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Crafting Strategy to Grow and Sustain for Technology-Based Firm

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***Abstract* – Today's global situation has faced uncertainty after two years of experiencing the COVID-19 pandemic, disruption threat, and the macroeconomic foreshadowing unforeseeable future. Sensync is an integrated system digital firm engaged in sustainability. Unfortunately, since 2020, the annual income has been decreasing. Using a cause map and fishbone diagram, the business issues for declining growth potentially come from people with low transaction rates and the government as a market target. This research aims to reinvent Sensync business conducting a qualitative and single-case study with semi-structured interviews and cross-sectional approaches. The research findings show that Sensync should create and raise values that support the strengths and opportunities presented and reduce and eliminate the costs that represent the weaknesses and threats that exist. In corporate strategy, Sensync emphasizes backward and forward vertical integration. Furthermore, Sensync can implement a related-constrained diversification strategy. Meanwhile, Sensync should also consider borrowing resources through integrated strategic alliances. Finally, to make up the strategy execution successful is divided into three main parts, building organizational capability, managing internal options, and corporate culture and leadership.**

***Keywords* – Sustainability, Digital, Business Strategy, Corporate Strategy, Reinventing.**

I. INTRODUCTION

Today's global situation has faced uncertainty. After two years of experiencing the COVID-19 pandemic, the threat of disruption and the macroeconomic foreshadow the unforeseeable future. The digitalization of almost all aspects indicates technology disruption. By 2021, it affected the global market size at USD 608.72 billion [1]. Meanwhile, climate change is characterized by greenhouse gas emissions and impacts the world. According to The Royal Society [2], there is a correlation between digital technology and climate change. Digital technologies contribute to global CO2 emissions, while, it also makes a positive contribution that artificial intelligence and digital twins could help reduce greenhouse gas emissions.

Sensync is an integrated system digital firm established in 2015 from the commercialization of research and development activity in university. Sensync provides an environment quality monitoring system and calibration services. However, since 2020, the annual income has been decreasing. Sensync failed to reach the objective financial targets in 2021 and maybe 2022. From root-cause analysis with cause map and fishbone diagrams, the business issues potentially come from people with low transaction rates and the government as a market target.

This study aims to reinvent Sensync business, craft the strategies for growth and sustainability, and build a good strategy execution. This paper is organized as follows. We review the literature on sustainability, commercialization technology, climate tech, and strategy. Then present the conceptual framework and methodology. Finally, discuss the findings, especially for business solution strategies and implementation plan as a part of recommendation.

II. LITERATURE REVIEW

A. *Sustainability*

Global disruption and uncertain macroeconomic conditions have caused many industries to revamp their new strategy to survive. Currently, some companies are accelerating to adapt and innovate their business models to stay competitive [3]. The issues of creating innovation and sustainability are critical factors for a company's planning and executing strategy.

The legal basis for sustainable development was formally at the Rio Earth Summit in 1992, which produced an action program to promote environmentally sustainable development. For many companies, sustainability is synonymous with corporate social responsibility. Where this relates to the company's use of natural resources, their management and care are essential to its long-term economic interests. For some companies, these issues have a direct and tangible impact on the viability of their business models and strategies [4]. Previous research has recognized that developing sustainability strategies is crucial for successfully updating established business models [3]. However, more is needed because companies must update their business strategy to promote sustainability in line with changes in their business model [5].

Rainey [6] introduced a strategic management framework called Sustainability business development (SBD). This framework involves the whole business enterprise process to achieve superior and sustainable performance that exceeds current challenges and future expectations. SBD can be recognized as a subset of the broader sustainability and sustainable development concepts. It integrates business strategy, leadership, and capabilities for creating innovative solutions. Kaipainen and Aarika-Stenroos [5] found a process model for conducting strategic updates to obtain a sustainable technology business in five main steps. In addition to the business strategy development process, the findings show the sustainability requires officeholder companies to revamp their value chains and business model. It also finds management issues that need to be resolved at some stage in the update process.

B. *Climate Tech/Green Innovation*

One of the global disruptions that are currently happening is climate chan. The Paris Agreement sets goals to substantially decrease GHG emissions by 55% or below the limit of 1.5 degrees Celsius in 2030 and reach net zero in 2050. According to the Royal Society [2], there are correlates between digital technology and climate change. Digital technologies contribute between 1.4% and 5.9% to global CO2 emissions. However, it also makes a positive contribution: artificial intelligence (AI) could help reduce greenhouse gas emissions by 4% by 2030, while digital twins can help increase wind farms' annual output by up to 20%. World Economic Forum [7] reported that materials and mobility sectors can reduce emissions by an additional 4-10% in 2030 by accelerating the adoption of digital technologies. In addition, they identified four clusters of digital technology to deliver decarbonization.

The term green innovation approach is a solution that positively influences the environment or sustainability [8] [9]. Almost similar to the term climate tech. These are technologies specifically aimed at reducing greenhouse gas emissions or addressing the effects of climate change. The applications can be grouped into those that directly mitigate or remove emissions, help us adapt to the effects of climate change, and deepen our understanding of the climate [10]. It is not enough to pursue commercial goals but also to contribute to solving

social problems. However, the findings show the complex situation in applying green innovation. Wicki and Hansen [9] explained three levels of complexity: more prone to regulatory interventions, early stage of the development phase and typically function differently than mature markets, and have less impact in the use phase. Investment in the climate change sector has been increased; many investors were driven not only by the desire to make a positive impact but also by the potential for significant financial returns [10]. As of semester 1-2021, investment in the climate tech sector exceeds USD 60 billion with 600 transactions, where the mobility and transport areas are the most funded, followed by Industry, manufacturing and resource management, and built environment.

C. *Technology Commercialization*

By definition, technology commercialization is developing a technology based on research activities with the ultimate goal of being marketable [11] [12]. Technology commercialization occurs because of the interaction of interested parties, in this case, universities and external institutions [13] [14] [12]. The commercialization channels are usually formalized [14], such as licensing and facilitating via Transfer Technology Officer (TTO). However, there is also an informalized channel through informal communication processes. This mechanism can be viewed as a process bypass [12]. Kirchberger and Pohl [11] reviewed the success factors of commercial technology. University policy and structure and technology transfer strategy factors are the most researched while networking activities are the least researched in the context of a specific commercialization channel.

Belitski et al. [14] find that funding from industrial is more efficient than via TTO activity. Furthermore, Prasetio and Dzakiy [12] give recommendations for strengthening the commercialization, including business process and organization. This includes managing start-ups or spin-offs to develop into large companies. The important points are how the distribution of royalties is mutually beneficial between the inventor, university, and industry, more professional management, and the TTO's active role. As previously explained, the disruption of digital transformation makes a tremendous impact, but some opportunities can be exploited.

D. *Business Strategy*

The main goal is to produce a growing and sustainable business, especially after the COVID-19 pandemic. There are business strategy recommendations have been published, such as Saarikko et al. [15], Kuckertz et al. [16], and Caballero-Morales [17] leading to innovation. Furthermore, digital start-up is required to be lean and agile at the level of strategy and business models and in terms of innovation with the approach of the lean start-up framework [18] [19]. This method elaborates on the lean philosophy and customer development. This approach is defined as a start-up’s activity to fulfil desired customer needs with optimal efforts. It will result in minimum viable product (MVP) ideas that can fill the gaps between missing features and product solving.

Kaipainen and Aarika-Stenroos [5] proposed a model for sustainability strategy for the company. The development of this strategy contains related stages, process patterns, and internal and external management issues. This strategy also requires active involvement and collaboration. In addition, technologies, operations, competencies, partnerships, and business model updates are required to be sustainable.

In his book, Driving Digital Strategy: A Guide to Reimagining Your Business, Gupta explained the digital transformation framework for reinventing firms with developed new capabilities that will help firms leverage existing assets and create a digital strategy through the transformation process. This strategy emphasized

differences from competitors/ competitive advantage and provided direction and guidance for the company [20]. Rothaermel [21] explains a more detailed explanation of business strategy, and Thompson et al. [4] with the core concepts and analysis, formulation, and implementation of strategic management. More detail about these frameworks will be discussed in Methods section.

III. Conceptual Framework

The main conceptual framework is used derived from Gupta [20]. The framework used for reinventing the business consists of four main components: reimagining the business, re-evaluating the value chain, reconnecting with customers, and rebuilding the organization. This framework requires firms to strengthen the core and build for the future for a successful digital transformation.

IV. Methods

We applied a mono-research methodology based on a longitudinal and single-case study to explore crafting a business strategy to grow and sustain a technology-based firm. As we said previously, qualitative data collection has been used it. In addition, cross-sectional research is used to study phenomena in constrained time. This study uses interviews conducted in a short period. Furthermore, a single-case study strategy is used to investigate sustainability further [9] [22] [5]. In addition, this defines the actual case of an opportunity to observe and analyze which author's work. Due to the selected company that works for us, we can provide open access to data that allows us to gain insight into the business and operations mechanisms that are carried out.
To answer the research question, we collected data through mono-method research. This method uses qualitative data collection. The research consisted of two stages: semi-structured interviews and data from published reports. The semi-structured interviews were conducted with thirteen representatives from ten institutions that differed in organizational function and market segments (See Table 1). The respondents were chosen given and knew the questions' list. The questions comprehended the perceptions according to analyzing and crafting the strategy of Sensync company.

We start to analyze from the global to local environment how the external perspective affects Sensync. We used the PESTEL technique, five force, and the market opportunities and threats of firm for external analysis. Meanwhile, strength and weakness of firm, VRIO, and business model innovation for internal analysis. These analyses use to craft solutions by formulating the strategies.

Table 1. Data Sources.

Type	Information	Utilization
Interview	12 participants (45 – 70 minutes on average): • Inventors on technology license • Sensync's Commissioner • Independent commissioner in venture capital • Principal investment in venture capital • Assistant of GM in the textile industry • Procurement team in the paper industry	• Principal use in exploration, completing and validating the analysis • Provides the business outlook on inventors, customers, ventures, and policies

Type	Information	Utilization
	• Supervisor in an industrial area • Regulatory in air pollution KLHK • Regulatory in river water pollution • Regulatory in waste water pollution • Sales manager in a start up • Executive director in NGO	
Annual reports	Sensync's annual reports 2019 to 2022 period (1st semester)	Provides a firm outlook for analysis
Secondary data	• Scientific articles about the business scope • Study reports from the consultant • Strategic planning KLHK	• Principal use in complementing and verifying information from another data and permits supportive analysis • Provides supplementary stakeholder and media outlook throughout the strategic reinvention process

V. RESULT

In the analysis of the impact of external factors, it can be seen that global disruption factors such as the Russia-Ukraine war, digitalization, post-pandemic lifestyles, and climate change represent political, socio-cultural, technological, and environmental components. While macroeconomic uncertainties such as high inflation and interest rate hikes that can impact investment and level of employment represent the economic and legal components. In addition, the external analysis also uses the five forces to diagnose competitive situations. This hostile environment results in intense competition between existing industries and low-profit potential. Finally, there are still market opportunities that can be explored but still make strategic plans to minimize the effects of threats of economic and political uncertainty and intense competition. The internal analysis uses the strengths and weaknesses of the SWOT element that Sensync strength lies in intellectual property, and support from the university can be directed to take advantage. Meanwhile, team capability, product quality, and competence weaknesses can be prevented. Then, using VRIO tools to see different perspectives from internal analysis results in Sensync being a temporary competitive advantage company due to the ease of being imitated by competitors. Another approach uses the innovation business model by blending the business canvas model and the blue ocean strategy, using the perspective of exploring the customer's impact on current business models, we analyze the eliminated, reduced, added, and even retained factors to increase value and reduce costs.

According to interview results with inventors and commissioner, Sensync defines their business as products or competitors. This can be seen from the product development carried out to obtain added value or competitive advantage over rivals. In addition, Sensync began as a focused low-cost player. This strategy tends to be unattractive because the target market needs to be more significant to grow and be profitable. Therefore, Sensync does not provide a unique advantage that makes it difficult for rivals to compete. In today's digital era, a sustainable competitive advantage comes from creating a platform with a strong network effect that provides a system of connected and complementary products and increases switching costs for consumers [20].

Unfortunately, Sensync still focused on the traditional approach to make it a cheaper or better strategy. Sensync, engaged in the IoT sector, has yet to be able to process the collected data. Therefore, the function is not optimal. In addition, feedback from customers' needs to be carried out correctly. Platform development in the form of an application named ASRI is being carried out. This is to provide complementary services and network effects. The plan will also add services such as analysis, prediction, marketplace, and API to outside developers so that the platform is agnostic.

Sensync implemented Product-as-a-Service (PaaS) last year. By implementing the PaaS business model, Sensync is already on the right track. However, its application is still limited to the western part of Java (West Java, DKI Jakarta, and Banten). This is due to Indonesia's geographical condition, which is in the form of an archipelago. Therefore, there are concerns that service costs will be higher due to variable transportation costs. Outside of these regions, Sensync implements a buy-in-warranty business model. Therefore, value creation and sustainable benefits are based on more than just product characteristics.

Sensync implemented a product-focused company. This focuses on developing a reliable product and maximizing sales and profit while maintaining a competitive advantage through rigorous control of proprietary knowledge. However, looking at the business issues of this research, this objective still needs to be achieved. Therefore, Sensync must change its focus to gain new value innovation by building a platform enabling transactions and creating a whole ecosystem. Platform-based companies are therefore looking to build a network of third-party providers that can develop complementary services. Starting this year, Sensync has a development and quality control division, which was previously part of the operations division. The main task is to develop both business and operations and to guarantee product quality. Partnership activities with research conducted on campus continue, but research is still fundamental research. Sensync also tries to do project-based development to explore new ideas. By applying the principle of "fail fast, learn fast" and a short period (< three months). Unfortunately, the development project should have gone better. This shows that no sustainability can be followed up. Some ideas have validated the market but need to be more competitively feasible. Then there are obstacles in human resources and incomplete data collection due to the lengthy licensing process. The key performance indicators used are usually the customer satisfaction index and the timeliness of project implementation. However, this is considered too simple and needs to show operating excellence activities. This is also supported by less skilled resources with knowledge of operations and production.

The primary factor that led to the growth and revenue increase in 2020, when the pandemic started, was the presence of distributors. Their superior strength is their ability to approach and communicate with customer decision-makers (B2B segments). However, there are areas for improvement regarding profit margins obtained by Sensync and sometimes presented conflicts. Since then, Sensync has tried to substitute by building its channel, developing the platform, and direct customer approach. Unfortunately, it never matched the realization for two years (until the 3rd quarter of 2022), like in 2020. Of course, digital channels are needed to serve customers to provide more experiences and involve consumer behavior in the current era and prediction for the future. The key is to complement each channel and build around it. In the B2B segment, a direct approach is still the most appropriate consumer decision. Sensync applies a discount and referral strategy. First, this is done for the government's target market through tenders and industries that are required to spar due to experiencing constraints during the pandemic. Second, the scheme offered could be more apparent to them, and lastly, the

uncertainty of success in the B2B segment. In addition, the referral program is carried out for anyone who has succeeded in recommending Sensync products to customers with the target of making a purchase contract. Unfortunately, the referral program cannot be maximized because there is still a reluctance to do so due to limited relationships.

People must understand the target market's stakeholders when they want to make contact. This is an obstacle because it is difficult to determine who the actual decision-maker is. Then because Sensync implements a PaaS business model, with payments that are not made-up front and in full, the rewards provided are adjusted to the contract. They won over a long period with different amounts. Finally, it is difficult to convince customers in a B2B business by looking at the position, as explained in the first point, if not as a decision maker.

Sensync is trying gradually to rebuild its organization. Changes in focus on product orientation to customer problems, shifting business model and building a culture to support the company's vision and mission. However, as seen from one of the causes of the research problem, Sensync has yet to form a capable team. This can be seen from the dominance of technical educational background and the lack of understanding of each other's work tasks, making team management less effective, such as fear of taking risks, lack of initiative, and lack of communication which is a culture that Sensync is building.

Furthermore, the recruitment process was sober based on the project (short-term contracts), no training and development (Sensync implemented self-development), and a simple performance evaluation matrix became the obstacle to this change. Arguably, this is also a factor in leaders' lack of supervision and responsibility

Sensync has yet to involve marketing with online channels to engage consumers. Only through the omnichannel tool by sending a blasting message. This is somewhat understandable with the B2B market segment, which prioritizes direct/offline interactions. However, it is very uneven in measuring the effectiveness of the traction between activities and the marketing budget with sales indicators.

VI. Discussion and Recommendation

A. *Discussion*

In Business Model Innovation, Sensync use customer segment perspective to start four actions framework. This approach is intended to explore customer impact by asking questions on each business model block on the customer side and analysis that occurs on the cost side. Cirque du Soleil and Nintendo's Wii succeeded in presenting a new business model with this approach [23], even companies with the same technology and products can have multiple business models. Several key questions should be answered such as who is the focus of the customer segment, what is offered, how to reach and connect, and the cost implications.

Sensync partners with the industries required to install and operate Sparing of the Sensync customer segments. This revamped customer segment allowed Sensync to broaden the market and product development, rather than already down and uncertain markets. Due to a declining market, it reduced costly elements while adding other segment elements, such as ESG and enterprise digitalization oriented. This is in line with the results of external analysis where the increasing digital society culture and healthy living behavior.

To address what is offered and how the institutional relationships form, we add another element to generate value, including automated services for customer relationships, "getting the job done" for value propositions,

distributors and platforms on channels, subscription fees for revenue streams, humans for critical resources, and investors/universities for key relationships. Then the elements that must be raised include omnichannel services and marketing and sales on the channel, performance for value propositions, service revenue to strengthen the PaaS business model, intellectual property, and assets for activity resources. Other things that must be raised are production and platforms for critical activities and strengthening key partners for hardware manufacturers, distributors, and research institutions (See Figure 1).

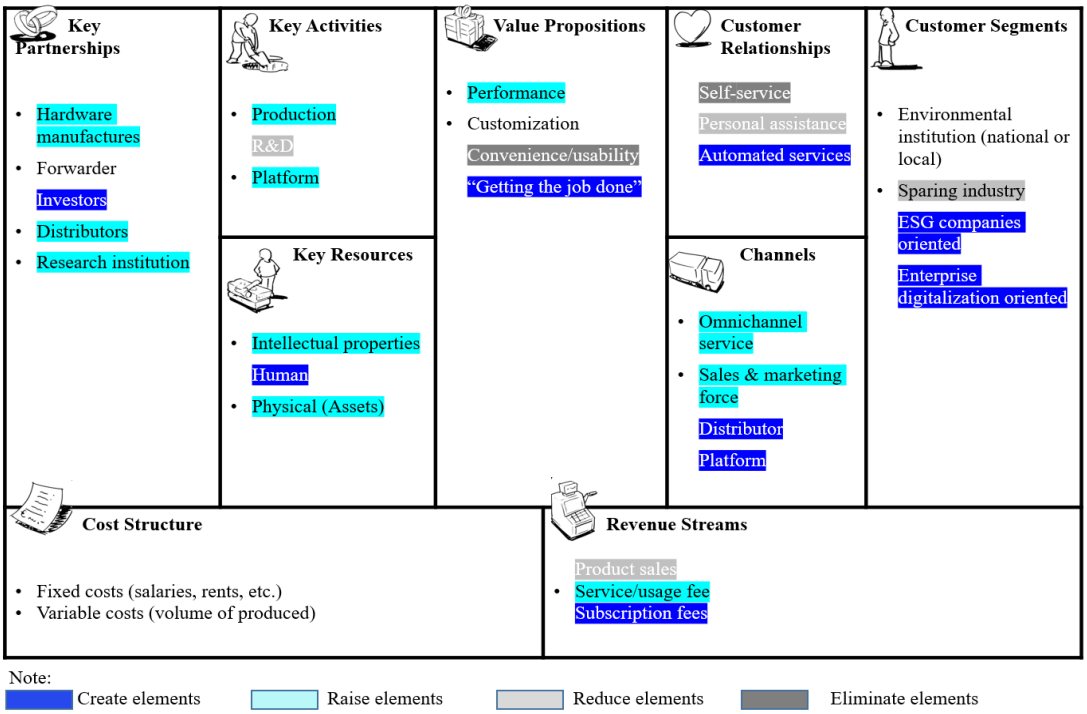

Fig. 1. Sensync's business model innovation.

Meanwhile, other things that must be reduced due to cost implication besides the Sparing industry in the customer segment are personal assistants for customer relationships because they are felt to be less effective, R&D to focus on the applied and demonstration stages, while collaboration with the university focus on basic and development stages, and sales for revenue streams. Moreover, other things that must be reduced besides the Sparing industry in the customer segment are personal assistants for customer relationships because they are felt to be less effective, R&D to focus on the development and demonstration stages, and sales for a source of income. The last element that is reduced is self-service because the type of customer is traditional and convenient/usability in the value proposition. After all, it is felt incompatible with the primary painful customer who wants more performance. This is expected to impact changes in Sensync's value proposition.

As previously informed, Sensync has implemented a PaaS business model, but its application is limited to geography close to Sensync's location (in Bandung). The biggest hurdle is minimizing maintenance costs for distant customers because it has financial implications due to requiring significant upfront capital. This can be answered fundamentally that companies implementing the PaaS business model are motivated to increase product reliability, extend service life, and reduce operating costs [20]. One solution to avoid this risk is to establish cooperation with intermediate parties where the customer is located. However, it is necessary to emphasize in the process of selecting intermediate parties by taking into resources and capabilities. In addition,

product knowledge improvement needs to be done. Then this can be expanded to the customer base whose number of target markets is more significant than only those near Bandung. Furthermore, another solution, there must be a significant change. The selling paradigm needs to change to selling results, and customers must also be educated and convinced about this shift.

A system of interconnected and complementary products is a durable competitive advantage, as is building a platform with powerful network effects that make a high entry barrier for customers [20]. Therefore, Sensync has developing a reliable platform, it called ASRI/ PeduliLingkungan, by offering added value in the form of a sustainable marketplace to complement products and APIs so that other providers can integrate their services that provide strong network effects. The main challenge is how to better manage the customer experience and increase customer loyalty. In addition, how to minimize the limited control. This is value proposition and customer relations come into play a lot. elements of “getting the job done” and “personal assistance” are expected to be able to answer this. Therefore, that the value chain provided combines digital, in the form of platforms, and physical in the form of personal assistance.

In corporate strategy along three dimensions, vertical integration, diversification, and geographic scope. Sensync’s value chain consists of two categories of activities: the primary activities that are most important for generating value for consumers and the necessary support activities that help the primary activities work more effectively and make a higher profit margin. This is important because it can make the enterprise survive for a long time [4]. The core competencies of Sensync are superior system integration capabilities to provide reliable measuring and establish an ecosystem of the sustainability solution. The primary activities at Sensync consist of supply chain management, operations and system integration, marketing & sales, and services. Meanwhile, principal support activities include general administration (procurement, finance, legal & regulatory affairs, collaboration with partners, and general management), human resource management (recruitment, hiring, training, development, retention, and compensation), and development & IT system (development of design, process, and product, and IT system).

In the vertical integration value chain, Sensync focuses only on final assembly and manufacturing, marketing, and after-sales service and support. All other value chain activities are outsourced. Sensync should capture significant value to reach profitability. According to five forces and VRIO tools, many sensor OEMs are almost entirely interchangeable and face near-perfect competition. However, these components have not been tested in environmental conditions in Indonesia. Bargaining with EOM suppliers is required to produce reliable products that meet the needs. Therefore, the demands of Sensync’s competence in innovation and system integration to make it reliable and guarantee performance quality is a valuable, rare, and unique resource (cannot be imitated). In doing so, Sensync engaged in backward vertical integration. Moreover, supported by attractive sales marketing activities and increasing branding, Sensync has also engaged in forward vertical integration. There are advantages to be gained when implementing vertical integration, including improving quality and securing supplies channel. However, there are still risks such as increased costs.

Another corporate strategy that can be carried out is product diversification. Sensync can be moved to the sustainability business area by implementing a related-constrained diversification strategy. Sensync believes that sustainability issues will become dominant in the future; thus, exploring further the diversification process will pay off. Sensync can be transformed from an environmental monitoring equipment system to an environmental

management company that provides predictive maintenance, modelling, and process optimization through an integrated system. This is in line with the results of interviews with customers. Desire and painful customers who require analysis and predictions so as to be able to help them meet their needs. In addition, Sensync can diversify into other sustainability or digital/IoT sectors (See Figure 2). For this activity it is necessary to carry out further studies, such as market and product research. This is included in the execution process.

Strategies often fail because it is poorly executed [4]. We craft to perform ten essential managerial tasks (adapted from Thompson, et al. (2022)) from business and corporate strategies that make up the execution process. Table 2 identifies these parts and task solutions. It is divided into three main parts, building organizational capability, managing internal options, and corporate culture and leadership. The plan for implementing the execution process will be carried out during 2023 with a budget of Rp.150 million.

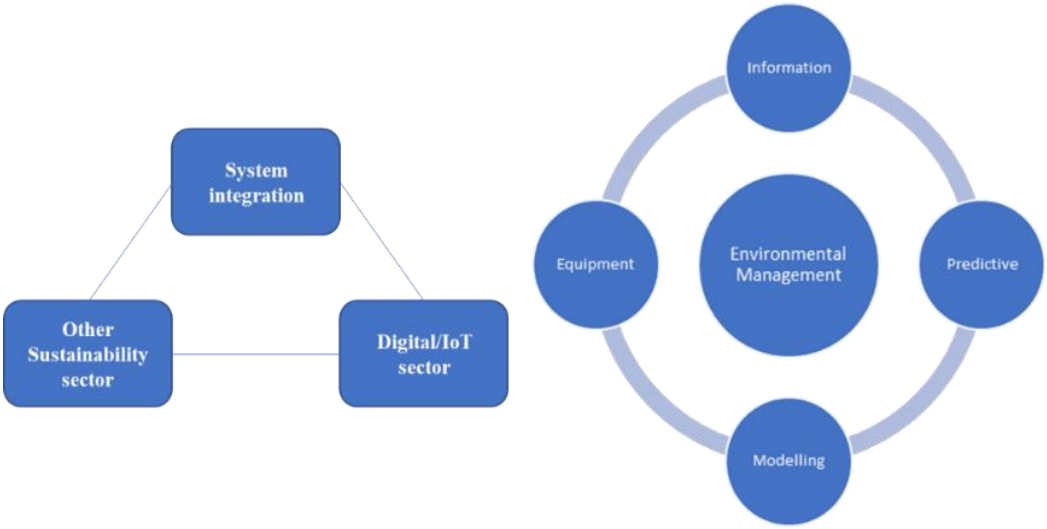

Fig. 2. Sensync's transformation and diversification strategy.

Table 2. Identification task solution for strategy execution process.

Part	Task	Solution
Building Organizational Capability	Staffing the organization	• Conduct an assessment of the current team by involving external parties. If incapable should be replaced. • Hire with solid skill and intelligence, know the business, and are good at getting things done • Offering promising and rotating action • Organize unique and continued training programs and provide mentor • Making the work environment engaging and motivating
	Developing and building critical resources and capabilities	• Strengthening business (such as customer service) and technical (Such as Embedded and IoT) skills & knowledge • Coordinating and integrating the efforts of the various work division • Collaborative partnership with resource firms (such as PCB and casing manufacturers) and strategic alliance to achieve the strategic objective (such as Companies that meet the requirements for procurement of goods in the government market segment)

Part	Task	Solution
	Structuring the organization and work effort	• Decide primary and support value chain activities. • Implement the functional structure which represents the suitable Sensync value chain. • Implement centralized decision-making with flexible control orientation. • Providing for internal cross-unit coordination to achieve objective strategic. • Facilitating Collaboration with External Partners and Strategic Allies by building relationship managers.
Managing internal operation	Allocating resources to the strategy execution effort	• Allocate budget and resources proportionally. • Marketing research/detail analysis for diversification.
	Instituting Policies & Procedures That Facilitate Strategy Execution	Providing standard policies and procedures in business and operation divisions.
	Employing business process management tools	Implement total quality management (TQM).
	Installing information & operation system	Build state-of-the-art platform.
	Using Rewards & Incentives to Promote Better Strategy Execution	• Provide financial rewards such as bonuses and incentive • Provide nonfinancial approaches such as employee recognition rewards for top performers, promotion, creating a work atmosphere, and sharing strategic information.
Corporate culture & leadership	Installing a Corporate Culture Conducive to Good Strategy Execution	Sensync's culture: KITA (Kreatif, Inisiatif, Tanggung jawab, Agresif) illustrates an entrepreneurial culture.
	Leading The Strategy Execution Process	• Implement Management by walking around (MBWA). • Treating employees as valued partners. • Create a fully engaged workforce. • Initiating corrective actions with regular meetings.

B. *Recommendation*

Suggestions for the future, due to the rapid development of technology and changes in market behavior, this business and corporate strategies need to be monitored and evaluated on its execution and operation. Even changes are needed if something significant happens (e.g., the strategy has become obsolete).

VII. Conclusion and Limitation

A. *Conclusion*

The process of reinventing the Sensync business after two years of negative growth begins with finding the root causes of business issues which are thought to originate from the people element in the form of low transac-

-tion rates and the government as the target market due to uncertainty and administrative barriers.

Analysis of the external and internal environment of Sensync found a hostile environment with intense competition between industries and low profit potential. Even so, there are still market opportunities that can be explored, but it is necessary to make strategic plans to minimize the effects of economic threats and economic uncertainty, as well as intense competition. Then Sensync only achieve a temporary competitive advantage due to ease of being imitated by competitors and it cannot be sustained.

The crafting Sensync's business consists of two-level strategies, business and corporate. In business strategy, Sensync must create and raise values that support the strengths and opportunities presented and reduce and eliminate the costs that represent the existing weaknesses and threats. In corporate strategy, Sensync emphasizes backward vertical integration, which focuses on design activities, final assembly, and system integration. Furthermore, Sensync can implement a related-constrained diversification strategy with transformed from an environmental monitoring equipment system to an environmental management company and/or diversifying into other sustainability or digital/IoT sectors. In addition, Sensync should consider borrowing resources through integrated strategic alliances (alliance with equity). However, after discussion with stakeholder, Sensync still continue to target existing market by penetrating and trying to showcase superior products.

Finally, to ensure that the strategy craft is successful, the execution process is carried out which consists of three main parts, building organizational capability, managing internal options, and corporate culture and leadership. The plan for implementing the execution process will be carried out during 2023 with a budget of Rp. 150 million.

B. *Limitation*

Since the core business of Sensync is in the Environmental, Social, and Governance (ESG) vertical, the research is focused on similar sustainable analysis and solutions. Also, this research limited to the national market scope strategy.

Suggestions for the future, due to the rapid development of technology and changes in market behavior, this business strategy needs to be monitored and evaluated on its execution and operation. Even changes are needed if something significant happens (e.g., the strategy has become obsolete).

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