

Human Resource Development Strategy In Facing Digital Transformation

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ABSTRACT

This research was conducted at PT. Aruman Aditya which operates in the developer sector with the aim of this research being to develop appropriate HR management strategies to support digital transformation in improving company results where human resource management requires a strategic management style to achieve sustainable competitive advantage by create education and training programs. Methodology study use qualitative approach, observation structured and SWOT analysis. The results of the research show that the educational methods used by company leaders are in developing human resources in facing transformation The company's digital implementation is still being pursued and the company owner advises management to take action to create a programmed and sustainable education program to increase knowledge and skills in accordance with digital- based work needs , while training methods in the process of developing human resources in facing digital transformation have not yet been programmed.

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1. Introduction

In the ever-growing digital era, companies are faced with demands to adapt to rapid technological changes. Digital transformation has become the key to increasing a company's competitiveness in an increasingly competitive market. One very important aspect of digital transformation is preparing employees who are able to utilize technology and increasing the abilities and skills that employees have in using the latest technological equipment to achieve current company goals.

This research was conducted at PT. Aruman Aditya which operates in the developer sector which is located at Jl. Abdullah bin Nuh, Nagrak village , Cianjur sub-district, Cianjur district, which has 14 permanent employees and 64 non-permanent employees, founded in 2001 in the field of developer business, construction services and planning consultants with a company vision: to develop the developer business with the spirit of creating a better life and the company mission: to be at the forefront of the developer business by being the most superior, professional and profitable so that it becomes the first choice for consumers. Share ownership is owned by the family and all director positions are filled by the family, so it is necessary to improve the quality of human resources because according to researchers human resource development is a management action in creating training and development programs involving increasing the effectiveness of the company and the individuals and teams within it. As a systematic and planned activity designed to facilitate the skills needed to meet job demands, both now and in the future. Designing competency development programs, as well as facilitating changes in organizational culture to support digital transformation, while according to Nagel (2020) companies are required to develop human resources so that they have competencies that are in line with the demands of the digital era.

The phenomenon found in this research is that at PT. Aruman Aditya has several employees who do not master computers, the internet, websites and social media because there are senior employees who are over 50 years old and the company does not have digital training and education programs such as: 1) There is no skills improvement program for digital training, 2) There is no educational process about digital transformation from within a programmed organization 3). Government policy does not yet require that developer companies must have experts who master information technology, resulting in a lack of employee knowledge and abilities regarding digitalization. According to researchers, digital transformation requires companies to develop human resources who have new competencies such as digital skills, adaptability, creativity, collaboration, and adaptive and innovative leadership. For this reason, an integrated long-term HR development strategy is needed. This is in line with the theory according to Priansa (2020:155) which is used in developing human resources through education and training methods. Educational methods (education) aim to improve knowledge and attitudes. Meanwhile, training methods aim to improve skills and education level. Meanwhile, digital transformation is a significant process in using digital technology to achieve business goals, to increase operational efficiency, reduce costs, increase innovation and increase consumer trust.

From phenomenon on This so study this aims to:

1. To find out how to develop human resources in facing digital transformation at PT. Aruman Aditya
2. What factors influence the process of developing human resources in facing digital transformation at PT. Aruman Aditya.
3. Strategy for developing human resources in facing digital transformation at PT. Aruman Aditya.

Human Resource Development

To achieve company and organizational goals, further human resource development is needed. Human Resource Development supports the success of the company/organization. In other words, if the Human Resources Department has sufficient potential to carry out its duties and duties as an employee, then it will contribute to the progress of the company/organization. Human resource development can be realized through career development, education and training through appropriate human resource development (Priansa, 2020). Meanwhile, according to Kumala (2022), human resource development is a continuous and planned process to improve employee competence and quality in order to achieve superior performance, both from the individual side and the entire organization. So human resource development is a process of increasing employee abilities, knowledge and skills in dealing with environmental changes.

Human Resource Development Factors

Factors that influence the need for Human Resources development are as follows (Priansa, 2020)

1) Internal factors

Internal factors are factors that come from within the organization, which concern. (a) Organizational Vision, organizational vision greatly influences the development of human resources within the organization. Organizations that have a strong, broad and ambitious vision tend to carry out aggressive human resource development accompanied by the availability of adequate funds. (b) Organizational Mission, every organization has a vision that it wants to achieve, for this it needs an appropriate mission. Mission is a vision in the operational stage. The mission provides important directions that need to be carried out so that the vision can be realized. Organizations that are aggressive in expansion have an aggressive human resource development mission as well. (c) Goal Achievement Strategy, the strategy describes how operationally the mission that has been created can be implemented. A good strategy needs to be supported by the right tactics, which will also require the support of good human resource development. (d) Nature and Types of Activities. The nature and types of organizational activities have a very important influence on the development of human resources. Organizations whose work is mostly technical will certainly be different from organizations that are oriented towards scientific work. (e) Technology Used, technology greatly influences the organization. Organizations that are able to utilize technology superiorly will become superior organizations and be able to compete at various business levels.

2) External Factors

External factors are factors that come from outside the organization but have an influence on the development of human resources carried out by the organization. (a) Government policies, government policies, whether issued through legislation, government regulations, decrees of ministers or government officials, and so on are directives that must be taken into account by the organization. (b) Socio-Cultural Society, socio-social factors cannot be ignored by an organization. This can be understood because any organization is founded for the benefit of people who have different socio-cultural backgrounds. (c) Development of Science, the development of science is very dynamic and organizations must have the ability to adapt. Employees must be able to adapt to developments in science so that they are able to continue to develop. (d) Technological Development, technological developments are different from internal technological needs. Technological developments are more about external aspects that arise outside the organization, where currently technological developments are very fast and need to be supported by the organization's ability to adapt and adjust to change.

Human Resource Development Methods

Human Resource Development focuses on education and training methods in organizations, including (Priansa, 2020) :

1) Educational Methods (Education)

Education is one of the most important things in human resource development. Basically, the goal of education is the description of knowledge, attitudes, actions, appearance, and so on, which are expected to have educational goals in a certain period.

2) Training Methods (Training)

Training methods are selected based on needs analysis originating from organizational interests and employee needs. Matters related to training include implementation time, costs, number of participants, education level, employee background, and various other things related to employees. The scope of training is narrower than education.

Human Resource Development Strategy in Digital Transformation

Training and development is the main strategy. Training can provide technical and non-technical skills such as digital literacy , data analysis, leadership, continuous learning, and character development (Pudjiarti , 2023). Training can be carried out internally or in collaboration with training/education institutions. Apart from that, there is a need to change *the mindset* of HR to *growth mindset* to be able to adapt to change. *Soft* development is also needed *skills* such as empathy, communication, collaboration, creativity, and adaptive and innovative leadership (Rachmad et al. , nd). Recruitment of quality human resources, competency-based performance assessments, giving *rewards* , and improving human resource development infrastructure also need to be carried out. Collaboration with educational institutions can support sustainable human resource development. With these various strategies, it is hoped that HR can adapt to changes in the digital era optimally.

Where this research is strengthened by SWOT analysis to determine the strengths, weaknesses, opportunities and threats for the company so that the results of the EFAS and IFAS calculations are known, the SWOT quadrant diagram is in which quadrant, thus producing strategy recommendations for developing human resources in *digital transformation*.

2. Method

The research approach uses qualitative methods with a case study type of research. The type of data is descriptive qualitative with data collection techniques using structured interviews, direct observation and reference books. Using data analysis methods, namely data reduction, data presentation, data verification and conclusions, and using the SWOT analysis model.

2.1 Population and Sample

1) Population

Population from study This are all employees at PT. Aruman Aditya, numbering 14 permanent employees and 64 non-permanent employees with a total population of 78 people .

2) Sample

The samples that were collected, interviewed and analyzed further, and deemed to meet the criteria are 7 permanent employees. Sample collection method with *purposive sampling* with consideration from researcher, limitations of research time and costs (Sugiyono, 2022) .

2.2 Proposition

Proposition built based on pre survey And reference study previously, as for proposition which was developed is :

1. Proposition Education and Training Methods: Human resource development in facing *digital transformation* must apply education and training methods that are based on knowledge, attitudes, actions, appearance, implementation time, costs, number of participants, education level, employee background, and various other things related to employees.
2. Proposition Human Resource Development Factors: Factors that influence the human resource development process in facing *digital transformation* are internal factors: (a) Organizational Vision, (b) Organizational Mission, (c) Achievement Strategy, (d) Nature and Type of Activities, (e) Technology Used, and external factors: (a) Government Policy, (b) Socio-Cultural Society, (c) Scientific Development, (d) Technological Development.
3. Proposition SWOT Analysis: The strategy used in developing human resources in facing *digital transformation* is using SWOT analysis from (Riyanto et al., 2021) .

2.3 Technique Analysis Qualitative

In analysis study This use approach qualitative (Sugiyono, 2022) , with a case study type of research, as for stages the analysis is :

1. Collection Data: In collection data, use method structured observation, structured interview, And studies documentation For get data Which comprehensive about development of human resources in facing *digital transformation* .
2. Reduction Data: The longer the researcher is in the field, the more data will be, more complex and complicated. For this reason, it is necessary to immediately analyze data through data reduction. Reducing data means summarizing and selecting the main things, focusing on the important things, looking for themes and patterns.
3. Presentation Data: Preparing reports on the results of research that has been carried out so that they can be understood and analyzed according to the desired objectives. The data presented must be simple, clear so that it is easy to read.
4. After the data has been reduced, the next step is to display the data. In qualitative research, data is presented in narrative text form. Conclusion on Data Make detailed conclusions based on the main findings. This process involves linking it to the research question. Conclusion must be provide answers or new insights related to human resource development in facing *digital transformation*, such as factors that influence human resource development in facing *digital transformation*, and strategies used in the human resource development process in facing *digital transformation*.

2.4 Technique Test Credibility And Validity Data

Data can be declared credible if there are similarities between what the researcher reports and what actually happened to the object under study (Sugiyono, 2022) . Test the credibility of the data or trust in the data resulting from qualitative research in this study using the triangulation method:

- 1 Source Triangulation: Source triangulation can be done by checking data that has been obtained through various sources.
- 2 Engineering Triangulation: Technical triangulation can be done by checking data from the same source, but with different techniques.
- 3 Time Triangulation: Time triangulation can be done by checking the data again at the source and still using the same technique, but with a different time or situation.

3.1 Parameter Study

Table 1. Parameter

No	Parameter	Sub Parameters	Reference
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1	Methods for developing human resources in facing digital transformation	Educational methods Training methods	(Priansa, 2020)
2	Factors influencing human resource development in facing digital transformation	Internal factors: (a) organizational vision, (b) organizational mission, (c) achievement strategy, (d) nature and type of activities, (e) technology used. External Factors: (a) Government Policy, (b) Socio-Cultural Society, (c) development of science, (d) development of technology	(Priansa, 2020)
3	SWOT analysis strategy for human resource development in facing digital transformation	Strength Weakness Opportunity Threat	(Riyanto et al., 2021)

From all parameter Which has collected, Then in make it design parameter as model in study This.

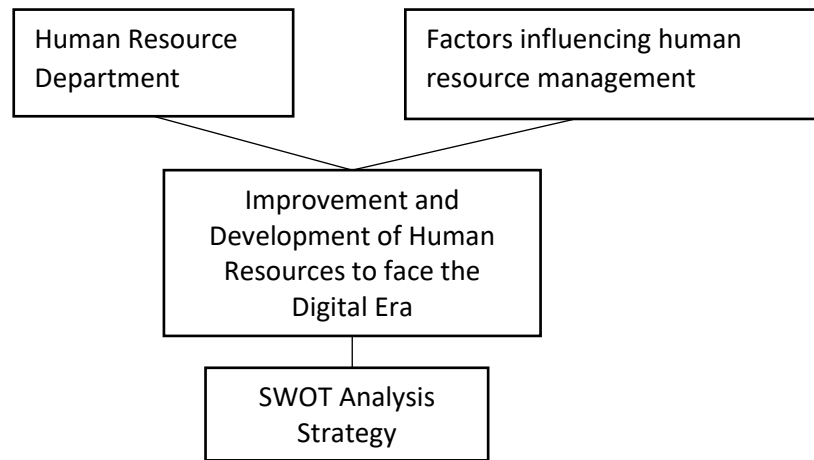


Fig. 1.HR Development Methods.

3. Results and Discussion

3.1. Testing Data

Testing data in study This has done through stages :

1. Test Credibility Data

Done test Triangulation with a number of method collection data And compare the results of each method to ensure suitability and accuracy information.

2. Validity Data

Data validity concerns data that has been taken using structured interview techniques, direct observation, and documentation studies, as well as data reduction and presentation.

3.2. Discussion

To find out how to develop human resources in facing digital transformation at PT. Aruman Aditya, the results are known according to Priansa (2022) regarding human resource development using educational methods and training methods

a. Educational Methods

Educational methods used by company leaders in developing human resources in facing transformation PT. Aruman Aditya is still pursuing digital work and the company owner advises management to take action to create a programmed and sustainable education program to increase knowledge and skills in accordance with digital-based work needs because the digitalization education program in developing human resources can help optimize processes, modernize human resources functions, and improve communication and collaboration between employees. This can lead to increased productivity and innovation in the workplace which can improve company results

b. Training Methods

Training methods in the process of developing human resources in facing digital *transformation* have not been programmed at PT Aruman Aditya because there are no costs for digital-based training programs. However, in future strategic planning PT. Aruman Aditya will spend money on employee development in collaboration with training institutions and universities, however, in the training process at PT . there will be employees who are still blind to technology, so according to researchers the costs spent on developing human resources should be in accordance with the needs and developments of the times, such as training to use internet-based computers and laptops, websites , social media and applications needed by companies in the field. developers.

To find out the factors that influence the development of human resources in facing digital *transformation* at PT. Aruman Aditya includes internal factors: the company's vision and mission, achievement strategies and technology used and external factors: Government policy, socio-cultural society and technological developments to obtain the following results:

c. Internal factors

The Company has a Vision: Developing the developer business with the spirit of creating a better life with the Company Mission: To be at the forefront of the developer business by being the most superior, professional and profitable so that it becomes the first choice for consumers. where at PT. Aruman Aditya employees in the productive age are 65% and have an average of 1st degree education, as well as changes in company management regarding work procedures that were previously traditional to modern and there are efforts to improve The ability of digital-based employees to own land assets for company development is available with the *Smart housing planning concept Home* , although there are weaknesses in carrying out the operational management implemented at PT. Aruman Aditya, one of them is that it does not yet have a strategy for achieving digital-based human resource development because the education and training programs are not programmed and the training costs have not been budgeted which results in employees over 50 years old (25 %) do not keep up with technological developments, are not yet optimal in mastering the internet, websites , social and *soft media skills* ” which causes the digital knowledge and abilities of employees over 50 years old to still be lacking so that the impact on company results is less than optimal.

d. External Factors

Company planning and evaluation is still not optimal with the inhibiting factors that researchers found, namely that the company does not have experts who master digital because government policy does not regulate the establishment of companies. Developers must have certified experts and experts in the digital field, the development of knowledge in the digital field has an impact. There are many competing companies in the developer sector that use digital by creating *Smart home products Home* Where *Smart Home* is a home technology that provides security, comfort, energy efficiency and convenience for home owners which causes management to carry out change strategies the way of working from traditional to a modern digital-based system where The challenge is that many consumers in Cianjur do not keep up with technological developments, such as consumers' knowledge of digital information about housing locations and home products that companies present via digital promo applications and advertisements on social media. Many people don't know about it.

To find out the strategy for developing human resources in facing digital *transformation* at PT. Aruman Aditya used by researchers used SWOT analysis with reference to theory (Riyanto et al., 2021) , which obtained the following results:

1. Strength Factor

- a. Employee age is still productive.
- b. Average education is S1.
- c. There is digital-based business planning.

2. Weakness Factors

- a. Not keeping up with digital developments.
- b. Education and training are not programmed.
- c. Education and training costs have not been budgeted.

3. Opportunity Factor

- a. Traditional work systems become modern.

- b. Efforts to improve digital-based employee capabilities.
- c. *Smart* housing planning concept *Home*

4. Threat Factors

- a. The company does not have certified experts and experts in the digital field
- b. More and more developer companies are using digital with the *Smart* housing concept *Home*
- c. Demand for change the way of working from traditional to a modern digital-based system .

Furthermore, after finding the SWOT analysis factor indicators, namely internal factors, strengths and weaknesses, while external factors are opportunities and threats. Next, the researcher distributed questionnaires which were filled in directly by *the stakeholders/* informants . Researchers carry out calculations according to theoretical references (Riyanto et al., 2021) which will later determine the current position, determine the SWOT matrix diagram and strategies that need to be implemented at PT. Aruman Aditya which researchers will present as follows:

Table 2. IFAS Measurement (Internal Factor SWOT Analysis)

No	Internal factors	Weight	Ratings	Score
<i>Strengths</i>				
1	Age employee Still productive	0.23	4.29	1.00
2	Average education: Bachelor's degree	0.23	4.14	0.94
3	There is digital-based business planning	0.23	3.57	0.83
Total		0.69		2.77
<i>Weaknes</i>				
1	Do not follow digital development	0.11	4.00	0.44
2	Education and training No programmed	0.11	3.43	0.38
3	Budget cost training Not yet budgeted	0.09	4.29	0.38
Total		0.31		1.20
Amount		1.00		
SW				1.57

^a Source: Researchers Processed 2024

1. To measure IFAS from *the strength and weakness indicators* , researchers used a scale range value with a minimum of 1 and a maximum of 5 to obtain the scale range as follows.
 Scale range 1.00 <= Mean 1.80 very poor category
 Scale range 1.80 <= Mean 2.60 less category
 Scale range 2.60 <= Mean 3.40 in sufficient/moderate category
 Scale range 3.40 <= Mean 4.20 good category
 Scale range 4.20 <= Mean 5.00 very good category
2. The results of this IFAS calculation can be interpreted to mean that a higher IFAS value indicates that the organizational strategy currently implemented is able to manage internal resources well. On the other hand, a lower IFAS value indicates that the company's current strategy is less able to manage its internal resources.
3. In this study, the IFAS value was **1.57** which shows a very poor value. So it can be concluded that the IFAS value of **1.57** is categorized as an organization, in this case PT. Aruman Aditya **has a very poor strategy** in carrying out the human resource development process in facing digital *transformation* . Then the researcher also carried out EFAS measurements which the researcher presented in the form of the following table.

Table 3. EFAS Measurement (External Factor SWOT Analysis)

No	External Factors	Weight	Ratings	Score
<i>Opportunities</i>				
1	Traditional work systems become modern.	0.22	4.71	1.02
2	Efforts to improve digital-based employee capabilities	0.20	4.57	0.90
3	<i>Smart</i> housing planning concept <i>Home</i>	0.19	4.43	0.84
Total		0.60		2.75
<i>Threats</i>				
1	The company does not have certified experts and experts in the digital field	0.08	2.86	0.23

2	More and more developer companies are using digital with the <i>Smart</i> housing concept <i>Home</i> .	0.17	4.71	0.80
3	Demand for change the way of working from traditional to a modern system based on information technology	0.15	4.29	0.64
		Total	0.40	1.67
		OT	1.00	1.09

^b Source: Researchers Processed 2024

To calculate EFAS with indicators of *opportunities* and *threats*, researchers use a scale range value with a minimum value of 1, a maximum of 5, to obtain the scale range as follows.

1. Scale range 1.00 <= Mean 1.80 very poor category.
2. Scale range 1.80 <= Mean 2.60 less category.
3. Scale range 2.60 <= Mean 3.40 in sufficient/moderate category.
4. Scale range 3.40 <= Mean 4.20 good category.
5. Scale range 4.20 <= Mean 5.00 very good category.

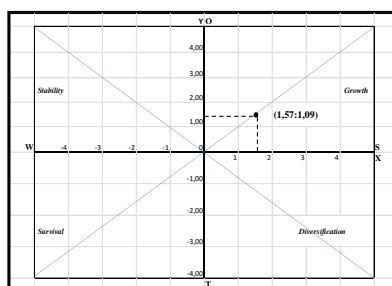
The IFAS calculation results in table 2 obtained a result of 1.57 and from the EFAS calculation results in table 3 the result was 1.09, where PT . Aruman Aditya, if interpreted in the above category, the value of the calculation results is very low, which is why PT. Aruman Aditya has a poor strategy in carrying out the human resource development process in facing digital transformation and is very poor in responding to opportunities and threats from human resource development in facing digital transformation .

Furthermore, the researcher also carried out calculations to determine the SWOT diagram which will later determine which quadrant position PT. Aruman Aditya which researchers will present as follows:

- *Strength* value is 2.77
 - *The Weakness* value is 1.20
- So the value of (X) SK is obtained, $2.77 - 1.20 = 1.57$
- *Opportunity* value is 2.57
 - *The Threats* value is 1.67

So the OP (Y) value is obtained, $2.57 - 1.67 = 1.09$

So if the results above are interpreted in the SWOT Matrix diagram image , you will get the following image:



^c Source: Processed by Researchers 2024

Fig. 2.SWOT Quadrant Diagram

Based on the SWOT quadrant diagram that has been depicted, the researcher can conclude that the company's position, in this case PT. Aruman Aditya is in quadrant I which shows that PT. Aruman Aditya has a strong position and has many opportunities in developing *digital-* based human resources . Then it is recommended to implement a *progressive* or *growth strategy* which means PT. Aruman Aditya is in a prime and stable position and the development of human resources in facing digital *transformation* must be carried out precisely and accurately so that the Company's Vision is realized, namely developing the developer business with the spirit of creating a better life and the Company's Mission to be at the forefront of the developer business by becoming the the most superior, professional and profitable so that it becomes the first choice for consumers.

There are alternative strategies for developing human resources in facing *digital transformation* that can be implemented by PT. Aruman Aditya is as follows:

1. Productive age employees have the opportunity to take part in training in human resource development in *digital transformation efforts* so that traditional work procedures become modern based on digitalization.
2. The background of employees who have a Bachelor's degree will find it easier to increase their knowledge and skills in efforts to develop human resources based on digitalization, so a budget must be allocated for education and training in a programmed and sustainable manner.
3. The existence of digitalization-based company business planning will make it easier for management to implement the *Smart housing planning concept Home* .
Change the way of working from traditional to a modern system based on digitalization.

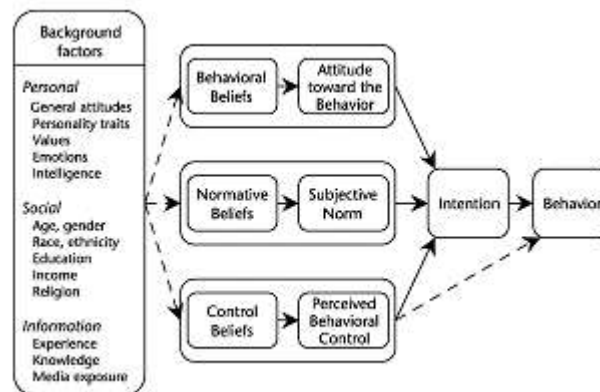


Fig. 3. Model Theory Planned Behavior (Ajzen, 2005)

4. Conclusion

Educational methods used by company leaders in developing human resources in facing transformation PT. Aruman Aditya's digital work is still being pursued and the company owner advises management to take action to create a programmed and sustainable education program to increase knowledge and skills in accordance with digital-based work needs , while training methods in the process of developing human resources in facing transformation digital has not been programmed at PT. Aruman Aditya because there is no cost for a digital-based training program. However, in future strategic planning PT. Aruman Aditya will spend money on employee development in collaboration with training institutions and universities. With training programs that suit the needs and developments of the times, such as training using digital-based computers and laptops, the internet, websites , social media and applications needed by companies in the developer sector.

Factors that influence the development of human resources in facing digital transformation at PT. Aruman Aditya, namely in carrying out the operational management implemented at PT. Aruman Aditya, one of which is that it does not yet have a strategy for achieving digital-based human resource development because the education and training programs are not programmed and the training costs have not been budgeted which results in employees over 50 years old (25%) not keeping up with technological developments which causes management to have to implement change strategies the way of working from traditional to a modern digital-based system where The challenge is that many consumers in Cianjur do not follow digital developments, such as consumers' knowledge of digital information about housing locations and home products that companies present via digital promo applications and advertisements on social media. Many people don't know about it.

Based on IFAS (Internal Factor Analysis Summary) and EFAS (External Factor Analysis Summary) calculations, conditions are very poor in developing human resources in facing transformation. digital . So from the results of research to develop human resources a strategy must be carried out where the results of the SWOT quadrant diagram analysis, PT. Aruman Aditya is in quadrant I which shows that PT. Aruman Aditya has a strong position and has many opportunities in the human resource development process in facing digital transformation and is recommended to

implement a progressive or growth strategy , which means PT. Aruman Aditya is in a prime and stable position, so it is possible to make improvements in terms of developing human resources in facing transformation digital with a strategy that must be carried out by the company for employees of productive age and with a Bachelor's educational background to take part in digital-based training programs so that digitalization-based company business planning will make it easier for management to implement the Smart housing planning concept Home so that the Company's vision and mission can be realized.

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