

EDUCATION AS HUMAN RESOURCE INVESTMENT: EDUCATIONAL RESOURCES AND EDUCATION AS AN INDUSTRY

Fatimatul Baroroh^{*1}, Nurrochim², Sita Ratnaningsih³
¹²³ Syarif Hidayatullah State Islamic University Jakarta, Indonesia

*Corresponding Author: fatimatul.baroroh22@mhs.uinjkt.ac.id
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Abstract:

Education serves as a future investment for the people of Indonesia. It encompasses not only physical aspects but also non-physical dimensions. Non-physical investment is better known as human resource investment. This study aims to describe education as a human resource investment and to explore its potential as an industry. Using a qualitative approach with a library research method, data analysis was conducted by reducing data, reviewing it, and drawing conclusions. The findings reveal that treating education as an investment involves managing the field of education seriously, akin to an industry. The education industry belongs to the service sector. In this sector, the most effective promotion is customer recommendations (students) based on satisfaction with the services received during and after transactions. Customers in the education industry, namely students or learners from an institution, exhibit unique characteristics compared to customers in other service sectors. A notable distinction is the prolonged engagement period of customers. Moreover, the increasing demand for formal education, particularly higher education, signifies its growing importance in meeting societal needs.

Abstrak:

Pendidikan merupakan investasi masa depan bagi masyarakat Indonesia. Pendidikan tidak hanya mencakup aspek fisik tetapi juga dimensi nonfisik. Investasi nonfisik lebih dikenal dengan investasi sumber daya manusia. Penelitian ini bertujuan untuk mendeskripsikan pendidikan sebagai investasi sumber daya manusia dan menggali potensinya sebagai sebuah industri. Menggunakan pendekatan kualitatif dengan metode penelitian kepustakaan, analisis data dilakukan dengan mereduksi data, menelaahnya, dan menarik kesimpulan. Hasil penelitian menunjukkan bahwa pendidikan sebagai sebuah investasi berarti mengelola bidang pendidikan secara serius, seperti halnya sebuah industri. Industri pendidikan termasuk dalam sektor jasa. Pada sektor ini, promosi yang paling efektif adalah rekomendasi pelanggan (siswa) berdasarkan kepuasan terhadap layanan yang diterima selama dan setelah transaksi. Pelanggan di industri pendidikan, yaitu mahasiswa atau peserta didik dari sebuah lembaga, memiliki karakteristik yang unik dibandingkan dengan pelanggan di sektor jasa lainnya. Perbedaan yang mencolok adalah masa keterlibatan pelanggan yang panjang. Selain itu, meningkatnya permintaan terhadap pendidikan formal, khususnya pendidikan tinggi, menandakan semakin pentingnya pendidikan dalam memenuhi kebutuhan masyarakat.

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INTRODUCTION

Human resources are productive individuals who act as the driving force within an organization, whether it be an institution or a company. As assets, human resources need to be trained and developed. One of the primary ways to enhance human resources is through education. Today, education plays a vital role in developing human resource capabilities and is even regarded as a form of non-physical investment. Investment in human resources entails the allocation of funds and opportunities to generate income during the investment process.(Hastarini Dwi, 2005)

Non-physical investment includes education, training, migration, health maintenance, and job creation. This type of investment, also referred to as human resource investment, involves spending funds with the expectation of earning higher incomes and achieving a higher standard of living as a return. Such investment is commonly known as human capital.(J. Simanjuntak, 1985) The significant impact of human resource investment on economic growth began to gain attention when Theodore W. Schultz and other economists highlighted its benefits. Discussions on the relationship between human resource investment and productivity became prominent, especially with the emergence of Gary S. Becker's analysis of human capital.(Warsito, 2002)

Robert M. Solow emphasized the role of knowledge and human resource investment in driving economic growth. His theory, later refined into the New Growth Theory, underscores the importance of balancing education with efforts to build an economy.(H.A.R, 2000) Several factors highlight the necessity of improving education to foster economic development; (1) Higher education broadens societal knowledge and enhances rational decision-making. (2) Education equips individuals with the technical knowledge required to manage modern enterprises and activities. (3) Improved knowledge gained from education stimulates innovations in technical, economic, and social aspects of life.

The equilibrium of an industry presents a challenge for modern education. Educators are increasingly required to address more complex challenges. Learning processes are expected to provide opportunities for students to creatively solve problems, optimize literacy and numeracy skills, collaborate, and think critically. In the era of globalization, Indonesia must reform its education system, focusing on creating a more comprehensive and flexible structure to ensure graduates can function effectively in a global, democratic society. Education must be designed to enable students to balance their natural and creative potentials in an environment that fosters freedom, collaboration, and responsibility.(Choli, 2020)

Thus, higher levels of education ensure continuous advancements in technology and industries used by society. Recognizing the crucial role of

education, it can be concluded that education as a human resource investment and as an industry is highly important and deserves further exploration and analysis.

RESEARCH METHODS

This study employs a qualitative descriptive research design using a library research method. Qualitative research seeks to understand phenomena by creating complex descriptions, presented in detail and carried out in natural settings.(Muhammad R., 2021). The library research process involves reviewing relevant literature and analyzing specific topics by synthesizing existing information.(F. Riizaldy & Bambang, 2020). Data collection was conducted by gathering information through documentation studies, including books, journals, articles, magazines, and newspapers related to education as human resource investment. Data analysis began with data reduction, where irrelevant data was filtered out, followed by an in-depth review of the remaining data. Conclusions were then drawn to address the research problems. The data analysis technique employed in this study involves triangulation of theories, ensuring the validity and reliability of the findings by comparing and cross-verifying information from multiple theoretical perspectives.

RESULTS AND DISCUSSION

Education as Human Resource Investment

Economists in the theory of Human Capital describe resources within individuals or groups as forms of capital. In business, capital refers to converting raw materials into semi-finished or finished products ready for sale. However, in education, human capital is attained when individuals acquire the desired skills or knowledge. Beyond natural resources, capital, and entrepreneurship, human capital is a crucial factor in a nation's productivity. Higher human resource quality in a country correlates with increased productivity, welfare, and competitiveness on a global scale(Meirceir, 2010). The urgency of mastering knowledge and investing in human capital lies in driving economic growth. To improve the welfare of its citizens, a nation should prioritize developing human resources over physical infrastructure. The Human Capital Theory assumes that individuals can enhance their income by investing in education(Schultz, 1961)

Each additional year of schooling is associated with increased educational expenses but also leads to enhanced work performance and earning potential. However, this additional schooling year often requires individuals to forgo potential earnings during the learning process (earning forgone). Consequently, those who continue their education not only incur direct expenses such as tuition fees, books, tools, transportation, and other necessities but also sacrifice income they could have earned had they joined the workforce. This cost is viewed as part of the investment in education, determining individual productivity levels. In the book *Human Capital: A Theoretical and Empirical Analysis with Special Reference to Education* mentions the term non-physical investment with human resource

investment which is then known as human capital theory. This theory states that the amount of money a person spends is directly proportional to the amount of income that will be earned during the investment process.(Beickeir, 1993). Cohn (Cohn, 1979) similarly argues that individuals who pursue education gain various benefits, such as increased employment opportunities, higher productivity, and enhanced income. Society also benefits from the productivity of educated workers. Becker further emphasizes that investing in education yields greater benefits compared to other forms of economic investment, as its impact extends beyond material gains to societal and non-material improvements.

Human resource investment is not limited to physical aspects such as buildings and equipment but also includes education, training, and migration. This type of non-physical investment, often associated with human capital, involves expenditures and opportunities to earn income during the investment process(Atmantii, 2005). Irianto (Iriianto, 2011)states that investment in education creates a workforce ready to contribute significantly to economic growth, ultimately enhancing societal welfare. The basic concept of education as human resource investment aims to improve the quality of human resources, enabling societal well-being and national productivity.

Investment in human capital is the amount of money spent and the opportunity to earn income during the investment process. This investment plays a role in spurring economic growth. Investment in human capital through education in developing countries is necessary although investment in education is a long-term investment at the macro level, the benefits of this investment can only be felt over decades. Investment plays a major role in spurring economic growth. Human capital investment through education in a balanced country is very much needed even though investment in the field of education is a long-term investment at the macro level, the benefits of this investment can only be felt over decades (Atmantii, 2005).

Education investment, particularly in human capital, plays a pivotal role in fostering economic growth. While it is a long-term investment, the macroeconomic benefits of education are only realized after decades. The relationship between education processes and their benefits is indirect. The outcome of education is manifested in learning achievements, such as increased knowledge, skills, understanding, and attitude changes. These benefits materialize only when the learning outcomes are effectively applied in society.(Siireigar eit al., 2011)

Thus, education serves as a form of investment in human resource development. By improving the quality of human resources, education contributes to societal welfare and enhances national productivity.

Education as an Industry

Economic prosperity and rising income levels are indicators of economic development. This cumulative growth contributes to increased national income. Industry, as a significant sector, plays a substantial role in this growth.

Education is vital for fulfilling the human resource demands of industries. It

aims to develop individuals capable of meeting industrial needs and enhancing competitiveness in the global era.(Alumamii, 2009).

Education should be viewed as an industry. As an industry, it involves structured activities that produce outputs valued by society. The quality of education is reflected in its graduates. Educational operations consist of managers, raw materials, processes, products, quality standards, and associated costs. However, unlike traditional industries focused solely on profit, the education sector emphasizes the quality control of its output—namely, the quality of education (Dabbagh & Breinda, 2005).

Viewing education as an industry implies that its graduates should not only be skilled and obedient workers but individuals capable of realizing their optimal potential based on their talents. Education should be considered an industry of products and services based on skills and knowledge. Like healthcare, education as an industry provides services, opportunities, and facilities, from library services to personalized guidance during the learning process(Banathy, 1991).

When analyzing how education is, education is an activity that is like an “industry”, where all educational organizations are responsible to the users of their services, namely the community, who are entitled to quality services and products. Therefore, education is said to be of high quality, if the provision of opportunities and learning facilities is done as optimally as possible. The student is not an input or output material, but a user or benefit of the output, namely learning (Boeidiiman, 2004). Education as an industry of products and services should be looking for customers (students) to take advantage of its opportunities, namely opportunities in terms of learning. How to utilize the knowledge and skills services provided by education, to educate students as much as possible. Education is likened to a motorbike that requires tools and facilities and guidance to drive the motorbike, but the student must drive it independently. Each student must drive independently the required instruction, either with the guidance of a teacher or a doctor so as to enable him or her to be balanced as much as possible. (Bok, 2003).

The government, as well as all stakeholders, still understand education as an industry of products or goods, which is oriented towards graduate diversity. If education is a factory, and the product is the graduates, then surely diversifying the graduates is the idea of the future (Teiasdalei & Z, 2000) . Ultimately, it always comes down to how we view education as a product industry or a service industry. The basic principle of education as a “product and service industry”, in essence, is that the quality of the product is measured by the Input-Process-Output (IiPO) system, through planning, analysis, and control. Thus, education is a service industry that promises prosperity for the people of Indonesia (Djaja, 2023).

The primary and essential requirement for a civilization is education. Education not only has a lifting power for the balance and progress of a country, but also as a basic right for every human being on earth. If education is recognized as a basic right for every human being in every country, then the consequence is that the country, through its government, has an absolute obligation to develop the

education sector so that it can be enjoyed by all, creating equal opportunities and opportunities for the public to balance their knowledge and other capabilities through education at a cost that is affordable for all (Branein, 1975).

The Law on National Education System (Law No. 20 of 2003) article 1 paragraph 1, states that "Education is a conscious and planned effort to create a learning atmosphere and learning process so that students are actively balancing their own potential to develop religious spiritual strength, self-control, personality, intelligence, noble character, as well as the skills needed for themselves, the community, the nation and the country". So it can be concluded that education is a conscious effort in order to instill abilities, both those that are related to cognitive (knowledge), affective (attitude) and psychomotor (skill aspect) experiences in an individual. Higher education consists of two tracks, namely the academic track and the vocational track. The academic pathway consists of universities, institutes and colleges that offer academic and specialist degrees and includes undergraduate (bachelor's), master's (master's), specialist and doctoral (doctoral) degree programs. Vocational pathways, on the other hand, generally offer vocational education at the diploma (associate degree) level. These courses are generally offered by all of the academic institutions in Indonesia.

Higher education (higher education) provides higher education services including the provision of services in Basic Sciences (MIPA), Sciences (exact sciences), and Social Sciences and Humanities (Social and Humaniora Sciences). Higher education institutions have the right to grant academic degrees to their alumni who have fulfilled the academic requirements in accordance with the National Education Law (D. Ei. Heilleir, 2001). The cost of tertiary education, which is already very expensive, is expected to become even more expensive, driven by economic motives and following the laws of the market, will transform tertiary education as a commercial good, just like other merchandise in a commercial transaction (Cotgrove, 1958). Like any business transaction, profit-loss balance is a key factor in the management of higher education. If higher education has become an expensive commodity, it is certain that only the rich can afford it. The poor will find it harder to gain access to higher education services because of their limited financial means. The three eternal issues - affordability, accessibility, accountability - are in fact the main issues that must receive special attention and must be dealt with seriously by policy makers and administrators of tertiary institutions (M. Heilleir, 2003).

Higher education in Indonesia is still facing a variety of fundamental and complex problems. One of the basic problems is "quality". Compared to ASEAN countries, the quality of higher education in Indonesia is still far behind. The effort to build human resources that are highly competitive, knowledgeable in IPTEK, as well as moral and cultural is not an easy task (Syah, 2010).

Internal Problems of Education

Some of the internal problems faced in the world of education include:

- The poor quality of academics, especially the mastery of natural sciences, mathematics, and languages, especially English, even though the mastery of these mathematics is the key to mastering and balancing academics. The decline in intensive education is due to the length of the study period exceeding the standard time required.
- The decrease in the efficiency of the higher education system, which is the reallocation of education, which causes the unemployment of education personnel to increase. Speaking of the reasons for the increase in unemployment, the balance of the business world is still dominated by a limited number of small businesses that prioritize efficiency (capital-intensive and technology-intensive). This means that the increase in the need for labor is much smaller than the increase in the number of graduates of educational institutions.
- The improvement of the quality of the work of the education system is not only caused by the effectiveness of the education system at the micro level of the education institution, but also by the education system at the macro level, such as the improvement of the efficiency and effectiveness of the education system.

The Education Industry in Indonesia

The Indonesian education system is indeed used as a means of educating the nation's children. The nation's children who have the ability to learn about education are likely to have a pivotal position in society, because in the early days of the government, it was still the only ones who knew the world of education (Liei, 2007)

At this time, higher education in Indonesia began to be balanced with a large number of higher education infrastructures. Developing in line with nation-building efforts. The government's programs to promote education are the most important thing in today's era.

However, as we all know that the hope for economic sufficiency is through education, society at all costs wants to enter the realm of education and improve its education status. It is this educational status that will be used as a tool to create money (Marhum, 2009). By relying on the black-on-white legal record of the agency, anyone has the right to gain the advantage of a position in office. Subsequently, the same result will also affect the economy.

The number of educational institutions that can produce products, will create problems in the world of education in the era of industrialization. Society has the ability to use the geographic pillar of education to work for its own interests. It doesn't matter what the pattern of competition is, what is important is to get a black on white record of the educational institution which will later be useful for the process of obtaining employment On behalf of education, the concept of industrialization emerged. The education service industry is just one example of a civilization that requires its balance to be based on industry with money as its fuel. When public and private universities apply high tariffs, there is an industrialization

of education. This phenomenon is a slap in the face for the government, as it is the government's responsibility to maintain and improve the quality of education. Higher education may be characterized by efficiency but it does not have to be costly. The state must provide an adequate education budget to help the economically disadvantaged, State Universities / Private Universities must provide student scholarships with one of the requirements being the quality of education (Mariana, 2010).

This is where the importance of linking the industry's interests with the government's interests in the education sector comes in. Building a strong synergy between industry and education, because the industrial world needs qualified human resources and the government also needs qualified people, then education can become a common direction for all parties involved in the industry sector and the government that is responsible for the education sector.

In developed countries, such as the US, Canada, Iceland or Australia, higher education is indeed a strategic industrial field that is part of and contributes to the economic growth of the relevant country. The education industry is growing as fast as other service and trade industries. Take a look at some of the world's most significant high-tech industries, such as Boston, New York, California; Toronto, Briarish Columbia; London, Mancheisteir, Cambridged; or Sydney, Melbourne, Canberra (Reigeiluth & Robert J. Garfinklei, 1994).

The industrial balance of higher education towards domestication is not protected, marked by the process of cognitiveization of science and technology, especially when economic growth is driven by IPTEK -knowledge-and-technology-driving economic growth (Miiarso, 2008).

The cognitiveization of higher education is generally driven by three main motives. They are;

- The desire for money and financial support as well as the desire for alternative sources of funding, which in the case of American/European universities is referred to as an offence of geineirous research funding in exchange for exclusive patents licensing rights.
- Opportunities for balancing or selling distance education programs to gain financial benefits as is commonly done in Indonesian higher education.
- Obtain favorable contractual arrangements with companies/industries through the provision of funding, facilities, equipment, and even sports uniforms in exchange for the acquisition of top-tier athletics, which requires the use of the logos of the companies supplying the funding for the universities.

The direction of development of the education industry in Indonesia

Education by global standards is experiencing a period of significant imbalance with the creation of education centers in many cities. Prospective students are trying to get into the most popular universities, both private and public. This balance can be observed especially in public universities - superior and favoriit

private universities are much sought after because they provide a guarantee of future deipan, even though they have to do no less investment to study in these universities.

In the field of higher education, there are currently fraudulent higher education institutions. Many universities that do not have a strong brand are not looking for students. The city of education such as Jogja, which used to be filled with students from outside the region, is now experiencing a decline in the number of students as a result. Only brand universities have survived and are even able to increase their seats.

Industry in education is part of industry in the service sector. In the service sector, the most effective promotion is the reaction of the customer (peiseirta diidiik) on the satisfaction of the service received at the time of the transaction or the service after the transaction is made. Customers in the education industry who are not other than students or students of the institution, have their own unique skills compared to customers in other service industries. The most obvious difference is the loyalty of customers over a long period of time. With the increasing needs of the community in formal education, especially higher education, this has made higher education as a strategic actor that is expected to provide quality human resources.

CONCLUSION

Education plays a strategic role as a non-physical investment in the form of quality human resources (HR). As an industry in the service sector, education produces "products" in the form of graduates who contribute to enhancing competitiveness. Education serves as a long-term investment in developing human resources that drive economic growth and national welfare. In the industrial context, education is seen as a service sector where its effectiveness and success depend on customer (student) satisfaction, which is measured by the quality of services provided during and after the educational process. The long-term engagement with educational services distinguishes this sector from other service industries. Furthermore, the growing demand for formal education, particularly higher education, underscores education's role not only in human development but also as an economic entity with strategic impacts on the industry and global competitiveness.

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