MEKONG CAPITAL

Vision Driven Investing

A Reliable Framework for

BREAKTHROUGH

in Investment Performance

Index

Foreword

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We used to do Private Equity like everyone else.

In our early days, especially from 2001 to 2007, we tried to add value by sharing our valuable ideas, providing solutions, and sometimes doing work for our investee companies. No matter how great our ideas were, they had little or no impact.

In December 2007, we blew up and reinvented everything about Mekong Capital, including who we are, our culture, how we add value, how we see the world. What emerged was a new model of Private Equity, ontological in nature, grounded in who people are and how things occur to them, rather than the traditional knowledge-and-solutions approach of most private equity firms.

What is that new model?

It is Vision Driven Investing (VDI). Launching in 2009, the Vision Driven Investing framework is regularly reviewed and refined, at least quarterly but typically more frequently based on careful analysis and insights about what's working best. The framework is carefully back-tested against our past investments since 2001 to ensure it is strongly correlated with what has led to the best performance among our investments until now.

This report presents:

1 Current evidence proven that VDI is a reliable framework for breakthrough in investment performance,

2 How we apply artificial intelligence (AI) and machine learning (ML) to improve the framework, and lastly

3 Our next agendas to fully exploring the potential of this framework.

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Framework Introduction

1.A

The contextual architecture of Vision Driven Investing

Vision Driven Investing ("VDI") is a set of contexts that are all highly correlated with a company achieving a long-term Vision. Thus, **it starts with a vision** for what's possible for a company's future which the company creates itself until they are aligned around it and organized around achieving it. The Vision is not an independently verifiable fact about the future; rather, it's a shared way of looking at a company's future.

So it won't have a lasting impact if we attempt to teach them or solve it for them. We can coach them, but **it's up to the company** to create these contexts as their ways of looking at things and initiate new ways of being and new actions, which will lead to breakthroughs in other areas, and ultimately achieve their Vision.

For example, rather than Mekong Capital asserting to a company that it should use certain KPIs because we know it is "best practice" in that sector, our role is to get the portfolio company to look at KPIs in a way that has them hungry and relentless about finding ways to keep tweaking what KPIs they are tracking, shifting towards what measures will have the greatest impact on their performance.

1.B
An **Ontological,** not epistemological, approach to Private Equity

Mekong Capital's value creation philosophy, of which VDI is a part, is ontological rather than epistemological. What we mean by this is that Mekong Capital's access to our companies achieving breakthrough performance is based on **who people are** and **how things occur for them**, not what they know. Each VDI element is like a world; when someone steps into that world, new ways of looking at things and new ways of arising lead to further actions being initiated by them. The breakthroughs all start with who Mekong Capital's team members are and, subsequently, who the CEOs and senior management of the portfolio companies are being.

To use an educational analogy:

An epistemological approach would be teacher-centric, with a teacher in the front of the classroom trying to teach the students something they must memorize for the test. The students will struggle to remember it, forget it after the test, and likely not use it much in their future lives

An ontological approach would be student-centric, with students working on projects that the students have chosen out of their interest and their "learning" happens by interacting with those projects in the real world and making discoveries about what works or doesn't work. Once they've made those discoveries, it becomes part of who they are being and how they see things, not something they must remember to do. They will use this in their future lives (when relevant).

1.C
The intention of each **VDI space**

Each of the 15 VDI elements has a clear intention. We try not to call it "VDI" or tell a company what or how to implement each element to avoid VDI being seen as something imposed on them or external to them. Instead, we communicate the intention and context of each VDI element to inspire a company to see and own these intentions their own and as enablers in their company's success.

01
Vision

02
Leadership Ownership

03
Optimal Pathway

04
KPIs

05
Business Intelligence

06
Generating Breakthroughs

07
Management Team

08
Core Values & Culture

09
Employee Performance

10
Corporate Governance

11
Outside Experts

12
Customer Experience

13
Focus & Asset Optimization

14
Digital Transformation & Agile

15
Delegation & Accountability
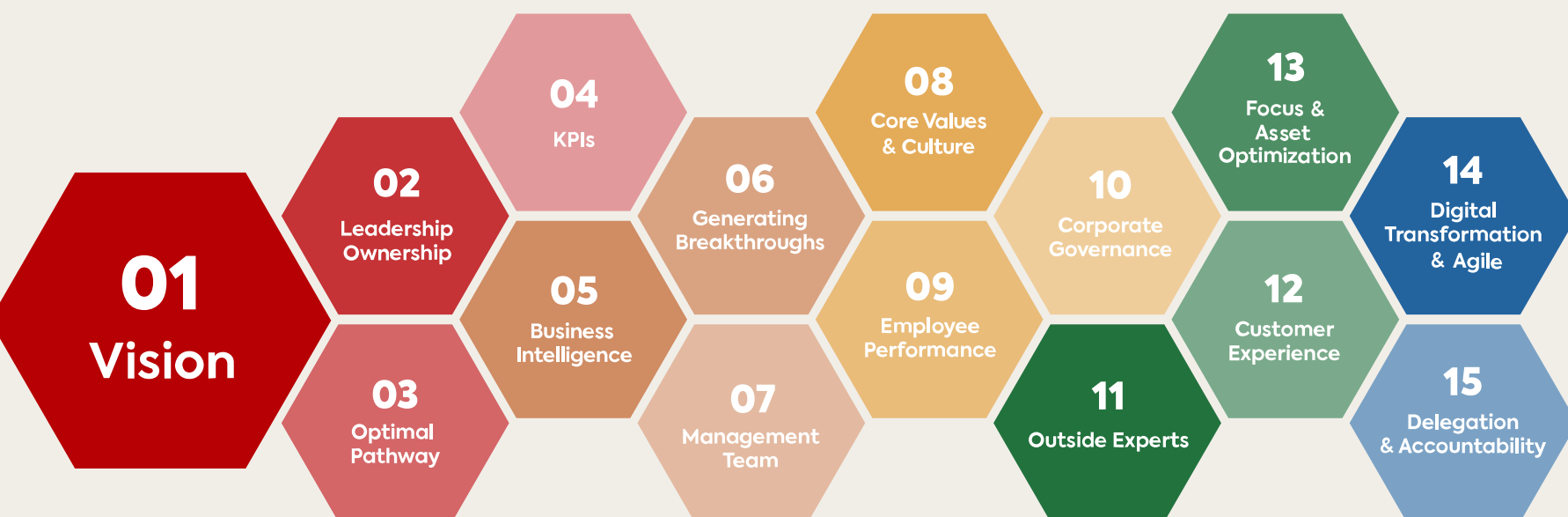
2

Every increase in VDI score is leading to an **exponential surge in IRR**

Thanks to the input from some of our LPs, we have added next to our VDI variables more investment-related variables and economic factors to our prediction model. Doing this improved our performance metric from **33.78%** to **81.86%.**

IRR ~ VDI

GROSS IRR

$IRR = -0.1 + 0.02e^{VDI}$

VDI WEIGHTED AVERAGE
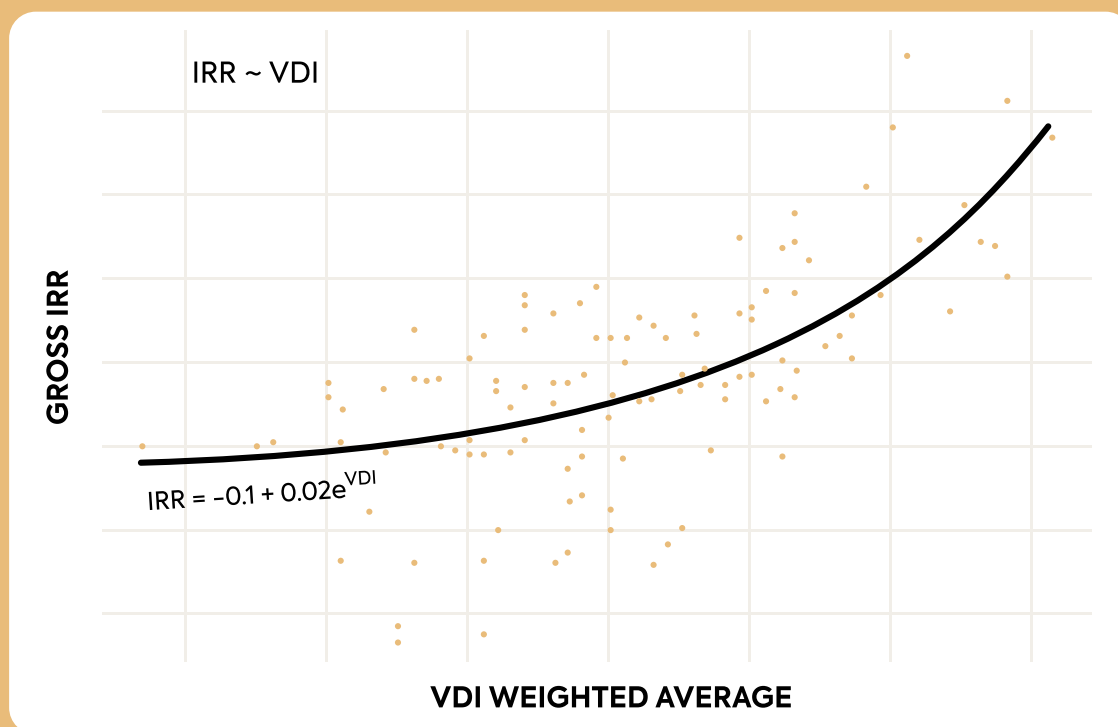
For every 1 score increasing in natural exponential of VDI, IRR goes up by **2%**

	Model 1 Arithmetic mean VDI		Model 2 Fibonacci mean VDI		Model 3 Exponential of Fibonacci mean VDI		Model 4 Full model	
	Est.	SE	Est.	SE	Est.	SE	Est.	SE
Intercept	–0.58**	0.09	–0.57**	0.08	–0.09**	0.03	–0.04**	0.073
VDI	0.29***	0.03	0.29***	0.03	0.02***	0.00	0.009***	0.001
Fair Market Value	-	-	-	-	-	-	0.004**	0.000
Overpaid	-	-	-	-	-	-	–0.394***	0.026
VN_index	-	-	-	-	-	-	0.000	0.000
GDP_annual_growth	-	-	-	-	-	-	3.148***	0.577
R Squared	0.3421		0.4101		0.4487		0.8245	
Adj. R Squared	0.3378		0.4063		0.4451		0.8186	
F	79.55		106.4		124.5		140	
df	153		153		153		149	

The Impact of VDI on IRR

We strive for continuous improvement of VDI framework modeling. In every step of improvement, we always obtain a higher Adjusted R-squared.

Model 4 is the full model that shows the impact of "VDI" as the source of growth on gross IRR after controlling for other important aspects such as deal valuation and economic factors. We found out that "VDI," "Fair Market Value," and annual growth as measured in GDP are significant and positively impact IRR. In addition, the negative slope of the indicator variable "Overpaid" reveals that overpaid deals tend to obtain lower IRR than underpaid deals. On the other hand, the public market performance "VN-index" does not statistically impact IRR in this portfolio.

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# Mekong Capital uses AI/ML to improve the VDI framework

3.A

Improvement to the Fibonacci weighted average method for modeling IRR

The research conducted on the impact of VDI on IRR presented in the previous section showed promising results and can be further improved. Therefore, in a later study, we investigated if we can find a "better" weighting scheme with training data for the VDI elements instead of using the Fibonacci weights. To this end, we used an optimization algorithm to improve the Fibonacci weights based on the observed data. **The top 3 highest weights belong to Vision, Business Intelligence, and Employee Performance.**
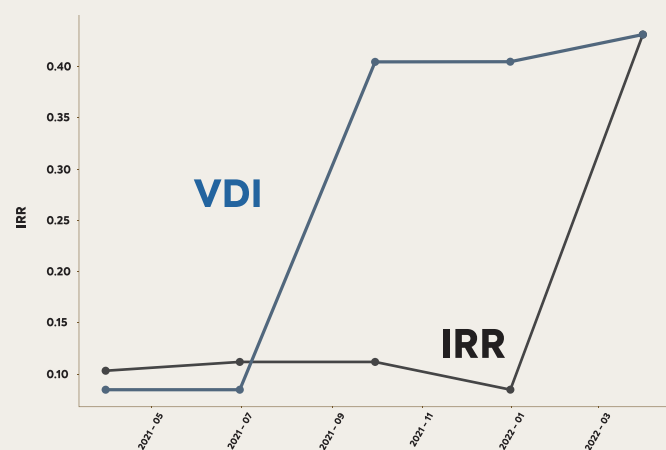
3.B

The **top 4 VDI elements** with the strongest and most immediate impact on IRR

|	
Vision	**Employee Performance**
Business Intelligence	**Focus & Asset Optimization**
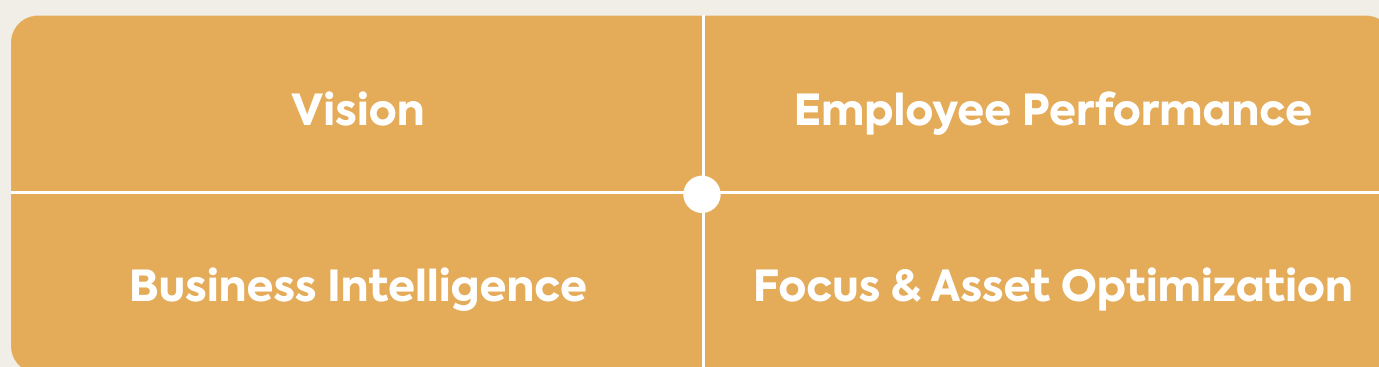
While the models introduced previously can give an idea of the impact of each VDI element on IRR, it is also beneficial to know how much time after the changes in VDI scores of each element take so that we can observe the notable impact in performance. This discovery is essential because it allows us to focus on important aspects that need immediate attention and actions.

To investigate this direction, we employed **time-lagged cross-correlation** to find the time lag between VDI element scores and IRR that yielded the highest correlation. This process can be seen as taking finding the correlation between VDI element scores and the IRR right after several quarters later, where this number is chosen sequentially from 0 (for immediate correlation) to 1 (correlation after one quarter later) to 2 (correlation after two quarters later) and so on until we reach a number that there are no data to compute the correlation. After that, we check the highest correlation number, which can also be seen as the amount of time after which the impact of the VDI element score on IRR is most noticeable.

IRR and weighted VDI score
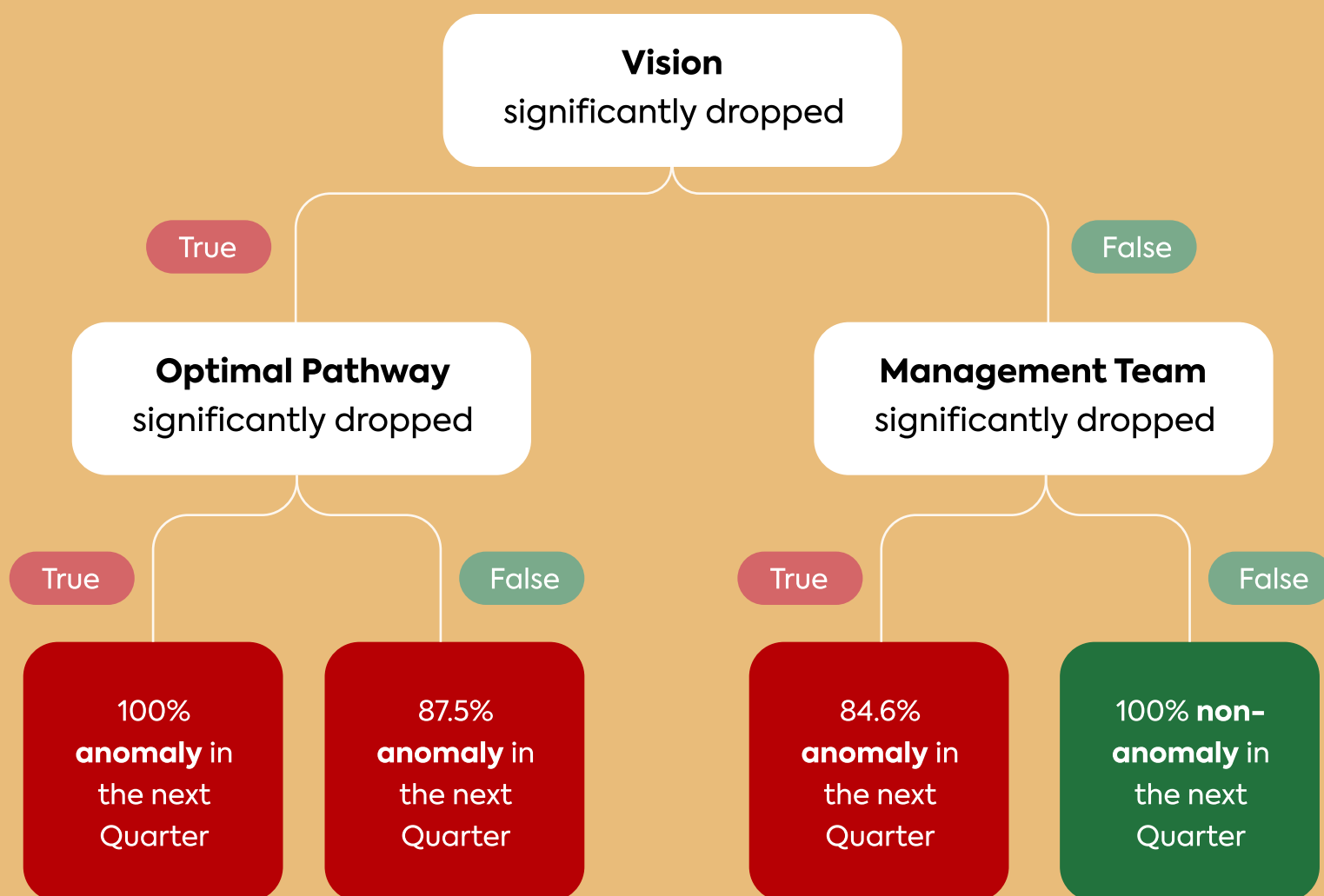of a specific portfolio company
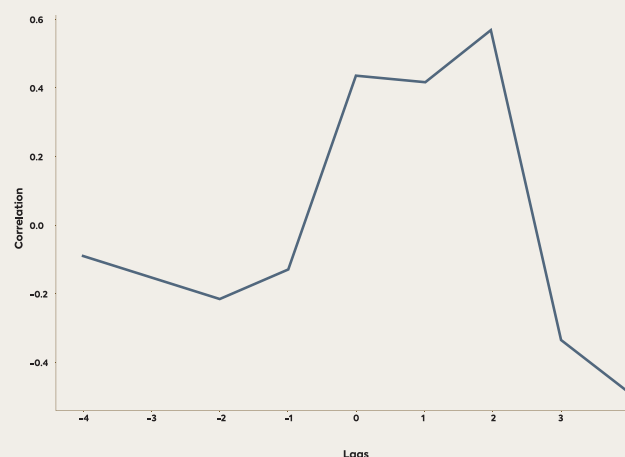
Time-lagged cross-correlation

We performed these computations for 15 VDI elements of each portfolio company and averaged the results for each VDI element to gain a comprehensive insight into this matter. We observed that the VDI elements with both high weights from our AI/ML model and low time lags would strongly and immediately impact IRR. In particular, **Employee Performance, Vision, Focus & Asset Optimization, and Business Intelligence** are the 4 VDI elements that overall have the strongest and most immediate impact on IRR.

VDI Element	Weight	Time Lag	Weight / Lag
Employee Performance	4.8	1.8	**2.7**
Vision	6.7	2.6	**2.6**
Focus & Asset Optimization	3.1	1.8	**1.7**
Business Intelligence	6.0	3.6	**1.7**
Digital Transformation & Agile	4.3	4.4	**1.0**
Management team	3.2	3.7	**0.9**
Leadership & Ownership	2.4	3.2	**0.8**

3.C

Vision, Management Team, and Optimal Pathway play an important role in detecting anomalies in performance and helping prevent crises

Vision
significantly dropped

True

False

Optimal Pathway
significantly dropped

Management Team
significantly dropped

True

False

True

False

100% **anomaly** in the next Quarter

87.5% **anomaly** in the next Quarter

84.6% **anomaly** in the next Quarter

100% **non-anomaly** in the next Quarter

The VDI framework also provides a way to detect **early anomalies in portfolio companies' performance**, which might result in crises if sufficient actions are not taken soon enough. In this case, we can define anomalies as data points where the weighted average VDI score decreases significantly in the next quarter. Therefore, we investigated the relationship between the changes in each VDI element score and the changes in the weighted average VDI score to identify the VDI elements, of which drops in values significantly correlate to large drops in values of the weighted average VDI score.

To this end, we chose a **traditional machine learning model**, Decision Tree, to help classify which cases are anomalies and which cases are not. First, to find the most appropriate configuration for the decision tree, we examined the significant drops (over a determined threshold) in the weighted average VDI score for the data points to be considered anomalies. Then, we employed the grid search technique to find optimal parameters to build the decision tree.

According to our findings, when scores of Vision and Optimal Pathway decrease significantly, it is very likely that we will have anomalies. Meanwhile, when the scores of the Vision and Management Team do not reduce significantly, it is very reasonable that there is no anomaly.

3.D

A model which predicts the **optimal number of VDI meetings** to drive performance

The VDI framework also gives us insights on appropriate meeting quantities for each portfolio company with the corresponding performance level. In particular, we build a model to predict the following meeting times based on the current number of meeting times and weighted average VDI score such that the weighted average VDI score next month is likely to improve.

In particular, we fit the following approximation function:

$$\text{next weighted average VDI} \approx f(\text{current number of meetings, current weighted average VDI})$$
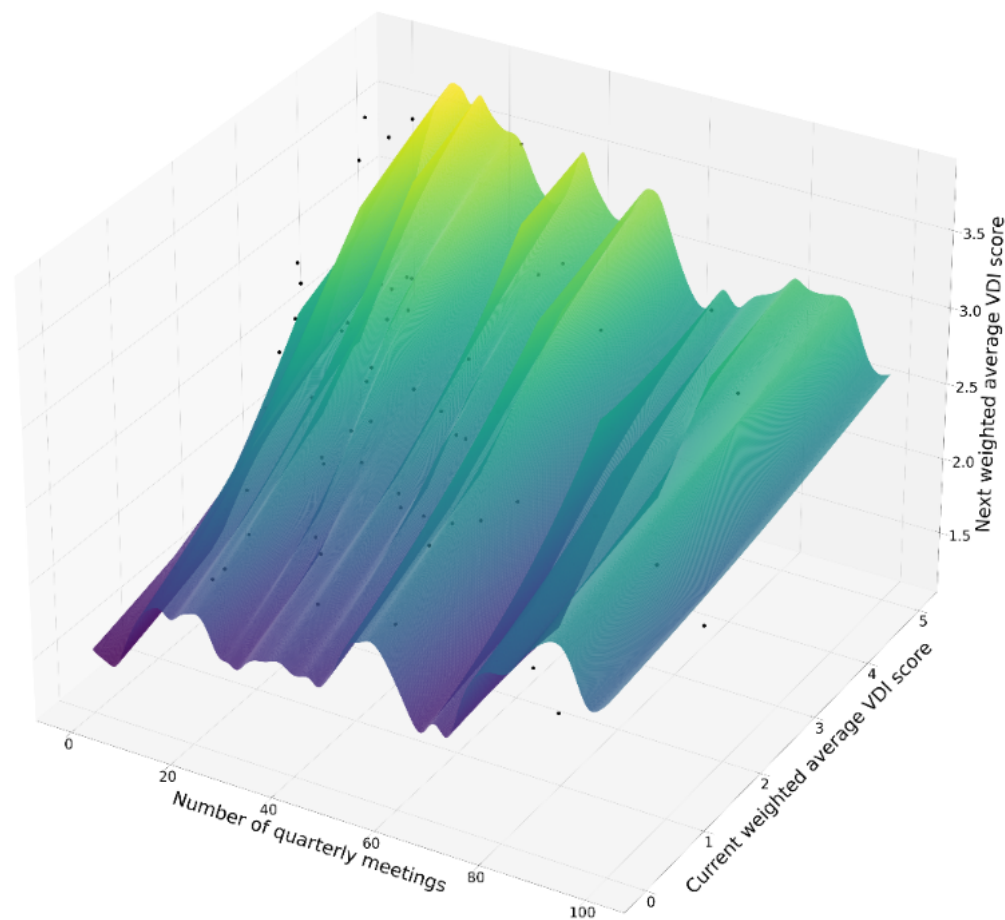
Using this approximation function, we can "approximate" the next weighted average VDI based on the current weighted average VDI and meeting times. For example, if a portfolio company has an existing weighted average VDI of 1.5 and the number of meetings of 46, the estimate for the next weighted average VDI is approximated as 2.11. The algorithm tells us that increasing the following number of quarterly meetings to 51 can give us a higher estimated weighted average VDI of 2.48.

Overall, using the graph of this model, we observe that for portfolio companies having low VDI scores, it might be beneficial to have more VDI meetings up to a certain level. On the other hand, for portfolio companies having already–high VDI scores, fewer VDI meetings might suffice.

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What's next – Potential of the VDI framework

Overall, the Vision Driven Investing ("VDI") framework has been an integral part of Mekong Capital's value creation philosophy and has played an important role in helping our portfolio companies construct and achieve their Vision through breakthroughs in 15 areas defined in the framework. This framework is being further improved by employing techniques in Artificial Intelligence / Machine Learning that are presented in this whitepaper.

We are proposing further research, given data of better quantity and quality that we can collect in the future.

- **Incorporate new variables on financial performance, unit economics, cash flows,** etc. to models.
- **More intricate IRR models** (take into account the time of each record in addition to IRR and VDI scores) with a more significant number of data records.
- **More specific optimization of meeting efforts and capital allocation** with data regarding each VDI element and other business aspects (optimize efforts for each aspect).
- **More reliable time lag and correlation** computation with more data records and better time coverage since correlation and time lag rely on data collected over a long period.

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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 SMEs 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 **06 patents** 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.

AISIA