

## Strategy to Increase Digital Capability of PT. Telkomsel Employees

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### ABSTRACT

Telkomsel changed from a telecommunications company to digital telecommunications so that it can continue to stay in business and provide services to customers in accordance with current and future conditions. Telkomsel carried out a transformation covering various aspects starting from People, Process and Technology. In the process aspect, Telkomsel is now starting to form a new operational model that is designed based on customer centricity. Furthermore, on the technological aspect, Telkomsel has begun to carry out internal digitization through the use of technology that makes all processes possible quickly and efficiently. In the last aspect which is also one of the most important aspects is people. Telkomsel encourages its employees to adapt to the culture, ways of working and capabilities needed in the digital era. Telkomsel considers that employees' digital capabilities are important in responding to business changes. This research focuses on the People aspect, namely increasing employees' digital capabilities. This study aims to determine the digital capability readiness of Telkomsel employees in facing the company's digital transformation, find out the right strategy to meet capability needs and improve employee digital capabilities.

The data collection method was carried out through observation, surveys and interviews with 130 employees in the Papua and Maluku regional Telkomsel. Based on the results of data processing, it was found that there were 130 survey data for position bands I, II, III and IV, as well as 10 interview data for position bands III and IV. Based on the research results from the two stages of analysis, namely descriptive analysis of digital culture variables and digital attitude variables. With the results of the observations that have been made, namely employees have potential capabilities that support the transformation process to face industry 4.0 opportunities. PT. Telkomsel in the Papua and Maluku Regions needs improvement towards digital attitudes, with a strategy of fulfilling and increasing digital capabilities to be able to support digital transformation, namely: 1) Maximizing programs from the company for the development of employee digital culture and skills. 2) Creating cultural and digital skills development activities for employees.

## INTRODUCTION

PT Telkomsel is the first GSM cellular telecommunications operator in Indonesia with HALO card postpaid service which was launched on May 26, 1995. Currently, to provide voice and data services using more than 233,000 units of Base Transceiver Stations (BTS) throughout the country, making 95% of the country's population covered by Telkomsel's 4G services. This information is obtained by accessing <https://www.telkomsel.com/about-us/inovasi/jaringan-telekomunikasi-berteknologi> websites. The signal coverage for Telkomsel services reaches remote areas, outer islands, to the country's border areas and this shows that Telkomsel is the most Indonesian cellular operator.

The application of the latest and most updated cellular technology has become part of Telkomsel (Pérez J. C., 2021). After being the first in presenting the first 2G, 3G and 4G LTE networks in Indonesia. Currently, Telkomsel is the first to present 5G services in Indonesia as an effort to succeed the government's initiative towards Making Indonesia 4.0 as a form of the country's readiness to face the Industrial Revolution 4.0 (Suwendra, I. W. (2018). ).

In an effort to accelerate the formation of Indonesia's digital society, Telkomsel also builds a digital ecosystem through the development of DNA (Device-Network-Application) which encourages the younger generation to take advantage of the role of technology positively and lead Indonesia towards a cellular technology-based society economy (Zomer T. N., 2020). LKOMSEL has a vision to become a trusted provider of world-class mobile digital lifestyle services and solutions and has a mission to provide digital mobile services and solutions that exceed user expectations, create more value for shareholders and support the nation's economic growth.

Telkomsel is led by a Board of Directors consisting of 8 (eight) Directors, with the following composition of the Board of Directors:

1. President Director : Hendri Mulya Syam
2. Director of Sales : Adiwinahyu Basuki Sigit
3. Director of Marketing : Derrick Heng Tze Meng
4. Director of Planning and Transformation : Wong Soon Nam
5. Director of Information Technology : Bharat Alva
6. Director of Network : Nugroho
7. Director of Finance : Mohamad Ramzy
8. Director of Human Capital Management : R Muharam Perbawamukti

Digital capabilities in industry 4.0 are crucial considering that the industrial revolution 4.0 which is synonymous with digitalization and automation will create jobs related to information technology (Syarif U. &, 2019). Telkomsel as an ICT company is closely related to work related to information technology and is currently transforming to digital telecommunications, it is very necessary to improve digital capabilities in order to survive and compete in the industrial era 4.0. Meanwhile, there is still a gap related to the fulfillment of employee digital capabilities at Telkomsel.

## METHODS

This study uses a quantitative approach (Quantitative Research) based on data collection techniques, according to (Sugiyono., 2014) in (Gani, A. (2014). ), research is a way of obtaining data with a specific purpose. Quantitative method is research conducted by collecting, processing, and analyzing data in the form of numbers to obtain the necessary information, in this study is information about the digital transformation of PT Telekomunikasi Selular Papua and Maluku Regional with a questionnaire to the sample population studied.

## RESULTS AND DISCUSSION

To explain the respondents' responses to the research variables, an analysis of the answers given by the respondents was carried out relating to the statements of each variable (Zhu Y. W., 2019). The statement consists of 43 items with 27 items for digital culture variables and 16 items for digital attitude variables (Peter M. K., 2020). The researcher will describe each statement item separately in subvariables and from this analysis it is known that the number of respondents who chose certain alternative answers and the highest to lowest average scores. To explain respondents'

responses to the sub-variables, the researcher used the threshold value previously used by (Sinaga, 2017) in determining the digital master category of an organization. Measuring instrument for respondents' responses to research variables is:

Feedback Value

Description

< 4.30 Not yet Digital Master

≥ 4.30 Digital Masters

### Descriptive Analysis of Digital Culture Variables

The following are the results of research on employee digital culture variables at PT Telkomsel Regional Papua Maluku based on the results of questionnaire distribution (Machado, C., Almström, P., Winroth, M., & Öberg, A. (2021).):

1. Respondents' Responses to Anticipation Sub-Variables The results of research on employee anticipation sub-variables at PT Telkomsel regional Papua Maluku are listed in table 1 and table 2 based on the results of questionnaire distribution:

**Table 1. Respondents' Responses to Anticipation Sub-Variables**

Sub-Variables	Statement Item	Value							Sum	Average
		7	6	5	4	3	2	1		
Anticipation	1 . I develop myself all the time	18	27	34	16	12	17	6	598	4,6
	2 . I was able to adapt	38	32	11	17	9	11	12	642	4,93
	3 . I thought of some considerations in making a decision	36	21	36	8	8	13	8	648	4,98
	4 . I have a long-term view	35	9	36	15	10	9	16	603	4,63
Average Anticipation									4,78	Digital Master

The average anticipation value is 4.78 with digital master status. According to the HC Telkomsel Regional Papua Maluku team, this is because the Telkomsel Regional Papua Maluku consistently encourages employees to develop themselves through training and official assignments regarding leadership. With training and assignments related to leadership, employees are faced with conditions to receive new knowledge and practice how to make decisions with various considerations (Royyana, A. (2018).). The condition of the Papua Maluku Regional Telkomsel itself has had many changes. These changes cover the technology side for daily operations, job desk changes, leadership changes, and organizational transformation so that employees are used to change.

In this study, calculations were also carried out on the survey results for each position band with the results as shown in table 2 below.

**Table 2 Respondents' Responses to Anticipation Sub-Variables per Position Band**

Sub-Variable	Average Position Band Value				Information
	I	II	III	IV	

Anticipation	5,61	4,81	4,01	6,25	Digital Master
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From table 2 above, it can be seen that all position bands have ready anticipation conditions or digital masters with the highest value in position band IV, which is at the General Manager level, while the lowest value in position I band is at the Staff level.

2. Respondents' Responses to the Creativity Sub-Variable The results of research on employee creativity sub-variables at PT Telkomsel Papua Maluku are listed in table 4.7 and table 3 based on the results of questionnaire distribution:

**Table 3 Respondents' Responses to the Creativity Sub-Variables**

1. Sub-Variable	2. Statement Item	3. Value							4. sum	5. Average
		6.7	7.6	8.5	9.4	10.	11.	12.		
13. Kreativitas	14. 5 . I was able to see things in a new way	15. 3	16. 4	17. 2	18. 7	19. 3	20. 2	21.	22. 615	23. 4,73
	24. 6 . I am able to find hidden patterns	25. 37	26. 9	27. 8	28. 0	29. 1	30.	31. 0	32. 656	33. 5,04
	4. 7 . I can connect phenomenon that not mutually relate	35. 31	36. 5	37. 9	38. 3	39. 0	40. 7	41. 5	42. 583	43. 4.48
44. Average creativity									45. 4,75	46. Digital Master

The average value of creativity reaches 4.75 with digital master status. According to the HC Telkomsel Papua Maluku team, this is because Telkomsel Regional Papua Maluku consistently encourages employees to think creatively. VP Telkomsel Network Service Management Area Pausuka and the management team through activities such as value leader talks, weekly meetings of all Telkomsel Papua Maluku management, and unit meetings emphasize employees to always find new ways to help their operational activities (Rachinger M. R., 2018).

In this study, calculations were also carried out on the survey results for each position band with the results shown in table 4 below.

**Table 4 Respondents' Responses to the Creativity Sub-Variables per Position Band**

Sub-Variable	Average Position Band Value				Information
	I	II	III	IV	
Creativeness	5,36	4,72	4,44	3,33	Digital Master

From table 4 above it can be seen that all band positions have a state of ready creativity or digital master (Magnusson J. H., 2021). With the highest score in the position I band, which is at the Staff level, while the lowest score in the IV position band is at the General Manager level.

3. Respondents' Responses to the Innovation Sub-Variable The results of research on employee innovation sub-variables at PT Telkomsel Papua Maluku, Tbk are listed in table 5 and table 6 based on the results of questionnaire distribution:

**Table 5 Respondents' Responses to Innovation Sub-Variables**

Sub-Variable	Statement Item	Value							Sum	Average
		7	6	5	4	3	2	1		
Innovation	8a. The customer is the core of product development	38	39	12	16	7	8	10	671	5,16
	8b. Partners are the essence of product development	40	9	35	10	14	12	10	625	4,8
	9a . I also innovate about business models	39	18	32	10	9	12	10	642	4,93
	9b . I also innovate about the operating model	36	34	19	14	10	11	6	665	5,11
	9c . Me, too innovate about ways of working	37	11	34	13	10	12	13	614	4,72
	10 . I use digital technology to innovate	37	38	15	13	10	8	9	669	5,14
Average									4,81	Digital Master

The average value of innovation reaches 4.81 with digital master status. According to the Telkomsel Papua Maluku Regional HC team, this is because the Papua Maluku Regional Telkomsel consistently encourages employees to participate in innovation events organized by the company and internal Telkomsel Papua Maluku Regional. Several events about innovation invite employees to innovate about business models, ways of working, and operating models such as: Innoxtion, Indico, Learning Platforms such as Percipio, LinkedIn Learning.

In this study, calculations were also carried out on the survey results for each position band with the results as shown in table 6 below.

**Table 6 Respondents' Responses to Innovation Sub-Variables per Position Band**

Sub-Variable	Average Position Band Value				Information
	I	II	III	IV	
Innovation	5,51	5,54	4,11	3,41	Digital Master

From table 6 above it can be seen that all position bands have a ready innovation condition or digital master. With the highest score in the band position II, namely at the Supervisor level, while the lowest score is in the band position IV, namely at the General Manager level

4. Respondents' Responses to Experimental Sub-Variables The results of the research on the experimental sub-variables of employees at PT Telkomsel Papua Maluku are listed in table 6 and table 7 based on the results of the questionnaire distribution:

**Table 7 Respondents' Responses to Experiment Sub-Variables**

Sub-Variable	Statement Item	Value							Sum	Average
		7	6	5	4	3	2	1		
Experiment	11. I appreciate the experiment (experiment)	32	36	17	14	10	5	16	637	4,9
	12. I accept learning from mistakes while experimenting	29	18	31	14	12	10	16	594	4,56
	13. A budget is provided for the experiment	33	18	36	7	14	12	10	623	4,79
	14a. Organizations develop responsive digital technology to answer time to market	30	34	14	17	7	13	15	614	4,72
	14b. Organizations develop digital technology that is flexible in response to time to market	30	15	33	14	12	14	12	597	4,59
	15a. I dare to try something new to come up with a solution even though it is full of uncertainty	35	37	9	17	13	12	7	650	5

	15b. I dare to try something new to produce a solution even though there is no data/information	34	13	36	7	14	14	12	606	4,66
	16. I have an entrepreneurial spirit in responding to technological developments	31	34	20	13	14	10	8	643	4,94
<b>Average</b>									<b>4,77</b>	<b>Digital Master</b>

The average experimental score reached 4.77 with digital master status. According to Telkomsel's HC team, the Papua Maluku region, the experimental conditions that have been digital masters are the result of consistency, encouraging employees to continue to try something new in their operational activities and participate in innovation events organized by the company and internally. Telkomsel Papua Maluku. Through this encouragement, employees have support so they are willing to try something new and are able to document it in the form of reports.

In this study, the survey results were also calculated on each position band with the results as in table 8 below.

**Table 8 Respondents' Responses to Experiment Sub-Variables per Position Band**

Sub-Variable	Average Position Band Value				Information
	I	II	III	IV	
Experiment	5,61	4,81	4,21	3,25	Digital Master

From table 8 above it can be seen that all position bands have a ready experimental condition or digital master. With the highest score in the position I band, which is at the staff level, while the lowest score in the IV position band is at the General Manager level.

5. Respondents' Responses to Open-mindedness Sub-Variables The results of research on employees' open-mindedness sub-variables at PT Telkomsel Regional Papua Maluku are listed in table 9 and table 10 based on the results of distributing the questionnaires:

**Table 9 Respondents' Responses to Open-Mindedness Sub-Variables**

Sub-Variable	Statement Item	Value							Sum	Average
		7	6	5	4	3	2	1		
Open-mindedness	17. I am aware of the opportunities that arise due to advances in	34	41	14	9	12	11	9	657	5,05

digital technology										
18 . I am aware of the threats that arise due to advances in digital technology	36	9	37	10	13	10	15	605	4,65	
19 . I want to accept opportunities that arise due to advances in digital technology	37	14	31	16	10	13	9	627	4,82	
20 . I want to accept the threats that arise due to advances in digital technology	39	10	38	17	7	8	11	639	4,91	
Average								4,86	Digital Master	

The average value of open-mindedness reaches 4.86 with digital master status. According to the HC Telkomsel Regional Papua Maluku team, the condition of open-mindedness that is already a digital master is the result of the company's consistency in introducing digital progress: starting from the products the company sells, ways of working that use digital technology, to training on leadership and market conditions in the digital era. This provides employees with knowledge of threats and opportunities from the development of digital technology (Cichosz, M., Wallenburg, C., & Knemeyer, A. (2020). ).

Training and direction from management also invites employees not to be afraid of the impact of digital technology, but to use it for the betterment of individuals and companies.

In this study, calculations were also carried out on the survey results for each position band with the results as shown in table 10 below.

**Table 10 Respondents' Responses to Open-Mindedness Sub-Variables per Position Band**

Sub-Variablw	Average Position Band Value				Information
	I	II	III	IV	
Open-mindedness	5,62	4,86	4,12	5,75	Digital Master



From table 10 above it can be seen that all band positions have a state of ready open-mindedness or digital master. With the highest value in the IV position band, which is at the General Manager level, while the lowest value in the III position band is at the Manager level.

7. Respondents' Responses to Networking Sub-Variables The results of research on employee networking sub-variables at PT Telkom Regional Papua Maluku are listed in table 11 and table 12 based on the results of distributing the questionnaires:

**Table 11 Respondents' Responses to Networking Sub-Variables**

Sub-Variable	Statement Item	Value							Sum	Average
		7	6	5	4	3	2	1		
Networking	21. I have good relations with the company's stakeholders	45	8	36	14	12	6	9	656	5,04
	22. I take advantage of good relations with company stakeholders to obtain data in order to be able to create value	47	30	19	11	4	10	9	689	5,3
Average									5,17	Digital Master

The average networking score is 5.17 with digital master status. According to the HC Telkom Regional Papua Maluku team, networking conditions that are already digital masters are the result of consistency encouraging employees to collaborate with stakeholders. Activities such as visits to government agencies, customer gatherings, and collaborations with other business institutions are believed to strengthen relations and provide added value to the services provided by the company.

In this study, calculations were also carried out on survey results for each position band with the results as shown in table 12 below.

**Table 12 Respondents' Responses to Networking Sub-Variables per Position Band**

Sub-Variable	Average Position Band Value				Information
	I	II	III	IV	
Networking	4,35	5,02	5,60	5,72	Digital Master

From table 12 above it can be seen that all position bands have ready networking/digital master conditions. With the highest score in band position IV, which is at the General Manager level, while the lowest score is in band position III, namely at the staff level (DESSLER, G. (2020). ).

According to tables 1 to 12 it is known that all digital culture sub-variables have an average value above 4.30. So based on these results it is concluded that digital culture in the work environment of PT Telkom Regional Papua Maluku is in the digital master category or ready to face digital transformation (Armstrong M. &, 2020). The table above also states that the highest average value is 6.24 obtained from statement 8a, namely "The customer is the essence of product development". While the lowest average value is 4.36 obtained in statement 15b, namely "I dare to

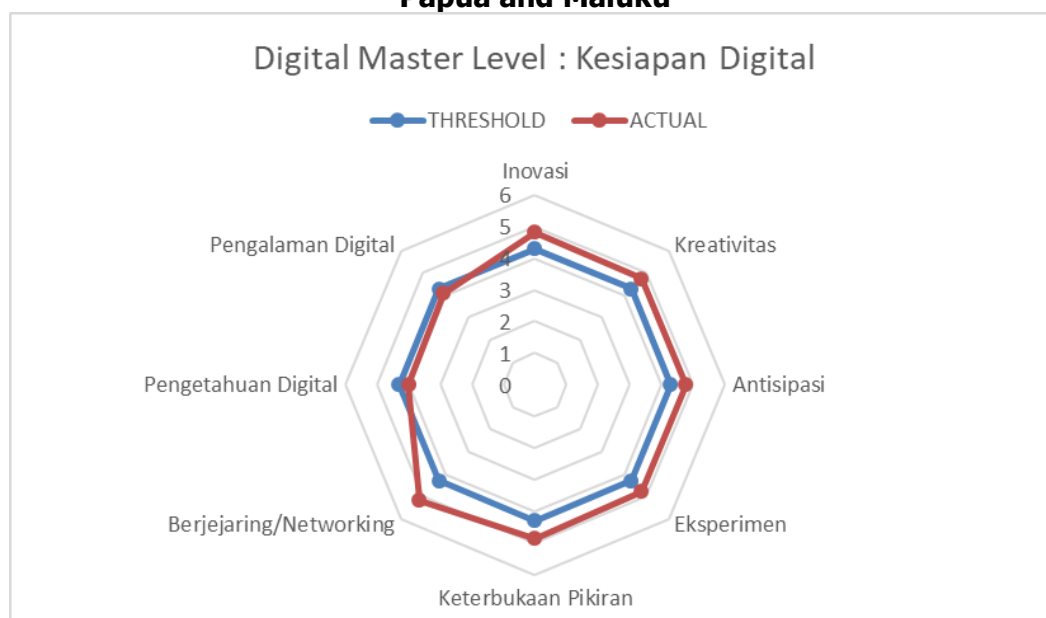
try something new to produce a solution even though there is no data/information" (Herceg, K. M. (2020). ).

The results of the research on the variable digital culture of employees at PT Telkomsel Papua Maluku are also separated according to the employee's level of position or which within PT Telkomsel Papua Maluku is referred to as Position Band. According to the results of the respondents' responses based on the position band of PT Telkomsel Papua Maluku, the digital culture of all position bands is in the digital master category. Thus the research question in sub-chapter 1.4 point 1 about how the condition of PT Telkomsel Papua Maluku's digital culture in facing digital transformation can be declared ready or referred to as digital master.

## Discussion

Digital readiness owned by PT Telkomsel Papua Maluku employees is said to be ready or digital master because it exceeds the standards set by (Sinaga, 2017) in determining the digital master category of an organization (Hilali W. &, (2020). ). If depicted in the digital mastery levers diagram, the digital readiness conditions for PT Telkomsel Papua Maluku employees look like figure 1 below:

**Picture 1 Digital Readiness of PT Telkomsel Indonesia (Persero) Tbk Regional 11 Papua and Maluku**



A good digital culture is due to a work environment that supports the digital transformation process. SVP Consumer Sales PT Telekomunikasi Selular Gilang Prasetya, in his fire briefing emphasized automation in work (rmstrong, M. &. (2020).). This automation requires employees to innovate and implement digital applications. Employees are given the opportunity to take part in e-learning, Hack Idea innovation events and other digital events, as well as develop skills outside their specialization areas so that employees are better prepared to face change and digital adoption (Westerman G. B.). Meanwhile, according to the results of discussions with the PT Telekomunikasi Selular Regional 11 Papua and Maluku Human Capital team, the digital readiness of employees who meet standards both in digital culture variables and digital attitudes is due to employees' familiarity with using digital tools that must be used daily (Kazemargi N. T., 2021). The use of these digital tools includes Moana's digital presence, Collaborate work using Ms Teams, Data Engineer using Python, Work Hybrid by Video Conference, Big Data Analytics, and Cloud Technology. Thus employees of PT Telekomunikasi Selular (Persero) Tbk Regional 11 Papua and Maluku have good digital knowledge and experience (Apriliyanto, W. (2021). ).

## CONCLUSION

It is known that all sub-variables of digital culture have an average value above 4.30. So based on these results, it is concluded that the digital culture in the work environment of PT Telkom Regional Papua Maluku is in the digital master category or ready to face digital transformation. For digital attitudes consisting of digital knowledge and digital experience in the work environment of PT Telkom Regional Papua Maluku are in the category of not yet digital master or not ready to face digital transformation, there are sub-variables that are still below baseline 4.30 (Digital Master), this is of special concern, namely the need for space to add to the digital experience.

The strategy for fulfilling digital capabilities for Telkom employees consists of several programs to support the strategy for fulfilling digital capabilities for employees, namely:

- a. Requiring each department in the Regional and regional offices (branch).
- b. Requiring all position bands in regional offices to participate in digital innovation programs that are routinely held by the company.
- c. Conduct training, courses and e-learning on new competencies related to digital, such as digital capability
- d. Providing a playground for employees to take part in business idea opportunities.

Strategy to increase the digital capabilities of Telkom's internal employees

IFAS EFAS analysis to find out the main strategies needed to improve employee capabilities. The results of the analysis are as follows:

- a. Maximizing programs from the company for the development of employee digital culture and expertise.
- b. Creating employee digital skills and cultural development activities.

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