knowledge sharing, and organizational innovation are mutually influential. However, Chang et al. [5] found that in order to achieve more excellent performance on innovation, the system within IPPO still lacks information and a learning technology platform to facilitate knowledge diffusion/dissemination. Technology

and social/community relations develop mutually and are inseparable. According to the actor-network theory by Latour [125], social life cannot be reduced to the 'purely' human or the 'purely' technological. Making goods means connecting the humans and non-humans represented by society and technology. The existence of a network that connects humans and non-human entities makes them connected [3].

According to Goodman et al. [126], a conducive organizational culture is important for an organization to progress rapidly. Furthermore, companies ready to engage in digital transformation must have a positive work environment and organizational behavior that wants to grow, develop, and change. A study by Kane et al. [98] found that organizational citizenship behavior is shaped by how leaders manage organizational members. Then, these regulations must be seen as something that liberates the members. If members of the organization voluntarily have respect for their facilitative environment, then the organizational citizenship behavior envisioned by a company will be achieved. Organizational citizenship behavior that follows the company's aspirations, according to Polonsky & Rosenberger [127], will enable companies to be more innovative and have a tactical mindset in weighing opportunities and risks. In addition, habits that are continuously honed in a positive work environment will train each organization member to position themselves in the company independently.

A professor at EDHEC Business School, Mohamed-Hédi Charki, with expertise on the implications of corporate social networks, stated that a work culture capable of forming organizational citizenship behavior would make it easier for organizational members to prefer collaboration and creativity [98]. Given that technology is a tool that enables work to be carried out easily, companies should see technology as a promising solution so that positive behavior among organizational members will be constructed. Therefore, the work culture that accepts digitization will have a domino effect on organizational citizenship behavior wanting to succeed in implementing digital transformation within the company.

A study by Hambrick & Mason [75] stated that company leaders have a big role in all changes and decisions. Therefore, when a company wants to create specific organizational citizenship behavior, top management must be willing to be part of creating the basic culture since organizational members will usually see how role models provide examples first. Given that top management has the most strategic position in the company [128], they must have a basic concept of how organizational citizenship behavior will see digital transformation in the long run. They must look into the various elements ingrained in the personality of organizational members, such as beliefs in digitization values, background capabilities, and daily attitudes towards emerging digitization trends.

The importance of leaders being able to identify compatibility between organizational members and digital transformation is reinforced by Hambrick [84], who stated that decision-makers have a significant influence in formulating company strategy at the organizational level to the company level, including how the company's strategy faces global competition. According to Choi [129], organizational citizenship behavior influences a company's competitiveness by formulating business strategies and risk analysis. Apart from that, work culture will determine how much the company can innovate. The study by Shepherd et al. [130] found that when organizational behavior sees digital transformation as an opportunity, organizational performance can be increasingly boosted by recognizing new business opportunities, sharpening strategic changes, accurate risk-taking, and business model innovation.

These elements are then applied in the daily lives of organizational members to create an organizational culture. When digital transformation enters the work culture, the response from the characteristics and behavior of organizational members, including company leaders, will directly influence organizational performance. Therefore, the role of the leader, the nature of leadership, and the characteristics of the company's organization in seeing digitization will directly influence the adoption of digital transformation and the company's ability to transform as a whole.

**4.3.2.3. Sales management control → digital transformation → organization performance.** There was a significant influence between the Sales Management Control and the Sales Organization Performance through the Digital Transformation variable as the first mediator, as it was found that  $t\text{-statistic} > t\text{-table}$  ( $7.805 > 1.9669$ ) at a significance of  $0.000 < 0.050$ . The digital transformation strategy has a cross-functional character and needs to be aligned with other functional and operational strategies within the same organization. Because digital transformation strategies can embrace a variety of strategies, at the same time, complex coordination efforts are required to oversee the digital transformation process.

Thus, several activities focusing on monitoring, directing, evaluating, and rewarding will experience efficiency because digitalization has touched their sales organization's sales management control aspect. Knowledge-based management facilitates sales innovation. Besides, the knowledge generated can be transferred and shared with others. Shared knowledge can improve the skills and abilities of salespeople, accelerate the dissemination of sales information, and stimulate salesperson knowledge. To produce something new and breakthrough in the sales process, combining various sales ideas to improve customer experience is extremely important [131].

The study by Kane et al. [98] in collaboration with Deloitte University on 4800 business executives, managers, and analysts in 129 countries found that companies view risks differently between grown organizations and organizations that have just recently entered into digital transformation. Risk is an organization's biggest fear. Furthermore, they found that 36% of respondents saw risk as a weakness often avoided. In sales management control toward risk management, a culture that is not hesitant to take risks is one of the biggest challenges for an organization to be successful in digital transformation. All members of the organization, especially leaders, play an important role in how the company regards risk management. A study by Lahiri et al. [132] argued that executives must change their mindset regarding company risk management. Leaders must be equally confident when formulating a strategy and when the strategy eventually fails. These findings are supported by Deloitte's interview with the CEO of Cisco, who believes that the willingness to admit failure does not mean anything but excellence [98].

Sales management control is an action by the company to produce satisfactory performance through transparency. A study by



Agnihotri et al. [133] found that the reluctance of one company, especially the sales management, to have direct contact with customers directly or indirectly increases when sales management control is not accompanied by exemplary digital transformation. Ultimately, companies will experience a void of concrete knowledge regarding market conditions and consumer demand. Therefore, if digital transformation is believed to maximize company performance, it will positively impact organizational performance. This transparency allows organizational members to participate and deliver services to customers on time actively.

A study by Hunter & Perreault [134] found that work processes by salespeople with the help of technology have been proven to maximize company efficiency and effectiveness. Besides, in sales management control, technology can shape how the company views the market: technology is oriented to the sales force's work processes; technology is oriented to customer needs; and technology is oriented towards building the company's image. Sales management control with an orientation towards the work processes of company personnel will always look for ways the company works by consistently managing workflows following market dynamics. A clear concept of management control influences the adoption of digital transformation when companies experience obstacles in managing strategy and coordinating between organizational members. Thus, the digital transformation that has been adopted can be beneficial in creating company efficiency and effectiveness.

Some studies [135–137] have found that digitization, which adopts automation, remarkably impacts company interactions with customers through the buying and selling process. In terms of company effectiveness and efficiency, good sales management control can adopt technology so that digital transformation can be used to the fullest. Valdivieso de Uster [135], who collaborated with the McKinsey Global Institute, found that 40% of tasks within the traditional sales function can now be automated. Automated sales processes with the adoption of digitization enable customers to find products or services accurately. That way, customer needs can be immediately met with just a simple deal. This situation then raises challenges related to privacy and security when having to deal with technology-oriented customer needs.

According to Kiron et al. [138], how a company handles privacy and security is determined by the basis of its digital strategy. Companies that do not see privacy and security as part of customer-oriented sales management will harm the safety of clients and the business as a whole. In the long term, customer needs are neglected, causing organizational members to be unable to win customer trust. A study by Paiola & Gebauer [139] stated that a company's digital strategy is fundamental in sales management oriented toward customer needs. Transparency regarding how organizational members process customer information determines the extent of the company's commitment to dealing with its customers in the long term. Data sourced from customers is a tool that makes it easier for internal companies to measure and determine systematic workflows. Organization members will have difficulty providing quality services if the company is blind about what, who, and how customers behave. Therefore, a consolidated strategy needs to be implemented by organizational members in sales management to answer customer needs, implement digital resilience, simplify business processes, ensure accurate management oversight, and provide transparency in the company's interactions with customers.

Sales management control, which adopts digital transformation to build a company image, is represented by how the company collects, processes, and distributes data, which is incorporated into a customer relationship management system. A study by Ranganathan & Grandon [140] found that applying digital sales tools and technology will be maximized if companies increase customer privacy and security awareness. Such transparency will unite customers and organizational members on a common perception of how data is disseminated.

#### 4.4. Prospects, challenges, and solutions Indonesia's FMCG digital transformation

The FMCG market in Indonesia has a bright future if it is targeted and developed well. An Indonesian Internet Service Providers Association survey found 215.63 million active Internet users in Indonesia during 2022–23 [141]. This figure equals 78.19% of Indonesia's population (275.77 million). The positive trend of internet users is increasing annually, and this phenomenon is correlated with the high level of community activity in fulfilling basic needs, which has shifted from offline retailers to online stores provided by various e-commerce platforms and websites. According to Adhiat [142], there were 449 million total active visits in Indonesia's five leading e-commerce sites (Tokopedia, Shoppe, Lazada, Blibli, and Bukalapak) at the end of the fourth quarter of 2022. This high activity is in line with the publication of e-Commerce Statistics 2022, which found that there were 2.8 million e-Commerce businesses in Indonesia in 2021, an increase from the total e-Commerce businesses in 2020 (2.3 million).

According to the Indonesian Financial Services Authority (OJK) [143], the high level of public participation in online shopping is due to several attributes that favor many customers: practicality, varied choices, and ease of payment. Customers who shop online frankly like the practicality offered by applicators thanks to digitization. This convenience indeed helps people save time finding goods according to their needs. In terms of choice, online shopping offers a variety of goods consisting of various stores that people are free to choose from. The diverse types and quality of goods at competitive prices give people the freedom to choose and fulfill their desires. The ease of obtaining these goods is enhanced by the concise payment types available because the online buying and selling process can cover distances beyond offline coverage. Online shopping allows someone to complete cashless transactions without worrying about changes.

In the business domain, online shopping greatly contributes to the Indonesian economy. Bank Indonesia reported that the value of Indonesian e-commerce transactions throughout 2022 has reached IDR 476.3 trillion [144]. As an economic sector that puts forward the concept of digitization, online business has significantly impacted how each party behaves. A study by Ghemawat [145] found that digital transformation on the seller's side has sparked the growth of various players in the FMCG industry, and it happens mostly due to the convenience of internet networks, capital that seems flexible, and the flexibility of stores to do business.

All the conveniences offered by digital transformation directly positively affect Indonesia's micro and macro economy, which comes from transaction taxes, high people's purchasing power, and money circulation. On the other hand, sales organizations are

increasingly able to understand who their customers are because digitization allows them to collect, process, and distribute data voluntarily provided by customers. The customer data available to the sales team, as a prospect, depends on how the data is positioned. A study by Loebbecke & Picot found [146] that data utilization is only optimal if the integration between data functions properly, considering that data is generally counterproductive when it stands alone. In addition, data integration must also be balanced with an efficient and strong data security system.

Companies, especially sales organizations, must be able to map and interpret high-quality data to provide significant benefits for all company activities, especially in risk management, increasing revenue, digital resilience, and stability in market competition. If a company is unsure about maximizing data, top management and organization members can improve internal capabilities with various training to analyze the market, map customer characteristics, and predict market competition. High-quality and integrated data, if processed properly, will provide an overview for companies on how to develop a systematic strategy in digital transformation. Regarding data management, companies must act professionally to maintain the company's competitiveness by assuring data privacy and security elements. How the company sees the customer determines the level of loyalty the company receives. Therefore, data management is highly correlated with risk management and determined by how companies move and interact with customers in data management: search, collection, and processing.

According to Zairi [147], companies focusing on improving internal quality and customer experience must understand that integration between humans and technology is absolute. Top management must understand that company digitization must create harmony, where members of the organization and technology between departments are streamlined according to company strategy. Steward et al. [148] stated that top management must explore the potential of creating digital ecosystems in all aspects and working areas of organizational members. Thus, companies can maximize the increase in the number of customers, work processes, profits, data analytics, organizational member capabilities, customer service, and privacy and security for customers and companies. Ultimately, all integration within the ecosystem will simplify the work processes of organizational members for the internal company and their relationships with customers and business partners.

Most organizations that will or have already adopted digital transformation will always encounter challenges despite the promising potential of digitization. Through interviews with respondents, the present study found that the three challenges most frequently faced by sales organizations in FMCG Indonesia in digital transformation are mastery of technology, level of security, company commitment, top management support, and governance. In terms of mastering technology, top management is responsible for ensuring that employees can know, operate, and explore the tools used internally in the company related to digital transformation. Claver et al. [149] stated that mastery of technology and the ability of organizational members to accept change are the most important elements for companies to be successful in digital transformation. Top management must pay attention to how organizational members perform gradually while continuing to monitor the indicators used to measure digital transformation adoption.

Following previous studies, the importance of organizational members' skills in implementing digitization-oriented work processes is reinforced by Blumentritt & Johnston [150]. They found that the ability of organizational members to translate how digital technology is applied in internal activities determines business activities. Even for companies that are still green in digital transformation, the skills possessed by organizational members are very critical. Therefore, it could be said that an organization must carefully prepare its internal digitization capabilities to become the cornerstone of the next stage. Otherwise, the company's work process will have no direction, and all activities will appear to be just trial and error.

The study by Kane et al. [98], together with Deloitte University on 4800 top management in 129 countries, found that almost 60% of respondents believed that the ability to create concepts together with the ability to adapt quickly to change and agility in embracing digitization are critical skills in digital transformation. To be able to execute facilitated digital transformation, organizational members must have the ability to be truly prepared to face digital trends. Preparation can be done through training for all organization members or, even more specifically, for those who work directly in connection with digital transformation. An interview by Deloitte University in 2015 with Steve Milovich from The Walt Disney Corporation found that the training for organizational members can be done via video, accessed anywhere. Since many media can be used as learning tools in the current digital era, training has a wider reach than just in the classroom [98].

As important as mastering technology, the level of security is also a critical element in digital transformation. The level of security is influenced by the leadership's ability to see security as an important aspect of winning customer trust. A study by Kane [98] found that almost 80% of respondents desire leaders with expertise in digitization. Besides that, technology-savvy leaders are also believed to have a high sense of the importance of privacy and security. FMCG in Indonesia is increasingly turning to the five e-commerce giants, such as Tokopedia, Shopee, Lazada, Bukalapak, and Blibli. The high enthusiasm of sales organizations for e-commerce is due to the many conveniences offered. Tokopedia, for example, with the "Served by Tokopedia" service, sellers only need to leave the product in Tokopedia's warehouse. Everything related to sales, order processing, and delivery will be assisted by the Tokopedia team, which means sellers can monitor it from anywhere. Unfortunately, when dealing with e-commerce, the sales organization as a seller does not have full control over how customer data and privacy are regulated.

Given that the level of security is related to consumer loyalty, several FMCGs selling their products through Tokopedia were positively affected by the uproar over the leak of 91.7 million Tokopedia user data traded on the black market in 2020. This data leak directly has reduced the credibility of how Tokopedia managed user data. Simultaneously, the decision of the FMCG leadership determines how the company's image will be presented if the company joins in transacting in such troublesome e-commerce. According to Adler & Kwon [151], trust is a strong social capital involving obligations, expectations, and trustworthiness. A sales organization's inability to meet its users' expectations, particularly regarding privacy and security, will reduce consumer loyalty and slow the company's ability to acquire new customers.

Digital transformation as a collective project within the company requires the involvement of all organization members.

Engagement is an important component in the execution of digital transformation, especially in preparing and implementing strategies. The study by Gioia et al. [152] found that leadership by top managers can shape culture. Leaders must understand that the involvement of all elements in the sales organization is needed so that the company can face the challenges of digital competition. Therefore, the role of the leader requires long-term consistency, represented by the company's commitment. Bearing in mind that top management has a full stake in shaping culture at the individual and organizational levels, top management must always be able to project digital transformation into the company's daily activities.

A study by Zhang et al. [71] found that corporate commitment and top management's active participation in digital transformation will bring significant organizational changes. These findings are supported by De Roeck et al. [153], who stated that organizational members view company commitment as the certainty that gives them a pleasing consistency that the digital transformation being carried out has a future. Thus, the tendency for all organization members to participate simultaneously will increase. The company's ability to demonstrate a long-term commitment to linear digital transformation will win the members' commitment.

Bearing in mind that participation in digital transformation is also dynamic, top management must be able to deal with changes in behavior that generate tension and fear. In terms of the ability to deal with psychological challenges, top management needs to provide transparency regarding how the company views organizational members within the company. Organizational members will usually respect company commitments when attributes such as open communication, readiness for current challenges, achievements accomplished, and business process progress are exhibited in the daily activities of organizational members [154]. Openness in communicating the [155]company's internal state to members of the organization, according to Rousseau & Tijoriwala [146], played a very important role in increasing leaders' credibility. Wrede et al. [156] stated that the behavior of top management in daily activities measures the trust and commitment of the company. Therefore, the company's commitment shown by top management greatly promotes corporate culture and influences employees' perspectives in the long run.

Market competition in the FMCG industry requires all organization members to have competitive abilities. The study by Wrede et al. [156] found that digitization has changed the level of competition between companies from the manufacturing sector to digital products and services. Thus, FMCG companies are seriously challenged to continue to grow in providing their products with the help of digital technology. Given that digital technology enables consumers to access their needs widely through online platforms, top management support that can increase the competitiveness of organizational members is urgently required. A study by Rust & Lemon [157] suggested that companies must adjust how consumers behave in the digital market through specific adjustments to all elements of the company.

In general, top management support to increase the competitiveness of organizational members can be done in stages: the ability to collect, process, and interpret data; the ability to use digital technology to transform business processes; the ability to adopt digital business logic; ability in innovation management; ability to explore big data that is useful for market predictions; analytical data processing capabilities that can provide an overview regarding the effects of digital advertising; and digital-based human resource management [158]. Popov et al. [159] found that ideas will come through collaborative efforts between people with highly diversified backgrounds. More than 80% of respondents in Kane et al. [98] studies found that collaborative workplace environments tend to foster innovation. These activities then accelerate organizational members in implementing digitization inside and outside the company. Considering that the formation of culture and facilities in digital transformation requires qualified resources, the presence of support from top management is highly expected to create an environment that stimulates innovation.

Companies must see that digital transformation, although mostly aimed at simplification, also requires governance and maintenance. Governance is often associated with sales management control, where top management regulates how the company, top management, and organizational members control all internal company activities. Apart from that, how all internal company activities are conveyed to the public is also included. Good governance is reflected in how customers view products and services. Therefore, all company actions must be in a measurable and structured system, making it easier for top management and key people to manage everything satisfactorily. A study by Hofmann & Jaeger-Erben [160] found that digital strategy must be linear with corporate governance. In this way, the company's internal activities can be understood and followed by every organization member, such as individual and team workflows, individual and team performance, and the latest developments in digital transformation. When all strategy and project execution are carried out with good integration, digital transformation can be expected to produce the best results.

Regarding how the work of a digital sales organization is managed, companies in their transformation must be willing to invite all members of the organization to change. The study by Wengler et al. [161] found that people, processes, and data are the main success factors of digital transformation. All of these attributes can be integrated with good governance by top management. Otherwise, the company will be stuck in the glooms of its past work. Top management must be able to organize, modify, and create new ways so that corporate governance with digitization can continue to be a process of change. Hopefully, this exercise can encourage organizational members to participate actively and work productively.

The most obvious implication of technology adoption can be seen in the refinement of the working process's overall quality. Such a fresh strategy by sales directors can impact business processes and work culture in the organization holistically. Furthermore, sales directors will efficiently encourage their organizations to participate in digitalization and achieve their goals in improving the company's internal business processes through three strategies: 1) leadership models that can bring change, provide inspiration, and deliver motivation, 2) organizational citizenship behavior that prioritizes solid teamwork and collaboration, and 3) sales management control that consistently provides critical activities to improve performance such as monitoring, directing, evaluating, and rewarding. Mastership of these three variables by top management in Indonesia's FMCG companies then matures the positive prospect of the digital ecosystem in all aspects of their work. As a result, the advantage of a digital culture at work will overhaul conventional activities that formerly provided false comfort.

## 5. Conclusions

Three hypotheses with the variables of leadership models, organizational citizenship behavior (OCB), and sales management control, had proven to affect digital transformation positively. According to Sow & Aborbie [28], leadership models influence transformative organizational projects, while MacKenzie & Wajcman [4] revealed that OCB is an essential antecedent for organizational innovation. Previous studies [4,28] did not reveal a direct interaction between sales management control and digital transformation. However, the present study found a positive influence between these variables on the digital transformation process. Proper sales management control activities are expected to ensure the success of the digital transformation process, which can later affect the sales organization's effectiveness.

In four hypotheses where sales organization performance was set as the dependent variable, it was found that the leadership model influenced organization performance with digital transformation as a mediator. Therefore, performing a suitable leadership model, be it transactional leadership, transformational leadership, digital leadership, or agile leadership, can ensure the success of the digital transformation process [32]. The present study findings are supported by Bass & Riggio [24], who found that transactional leadership strongly influences organizational performance through approaches involving feedback, expectations, and rewards. Furthermore, a study by Walz & Niehoff [116] showed that transformational leadership is positively related to OCB and sales productivity. Moreover, successful transformational leadership generates new variables such as adaptive sales behavior, customer relationship management, efforts in the sales process, knowledge of salespeople, and learning, which are also essential activities that increase the effectiveness of sales organizations [119]. Digital competence will ultimately increase a company's ability to use a flexible digital infrastructure. As a result, integrating digital resources can strengthen digital management to improve the company's performance holistically [25].

Finally, the other three hypotheses, with variables of sales management control, organizational citizenship behavior, and leadership model, affected organization performance through digital transformation as a mediating variable. Top management in Indonesia's FMCG companies must build the potential of digital ecosystems in all aspects of work so that they can attract unexplored customers, simplify work processes, increase profit, accomplish data analytics, improve organizational member capabilities, deliver better customer service, and secure privacy and security for customers and companies. On the other hand, sales organizations must be able to collect, process, and distribute data to understand better who their customers and competitors are. Improvement of internal capabilities such as training in market analysis, mapping customer characteristics, and predicting market competition, if properly mastered, will provide an outline for companies in developing a systematic strategy in digital transformation. Market competition in the FMCG industry requires all organization members to have competitive abilities. Therefore, FMCG companies are challenged to continue to grow in their work and maximize their activities with the support of digital technology.

Leaders in organizations who carry out digital transformation must ensure that their organizations can respond to disruptions related to the use of digital technology [38]. For an organization to achieve outstanding innovation performance, leaders need to facilitate the diffusion/dissemination of knowledge [5]. Furthermore, knowledge-based control within the organization can yield sales innovations, leading salespeople to generate and transfer their knowledge [131].

### Data availability statement

Data included in article/supplementary material/referenced in article.

### CRediT authorship contribution statement

**Adhitya Rendra Kusuma:** Writing – review & editing, Writing – original draft, Visualization, Software, Project administration, Funding acquisition, Formal analysis, Data curation. **Rizal Syarif:** Supervision, Investigation, Conceptualization. **Anggraini Sukmawati:** Writing – review & editing, Writing – original draft, Methodology, Formal analysis, Conceptualization. **Arry Ekananta:** Visualization, Validation, Resources, Project administration, Data curation.

### Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

### Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.heliyon.2024.e27017>.

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