CHAPTER 1
PROPOSAL IDEAS

1.1 General Description of Problem

1.1.1 Background Problem

One of the issues in Indonesia's employment sector is the mismatch or gap between job opportunities and industrial demands, which is created by a mismatch in education and skills [1]. The employment demand and supply imbalance forced many higher education graduates in Indonesia to seek jobs outside their field of study, regardless of the major they studied in college. This scenario is referred to as a horizontal mismatch, and it has become a severe issue, particularly for college graduates, because certain majors have more graduates than demand. As a result, many graduates must accept occupations unrelated to their majors [2].

A mismatch between education and employment is an issue because when an employee works in an area that does not match their educational background, they must work harder to acquire the necessary skills or competences for the job. It means that employees must learn new things and dive into different information than what they previously knew, which may make them feel uncomfortable with their employment and lead to poor levels of job satisfaction. This will also lead to diminished productivity and firm growth [3]. The definition of NLP in the Encyclopedia of Systemic NLP and NLP New Coding is patterns or programming created from the relationship between the brain (neuro), language (linguistic) and body state (body state). (Dilts, R dan Delozier. 2000. Enyclopedia of Systemic NLP an NLP) [4]. Researchers can use NLP methodologies to explore individuals' complex views and attitudes regarding the specified health services, therefore enhancing their grasp of public opinion [5].

One of the causes of the mismatch is a lack of high-quality human resources, which is also caused by individuals' lack of self-knowledge. Self-development is one strategy for developing human resources [6]. Self-development can be achieved by identifying one's own character, also known as self-awareness, to realize one's potential, limitations, and personality. As a result, a person might use self-evaluation as an effort or step toward increasing self-quality and eventually becoming a quality human resource [7]. The Big Five personality theory, created by Paul Costa and Robert McCrae, is one of the most widely recognized methods in personality psychology. This theory highlights the five basic qualities of human personality:

openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism. Each of these categories represents a range of characteristics that might define individual personality differences. Extensive empirical study has demonstrated the Big Five theory's remarkable validity in a number of cultural contexts and situations, making it a significant tool in personality studies [8].

1.1.2 General Analysis

1.1.2.1 Economic Aspect

The problem of mismatch between education and employment is caused by a lack of self-awareness in comprehending one's own character in the economic aspect. Workers who work in positions that do not correspond to their educational background may earn a poor salary. The consequence of this mismatch between education and job extends beyond the individual worker to the corporation as an employer and society as a whole. This mismatch has a negative influence on companies' productivity and company growth. Furthermore, society is affected, with underused human resources, higher unemployment rates, and a potential loss of income tax revenue.[9]

One of the primary goals of development activities in any country around the globe is to achieve public welfare. This degree of wellbeing may be shown in increased economic development and a more fair income distribution. To attain population wellbeing, income must be increased to raise people's level of life [10]. However, the existence of this mismatch would undoubtedly have an influence on slowing economic growth, hence impeding people's wellbeing as one of the development goals.

1.1.2.2 Manufacturability Aspect

The part of the web application that lets people view and interact with. it is called the frontend. The front-end programming languages used are JavaScript, HTML, and CSS. The backend refers to the area of the website that will handle every process, such as database connections and data processing. The programming language used at the backend is Python. The key challenge here is developing the machine learning model. Several models must be created before the best one is selected based on how well it predicts personality. The best machine learning model will then be integrated into the application website.

1.1.2.3 Social Aspect

The web application solution we developed focuses on determining a person's personality based on social media posts. As a result, it might be beneficial to understand and analyze someone's personality before engaging in additional interaction with them.

1.1.3 Capstone's Purpose

The purpose of this Research is to identify the problem of individual character analysis as a means of developing Human Resources (HR). This text is targeted to the entire community, particularly the younger generation that is seeking for jobs. Young people must recognize and assess themselves to have a positive influence on their own growth and become high-quality human resources. The solution in this research creates to be better of self-awareness and self-potential.

1.2 Analysis of Existing Solutions

1.2.1 STIFIn

STIFIn is a technique for identifying a person's personality traits by analyzing the unique properties contained in their fingerprints. Each person has a unique and distinct fingerprint pattern or mark. This information may be used to assess an individual's potential depending on their genetic makeup [11].

Basic Features:
- The STIFIn test, which uses fingerprints, reveals one of nine hereditary features in each facet of a person's personality. This personality is the product of a person's intelligence engine and intelligence motive. This combination depicts how a person uses different regions of their brain to make decisions and control their thoughts [12].
- One of the advantages of the STIFIn idea over other approaches is its ability to precisely determine the actual location of brain components. For example, the physical organ for the instinctive type is located in the midbrain. When we look at the actual form of this section of the brain, we can see that the midbrain extends from the corpus callosum to the midbrain, pons, medulla, brainstem, cerebellum, and even the spinal cord [12].

Characteristics of the Expected Solution:
- STIFIn offers three major advantages. The first is its simplicity, since STIFIn divides humans into five intellect engines and nine genetic personalities. As a result, we don't

have to learn as many different human kinds as previous assessments. The second advantage is that its simplicity allows the STIFIn test to be performed without requiring much preparation. Simply scan ten fingerprints, and the results will be ready within 5-10 minutes [13].

- The second is a high level of precision. This is based on reliability and validity tests done on samples involving hundreds of people, which achieved an accuracy rate of about 95%. In terms of testing accuracy, this is really high. In contrast, the study of psychology often reaches accuracy rates of 40–60%, with varied outcomes [13].

- Lastly, STIFIn has a broad range of applications. This means that STIFIn may be used for a wide range of topics and circumstances. STIFIn is currently employed in a variety of contexts, including learning, teaching, parenting, couple relationships, business, motherhood, spiritual elements, beauty, investing, politics, human resources, and many more sectors [13].

1.2.2   Enneagram

The Enneagram is a tool for analyzing a person's personality system. In the enneagram, human personality may be classified into nine categories. The Enneagram theory states that humans are born with dominant personality traits, which may be influenced and shaped by the environment and experiences of their lives. This means that even if a person has a specific type of privilege, he or she may have a different type of privilege. In the Enneagram test, there are nine types of personality: *the perfectionist* (type 1); *the giver* (type 2); *the achiever* (type 3); *the individualist* (type 4); *the investigator* (type 5); *the sceptic* (type 6); *the enthusiast* (type 7); *the challenger* (type 8); dan *the peacemaker* (type 10).[14]

Main feature:

This test determines an individual's personality type, which is one of the nine fundamental Enneagram types. It assists people in understanding the main aspects of their personalities.

Basic Features:

- Personality Type Description: The test includes a detailed description of each personality type's qualities, motives, inclinations, and distinguishing characteristics. This helps people better understand themselves.

- Personality Development Map: The tests can offer a developmental map that describes how people may develop, overcome their type weaknesses, and progress personally.

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Additional Features:

- Personality Type Comparison: This test allows people to compare their personality type to others in the Enneagram. This can assist us in comprehending the dynamics of relationships and interactions with others.

- Customized Action Plan: The Enneagram test may provide a personalized action plan based on a person's personality type. This assists individuals in conquering issues that are frequently tied to their personality type.

- Stress Management: This test can help people understand how they respond to stress and how to handle it more successfully.

- Profession Considerations: Some Enneagram tests may also help an individual choose the sort of work or profession that is most suited to their personality type.

These are some of the key characteristics, fundamental features, and optional aspects of the Enneagram personality test. However, take in mind that each Enneagram exam may have distinct attributes and techniques, and different sites may provide different features.

1.2.3 MBTI

The MBTI test is a personality assessment that asks a series of questions regarding a person's preferences across four categories. According to Myres and Briggs, humans have four realms, which are: 1. Introvert (I)-Extrovert (E); 2. Sensing (S)-Intuition (N); 3. Thinking (T)-Feeling (F); and 4. Judging (J)-Perceiving. This is why, even if a person has a specific personality type, they might feel connected to others. The Myers-Briggs Type Indicator (MBTI) test expresses each individual's personality in a variety of names, including INFP, INTJ, INFJ, INTP, ENFJ, and others [15].

Main Features:

Personality Type Identification: This test determines an individual's personality type and describes each personality type [16].

Basic Features:

- Personality Type Description: The test includes an in-depth description of each personality type's qualities and motives, as well as illustrative illustrations to assist in self-discovery.

- Development Recommendations: The MBTI test gives feedback on the final findings of each test to a person who has taken it in the form of a comparison of career and self-motivation.

Additional Features:

- Stress management: in this test, a person will determine their stress level and make input ideas for activities to lessen their level of pressure or relax for a minute.

- Professional development: This test includes a component to determine what type of professional path is best for someone depending on their MBTI test results.