



## Business Strategy for Geonusa in Facing Price Competition in Geospatial Information System Industry

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**ABSTRACT:** In an increasingly competitive market, Geonusa, a geospatial service provider in Indonesia, faces challenges from price-sensitive competitors and low barriers to entry. This paper explores strategies to position Geonusa as a thought leader in the industry, enabling the company to differentiate itself and move beyond competing on price. By leveraging its expertise, fostering innovation, and strengthening its marketing and government relations, Geonusa can secure a competitive edge and improve its market presence. The paper discusses how adopting a thought leadership strategy can help Geonusa address current challenges in market visibility and customer retention. However, the strategy focuses primarily on marketing and does not comprehensively address cost optimization and operational efficiency, which are essential for long-term success.

**KEYWORDS:** GIS, geospatial, business strategy, marketing strategy, thought leadership

### A. INTRODUCTION

Geographic Information Systems (GIS) is a technology used to capture, store, analyze, and present spatial or geographic data. It allows users to create layered maps and 3D models that visualize data such as topography, infrastructure, population density, and environmental features. GIS combines geographic information (location) with descriptive data (attributes) to enable detailed analysis and decision-making. It's widely used in industries like construction, urban planning, transportation, agriculture, and environmental management to optimize operations, monitor changes, and solve complex problems involving spatial data. In the world, GIS market is still growing double digit [1] considering the rapid development of infrastructure and land use.

The GIS industry in Indonesia is rapidly growing, driven by the country's need for accurate geospatial data to support infrastructure development, urban planning, and natural resource management. With the government's **One Map Policy** initiative, which aims to create a unified map for all government agencies, GIS technology is becoming essential for various sectors. Industries such as agriculture, mining, disaster management, and forestry are increasingly adopting GIS solutions to improve efficiency and sustainability. Additionally, the rise of smart city initiatives and renewable energy projects further boosts demand for geospatial services in the country. These complex activities are usually done by professionals, including Geonusa as one of the GIS service provider based in Jakarta.

Geonusa is a geospatial service provider company that focuses on delivering high quality geospatial data capture and analysis. The company is facing the challenge of competing in a very price sensitive market. The company has identified what is based on [2] as an early warning signal in price wars as indicated in table 1. In his paper, Heil [2] identified 4 signal categories, the market condition, firm characteristics, product, and customer characteristics. The early analysis has shown that Geonusa has the warning signal across all 4 signals.

The CEO of Geonusa is looking for a strategy to differentiate their products and services, getting away from the price sensitive market and become more competitive in their niche. He identified one of the company's competitive advantages is the quality of analysis and level of expertise of the team. Geonusa got a lot of praises from customers for its quality of delivery. However, this does not translate to profitability as Geonusa is found hardly compete in securing private companies projects. Only in governmental projects where regulation, standards, and requirements are very strict, the company may excel.

This paper aim to discuss how Geonusa can achieve thought leadership in the industry, maximizing the knowledge of the company.

### B. METHODOLOGY

To be able to understand the whole market situation, structured qualitative research through interview is conducted. The data collected will provide an in-depth understanding on the internal and external situation of the business. Collected data then analyzed



using strategic frameworks such as PESTEL and 5 Forces analysis to understand about the external factor , and VRIO framework for internal analysis [3]. The primary data will be gathered from company executives who oversaw business strategy to better understand how the company is operating and the challenges. Then an interview is also conducted with industry experts and customers to share a view about the external factors. The secondary data for this research is gathered through articles, journals, and other forms of shared media that is accessible publicly.

To validate the findings, the identified themes were triangulated with existing literature, research, and expert opinion on the designed problems [4]. Ethical considerations were paramount throughout the research process. Informed consent was obtained from all interview participants, ensuring they were aware of the study's purpose and their rights as participants. Confidentiality was maintained to protect the identity and sensitive information of the respondents.

### C. ANALYSIS AND RESULTS

#### PESTEL Analysis

Since Geonusa's customer base primarily consists of government and state-owned enterprises serving government projects, political, economic, and technological factors greatly impact the business. Government projects are heavily influenced by political forces, particularly in the formation of national strategic plans. Political connections become an important aspect in obtaining information and participating in tenders. These government projects are also highly affected by the economic conditions of the country, making business very volatile in relation to economic growth.

The company must also stay vigilant regarding technological developments in this industry. New technologies, such as drones, sensors, and AI for GIS, will significantly impact the industry, as they can affect operational costs and the quality of outcomes. Meanwhile, sociocultural aspects indirectly influence the business, considering the role of strategic government projects in promoting public welfare. Interestingly, environmental factors also contribute to business development. Disaster management, energy transition, and environmental sustainability can present a distinct market for Geonusa, particularly focusing on environmental and green energy aspects. This is worth further analysis, considering the growing trend in these topics [5].

From a legal perspective, the potential risks related to data protection regulations and aviation laws could hinder Geonusa's business processes. Mismanagement of data could lead to legal risks, including fines, additional costs, and a loss of customer trust.

**Table 1. PESTEL analysis of Geonusa**

<i>Factors</i>	<i>Description</i>
Political (High)	Highly influenced by government projects and SOE, changes in political structure may highly impact the demand
Economic (medium)	Macroeconomic condition will impact the numbers of government projects
Sociocultural (low)	Significant urban growth affecting the demand for GIS services
Technology (high)	Rapid development in technology of LiDAR, satellite imaging, AI powered analysis and cloud computing increase the competitive landscape of GIS industry.
Environmental (medium)	Increasing awareness in sustainability may increase the demand for environmental monitoring.
Legal (medium)	Strict regulation on drone usage, airspace law, and data privacy. Ensuring compliance with legal requirements is essential to avoid penalties and maintain operational integrity.

#### 5 Forces Analysis

Geonusa operates in a highly competitive market primarily due to the low barriers to entry in the geospatial services industry. Advances in technology have made it easier for smaller companies, and even individuals, to compete with larger firms by requiring



lower capital investments. This dynamic has intensified competition across the sector. Suppliers and buyers add further complexity, with both posing medium to high risks for the company. Supplier availability is often limited to a few key technology providers, and Geonusa relies on specific support from suppliers for certain tenders, which are often allocated on a first-come, first-served basis. On the buyer side, there is a significant possibility for customers to vertically integrate by establishing their own GIS services. However, the main obstacle to this backward integration lies in the difficulty of sourcing and retaining specialized talent.

In terms of substitute threats, a wide range of emerging technologies can serve as alternatives to existing geospatial solutions. However, each technology brings its own advantages and limitations. For instance, Vertical Takeoff and Landing (VTOL) drones may outperform fixed-wing drones in specific scenarios, while LiDAR sensors may prove more effective than satellite imaging for particular projects. These technological advancements continue to evolve, adding layers of complexity to Geonusa’s competitive environment.

Finally, the competitive landscape in Indonesia's geospatial industry is highly fragmented, with numerous players ranging from large firms to smaller companies and even freelancers. The low barriers to entry have led to a saturated market, intensifying price competition. This situation has triggered price wars, making it more challenging for companies like Geonusa to maintain profitability while offering high-quality services.

**Table 2. 5 Forces analysis of Geonusa**

<i>Factors</i>	<i>Description</i>
Threat of new entrants (high)	Low barrier of entry especially for basic mapping survey. Geonusa should focus on specialization and certifications to build barriers to entry for a specialized niche market.
Power of suppliers (moderate – high)	For basic mapping and survey, there are many suppliers that we can choose from. However in a specialized industry that requires skilled personel and special tools, number of technology suppliers is limited.
Power of buyers (high)	Customers can easily switch between providers from established firm into a niche smaller firm, creating a price sensitive environment. Customers also have a high possibility to do backward integration.
Threat of substitutes (medium)	In-house teams and satellite solutions pose a threat. Some technology such as LiDAR, and VTOL drones require high value of investment and specialized team
Competitive rivalry (high)	Geospatial industry in Indonesia is populated with many competitors that leads to price wars. Large firm, smaller firms, even freelance can participate in the industry.

**VRIO Analysis**

Geonusa holds sustainable competitive advantages in areas of expert knowledge and high-quality data delivery, which should be leveraged for long-term success. Meanwhile, its client relationships and regulatory compliance offer only temporary competitive advantages due to lack of organization. GIS software tools and project management do not differentiate the company from competitors and only offer competitive parity. Geonusa should focus on organizing its client relationships and compliance processes to strengthen these temporary advantages and invest in further differentiating its project management and software tools to create a more sustainable edge in the market.

**Table 3. VRIO analysis of Geonusa**

<i>Resources and capabilities</i>	<i>Competitive Advantage</i>
Expert knowledge in geospatial and remote sensing technology	Sustainable competitive advantage



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Strong client relationship in agriculture and government sector	Temporary competitive advantage
GIS software and data processing tool	Competitive parity
High quality data delivery	Sustainable competitive advantage
Regulatory and standard compliance	Temporary competitive advantage
Project management	Competitive parity

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## D. DISCUSSION

To create a sound strategy, we need to look at the company's competitive advantage over the competitors. Referring back from the VRIO analysis, Geonusa has an advantage in expert knowledge of the team and high-quality data delivery. When think back about the value of knowledge and quality, it is always related to the concept of thought leadership.

The term thought leadership popularized by Joel Kurtzman [6] from his book, *Thought Leaders: Insight on the Future of Business*. The terms has grown in meaning from opinion leadership, individual knowledge, into content marketing context [7]. In his journal, [7] redefining the meaning of thought leadership as "knowledge from a trusted, eminent and authoritative source that is actionable and provides valuable solutions for stakeholders". Even though [7] found that this definition does not always provide a valuable solution due to tensions that may occur during the implementation, thought leadership still an important part of a professional services firm (PSF) in establishing customer relationship and marketing.

Geonusa as PSF in geospatial industry can leverage on this thought leadership strategy to leverage the in depth knowledge base that the company has to reach a broader customer base as it serve a prominent digital marketing strategy for B2B [8]. Thought leadership strategy are recognized for drive conversation, champion new directions or ideas, education, provoke new mindsets for addressing upcoming challenges, advanced cutting-edge ideas on addressing issues, develop actionable strategy. [8] In his paper, he divides thought leadership to be operationalized as two constructs:

*Thought leadership competency*: The intellectual strength of a company or individual lies in their ability to capture the attention and trust of potential clients and customers through innovative insights, fresh ideas, unique viewpoints, or valuable educational content. This expertise fuels discussions, advocates for new approaches, and motivates the development of actionable strategies [8].

*Trusted authority recognition*: The level of trust and authority given to an individual's or a company's perspective, which has the ability to influence their prospects and customers' opinions, shaping them to align with the business solutions being offered [8]. With the knowledge advantage that Geonusa has, the company can easily focus on growing the thought leadership, providing customer with high quality experience and gaining more trust. Even with in depth knowledge based, it is very likely to be approached by technology suppliers. Technology developers are more likely look for partners who are able to educate the market about the technology, therefore they with this advantage being built, the future model can be set as a distributors of GIS technology or even the developer itself.

In this research, we will focus to enhancing knowledge and technology, and becoming the top of mind in term of high quality geospatial services. In achieving this goal, we will put more effort in marketing strategy. Therefore, on the business model canvas framework developed by [9], we will only focus on the market segment, key activities, resources, and revenue stream.

## IMPLEMENTATION PLAN

The implementation plan of the strategy is divided into 4 (four) points. Firstly we will discuss the direction of the company strategy which is the market focus. From the market, the management team need to understand how to get revenues from that particular market in the revenue streams section. Next we will discuss what activities need to be taken in order to achieve the strategy, including the performance measurement metrics for the management. And lastly, the resources that management need to fully achieve the strategy. Market Focus

The primary focus for Geonusa should be on securing government projects by leveraging its strong network in the public sectors.



This will align the company with Indonesia's One Map Policy and other infrastructure development initiatives. However private sector serves as an important factor as possible partnership with private company for a larger project may occur. For example, Geonusa can offer data analysis services only from pre-captured data. In this way, Geonusa can leverage their advantage in data analysis and maximizing operational cost.

Government projects serve as the low hanging fruit for the company as it can be accessible through open tender mechanism and the company has already made a strong presence in the segment. However, it is very important to maintain relationships or partnership with private companies to secure bigger projects without heavily investing in resources.

#### Revenue Stream

From the strategy mentioned above, Geonusa can have multiple revenue streams:

*Direct sales - Distributorship:* Geonusa can leverage their in-depth knowledge based and networks to help technology company promotes their technology to Indonesian market. Therefore, having a close relationship with technology supplier will open windows of opportunity.

*Direct sales / subscription – paid training:* With knowledge advantages, Geonusa can open a courses or training class for those who want to learn about geospatial technical and management. Geonusa can use direct sales approach for individuals or partnership based for B2B.

*Long term / short term contracts – Government Projects:* Government projects are usually conducted through public listed tender. It is important for this sector to monitor the listed opportunity, while maintaining relationship with customers. Geonusa can use direct sales approach for this kind of customer.

*Partnership – Private contractors:* From private segment, it is advised to focus on data analytics services based on existing data. The data can be from collection pool of the customer, or provided by other third party. Geonusa can use direct sales approach for this kind of customer.

#### Key Activities

Geonusa should focus more on marketing activities. As businesses increasingly rely on online media for visibility and growth, the concept of thought leadership has emerged as a powerful strategy, particularly in the B2B sector. Thought leadership advocates suggest that marketers should harness the power of online communities to spread and endorse their content by offering superior insights and expertise [10]. By doing so, companies can position themselves as trusted advisors, creating a deep connection with their target audience that transcends mere transactions [10].

**Marketing:** The company can utilize low-cost digital marketing to via social media platforms like LinkedIn, online seminars, conferences, and paid training. This can be in form of knowledge sharing, research and findings, new technology updates, debates and discussions. This will help the company to be recognized as a thought leader in the domain of GIS. Management can use metrics such as customer acquisition cost (CAC) and revenue generated as performance metric for marketing.

**R&D:** The company may also start to do R&D activities to stay competitive by investing in cutting edge geospatial technologies or developing proprietary software that streamlines services and improves efficiency to stay ahead of current technology trends. Explore collaborations with universities or research institutions including research on renewable energy and geospatial innovation to foster technological advancements and create bespoke solutions. Performance measurement metrics such as time to market, and return on Investment (ROI) can be used for this activities.

**Compliance and regulatory monitoring:** Since Geonusa is operating at a very regulated market in government sectors, continuously monitor and update knowledge on government regulations concerning geospatial data, drone use, is a must known. Further understanding on the compliance will positioned Geonusa as a go-to resource for regulatory expertise. Geonusa can use metrics like number of participated tenders and customer feedbacks to measure how compliance has been implemented.

#### Resources

To achieve the mentioned strategy Geonusa need to build a team with a strong knowledge base and in depth experience in GIS industry. Advance understanding in latest geospatial technologies will also help to build authoritative opinion towards the topic. Digital marketing expertise will also be an important aspect in publishing the expertise towards greater audience.

Other resources will be financial support for R&D to stay ahead of technological trends including the funds for acquiring and maintaining new geospatial technologies such as drones, AI-powered analytics tools, and cloud based GIS platforms. However, the company information about financial data is limited, therefore creating accurate financial measures is difficult to conduct.



The strategy outlined above is designed to position Geonusa as a thought leader in the geospatial industry, helping the company differentiate itself in a competitive market and excel in potential price wars. By leveraging expertise, strengthening its government and private sector networks, and developing knowledge base in new technology, Geonusa can build a reputation as a trusted advisor. This approach not only elevates Geonusa's industry presence but also enables the company to shift away from competing solely on price, allowing it to sustain long-term customer relationships based on value rather than cost.

However, the limitation of this strategy lies in its focus primarily on marketing tactics to stand out from competitors. While positioning Geonusa as a thought leader addresses market visibility and differentiation, it does not comprehensively cover cost optimization or operational efficiency, which are equally vital to the company's overall success. A unified strategy that integrates marketing with cost management and operational improvement would provide a more holistic approach. Nevertheless, this paper focuses solely on the marketing strategy, leaving operational and financial aspects, such as cost optimization, to be addressed in the broader company strategy.

## E. CONCLUSION

Geonusa operates in a dynamic and competitive environment, where low barriers to entry and evolving technologies create significant challenges. This paper has explored how Geonusa can achieve its vision of becoming a thought leader in the geospatial industry. By focusing on its strengths—such as high-quality data delivery and expert knowledge—Geonusa can leverage marketing strategies that position the company as a trusted authority in the field. Building thought leadership will not only enhance the company's reputation but also allow Geonusa to escape the pressures of price competition by providing value through expertise. However, while the strategies outlined focus on improving market positioning, a holistic approach is necessary for Geonusa to achieve sustainable success. Cost optimization, operational efficiency, and R&D investments must complement the marketing strategies to ensure the company remains competitive both in terms of expertise and profitability. Although this paper centers on the marketing aspects, integrating these efforts with broader company objectives will be crucial in solidifying Geonusa's future growth and resilience in the industry.

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