

## Measurement of Hard Competency through Self Assessment in Employees of Pt Industri Kereta Api (Persero) Madiun

Rara Sakti Yuwanda Putri<sup>1\*</sup>, Survival<sup>2</sup>, Adya Hermawati<sup>3</sup>

<sup>1</sup> Management, Faculty of Economics and Business, Widyagama University Malang, Indonesia

<sup>2</sup> Management, Faculty of Economics and Business, Widyagama University Malang, Indonesia

<sup>3</sup> Management, Faculty of Economics and Business, Widyagama University Malang, Indonesia

\*Corresponding Author: [rara.sakti5@gmail.com](mailto:rara.sakti5@gmail.com)

### ABSTRACT

This internship report has been compiled with the aim of explaining the assessment activities carried out by the Human Resources division called "Self Assessment Hard Competency", which is an assessment to measure the level of hard competency / hard skills of all employees at PT Industri Kereta Api (Persero). through Self Assessment activities. The implementation of the Certified Student Internship Program (PMMB) batch 2 in 2023 starts from October 2022 until the end of March 2023. Data collection comes from observations, interviews, field activity reports, documentation results, and articles from previous researchers. The results of the internship show that by carrying out the hard competency assessment based on self-assessment, it will make it easier for HR to map skills (capabilities), especially the technical capabilities of employees and to monitor the level of competency they have achieved. Later these results will be evaluated for the purpose of developing the company's human resources, training/training needs, as well as the need to increase employee career paths.

**Keywords:** Human Resource, Self Assessment, Competency, Hard Skill



## INTRODUCTION

Internship is an academic activity that is carried out to train students' abilities or passions in the world of work directly. This activity is certainly very much needed, especially in Indonesia, in order to improve the quality of Human Resources (HR) for fresh graduates to be better prepared for work Human Resources (HR) for fresh graduates to be better prepared for work.

The quality of Human Resources (HR) can be seen from the graduates of both private and public universities. In the past, many industries had complaints that university graduates in Indonesia were still not in accordance with what was needed. not in accordance with what is needed. This is due to the lack of experience of students plunging into the world of work to understand and train their passions, so that many students are found who have not got a job because of lack of technical skills. job due to lack of technical skills. The government's action in responding to this is to launch a programme, namely the Certified Student Internship Programme (PMMB) by the Ministry of BUMN through the Human Capital Indonesia Forum Capital Indonesia (FHCI).

The Certified Student Internship Programme (PMMB) is one of the manifestations of the Ministry of State-Owned Enterprises (SOEs) programme. Forum Human Capital Indonesia (FHCI), which is a forum for managers and practitioners of Human Capital Management within State-Owned Enterprises (SOEs), provides opportunities for students to channel their potential and gain experience in the company through the Internship Programme and gain experience in the company through this Certified Student Internship Programme (PMMB). Thus, students will gain experience about activities or work systems in the world of work, especially in the State-Owned Enterprises (BUMN) companies. In addition, students are expected to be able to make observations or study knowledge about the agency.

The programme, which has been running before the covid-19 outbreak became widespread, namely since 2018 until now, has involved around 146 students. 2018 until now has involved around 146 SOEs and 16,648 students from both State Universities (PTN) and Private Universities (PTS) (FHCI, 2018). One of the State-Owned Enterprises (SOEs) participating in this Certified Student Internship Programme (PMMB) is PT Industri Kereta Api (Persero) or familiarly abbreviated as PT INKA. This company is engaged manufacturing railway facilities with a wide range of products offered such as the manufacture of train carriages, train innovations and energy-efficient buses, to service and maintenance of railway equipment. For more than 30 years PT Industri Kereta Api (Persero) has always participated in encouraging the development of the transport industry in Indonesia. Product quality products at PT Industri Kereta Api (Persero) has also been recognised in the international market (INKA, 2017).

Running a company/organisation without people is impossible. Humans are a vital part of the sustainability and success of an organisation or company (Hermawati, Nurwati, et al., 2020). Moreover, in running this railway industry company, by employing more than 1000 workers, of course, the human resource management of PT Industri Kereta Api (Persero) must have a strategy in filtering and managing the workforce as well and selectively as possible. Not infrequently human resources in large companies like this are usually required to have qualified work quality, especially in mastering hard skills that can support company productivity.

Some companies may have problems that generally occur frequently. Especially with the emergence of the covid-19 outbreak which has quite an impact on the industrial sector. Such as the problem of decreased productivity due to skills that are not in line with the work field, or employees experiencing work stress, or company losses and layoffs that occur drastically due to the impact of covid-19. Uniquely at PT Industri Kereta Api (Persero), these things are not a big problem for the company. The company's management team is more responsive in suppressing sources of problems that are likely to have a greater impact in the future. However, there is one thing that is a little bit odd at PT Industri Kereta Api (Persero), namely that there has been no measurement of employee competence, especially Hard Competency, which results in a misalignment between the level of competence, especially technical competence (hard skills) possessed by employees with the work field or workload given. It turns out that this also affects the provision of wages which in the end are equalised and do not look at the abilities possessed and the workload felt by employees. This problem triggers a sense of discomfort among fellow employees in the work environment. In dealing with this, Human Resources in collaboration with the parties involved in measuring employee performance at PT Industri Kereta Api (Persero), conducted an assessment activity called "Self Assessment Hard Competency". This assessment is needed to measure the level of hard competency in each employee through self-assessment activities, which aims to find out how much the level of technical competence / hard skills and knowledge that has been mastered by most employees. Another goal is for manpower planning or company employment planning. That way, later the HR department will find it easier to map the skills of each employee and make it easier to determine work planning and further training for career advancement in developing human resources.

The objectives of this Certified Student Internship Programme (PMMB) include being able to introduce and teach students / interns about the work culture at PT Industri Kereta Api (Persero), especially in the HR division, can add to the experience and knowledge of students about how the company manages existing human resources, is able to improve skills and measure their ability to solve problems faced, and is able to know how to manage human resources.

how the company manages existing human resources, is able to improve skills and measure their ability to solve the problems they face, and is able to find out about how the Self Assessment Hard Competency activities are carried out. about how the Hard Competency Self Assessment activities will be carried out.

The Final Report of the Certified Student Internship Programme is prepared in accordance with the author's experiences and activities during the implementation of the internship to fulfil one of the requirements to achieve a Bachelor of Management (S1) degree. From the various activities that the author has carried out during the internship, the author chose one of the topics on how the process, benefits and objectives of the implementation of Self Assessment Hard Competency with the title "Measurement of Hard Competency through Self Assessment on Employees of PT Industri Kereta Api (Persero) Madiun".

This internship report is not result-oriented or in-depth research, but the preparation of this report is more to explain and report / tell how and what activities the author has done during the internship process, especially on the topic of Hard Competency Self Assessment activities.

## THEORETICAL STUDIES

### Hard Competency

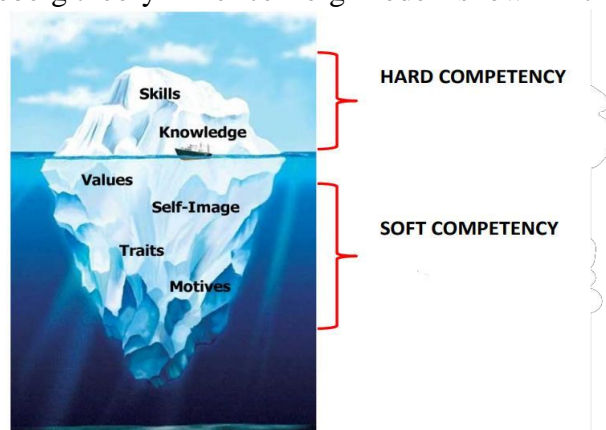
Human resources that are competent and have qualified competencies or skills are one of the company's advantages in business competition. From here, it is necessary to master skills, especially hard skills / hard competencies for employees. This certainly cannot be separated from how Human Resource Management actions in a company manage its members. This human resource management activity is very diverse starting from the recruitment process, training, development, assessment, compensation, to career planning while still paying attention to labour relations, health, safety, security, and fairness of workers. This activity also directly affects the development of competencies / skills owned by employees. If these human resources are not managed properly, the success of the organisation in achieving its strategic plan will be difficult to realise. (Hermawati & Mas, 2016) Basically, the term hard competency or hard skill is the same, which means the ability or skills possessed by each employee in the technical field. It's just that the scope of competence is broader, one of which also discusses skills. Below the author will explain

about competence in general and what hard skills are.

#### 1. Competency

Competence in English is called "Competence" or "Competency" which means an ability/skill, authority, and proficiency. According to Sedarmayanti (2008), competence is a fundamental characteristic of an employee that has a direct effect on performance and can predict good performance. According to Stephen Robbin (2007), competence is an ability or capacity of a person to perform various tasks in a job, this ability is determined by 2 factors, namely between intellectual abilities (soft competencies) and physical abilities (hard competencies). Meanwhile, according to Mc. Acshan (Sutrisno, 2010) defines competence as knowledge, skills, and abilities mastered by someone who has become part of him, so that he can perform cognitive, affective, and psychomotor behaviours as well as possible.

Based on the results of the author's interview, referring to Spencer's (1993) Iceberg theory "The Ice Berg Model" shown in the figure below:



Source : Competency teaching materials – IBC (2022)

The figure above shows that Hard Competency (technical ability) is shown by the surface of the iceberg. These competencies are easy to identify and relatively easy to develop, usually through training. These competencies are similar to hard skills, which can be interpreted as abilities related to

knowledge, skills and attitudes or behaviours that can be observed, measured and developed specifically related to technical abilities in a job. This competency covers knowledge and skills. While Soft Competency (managerial ability) is shown by the base of the iceberg covered by sea water. It is a competency with more hidden characteristics because it is closely related to a person's personality, so that soft competency development adjusts the ability and personality of the employee. This competency is similar to soft skills, which is a competency related to managerial expertise or knowledge of a person in managing work processes and relationships between people. This includes values, self-image, traits, motives.

So the author can conclude that competence is an ability / expertise, knowledge and attributes that a person has so that he can improve his performance by making a good contribution in a company. Competence is an important characteristic for a person that causes that person to be able to produce superior performance in their job, role, or situation/condition for which they are responsible. By conducting assessments related to hard & soft competencies, personnel will find it easier to know how much technical ability or knowledge their employees have.

## 2. Hard Skill

Islami (2012) argues that, Hard Skills are technical knowledge and abilities that a person has. Technical knowledge includes knowledge of the design and features of the product, can develop according to technology, be able to solve problems that occur and analyse the usefulness of the product in an effort to identify new ideas about the product or service (Sari et al., 2022). Fachrunissa (2015) suggests that Hard Skills are all things related to the enrichment of the theory that is the basis for an analysis or a decision. Technical ability or hard skill is an understanding, ability and real skills that should dominate a person's field of work in completing a technical job.

Hard skills are identical to the abilities required for a profession or field of work. Because PT Industri Kereta Api (Persero) is a company engaged in the railway industry, a person's technical ability, especially in the field of technology, is a major icon in the running of the company. Basically, hard skills can be learned or trained, while soft skills are innate in a person. In the world of work, hard skills and soft skills are both needed as the key to success which has a significant effect on work results.

### **Self Assessment**

Self-assessment is one type of self-assessment related to the ability, understanding, and level of competence that has been mastered by employees. In social psychology quoted from wikipedia, self-assessment is the process of looking at oneself to assess aspects that are important to one's identity. Sedikides (1993) suggests that the motive for self-assessment will encourage people to seek information to confirm their uncertain self-concept rather than their particular self-concept and at the same time people use self-assessment to increase their certainty about themselves. According to Kunandar (2012) self-assessment is an assessment technique by asking someone to express the strengths and weaknesses of himself in the context of attitude competence, both attitudes and behaviours. himself in the context of attitude competence, both spiritual and social attitudes.

Self-assessment in the scope of industry / companies is generally used by the Human Resource (HR) department to study, measure, observe, and evaluate the

competence of a person / employee who will later be used to design a strategy. from these results can be used to design a strategy for the development of human resource management in the company. This assessment helps the manager to better understand what is needed by his employees and how the work obstacles they face. That way the manager can develop a work strategy so that it can be more integrated with employees without the need to reduce work targets. While from the employee's side, with the employees will be able to understand the development and quality of their own performance, with this it is hoped that they can learn from previous mistakes and can be motivated by their level of work achievement. So it can be It can be concluded that Self Assessment is an activity of self-assessment by expressing their weaknesses and strengths to find out the competencies they have. The objectives of this self-assessment activity include:

1. Improvement of work performance, with a performance appraisal it will make it easier for the company to carry out activities that can improve employee performance.
2. Skill mapping, from the results of the assessment it will make it easier for personnel to map or classify the skills that employees have mastered.
3. Work rotation, the results of the assessment can also determine the rotation of labour that is good for the company and employees. Training & development, training and development will be easier to implement after the personnel know the skills that have been mastered by employees.
4. implemented after the personnel know the level of employee performance appraisal.
5. Promotion, it will be easier to see which employees are more capable and deserve to be promoted.

The Human Resource at PT Industri Kereta Api (Persero) itself uses this assessment activity to be able to map skills which will also affect the HR development process to increase career paths.

## **REPORT METHOD**

### **Observation**

Observation is a data collection technique for observing human behaviour, work processes, and natural symptoms, and respondents (Sugiyono, 2017). In other words, this method is carried out to obtain first-hand information data by making direct observations. The observation carried out by the author is a type of participant observation, where the author observes and participates in field activities during the internship process.

### **Interview**

The interview method is a method that involves a conversation between two or more people, namely the interviewee and the interviewer, with the aim of collecting or extracting data in the form of information. In complementing observation data, interviews are one of the strongest evidences for the validity of report preparation. In this report, the author uses the interview method by interviewing one of the employees who participated in the process of implementing the hard competency self-assessment. The author conducted the interview to find out the background of the hard competency assessment with the self-assessment method, as well as briefing/mentoring on the materials needed in the preparation of the report..

## Literature

According to Nazir (2003) literature means data collection techniques by examining books, literature, notes, and various reports related to the problem to be solved. Meanwhile, according to Sugiyono (2012) literature study is a theoretical study, references and other scientific literature related to culture, values and norms that develop in the situation.

related to culture, values and norms that develop in the social situation under study. In preparing this report, the author directly refers to literature guidelines and references related to the contents of the report.

## IMPLEMENTATION METHOD

The Certified Student Internship Programme (PMMB) activity at PT Industri Kereta Api (Persero) begins with an induction training period. The participants were first introduced to PT INKA's company profile, division placement, and the rules and regulations that must be carried out during their internship at PT INKA. This induction training activity was carried out face-to-face with the company's Human Resources (HR) on the first day of the internship, namely 3 October 2022 at 13.00 - finished and continued with the delivery of interns to their divisions. delivery of apprentices to their respective divisions in accordance with the jobdesk that has been given previously. After that, the interns made self-introduction to the mentor and other employees in their respective workspaces.

On another day of the same month, interns were gathered again and directed to take part in Site Workshop activities which were guided directly by the company personnel. The purpose of holding this Site Workshop is to introduce the work environment of the railway industry that will be occupied for the next 6 months.

The author was placed in the Human Resources (HR) & General Affairs Division, focusing on the Human Resources (HR) Planning, Management & Development Department. The jobdesk in this department includes preparing operational plans, proposing policies and procedure systems, carrying out main tasks, supervising, controlling work and compiling reports in the Department of Planning, Management, and Development of Human Resources. reports in the Department of Planning, Management, and Development of Human Resources (HR). In this department, the author is guided and directed by mentors and co-mentors regarding the provisions of the department and the assignment / work that will be carried out during the internship.

Internship or field work practice is a form of organising education and learning activities that are external in nature by working directly, systematically and directed with competent supervision in order to have provisions in the form of work experience when entering the world of work later.

## RESULT AND DISCUSSION

The internship activities carried out by the author at PT Industri Kereta Api (Persero) located in Madiun City are a form of real practice of several courses obtained during lectures. During the internship process at PT Industri Kereta Api (Persero), the author did many activities or jobs that were rarely and even never done before. The author also found new experiences that were quite unfamiliar to him. This is a challenge in undergoing this internship activity.

From these challenges, it can finally trigger the author's interest in one of the new and unique activities carried out by the HR team together with the Corporate Development team to be used as a topic in the final report. The activity is "Self Assessment Hard Competency". It can be underlined that the topic that the author takes in compiling this Final Internship Report is the topic of a new activity that will be carried out at PT INKA, so the author has not found previous research that discusses the topic at PT INKA. The preparation of this report is in accordance with the experience and activities and interviews conducted by the author during the internship process. Below I will explain what problems occurred until the activity was carried out, where the source of the problem was and the impact of the problem, to solve the problem.

#### 1. Problem

After conducting various field activities, observations, guidance and interviews with co-mentors, the author can conclude that in terms of performance measurement itself there are actually no significant problems, because there is already a performance measurement through the IKK (Employee Contribution Index) assessment which is carried out every month and a semester assessment which is carried out every 6 months at PT Industri Kereta Api (Persero). However, there are problems that are still felt by some workers, namely the distribution of workloads that have not been adjusted to the level of competence, especially the technical competence (hard skills) of the employee, in the end the employee's competence is less valued according to the level or level and so generalised (all levels or levels are valued the same)..

#### 2. Problem Source

The source of the problem occurs because competency measurement has not been carried out, especially technical competence (hard competency). Competency measurement is an activity needed for job evaluation of employees at PT Industri Kereta Api (Persero). In addition, this competency measurement is needed so that HR can find out the potential expertise or hard skills possessed by employees so that they can provide fair performance appraisals and make it easier to determine employee career paths.

#### 3. Problem Impact

The resulting impact turns out to be quite influential on the provision of wages which in the end are equalised and do not look at the level of competence possessed by employees. This problem eventually triggers a sense of employee discomfort at work and of course will affect employee morale. Because some employees feel unfair between the division of workload that has not been adjusted to the level or level of competence but is valued or valued the same. So that this has an impact on employee morale and employee career paths that are still not measurable.

#### 4. Problem Solving

To deal with these problems, Human Resources in collaboration with the parties involved in measuring employee performance at PT Industri Kereta Api (Persero), conducted an assessment activity, namely "Self Assessment Hard Competency". This assessment is needed to measure the level of hard competency in each employee through self-assessment activities, which aims to find out how much



the level of technical competence / hard skills and knowledge that has been mastered by most employees. Another goal is for manpower planning or company employment planning. That way, it will be easier for HR to classify the skills of each employee and make it easier to determine work planning and further training for career path planning in developing human resources.

Unfortunately, this activity is still in the trial process, meaning that it has not been applied directly to all employees. On the other hand, this trial process is also constrained by the change in the Board of Directors, which caused a slight change in the organisational structure. Because this competency measurement can only be done when the company's organisational structure has been safely fulfilled. Therefore, in this report, the author intends to better introduce and describe what this activity is like and how the process will be carried out by the team. The internship report on the topic of this activity does not refer to the results, but rather refers to the introduction and description of the process of implementing the Self Assessment Hard Competency activity.

The following will explain how the overall picture or process of the implementation of the Hard Competency Self Assessment. This process is divided into 5 (five) stages, namely:

1. The first starts from the preparation stage. HR together with the company's Planning department and the Technology division conducted FGDs (Focus Group Discussions) in preparation for determining hard competencies and their levels. This preparation includes the preparation of a Hard Competency dictionary that has been compiled by the University of Indonesia and endorsed in 2020 in accordance with the needs or competency standards that exist at PT INKA (Persero).
2. After determining the Hard Competency, continued with the preparation of tools that will later be used in filling out the hard competency assessment by employees. In filling out this assessment, the team utilised the platform provided by Google, namely Google Form, which we arranged in such a way as to contain the competencies to be assessed in relation to the technical competencies of each division. The assessment uses a range of 1 - 5 in accordance with the division of employee competency levels in the PT INKA (Persero) Hard Competency Dictionary (University of Indonesia, 2020).
3. Furthermore, after the assessment tools have been compiled, proceed with the implementation of the Hard Competency Self Assessment tools to all employees of PT Industri Kereta Api (Persero) starting from the official level to the staff level. At this stage the deployment of assessment tools is still in the trial process. Employees who first conducted the trial were employees in the Technology division, because this division is the icon of the company and has quite diverse types of hard competencies.
4. The next stage is to conduct FGD (Focus Group Discussion) on the results of the Hard Competency Self Assessment. At this stage, the assessment team entered the process of hard competency adjustment activities, meaning the process of validating the assessment results carried out by structural level officials who had served in the previous period or batch. Represented by 3 former officials (General Manager, Senior Manager, & Manager) to validate the assessment results in accordance with the division concerned.

5. In the final stage, namely the approval/validation stage of individual self-assessment results by the HR team, usually carried out by interview or using approval documents from superiors for filling out individual self-assessments in stages. This is followed by finalisation and leveling of the hard competency assessment results that have been validated by officials in the relevant division. In this final stage, the leveling process refers to 5 levels of behavioural indicators according to the Hard Competency Dictionary. The five levels include: Level 1 Concept (recognising basic concepts), Level 2 Applied Concept, Level 3 Working, Level 4 Advanced, Level 5 Mastery (highly experienced).

On the other hand, according to ideal conditions, companies should carry out Hard Competency Certification by Assessor after the preparation of assessment tools, and continued with the implementation of Hard Competency Self Assessment. Competency Assessor is someone who has the authority in the competency test process that recommends test participants to be declared competent or not competent. Seeing the important role of Assessor, it is necessary to prepare a mechanism and procedure in preparing, selecting training, certifying and developing an Assessor to achieve the required competencies Assessor to achieve the required competence.

From the results of interviews with relevant sources, it is unfortunate that PT Industri Kereta Api (Persero) still does not have or has not conducted training specifically to produce Competency Assessor candidates (especially in the technology division). So that the Hard Competency measurement for the time being must be done through a self-assessment process. However, in its execution, this measurement trial is still constrained due to a change in the Board of Directors which affects the company's organisational structure. Therefore, this assessment is likely to be continued after the approval of the new organisational structure.

## CONCLUSION

Based on a series of internship activities carried out by the author at PT Industri Kereta Api (Persero) and the final report that the author has compiled on the topic of "Measuring Hard Competency through Self Assessment in Employees of PT Industri Kereta Api (Persero) Madiun", in this final chapter the author tries to convey several conclusions, including:

1. PT Industri Kereta Api (Persero), located in Madiun, is the first company in Indonesia engaged in railway manufacturing. The quality of railway products at PT Industri Kereta Api (Persero) has also been recognised in the international market.
2. The management of PT Industri Kereta Api (Persero) has not conducted an in-depth measurement of the technical competence of employees. Therefore, the HR team with related parties, conducted an assessment activity, namely "Self Assessment Hard Competency". But unfortunately this activity is still at the trial stage and has not been applied directly to all employees due to a few obstacles.
3. The assessment in this activity is divided into 5 levels or levels of hard competency assessment, starting from Level 1 Concept (recognising basic concepts), Level 2 Applied Concept, Level 3 Working, Level 4 Advanced, to Level 5 Mastery (recognising basic concepts).
4. By holding this activity, it is hoped that HR will be able to find out how much level of technical competence / hard skills and knowledge has been

mastered by employees. Another goal is for manpower planning or company employment planning. That way, later the HR department will find it easier to classify the skills of each employee and make it easier to determine work planning for career path planning in developing human resources.

In addition, the Certified Student Internship Programme activities carried out for 6 months can have a very positive impact on the author including:

1. The author gained new knowledge in addition to the material provided during lectures.
2. The author understands how the real world of work is.  
The author can understand how the Human Resource Management work system actually works from the experiences the author gets.
3. The author was able to train and develop his potential to the maximum during the internship.

The author understands that the preparation of this Final Report is far from perfect. Therefore, future authors are expected to develop new research based on the results of this study so that it can be maximally known about how the final results of the application of Hard Competency measurement through Self Assessment on PT INKA (Persero) employees.

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