Challenges and Opportunities in Promoting Quality Education for Companies in the Era of the Industrial Revolution 4.0 Through School Branding: A Case Study of Private Schools in Bali

Niluh Ari Kusumawati[1]
[1]Universitas Sebelas Maret
[1]niluharikusumawati@student.uns.ac.id

ABSTRACT

In the context of education in the era of the Industrial Revolution 4.0, VUCA (volatility, uncertainty, complexity, and ambiguity) is a very serious challenge in realizing quality education. Education in the era of the Industrial Revolution 4.0 tends to change very quickly, both in the context of technology use, learning methods, and social trends. In this case, educators must be able to adapt quickly to the various changes that occur in the world of education. The emergence of artificial intelligence (AI), the Internet of Things (IoT), big data, chatgpt and so on, has an impact on learning methods, curriculum, and the need for new skills that must be owned by educators and students. Focusing on the problems currently faced by several schools in Bali, especially private schools, is a very significant decrease in the number of students. Competition with public schools can be a challenge for private schools. Public schools generally have lower fees or are even free, which can entice parents to enroll their children in public schools. This can result in reduced student numbers and revenue for private schools. Improvement of the private school management system in Bali needs to be done so that private schools can continue to exist. To overcome these problems, school branding can be a solution to realizing quality education. School branding by utilizing digital technology as a solution, so that private schools can exist and compete again in the world of education.

Keywords : Challenges, Opportunities, Quality Education, School Branding

I.   Introduction

The Industrial Revolution 4.0 is characterized by the use of massive digital technologies. In very complex conditions of life, technology can be the solution to helping and solving problems present in everyday life. The development of the Industry 4.0 revolution has affected many areas of life, especially in the field of education. Where with the sophistication of science and digital technology today, society puts great hopes on the world of education in Indonesia to be able to prosper and improve quality. However, post-covid-19 education is a complex challenge and requires recovery through a holistic approach (Angga & Muhtar,

2022). The biggest impact of the COVID-19 pandemic on the education sector is the presence of changes in the way we learn to teach; there are some schools that suffer bankruptcy, teacher well-being; inequality of access to education; and so on. Focus on the problem of schools that are unable to survive or go bankrupt because of a lack of students; this problem is dominated by private schools.

Based on data from the Institute of Private Colleges (BMPS) of the Province of Bali, there is an indicator of the decline in the number of private high school / SMK students in Bali from the academic year 2018 until 2022. And also according to the data of the Trees of Education (Dapodik) Department of Primary and Secondary Education, the number of students in private schools decreased to minus -28,71 percent (Syamsuar & Reflianto, 2018). This has caused many private schools to be unable to survive and to choose to close due to a lack of funding. In addition, the economic and tourism recovery factor in Bali is also the main cause of the decline in the interest of parents to educate their children in private schools because it is expensive, and they prefer to teach their kids in public schools because they are subsidized by the government. Competition between private and state schools in Bali is also one of the main factors because the state school is trying to open a lot of rombel (classrooms), and by adding this, the amount of acceptance of new learners is very large. The continuity of private schools is measured by the number of students enrolled. Because the number of registrants affects the profits earned by the school. So the minimum number of students who enrolled caused some qualified private schools not less good than public schools in Bali to scream because of the difficulty of covering the operational needs of schools and teacher salaries. Even some private schools were forced to close.

In a situation where there is a shortage of pupils at private schools in Bali, it can create public distrust of the quality of education provided by the school. It is necessary to improve the management system of private schools in Bali so that they can remain in existence. School branding by using digital technology as one of the solutions, so that private schools can remain and compete again in the world of education. In addition, school branding can also build a positive school image so that it can restore the public's confidence in educating their children in private schools. By using effective communication strategies, choosing slogans that reflect

the values and culture of schools and aim to promote school identity or brand so that it is easy to remember by the public through publication on websites, television, and social media such as Instagram, Facebook, TikTok, and YouTube can help private schools in the face of the increasingly stringent competition in the world of education, increase the attractiveness of schools for prospective students and parents, and gain greater support and recognition from the public. Based on the phenomena outlined above, the authors are interested in studying in depth "The Challenges and Opportunities in Creating Quality Education for Society in the Era of the Industrial Revolution 4.0 through School Branding: A Case Study of Private Schools in Bali".

II. Discussion

2.1 Challenges and Opportunities to Create Quality Education in the Era of the Industrial Revolution 4.0

In the context of education in the era of the Industrial Revolution 4.0, VUCA (Volatility, Uncertainty, Complexity, Ambiguity) is a very serious challenge in creating quality education. VUCA is an acronym used to describe environments that are Volatile (very rapid change), Uncertainty (incertitude), Complexity (complexity), and Ambiguity (multi-interpretation) (Sandoval, 2022). In the context of education, VUCA refers to the way of viewing a variety of challenges, complex and dynamic situations in the learning process. An analysis of the challenges in creating quality education in the era of the Industrial Revolution 4.0 using the VUCA approach is as follows:

a. **Volatile**

Education in the era of the Industrial Revolution 4.0 tends to undergo very rapid changes, both in the context of the use of technology, the way of learning, and the presence of social trends. In this case, educators should have a high ability to adapt to the various changes taking place in the world of education. The emergence of artificial intelligence, such as artificial intelligence (AI), the Internet of Things (IoT), Big Data, Chatgpt and so on, has an impact on learning methods, curricula, and the need for new skills that educators and learners should have. The shift of traditional learning paradigms into modern post-covid-19 learning has

caused disruption in the world of education. At the beginning, educators as a center of learning (teacher-centered learning) experienced a shift where the application of learning is now centered on student-centered learning and educators act as facilitators of learning (Madhusoodanan, 2021). The changes in skills in the world of work as a result of the Industry 4.0 revolution affect the skills that education graduates must possess. Traditional skills such as reading, writing, and counting are still essential for students, but they must be integrated with digital technology, coding, data analysis, and other skills.

b. Uncertainty

The challenges faced in implementing the learning process are unpredictable. Conventional education in Indonesia was initially very difficult to reform, but the presence of the covid-19 pandemic gave momentum and a backbone to the early education reform in Indonesia. The massive use of digital technology leads to uncertainty in the workplace. This is confirmed by the presence of various predictions that, in the future, human labor will be replaced by technology. This creates uncertainty for educators and learners in preparing relevant skills for the future and choosing the right career path.

c. Complexity

The implementation of the learning process involves a variety of interactions and is influenced by a range of complex factors, such as social, cultural, economic, and political environments. One is the presence of a variety of curriculum changes designed to face the challenge of preparing learners to have skills relevant to the era of the Industrial Revolution 4.0. The use of digital technology, in addition to improving the quality of learning, also creates a digital gap between educators, learners, and educational institutions. Students who have limited access to digital technology will tend to face difficulties following the learning process. The inequality of the means and practices of education will raise very serious problems and affect the quality of education in Indonesia.

d. Ambiguity

The use of digital technology in the world of education makes a variety of learning information very easy to access, but on the other hand, a lot of information spread on social media makes students interpret it in different ways.

Students must be able to cope with ambiguity when interpreting information wisely (Cholily et al., 2019). The spread of hoax news nowadays is becoming increasingly widespread, which can procrastinate various groups of society. Therefore, educators should be able to guide learners in using technology wisely, and in addition to learning, they should be capable of integrating 21st century competencies so that learners are able to dig into and understand concepts or various problems from different perspectives.

In the face of the dramatic changes in the private school education system in Bali, the Industrial Revolution 4.0 provides solutions and hopes for the future of private schools. Some opportunities for creating quality education in the era of the Industrial Revolution 4.0 are as follows.

a. Use of digital technology

The Industrial Revolution 4.0 offers opportunities to integrate technology into the implementation of learning processes. In addition, the Industry 4.0 revolution has changed the way in which learners access learning information. Use of online platform software such as Zoom, Quizlet, a learning management system, Googe Classroom, Kahoot, and so on. And also, the use of hardware such as tablets, laptops, and smartphones can help students learn independently and more flexibly. Educators also have equal opportunities in the adoption of digital technologies by creating digital learning media that suit the needs and characteristics of the learners.

b. Learning based on artificial excellence

Artificial intelligence can be used to identify the needs of students in independent learning, provide feedback on learning, and design curricula that are tailored to the learning speed and abilities of each student. Artificial intelligence can also help educators manage student data and optimize learning experiences (Ni`mah & Nanik, 2022). The emergence of chatgpt as a form of artificial intelligence that is widely used today has had a huge impact on the academic environment. On the other hand, chatgpt is able to answer the various questions asked by educators, but on the other side, it can also create academic fraud that affects the student's ability to think. Where the presence of chatgpt makes the participant learn to do something without thinking inwardly (critical thinking)

because everything can be done instantly without going through a meaningful process.

c.   Developing the Skills of Players

In the face of the challenge of "industrial revolution 4.0 education, the development of students' skills is one of the solutions. In today's world of work, skills include the mastery of digital technologies and 21st century skills consisting of critical thinking, problem-solving skills, communication, creativity, and collaboration. The learning carried out should be able to prepare and develop the learners' skills that are relevant to the future world of work.

d. Use of Big Data

The Industrial Revolution 4.0 has produced huge amounts of data in various fields, including education. Big data refers to the collection, storage, and analysis of large and complex data generated from a variety of sources, such as student management systems, online learning platforms, electronic exams, and school administrative data. In the educational context, the use of big data can provide valuable insights to improve decision-making, improve the learning experience of students, and optimize the efficiency of education systems. The use of big data can be used to predict and analyze the world of education in the future. Predictions and analysis can be done in the form of learning behavior analysis, prediction of academic achievement, management of teacher performance, analysis of school administration data, and predictions of dropout students.

e. Partnership and Collaboration

Education in the era of Industrial Revolution 4.0 provides an opportunity for institutions and educational organizations to collaborate and establish broad partnerships with both companies and society. An opportunity for learners to be able to enjoy the learning experience in practice and understand the world of work from an early age. This can be done through internship programs, internships, collaborative projects, and industry visits where students can learn about the challenges facing the world of work and improve their understanding of the application of technology in the work world or business context.

f. Multidisciplinary education

Multidisciplinary education is an opportunity in the era of the Industrial Revolution 4.0 with the use of technology in various sectors such as healthcare, transportation, agriculture, education, and so on. Students should be taught to understand the relationship between technology, science, and the social sciences, develop holistic understanding and diverse skills in the face of the complexity of the world in the future, and be able to compete globally.

2.2 School Branding as a Solution to Creating Quality Education in the Era of the Industrial Revolution 4.0

Technological changes that take place very quickly have changed the needs of competencies and work landscapes, which require educational institutions to be able to prepare for and address them through new and innovative approaches. The problem faced by some schools in Bali today, especially private schools, is the decrease in the number of pupils. Competition with public schools can be a challenge for private schools. Public schools generally have lower fees or are even free, which can attract parents' interest in enrolling their children in public schools. This could result in a decrease in the number of pupils and income for private schools. To solve this problem, school branding can be a solution for creating quality education. In conducting educational innovation through school branding, there are five principles (Salisbury, 1996) that should be applied as follows:

a. Thinking systemically

The system implemented in the school greatly affects the performance of all the components present in that school environment. When the system is implemented well, the resulting performance will tend to be good. On the other hand, when the system in a school is not good, the performance will also tend to be lower. The system applied affects all the components contained in it. In this case, think of "systemic as a holistic approach and way of viewing improving systems in the world of education. This approach considers all the complex relationships between the various components of the educational system by involving interactions between elements consisting of learners, educators, the head of

school, the learning environment, the curriculum, and other factors such as culture, economics, politics, and others.

The complexity that occurs in the world of education gives rise to dynamics that influence the long-term effects of educational policies, programs, or actions. In solving the problem of private schools experiencing a lack of students (colapse), think systemic, which is a holistic approach to looking at the relationship between the components in a system. Each component of an educational system is interrelated and influences each other. Identifying hidden patterns of system behavior should be done so that school management can be implemented properly and can also understand the long-term implications of the implementation of such models (Syafi'i, 2021). In addressing the various problems that exist in the school, it should be able to involve all stakeholders in decision-making, involving educators, parents, the public, the government, and other relevant parties, to gain a comprehensive understanding of the systems applied and diverse input. Taking into account the social, cultural, and economic factors that affect the education system in a region is also very important as a form of external analysis.

b. Systemic planning

Systemic planning in school branding that is carried out in addressing school problems that lack the number of students is through school branding. Systemic planning is carried out to achieve optimal and sustainable results in improving the quality of education in private schools. Plans that can be done to create quality education through school branding are as follows:

1) Analysis of the situation

The first step in systematic planning is to conduct a comprehensive situation analysis to understand the school's position in the marketing and branding environment. It involves identifying the strengths, weaknesses, opportunities, and challenges (SWOTs) faced by schools, as well as analyzing potential competitors and markets.

2) Setting goals and targets

Based on the analysis of the situation, the next step is to set clear and measurable school branding goals. These goals and objectives must be in

line with the vision, mission, and values of the school, and must be realistic and achievable within a set time frame.

3) Improve the quality of learning

Improving the quality of learning in school branding is an effort to improve the image and reputation of the school as well as produce qualified graduates. This can be done by drawing up a comprehensive learning plan, using innovative teaching methods, involving qualified educators, taking into account the needs of individual learners, using evaluation and feedback, and involving parents, the community, and the government.

4) Mining of school image and reputation

Brand identity is at the heart of school branding. It involves the development of characteristic brand elements, such as school names, logos, slogans, colors, and visual styles, that reflect the image and values of the school. Brand identity should be consistent and integrated into all aspects of school communication and promotion.

5) Distinguish schools from competitors

In an increasingly stringent educational environment, strong branding can help schools distinguish themselves from their competitors. By building unique identities and values, schools can highlight distinctive features among the many options available to parents and learners. This can help the school gain a competitive advantage in obtaining the students and the resources needed.

6) Communication and Promotion Strategies

Plan effective communication and promotion strategies to strengthen the school's brand identity. This involves the use of various communication channels, such as social media, websites, publications, events, and advertising campaigns, to communicate school brand messages to the target audience. This strategy should be in line with the goals of branding that have been previously set.

7) Measurement and Evaluation

The final step in systemic planning is the measurement and evaluation of the effectiveness of school branding. This involves monitoring

the school's branding performance periodically and measuring the achievement of the set goals and targets. These measurement and evaluation results can be the basis for identifying areas that need improvement and adapting existing branding strategies.

With the presence of systematic planning in the implementation of school branding, it is expected to be a strategy for addressing the problems of private schools that have experienced a lack of students. And it facilitates the implementation of school branding because everything has been well planned and organized.

c. **Control of the Mouse**

It is important to remember that good branding should be supported by high-quality education. Therefore, an important step in quality control through school branding is to continuously improve the quality of education provided by the school. This can be done through the development of relevant curricula, the procurement of adequate facilities, the selection and development of qualified teaching staff, and the implementation of effective evaluation and supervision systems. Quality control through school branding is an approach that involves an effort to ensure a high quality of education in an educational institution by using branding or marketing strategies to strengthen the image and reputation of the school. The goal of quality control through school branding is to build trust, increase attractiveness, and maintain the competitive position of the school in the educational market.

d. **Management of Change**

Management of change through school branding is a process of management of change that involves an effort to strengthen the image and reputation of a school or educational institution through an effective branding strategy. Change management can be done by analyzing the understanding of the school's image, preparing a branding plan, involving stakeholders, implementation and evaluation. Managing change through school branding should be part of a sustainable school culture. It is important to ensure that the branding message remains consistent and applied in all school communications and activities continuously. Managing change through school branding is a complex effort and

requires consistency in implementation. With effective branding, schools can enhance their image and reputation in the eyes of the public, increase the attractiveness of prospective learners and parents, and create an educational environment with positive competitiveness.

e. Educational Technology

The use of educational technology in school branding can provide many benefits for schools or educational institutions in strengthening their image and reputation. Educational technologies can be used to create engaging branding content, such as school profile videos, digital presentations, and engaging websites. Such content can be shared through social media, websites, or other online platforms to increase school visibility and create a positive image. Educational technologies enable schools to communicate effectively with a variety of stakeholders, such as parents, learners, alumni, and the community. E-learning platforms, emails, text messages, or social media can be used to strengthen interaction and communication with stakeholders, dig in input, and promote school activities. The use of e-learning platforms, learning apps, or interactive software can enhance the participation of students in learning, optimize digital-based learning, and help build a progressive and modern school image. Educational technologies can be used to manage school administration processes more efficiently, such as the management of student data, attendance, assessment, and reporting. The use of school management software, school information systems, or educational administration applications can optimize administrative processes and strengthen the image of a professional and organized school.

III. Closing

VUCA (Volatility, Uncertainty, Complexity, Ambiguity) is a very serious challenge in creating quality education in the era of the Industrial Revolution 4.0. (1) Volatile (Very Fast Change), education in the era of the Industrial Revolution 4.0 tends to undergo very rapid changes both in the context of the use of technology, the way of learning and the presence of social trends. (2) Uncertainty, the very massive use of digital technology leads to uncertainties in the world of work with the presence of various predictions that some human work in the future

will be replaced by technology. This creates uncertainty for educators and learners in preparing relevant skills for the future and choosing the right career path. (3) Complexity, the implementation of the learning process involves a variety of interactions and is influenced by a range of complex factors such as social, cultural, economic and political environments. (4) Ambiguity (multi-interpretation), the use of digital technologies in the world of education makes a variety of learning information very easy to access but on the other hand with the abundance of information spread on social media makes learners interpret in a different way. In the face of the situation of the private school education system in Bali with dramatic changes, the industrial revolution 4.0 provides solutions and hopes for the future of private schools. Some opportunities in creating quality education in the era of the Industrial Revolution 4.0 are (1) the use of digital technologies, (2) artificial learning, (3) the development of students' skills, (4) the usage of big data, (5) partnership and collaboration and (6) multidisciplinary education.

In a situation of a shortage of pupils at private schools in Bali, it can create public distrust of the quality of education provided by the school. It is necessary to improve the management system of private schools in Bali so that private schools can remain in existence. School branding by using digital technology as one of the solutions in creating quality education and so that private schools can remain and compete again in the world of education. In conducting educational innovation through school branding there are five principles consisting of (1) Systemic thinking, the system that applies affects all the components contained in it. Where in this case, systematic thinking as a holistic approach and way of viewing in improving systems in the world of education by involving interaction between elements consisting of learners, educators, head of school, learning environment, curriculum, and other factors such as culture, economics, politics and others. (2) Systemic planning, carried out to optimal and continuous results in improving the quality of education in private schools. Planning that can be done in achieving quality education through school branding consists of (a) a situation analysis, (b) setting goals and goals, (c) improving the quality of learning, (d) mining the image and reputation of the school, (e) distinguishing the school from its competitors, (f) communication and promotion strategies and (g) measurement and evaluation. (3)

Quality control, it is important to remember that good branding should be supported by high quality education. An important step in the control of quality through school branding is to continuously improve the quality of education provided by the school (4) Management of change as a change management process involving an effort to strengthen the image and reputation of a school or educational institution through an effective branding strategy and (5) The use of educational technologies in school Branding can provide many benefits for the school or education institution in strengthening the image of branding content, promotional media, use in learning as long as it can improve learning quality, effective and efficient means of communication and help manage the school administration procedurally and efficiently.

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