

Identifying Key Driving Factors and Critical Uncertainties in the Future of Non-Formal Foreign Language Education Industry in Jabodetabek, Indonesia

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ABSTRACT

The rapid evolution of technology and social media influence, added with the dynamic of consumer behavior and possibility of change in policy and regulation, have brought about consequential uncertainties to the non-formal foreign language education industry in Jabodetabek, Indonesia. Scenario planning approach is used in this research to guide stakeholders in preparing the future. The time frame referred in this study is from 2030 to 2035 (5 to 10 years from the time this paper was written), a period deemed to be short to medium term. Eleven key driving factors were identified from this study through qualitative analysis and were assessed using a PESTEL framework. Following the qualitative analysis, rating method was conducted and two critical uncertainties for this industry were identified, they are "affordability & economic condition", and "consumer-driven demand".

Keyword: Scenario Planning, Uncertainty, Strategy, Nonformal Education Industry, Foreign Language Education.

ABSTRAK

Evolusi teknologi dan pengaruh media sosial yang pesat, ditambah dengan dinamika perilaku konsumen dan kemungkinan perubahan kebijakan dan regulasi, telah membawa ketidakpastian konsekuensial bagi industri pendidikan bahasa asing non-formal di Jabodetabek, Indonesia. Pendekatan perencanaan skenario digunakan dalam penelitian ini untuk memandu pemangku kepentingan dalam mempersiapkan masa depan. Kerangka waktu yang dimaksud dalam penelitian ini adalah dari 2030 hingga 2035 (5 hingga 10 tahun sejak makalah ini ditulis), periode yang dianggap jangka pendek hingga menengah. Sebelas faktor pendorong utama diidentifikasi dari penelitian ini melalui analisis kualitatif dan dinilai menggunakan kerangka kerja PESTEL. Setelah analisis kualitatif, metode pemeringkatan dilakukan dan dua ketidakpastian kritis untuk industri ini diidentifikasi, yaitu "keterjangkauan & kondisi ekonomi", dan "permintaan yang didorong oleh konsumen".

Kata kunci: Perencanaan Skenario, Ketidakpastian, Strategi, Industri Pendidikan Nonformal, Pendidikan Bahasa Asing.

INTRODUCTION

a) Background and Industry Profile

Non-formal education is gaining global attention with government acknowledging its role in lifelong learning alongside formal education. Despite market saturation and competitiveness, post-pandemic development and the development of education technology have given new chances for

industry to innovate. The rise of Ed-tech companies in Indonesia reflects a worldwide shift toward digital learning, which is altering conventional face-to-face education. Furthermore, social media has had a huge impact on language learning, giving free access to English information and speeding up language acquisition. This then raises question about the future usefulness of English courses itself and provides chances for entrepreneurs to explore the alternative potential languages in the changing education environment.

The non-formal education industry, especially the foreign language education, was perceived to play an important and essential role in Indonesia's economic and educational landscape. The industry has undergone major changes within the past decade, transitioning from fully-traditional classroom learning to blended and online learning. This industry is also characterized with the diversity of players. Traditional language schools, such as EF English First and Wall Street English, have a long history in the industry, providing program and curriculum with face-to-face interaction. Along with them, Ed-tech platforms began to appear in the market around 10 years ago. Ruangguru, Zenius, and Quipper are some of the major market players that have transformed the sector by offering online learning solution. This system offers modern, flexible, and innovative approach, including video lesson, interactive quizzes, and a gamified learning experience. In addition to them are private tutors, many of whom work as freelancers. Their presence makes major contribution to the market by providing more flexible language classes at a more reasonable cost.

b) Business Issue

The fast expansion of the non-formal foreign language education sector in the last decade has created major uncertainty for both existing institutions and new companies. The development of EdTech and online learning platform implies that the market will continue to develop. This take forces businesses to adapt in order to stay competitive. Consumer behavior in the Jabodetabek area, where internet penetration and economic activity are strong, is changing toward digital and on-demand learning platform. The availability of free or low-cost option puts established language schools under further pressure, as many students increasingly choose these more accessible alternatives to pricey formal sessions.

Furthermore, social media has had a significant impact on language learners' choices. According to study conducted by Haque (2023), sites such as YouTube, Instagram, and Facebook are becoming more popular as language-learning media, boosting vocabulary exposure and fostering English conversation. While English remains the most often acquired foreign language in Indonesia, there is an increasing interest in Mandarin, Japanese, and Korean, motivated by economic prospect and cultural influence. Jabodetabek's diverse population of students, professional, and expats give both possibilities and problems for language education providers looking to meet a wide range of language-learning needs.

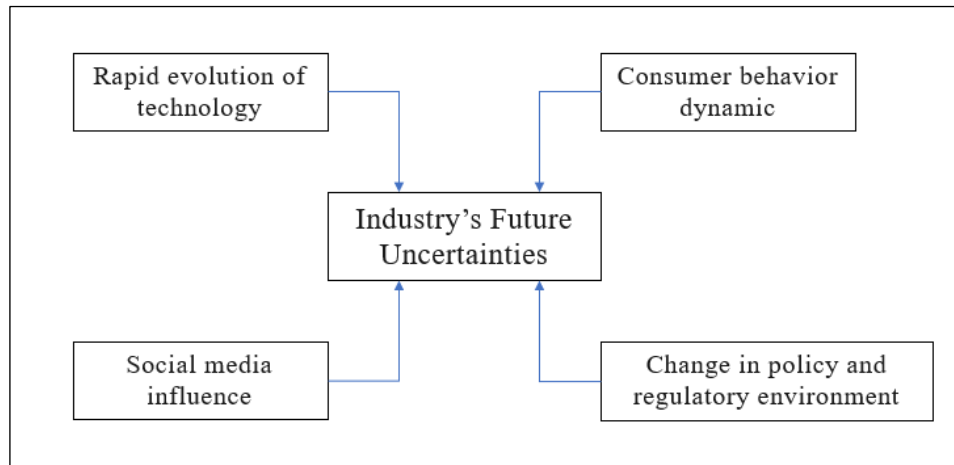


Figure 1. Business Issue

Indonesia's changing regulatory environment is another important aspect that can create instability. English education regulations have changed many times over the years, beginning as an extracurricular course in 1985 and becoming an official subject in 1993, followed by a policy adjustment in 2013 that put more focus on local languages than English. The regulatory environment is still uncertain, with possible future rules influencing content development, business structure, and/or teacher certification requirement. If new certification criteria is implemented, the business may face a scarcity of trained teachers, raising hurdles for new entrant and putting further pressure on current institutions to comply with government demand. Understanding these legal changes will be critical for companies to continue growing in the dynamic world of non-formal foreign language teaching. All four factors influencing the uncertainty in this industry are summarized in Figure 1.

METHOD

This research uses a scenario planning technique to analyze the future of the non-formal foreign language education market in Jabodetabek Indonesia in the next 5-10 years. It employs a mixed-method approach, combining a literature review, expert interviews, thematic analysis, and a rating method to identify key driving factors and critical uncertainties. The study follows Garvin and Levesque's (2006) framework, although the phases discussed in this paper will be confined to only the orientation (defining key focal issue) and exploration (analyzing driving factors and uncertainties).

To provide a diverse representation of stakeholders, this research collects primary data and perspectives from industry experts, practitioners, and regulators using semi-structured interviews and a rating method. Open-ended questions are utilized to enable respondents to openly express their opinions while keeping conversations focused on the variables impacting the non-formal foreign language education landscape in Indonesia, specifically in Jabodetabek. The questions are

carefully crafted to elicit essential industry trend while being remain relevant to the study topic. Table 1 contains the target respondent list in this study.

Table 1. Target Respondents

No	Organization Background	Position	Method
1	Multinational English education company	Business Partner	In-person interview
2	Multinational English education company	Director	Online interview
3	Asia-wide English literacy institute	Manager	Online interview
4	Indonesian (local) English language institute	Manager	In-person interview
5	Indonesian EdTech - English language learning platform	Manager	Online interview
6	Indonesian EdTech - Multilanguage learning platform (English, Chinese, Japanese, Korean)	Manager	Online interview
7	Indonesian (local) Multilanguage institute (English, Arabic, Dutch, Japanese, German, Korean, Chinese, French, Russian, Spanish)	Manager	Online interview
8	English private Tutor business	Owner	Online interview
9	European/Asian language private Tutor business	Owner	Online interview
10	Education authorities		In-person interview

This research uses both qualitative and quantitative data analysis methodologies. To extract insights from semi-structured interviews, qualitative analysis employs in-vivo coding and thematic analysis techniques. Meanwhile, the quantitative approach employs a rating system in which respondents assess the impact and uncertainty level of the identified driving forces.

Thematic Analysis

This study uses thematic analysis (Braun & Clarke, 2006) to identify and analyze patterns in qualitative data, with six steps: data familiarization, data coding using in vivo coding, theme generation, theme review, theme definition and naming, and report production. Thematic analysis extracts essential information from interview transcripts by categorizing codes into larger themes that represent industry trends. According to Manning (2017), in vivo coding is a qualitative data analysis method that focuses on the participants' exact spoken words. The finished

themes from this analysis will serve as the study's driving factors, which are subsequently assessed using a quantitative rating approach to identify critical uncertainty.

Business Environment Analysis

To map the contextual environment, this research will use a PESTEL framework to identify and evaluate the external determinants influencing the non-formal foreign language education business in Jabodetabek, Indonesia. The PESTEL analysis will take into account various elements, as depicted in Figure 2.

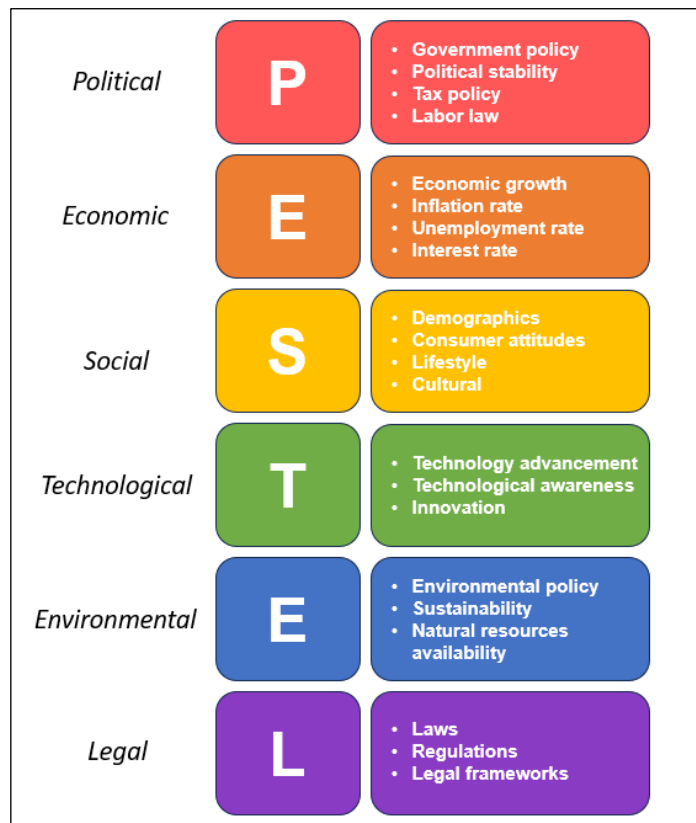


Figure 2. PESTEL framework for this study (Frank & Mohamed, 2024, with modification)

RESULTS AND DISCUSSION

Orientation Phase

The orientation phase of this research is concerned with defining the key focal issue: how the non-formal foreign language education industry in Jabodetabek will adjust to uncertainties in the next five to ten years. This phase also includes identifying key stakeholders. From the thematic analysis, industry actors identified include companies (both EdTech and non-EdTech), language institutes, private tutors, teachers, business practitioners, investors, school owners, consumers (parents and students), government agencies, overseas study consultants, formal schools, and non-profit organizations. To gain perspectives, 12 participants were

chosen through purposive and snowball selection, guaranteeing a wide sample of industry players. These stakeholders were asked to interviews to explore the industry environment, future trends, driving factors, and possible problems, risks, and opportunities affecting the sector.

Initially, the research intended to recruit just ten participants from profit-based organization and academic institution that primarily concentrated on English language instruction. However, during data collecting, the author saw the need for additional viewpoint, and included representative from a Mandarin language institution, a nonprofit organization, and consumer. This change ensured that the analysis was well-rounded, with contribution from industry experts from multinational, Asian, and local organization, business practitioner and investor (such as school owner and franchise investor), consumer (parents and students), and regulator from the Ministry of Education, Culture, Research, and Technology. The final panel of 12 respondents presents a thorough picture of the industry's transactional landscape. (See Table 2).

Table 2. Study's Respondents List from Indonesia Jabodetabek's Non-Formal Foreign Language Education Sector

No	Study Respondents	Organization Background	Position and Relevance
1.	Key Personnel 1	Privately-owned company	A business practitioner in the industry, serves as an investor and owner of 20 English centers and a university.
2.	Key Personnel 2	Asia-wide English literacy institute	With 20 years of experience in this industry, KP2 serves as a leader in his institution, overseeing the professional development of academic department in his company.
3.	Key Personnel 3	Indonesia EdTech multilanguage learning platform	Responsible for business operation, branch expansion, and performance management, KP 3 has 16 years of experience in the industry.
4.	Key Personnel 4	Indonesia EdTech learning platform	KP 4 has 13 years of experience in the industry and currently oversees academic and operations management across various teams of his company's subsidiaries.

5.	Key Personnel 5	Multinational English education company	KP5 is responsible to oversee national operations of his company in Indonesia. KP5 has 21 years of experience in the industry.
6.	Key Personnel 6	German and English private tutor	KP6 has 5 years of experience teaching German and English as private tutor.
7.	Key Personnel 7	English private tutor	KP 7 has 22 years of experience in the industry and currently works as English language private tutor.
8.	Key Personnel 8	Indonesia multilanguage learning center	KP8 serves as center supervisor, overseeing and managing operation and sales for two schools belong to her company.
9.	Key Personnel 9	Government agency	KP9, from the Directorate General of Vocational Education of the Indonesia's Ministry of Education, Culture, Research, and Technology, specializes in regulatory drafting.
10.	Key Personnel 10	Consumer / Foreign language education customer	KP10, a consumer and/or foreign language education customer, has enrolled his daughter in a lot of nonformal education programs, including language school.
11.	Key Personnel 11	English education non-profit organization	With over 13 years of experience, KP11 currently leads operations in a nonprofit education platform.
12.	Key Personnel 12	Mandarin language school	KP12 is a Gen Z leader and CEO of her very own company, specializes in online Chinese language classes.

Exploration Phase

In this phase, the research maps the contextual environment to identify important driving variables and critical uncertainties that will shape the future of Jabodetabek's non-formal foreign language teaching business. The research conducts in-depth examination of external and internal element that influence trend and

uncertainties. To characterize these driving factors, twelve interviews were performed with industry players, both online and offline, to get insight into the sector's dynamic. The interviews were videotaped, transcribed, and analyzed using in-vivo coding and thematic analysis, which allowed major themes to emerge from the participants' own words. This technique first identified 24 driving elements, which were subsequently refined to identify the most important factors in the contextual environment.

Key Driving Factors

A thematic analysis was carried out to classify and assign themes to the discovered interview codes. As a result, 24 initial driving variables were discovered and evaluated. According to Braun and Clarke (2006), the next stage is ensuring that the themes are consistent with the total data set and updating and/or combining the themes as needed.

The analysis revealed 11 final key driving factors: 1) Language Trend, 2) Learning Method, 3) Teacher Qualification and Shortage, 4) Transformative Education Technology, 5) Affordability and Economic Condition, 6) Consumer-Driven Demand, 7) Regulation and Policy Momentum, 8) Global Politic and Economic Trend, 9) Market Competition, 10) Business Strategy and Operation, and 11) Sustainability. Table 3 provides description of each of the main factors translated from the interview result analysis.

Table 3. Eleven Key Driving Factors affecting the Non-Formal Foreign Language Education Sector in Jabodetabek, Indonesia

KEY FACTORS	DESCRIPTION
Language Trends	Language Trend highlights the foreign language variations for language learning in Jabodetabek Indonesia driven by globalization, cultural influence, and career aspiration. English is believed to remain dominant as global language in the future, while other languages like Mandarin, Korean, French, and German are becoming popular and expected to see increased demand due to cultural, study or work purpose, and/or economic factors. Multilingualism is also increasingly valued.
Learning Method	Learning method captures the diverse educational approaches, including traditional classrooms, one-on-one tutoring, online and hybrid models, gamification, and personalized learning. Offline meetings believed to remain crucial for younger learners, while digital tools and AI will enhance flexibility and accessibility.
Teacher Qualification and Shortage	Maintaining both the quality and supply of teachers in the non-formal language education field. While there is

	<p>a demand for qualified educators with certification and good teaching skills, certifications as well as proficiency in English and other languages, are essential but not uniformly accessible. As an example, currently the sector faces a shortage of skilled teachers due to resource limitation and stringent visa requirement for expat teachers.</p>
Transformative Education Technology	<p>The integration of AI, digital tools, technology development and innovation in reshaping the learning landscape. AI technologies such as chatbots, adaptive learning, and AI-powered tutors personalize education, while digital tools, including apps, online platforms, and social media, provide flexible and engaging learning experience, breaking geographical and resource barriers. Innovation further drives these advancements through research and development.</p>
Affordability and Economic Condition	<p>The ability of individuals to pay for education, influenced by tuition cost, discount, payment flexibility, and their spending priority amid limited resources. On a macro level, they are influenced by economic condition including economic stability, inflation, and income level. Together, these factors highlight the importance of pricing strategy, financial support mechanism, and policies, especially for middle and lower-income group when facing the economic uncertainties.</p>
Consumer-Driven Demand	<p>The "Consumer-Driven Demand" category represents customers' changing choices and expectation, which are heavily impacted by their needs, demand pattern, parents influence, and consumer perception.</p>
Regulation and Policy Momentum	<p>Emphasizes the importance of government law and policy formation. Permits, accreditation, taxes, and administrative compliance are all regulatory requirement that have an effect on the construction and administration of educational institution. Policy momentum is heavily impacted by variation in government goals and political dynamic.</p>
Global Politic and Economic Trend	<p>Highlights how global factor such as China's economic development, globalization, global political stability, and economic competitiveness influence possibilities and challenges in the non-formal foreign language teaching industry.</p>
Market Competition	<p>The market has diverse players, ranging from major institutions and worldwide brands to app-based</p>

	platforms and/or smaller organizations. According to the statistics, the entrance barrier in this business is rather low, making the sector both dynamic and highly competitive.
Business Strategy and Operation	Focuses on the components required for efficient management and growth of education organizations and/or institutions. It combines student retention, stakeholder involvement, and operational performance. It emphasizes the necessity for a strategic approach, which includes partnership, branding and marketing, and adjusting to market changes, to guarantee the delivery of high-quality education and sustained development.
Sustainability	Emphasize environmentally practice in teaching, such as lowering carbon footprint, paper usage, and energy use. It is consistent with the Sustainable Development Goals (SDGs) and addresses issues such as urban pollution, power consumption, and transportation.

The study's driving factors are then classified using the PESTEL framework, as shown in Table 4 and Figure 3 below.

Table 4. The key driving factors of the non-formal foreign language education sector in Jabodetabek in PESTEL category

CATEGORY	DRIVING FACTORS
Political & Legal	Regulation and Policy Momentum
	Global Politics and Economic Trend
Economic	Affordability and Economic Condition
	Market Competition
	Global Politics and Economic Trend
Social	Business Strategy and Operation
	Consumer-Driven Demand
	Language Trend
	Learning Method
	Teacher Qualification and Shortage
Technological	Transformative Education Technology
Environmental	Sustainability

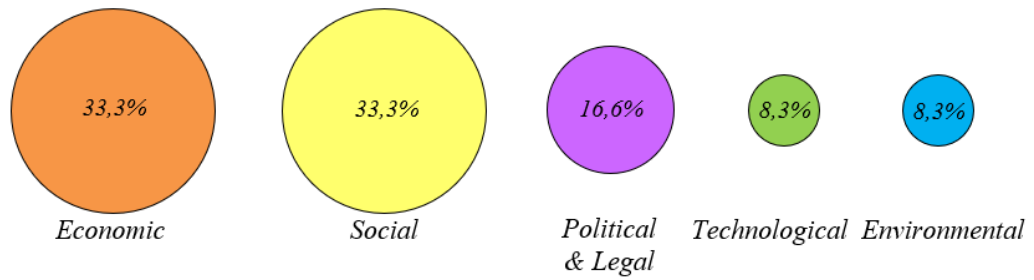


Figure 3. The key driving factors of the non-formal foreign language education sector in Jabodetabek in PESTEL percentage

Critical Uncertainties Discussion

Following the driving factors identification and PESTEL analysis, the study identifies critical uncertainties by evaluating the impact and uncertainty level of each driving factor using a direct rating approach. Eleven out of twelve interview respondents rated each factor on a three-level scale (1 = low, 2 = medium, 3 = high) for both impact and uncertainty. These assessments, presented in Table 5, help determine the most influential uncertainties in the industry.

Table 5. Impact and Uncertainty Level of the Key Driving Factors in this study

IMPACT	KP 1	KP 2	KP 3	KP 4	KP 5	KP 6	KP 7	KP 9	KP 10	KP 11	KP 12	TOTAL
Language Trend	3	2	3	2	2	3	2	1	3	3	3	27
Learning Method	3	3	2	3	2	2	3	2	2	3	3	28
Teacher Qualification and Shortage	3	2	1	2	3	3	3	1	3	1	3	25
Transformative Education	2	3	3	3	2	3	2	3	2	3	2	28
Technology												
Affordability and Economic Condition	2	3	3	3	3	2	3	3	3	3	3	31
Consumer-Driven Demand	2	3	3	2	3	2	2	3	3	3	3	29
Regulation and Policy Momentum	1	2	2	2	3	2	2	3	1	2	1	21
Global Politics and Economic Trend	1	1	2	2	2	1	2	3	1	2	2	19
Market Competition	2	2	3	2	2	3	1	3	3	2	2	25
Business Strategy and Operation	2	2	2	2	2	2	2	3	3	3	2	25
Sustainability	1	1	1	1	1	1	1	3	1	1	2	14
UNCERTAINTY	KP 1	KP 2	KP 3	KP 4	KP 5	KP 6	KP 7	KP 9	KP 10	KP 11	KP 12	TOTAL

Language Trend	1	2	1	1	1	2	2	1	2	1	2	16
Learning Method	1	2	1	1	1	2	1	2	3	1	2	17
Teacher Qualification and Shortage	1	2	1	1	1	2	1	2	1	1	2	15
Transformative Education Technology	2	2	1	2	2	2	2	3	3	2	2	23
Affordability and Economic Condition	2	3	3	2	3	2	2	3	3	1	3	27
Consumer-Driven Demand	2	2	3	2	3	2	2	3	3	3	2	27
Regulation and Policy Momentum	2	2	3	1	3	2	3	3	2	2	1	24
Global Politics and Economic Trend	1	3	3	3	2	2	3	3	2	2	3	27
Market Competition	2	3	3	2	2	2	2	3	3	2	3	27
Business Strategy and Operation	2	2	2	1	2	2	2	3	1	2	3	22
Sustainability	1	2	1	1	1	1	1	3	1	2	1	15

An uncertainty matrix is constructed by visualizing the impact (X-axis) and level of uncertainty (Y-axis) of each driving factor. This representation, displayed in Figure 4, helps in identifying the most critical uncertainties influencing the industry's future direction.

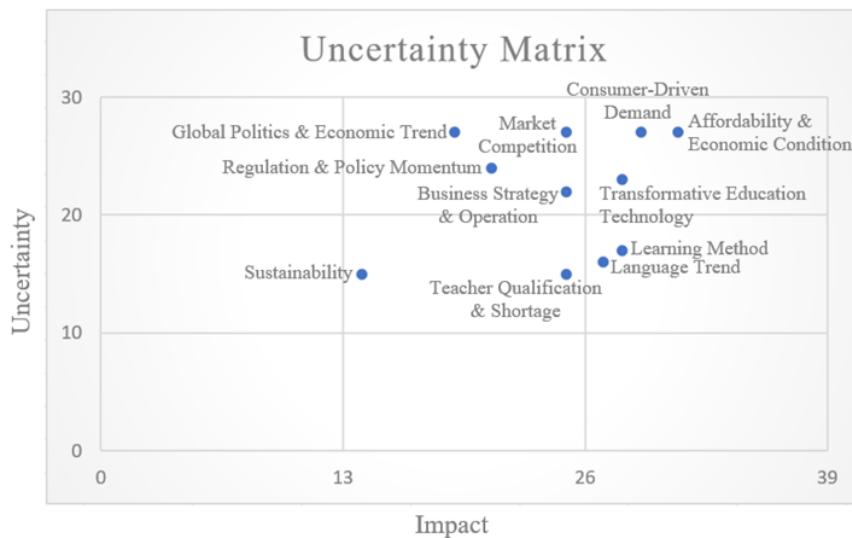


Figure 4. Uncertainty Matrix of this study

From the picture above, it can be concluded that the 2 critical uncertainty factors for the non-formal foreign language education industry in Jabodetabek, Indonesia, are 'Affordability & Economic Conditions' and 'Consumer-Driven Demand'.

CONCLUSION

In conclusion, driven by the four factors, rapid evolution of technology, consumer behavior dynamic, social media influence, and possibility of change in policy and regulation environment, a business issue of non-formal foreign language education industry's future uncertainties is formulated. This business issue further define the key focal issue in this study: how the non-formal foreign language education industry in Jabodetabek will adapt to the uncertainties over the next five to ten years. This study builds on that question and a mix of qualitative and quantitative analysis was conducted. Result from thematic analysis reveals eleven driving factors that will influence and shape the future of Jabodetabek's non-formal foreign language teaching business in the next 5-10 years. The eleven driving factors are 1) Language Trend, 2) Learning Method, 3) Teacher Qualification and Shortage, 4) Transformative Education Technology, 5) Affordability and Economic Condition, 6) Consumer-Driven Demand, 7) Regulation and Policy Momentum, 8) Global Politic and Economic Trend, 9) Market Competition, 10) Business Strategy and Operation, and 11) Sustainability. Following the thematic analysis, PESTEL grouping was conducted. From the PESTEL categorization, Economic and Social factors were shown to play major role, with 33,3% each. Succeeding to the next stage, direct rating method was conducted to assess the level of impact and uncertainty of each of the identified driving factors. Through the uncertainty matrix plotting, the result shows that the two critical uncertainty factors affecting the future of the non-formal foreign language education industry in the next 5-10 years are "Affordability and Economic Condition" and "Consumer-Driven Demand".

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