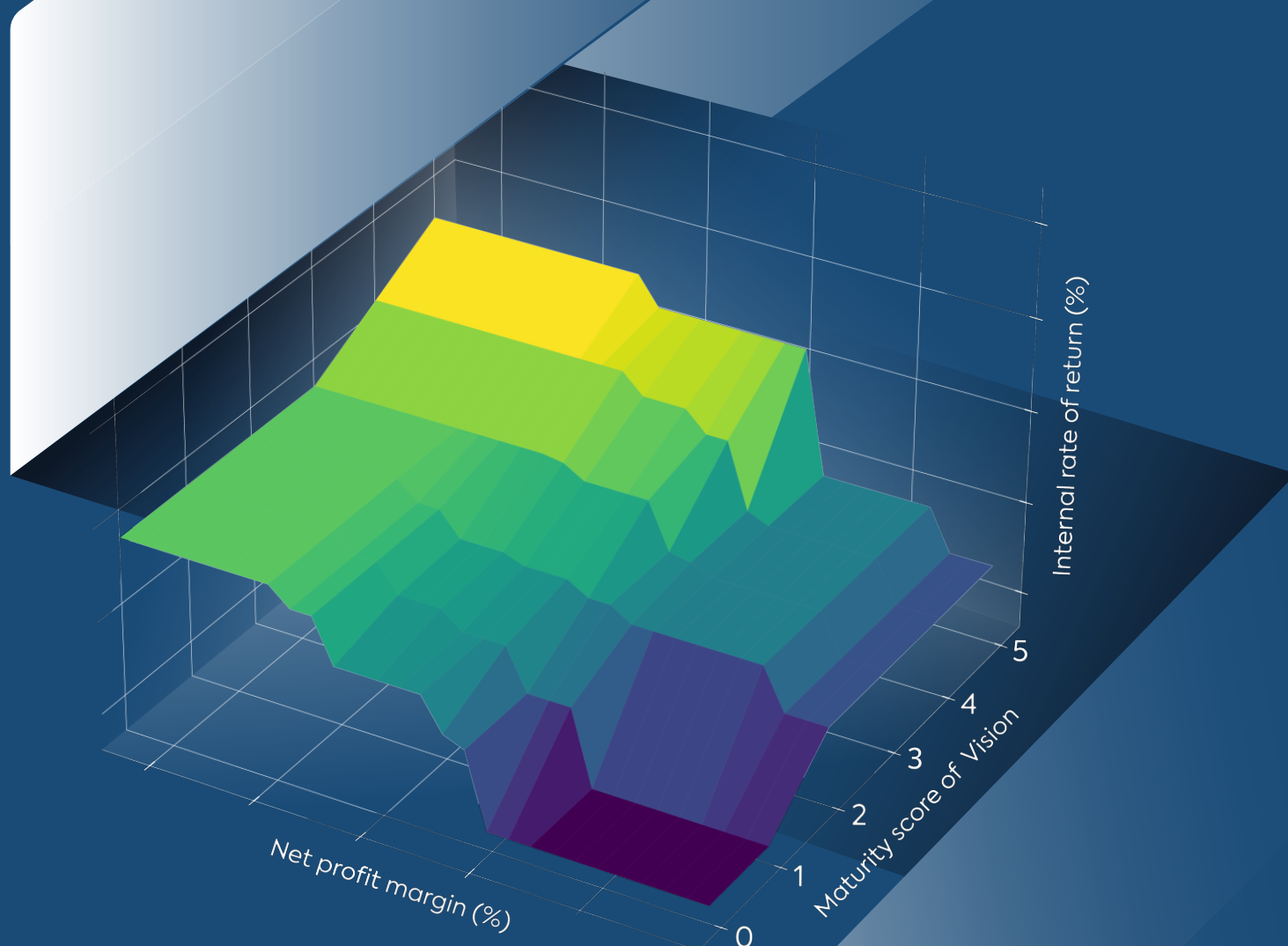


Unleashing the power of
Vision Driven Investing Framework

BREAKTHROUGH IN BUSINESS & INVESTMENT PERFORMANCE



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01.

Introduction



The Vision Driven Investing (VDI) framework has been instrumental in the success of Mekong Capital and its investee companies in achieving their visions. Since its inception in 2009, this ontological framework has undergone regular reviews and refinements based on careful analysis and insights. It is essential to note that this framework is not a rigid set of best practices or solutions to be imposed on a company. Rather, it provides 15 unique perspectives or “places to look from” of what it takes for a company to achieve its Vision. These 15 perspectives are referred to as “VDI elements”, which form the cornerstone of our framework. Each of the 15 VDI elements has its own maturity model definition for each level, but there is a basic principle that exists across the maturity levels:

Score	Explanation
0	Not in existence: No one is using it.
1	Ad Hoc: It is only in existence for a minority of individuals, or they may know it, but they are not acting from it.
2	Partial: It is owned by some managers and in existence for some teams. Some actions are being taken but it is incomplete.
3	Organizational: It is in existence throughout the whole company and a reliable system keeps it in existence. People are consistently acting to fulfill this intention.
4	Optimizing: The company is consistently evaluating the effectiveness of the element and taking action to optimize its impact, and this is showing up as continuously improving performance.
5	Best in Class: The company consistently delivers breakthrough results due to this element and has become a model of best practices in this area.

Table 1: Basic principle of VDI maturity system

In 2022, we collaborated with AISIA Research Lab and employed advanced Artificial Intelligence/Machine Learning techniques to enhance our VDI framework further. This collaboration produced significant insights into several areas, including the impact of the 15 elements in this framework on the internal rate of return ("IRR"), the VDI framework's role in detecting anomalies in portfolio companies' performance, and the optimal quantity of meetings per quarter based on current portfolio companies' performance on the VDI framework. We have shared our findings with the wider investment community through a whitepaper accessible at

[!\[\]\(99f58673407353e96a019fbca558fd72_img.jpg\) Vision Driven Investing, A Reliable Framework for Breakthrough in Investment Performance.](#)

This year, we build upon this research and explored further the potential of the VDI framework. This whitepaper presents the latest findings, including:

- 1 The impact of the VDI elements on Business Performance and Investment Performance across different stages of the holding period,
- 2 The three-way interrelationship between the VDI elements and Business Performance and Investment Performance, and
- 3 Further utilization of the VDI framework in detecting anomalies through data-derived patterns.



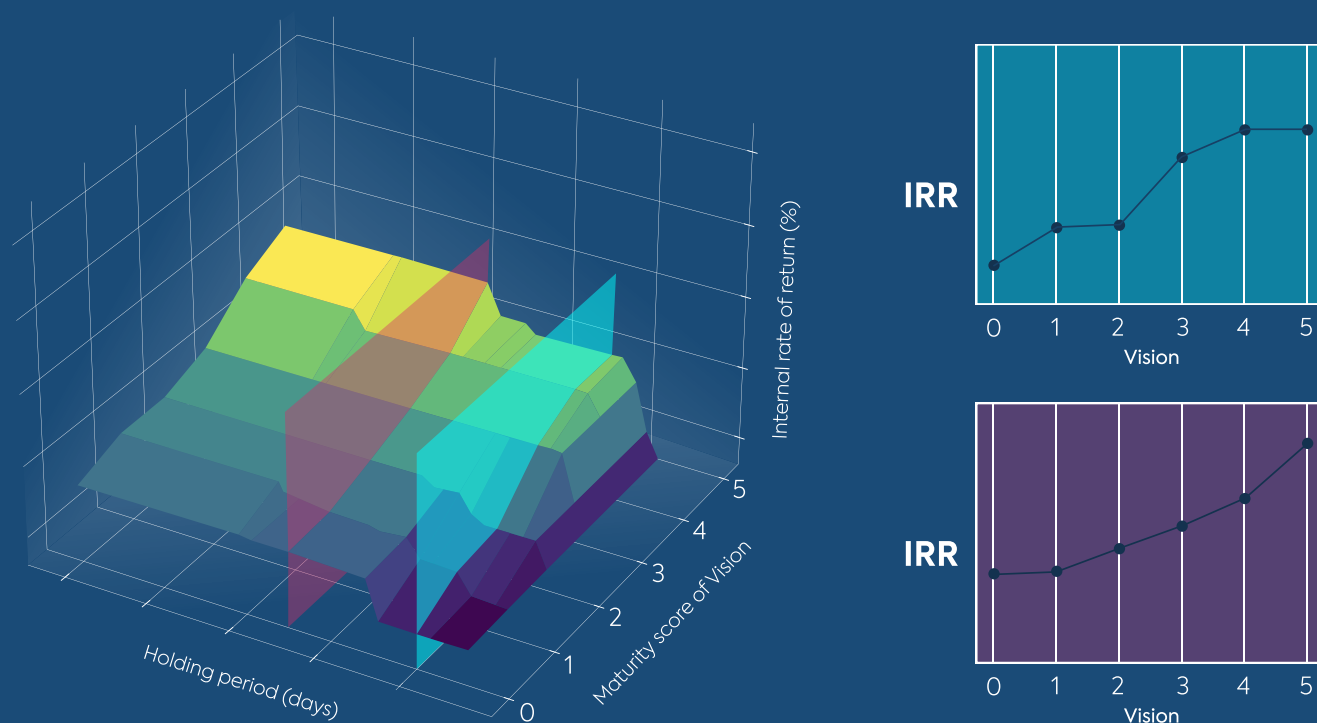


02.

The VDI framework exerts a positive influence on both Business Performance and Investment Performance across varying holding periods.

In our previous research, as described in our prior whitepaper, we modeled the impact of VDI elements on the investment performance (such as IRR) of our investee companies. In this whitepaper, we incorporate the different stages of holding periods into our analysis. By broadening our **analysis** to include the holding period, we aim to gain a deeper understanding of the relationship between VDI elements and investment performance over time. **Across varying holding periods, 15 VDI elements exert positive influences on Investment Performance.**

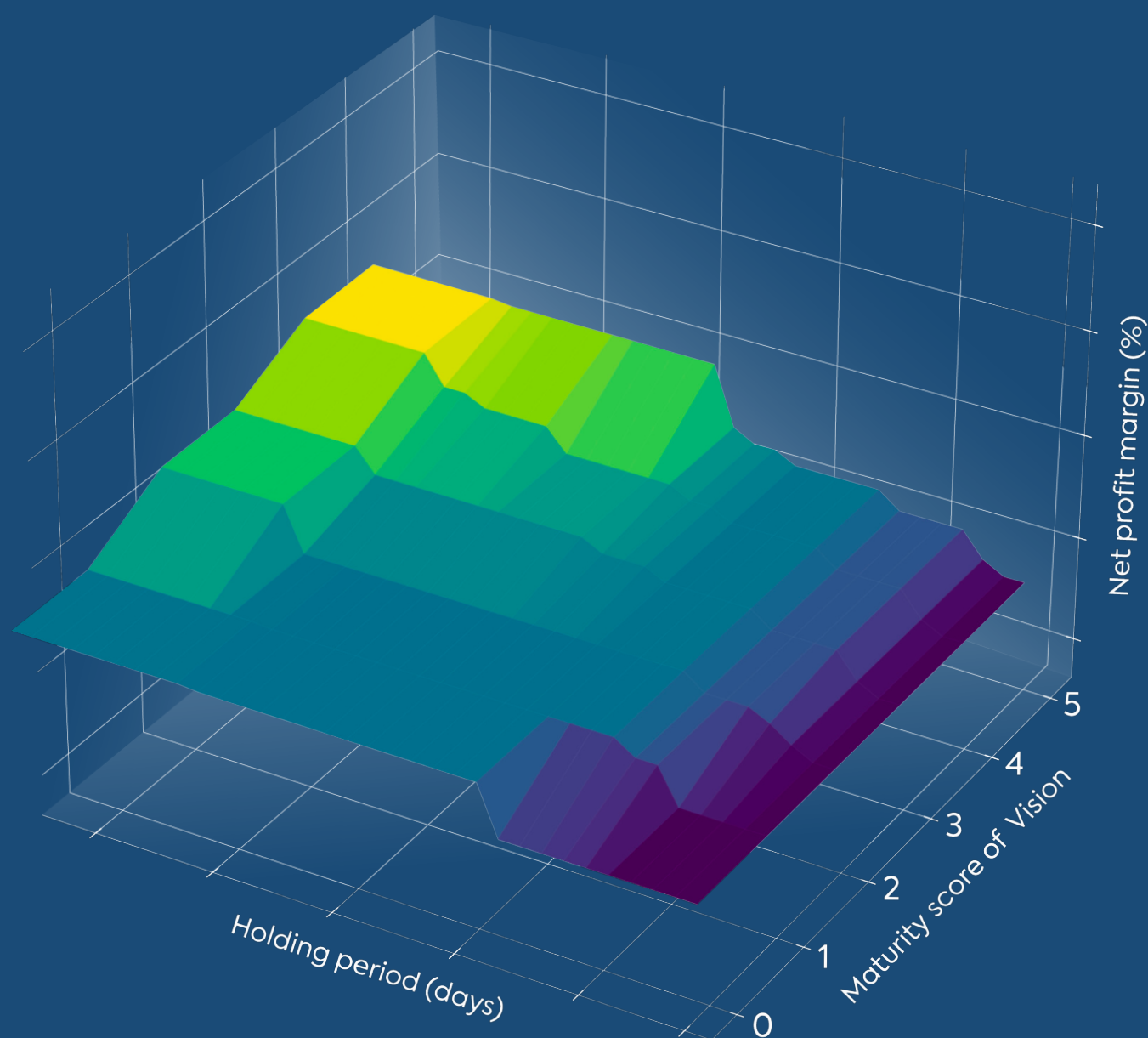
To illustrate, we present the model for the VDI element “Vision” and its relationship with investment performance at each stage of the holding period in the visualization below.



“Vision” element in the VDI framework exerts a positive influence on Investment Performance across varying holding periods. This impact is particularly notable in longer holding periods (represented by the red cut in the figure) compared to shorter holding periods (represented by the blue cut in the figure). The details for the maturity score of “Vision” can be found in Table 1.

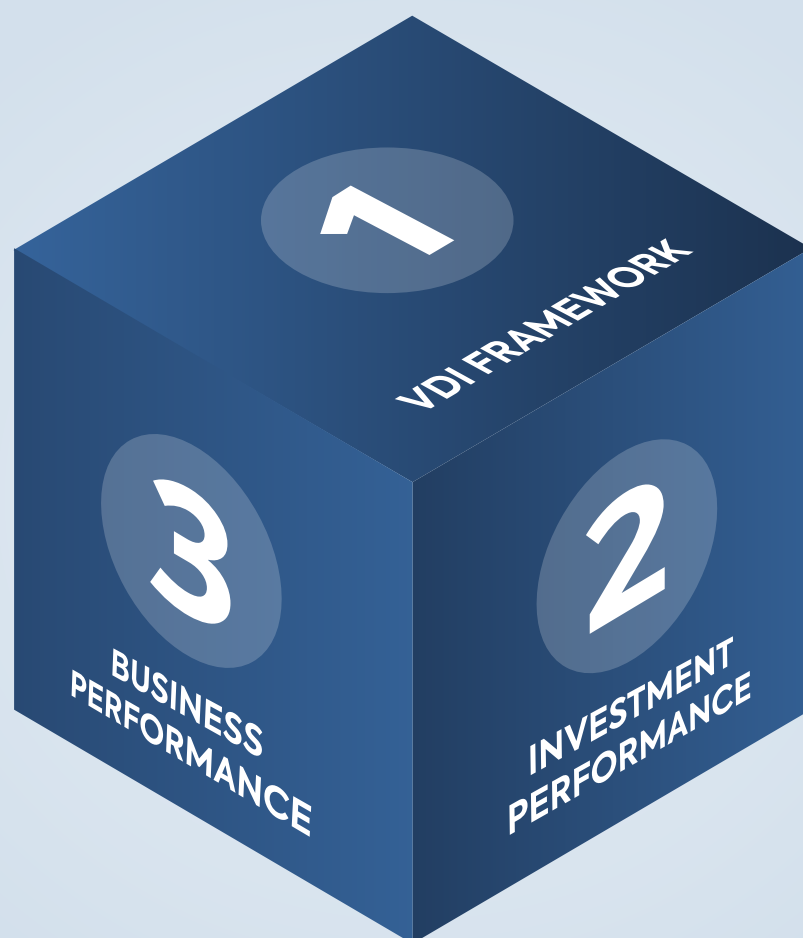
Based on our observations, fulfilling a higher maturity level of Vision (increase in the VDI element score) contributes to greater investment performance at all stages of investment. Generally, higher investment performances are associated with higher VDI element scores during the same holding period. Moreover, in the early days of investment, we can see a sharp increase in the impact of “Vision” on IRR as illustrated by the steep slope along the holding period axis on the right-hand side of figure above, highlighting the importance of the “Vision” on Investment performance in the initial stage of investment. Additionally, we have observed that potentially higher investment performance corresponds to longer holding periods with the same VDI score. **These findings suggest that the VDI element of “Vision” is a significant factor in driving investment performance both short-term and long-term.**

Likewise, we can also observe the same positive impact of “Vision” on business performance (such as Net profit margin) over time through the model depicted below.



“Vision” element in the VDI framework exerts a positive influence on Business Performance across varying holding periods.

Regarding the other VDI elements (such as Management Team), we also found similar positive patterns. That is to say, **each element exerts a positive influence on Business Performance and Investment Performance across varying holding periods**. From a broader perspective, these models help us measure how much an increase in the VDI element score during a specific period of time contributes to the overall improvement in investment or business performance. These quantifications offer critical insights into the impact of VDI elements on portfolio companies, enhancing our understanding of the framework's effectiveness in driving portfolio company success.



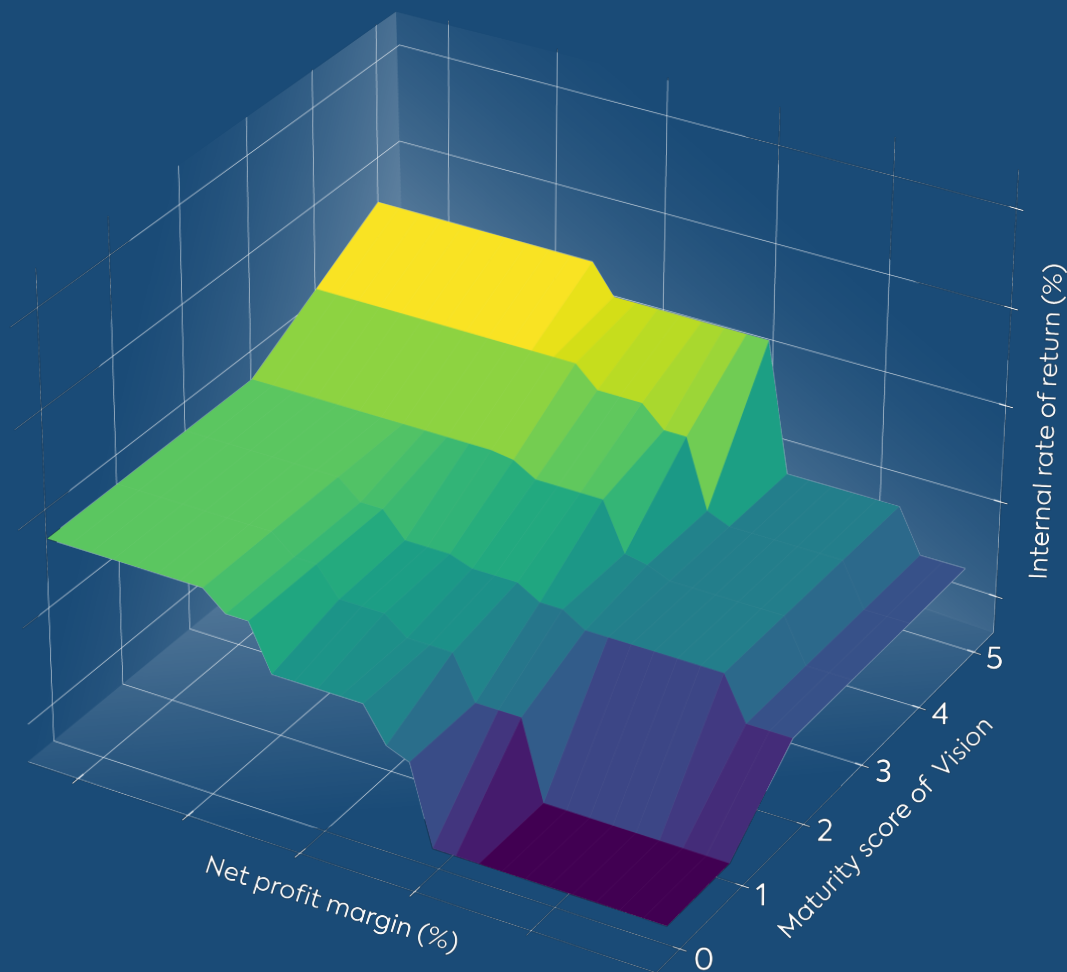


03.

We found a positive interrelationship between VDI elements, Business Performance, and Investment Performance

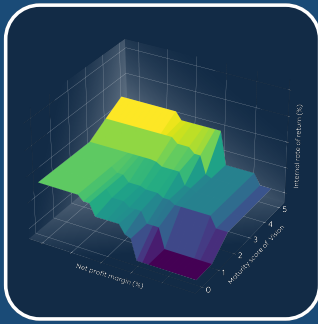
As discussed in the previous section, our research findings offer quantifications of the impact of VDI elements on business and investment performance over time. These findings naturally prompt a question about the potential interrelationship between these factors, and in the event that such an interrelationship exists, it would be crucial to investigate modeling methods in order to quantify it.

To explore this question, we aggregated our historical data with data from all existing portfolio companies and formulated a mathematical model to examine the interrelationship between the score of each VDI element, business performance, and investment performance. As an example, we can visualize the model for the VDI element "Vision," as shown below.

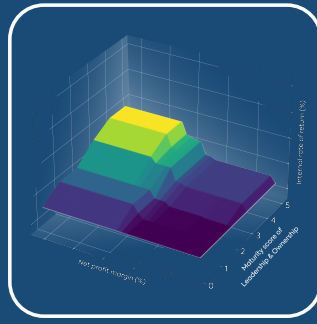


The positive interrelationship between the VDI element “Vision”, Net profit margin, and internal rate of return.

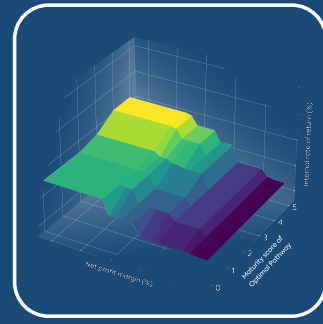
Our analysis through this model shows a clear and positive correlation between VDI elements, business performance, and investment performance. **Specifically, an improvement in VDI score is associated with better business performance as well as investment performance.** These findings are applicable to all VDI elements.



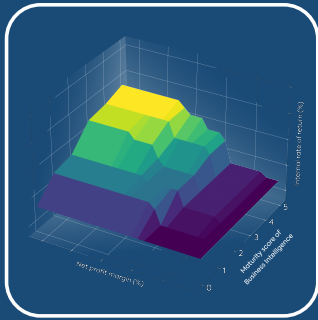
Vision



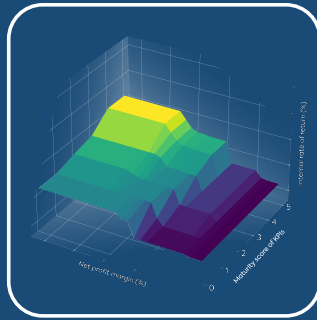
Leadership & Ownership



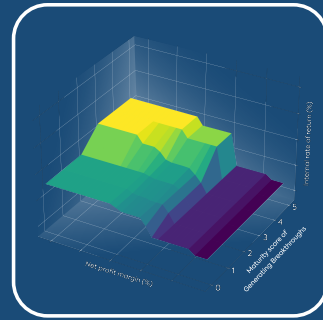
Optimal Pathway



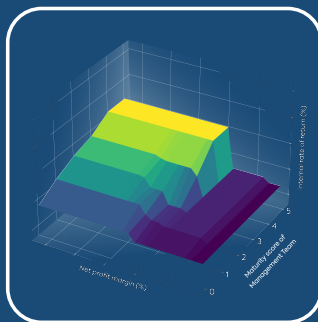
Business Intelligence



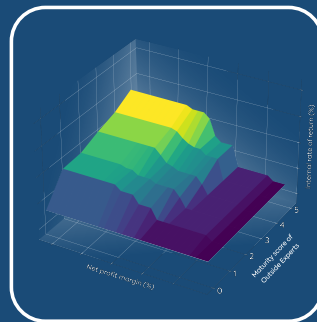
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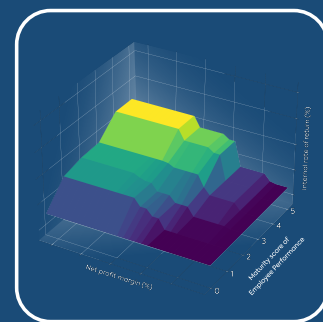
Generating Breakthroughs



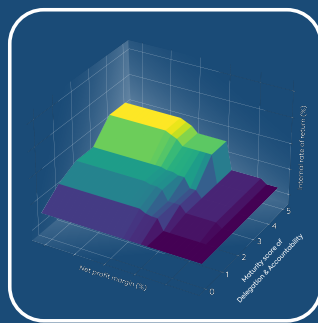
Management Team



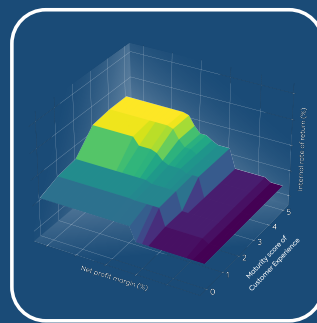
Outside Experts



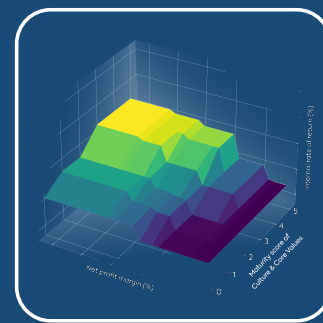
Employee Performance



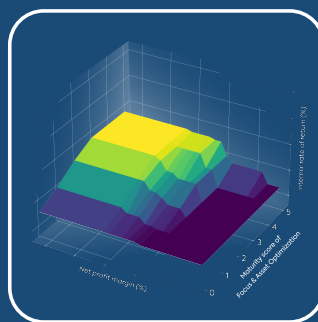
Delegation & Accountability



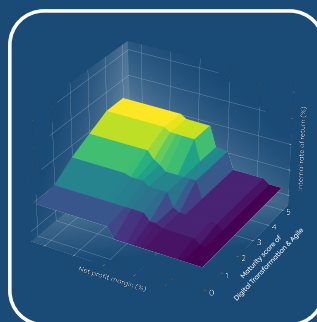
Customer Loyalty



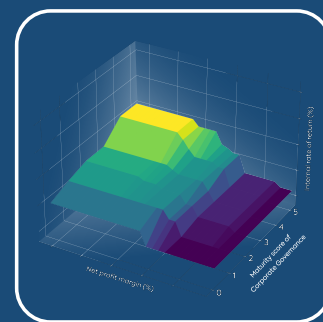
Culture & Core Values



Focus & Asset Optimization



Digital Transformation & Agile

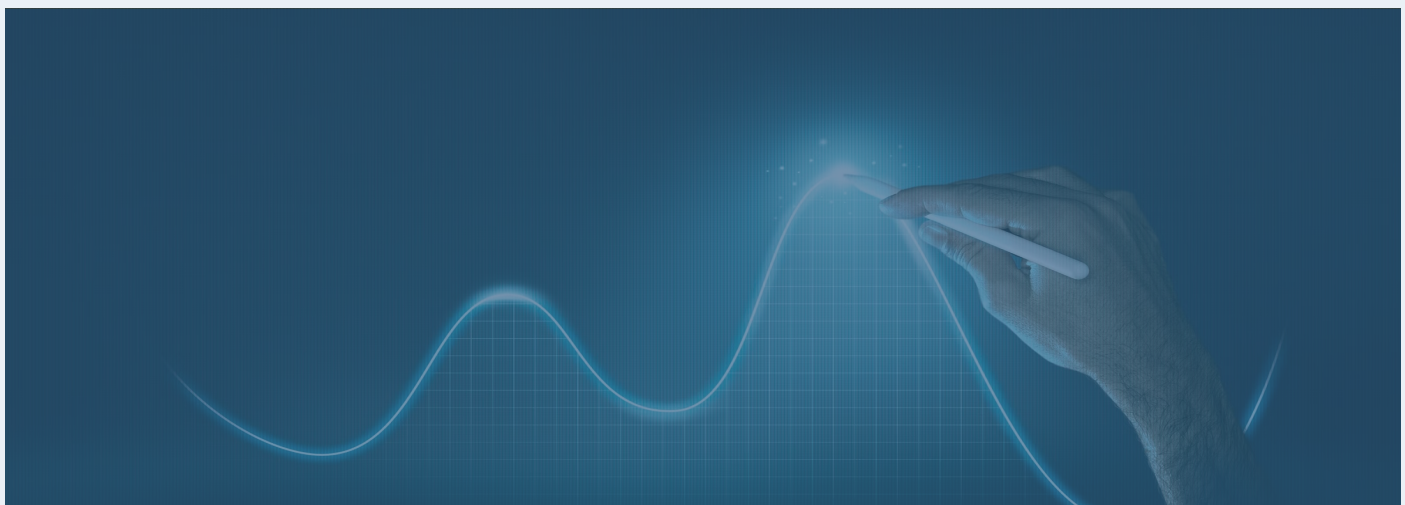



Corporate Governance

04.

The VDI framework allows us to detect anomalies in portfolio companies' performance.


Anomaly detection plays a critical role in our investment strategies, as it enables us to identify and respond to unusual or unexpected behavior in the performance in a timely manner that helps alleviate potential risks. Therefore, we have explored various approaches to this problem using the VDI framework. While we have developed viable methods for this task as described in our previous whitepaper, our experience has also led us to identify **three key improvements** that can further enhance our anomaly detection methodologies. These improvements are as follows.





**Data
completeness**

- **Data quality:** Uses missing data natively and avoids relying on data imputation techniques to fill in gaps in the data.
- **Data quantity:** Uses all available data sources in our databases, including data beyond just quarterly reports that were previously used.
- **Data variety:** In addition to VDI elements, we now incorporate other data such as various business performance metrics into our analysis.



**Feature
engineering**

In our prior research, we focused on using VDI elements data to predict anomalies in IRR. However, in this new investigation, we have expanded our approach by **incorporating business performance metrics**. We now use VDI elements data to predict anomalies in these metrics while also utilizing these metrics as additional features to predict anomalies in IRR.



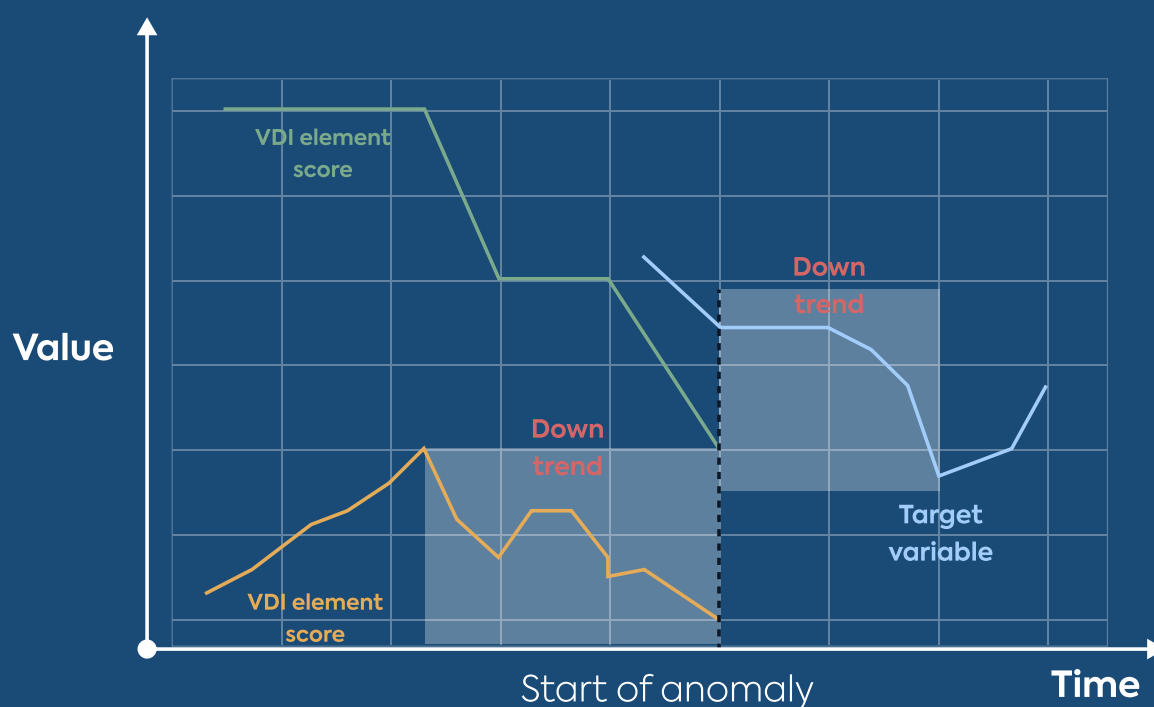
Forecasting

While our previous method provided detection for anomalies that were about to happen, we recognize the importance of **forecasting anomalies that may occur in the future**. To achieve this, we consider anomalies that are defined by using data from periods of time. By finding patterns of trajectories in observed features that occur before anomalies, we can detect potential anomalies and take early action to prevent or mitigate their impact.

Table 2: Key improvements to anomaly detection methodologies

By considering the desired improvements, we developed the trajectory-based pattern mining framework with the goal of identifying patterns in VDI elements that precede anomaly patterns in target variables, such as various business performance and investment performance metrics.

We have gained valuable insights into which patterns require additional attention. For example, using this approach, we have identified that if the “Vision” element decreases for a quarter (downtrend) or remains unchanged for three quarters (staying trend), it is a signal indicating that an off-track in business or investment performance may occur soon. These two behaviors are the ones we search for to detect anomalies.



This approach focuses on specific target variables such as IRR. The first step is to identify periods that exhibit anomalous behavior, such as downward trends. Once these periods have been identified, we then examine the preceding trajectorial patterns of relevant features that may have contributed to these anomalies. In the case of IRR as the target variable, these features include the maturity scores of the 15 VDI elements and various business performance metrics.

Hence, we have established the number of days for downtrends and staying trends that would warrant closer examination for each VDI element and business performance metric. Some details are as follows.

VDI element	Down duration (days)	Stay duration (days)
Vision	107	235
Management team	99	207
Business Intelligence	91	327
Employee Performance	106	182

Table 3: Observing a prolonged downtrend or staying trend for a duration exceeding a certain number of days can significantly increase the likelihood of an anomaly. For example, if the VDI element "Business Intelligence" experiences a decline lasting 91 days or remains at a consistent level for 327 days, there is a high probability of an anomaly occurring.

Overall, identifying trajectorial patterns in VDI elements may signal potential off-track in business or investment performance, enabling proactive measures and ultimately driving improved portfolio outcomes.

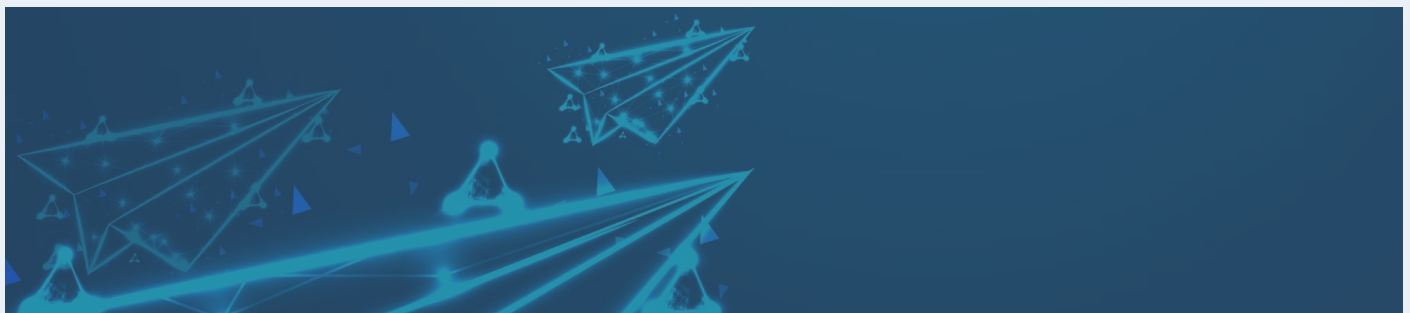
05.

Summary

This paper showcases our continued innovation and research in enhancing the Vision Driven Investing (VDI) framework. The VDI framework provides 15 spaces in which our investee companies discover and create for themselves, always towards fulfilling their Visions. By employing various Artificial Intelligence/Machine Learning techniques, we have gained significant insights into the following aspects:

- The impact of VDI elements on business performance and investment performance across different stages of the holding period.
- The three-way interrelationship between the VDI elements, Business Performance, and Investment Performance.
- Utilization of the VDI framework in detecting anomalies through data-derived patterns.

In addition to these new insights, we continue to research and refine the framework through meticulous analysis and insights about what works best to gain a deeper understanding of the underlying factors that generate breakthroughs in business and investment performance.



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About Mekong Capital – Most Experienced Private Equity Firm in Vietnam

Mekong Capital is a Vietnam-focused Private Equity firm specializing in consumer-driven businesses. Mekong Capital's investee companies are typically among the fastest-growing and market-leading companies in Vietnam's consumer-driven sectors.



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About AISIA Research Lab

AISIA (Artificial Intelligence Solutions for Industrial Applications) Research Lab helps startups and companies quickly deliver AI solutions and efficiently integrate AI services in their production environments.

Over three years, we have provided multiple R&D projects with companies in Ho Chi Minh City, including POPS Worldwide, Athena Studio, Hung Thinh Corp., and Mekong Capital. Besides, we have published over 70 papers and won over ten awards on different fronts. During the next five years, we aim to become one of Southeast Asia's most active research and development units in Machine Learning, Data Science, and Scientific Computing.



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