Predictive Testing of Opportunities

Fix Your Growth Gap by Improving your Success Rate

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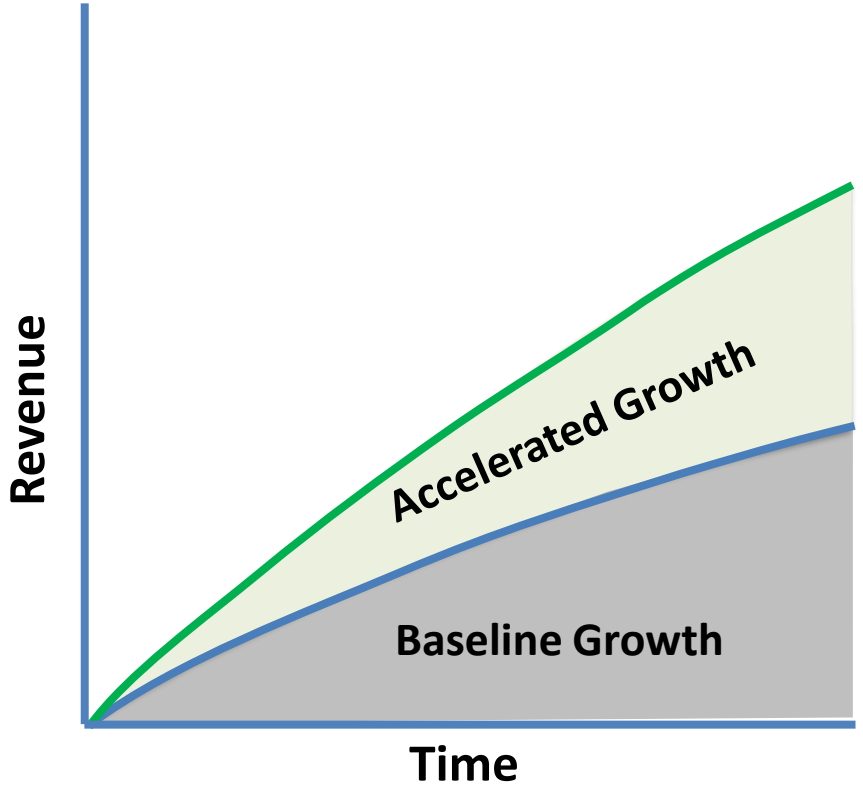
The Problem

Your portfolio is expected to deliver more than baseline growth. It is expected to deliver accelerated growth required by your stakeholders.

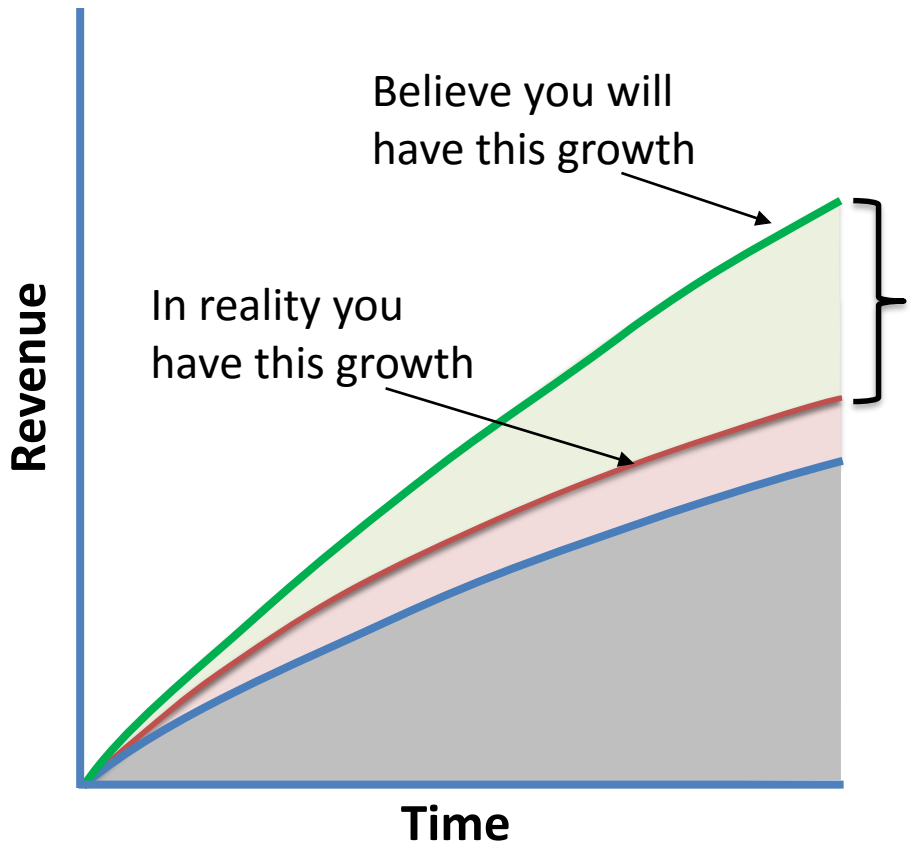
Only some of the projects in your portfolio are **high impact** projects that are key to delivering the accelerated growth required.

BUT

These projects are the most uncertain projects in the portfolio.



The Growth Gap



Rule of Thumb - About 10-20% of your projects are high impact.

Their success (risk discounted) is required for accelerated growth.

Estimates of risk-discounted success are notoriously inaccurate – only 10-30%

The accelerated growth curve is too optimistic – there is a growth gap

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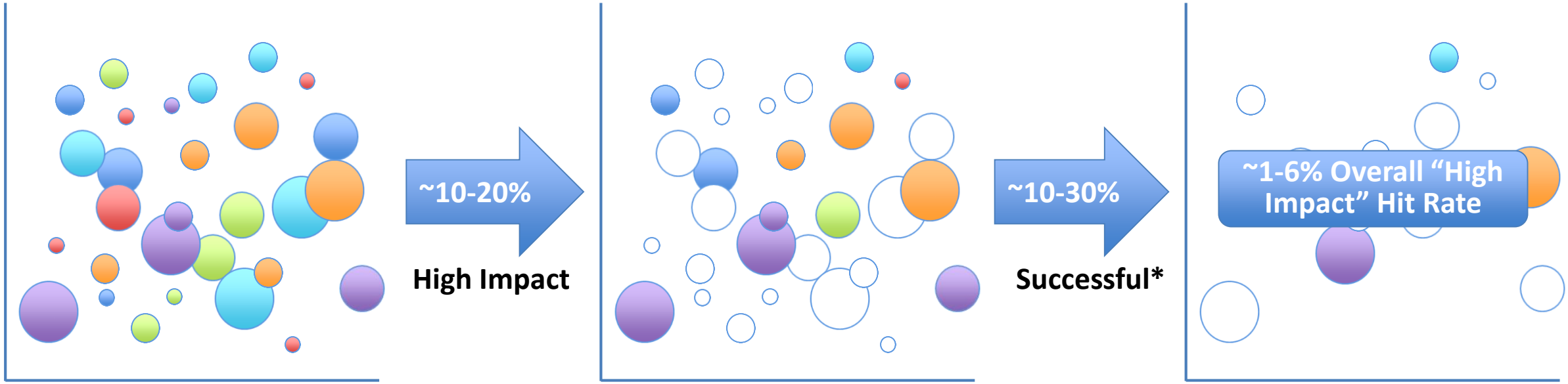
Portfolio View of the Growth Gap



* Successful = still alive in 10 years with expected returns

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What You Believe About Your Growth Gap	Likely Reality
You don't have one	You are very likely ignoring an issue…for now
You have one and believe it is filled by your portfolio	You are overly confident about your powers of prediction
You have one and know it is not filled	You are realistic but aren't sure what to do about it
You have one and it is indeed filled	You are one of the few

You have a growth gap but probably don't know how big it is and don't have an effective way of filling it.

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Imagine …

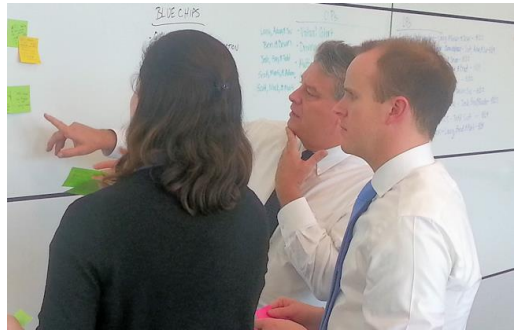
Identify…

…which projects in your portfolio are high impact and critical to achieving accelerated growth.

Predict…

…which of these high impact projects will be successful with 70% accuracy (vs the norm of 10-30% accuracy).

Re-imagine…



…why projects may be at risk and how to shape them to increase your odds of success.

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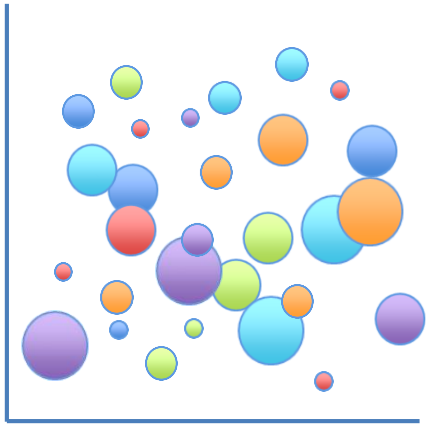
A *Portfolio Assessment*

Corporate Portfolio

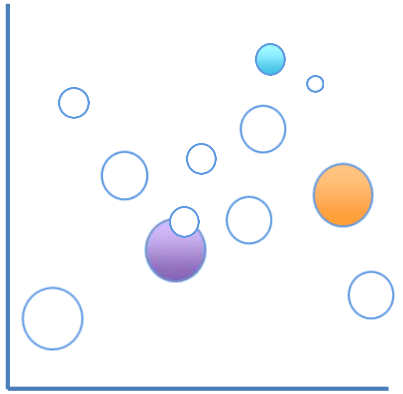


Information Gathering and Simulation preparation

Simulation

Portfolio Success Workshop

Re-aligned High Impact Portfolio



Select the top 20% of projects that are high impact

Analyze projects and calculate success and failure probabilities

Deep-dive into specific projects to reshape and re-align. Gap identification

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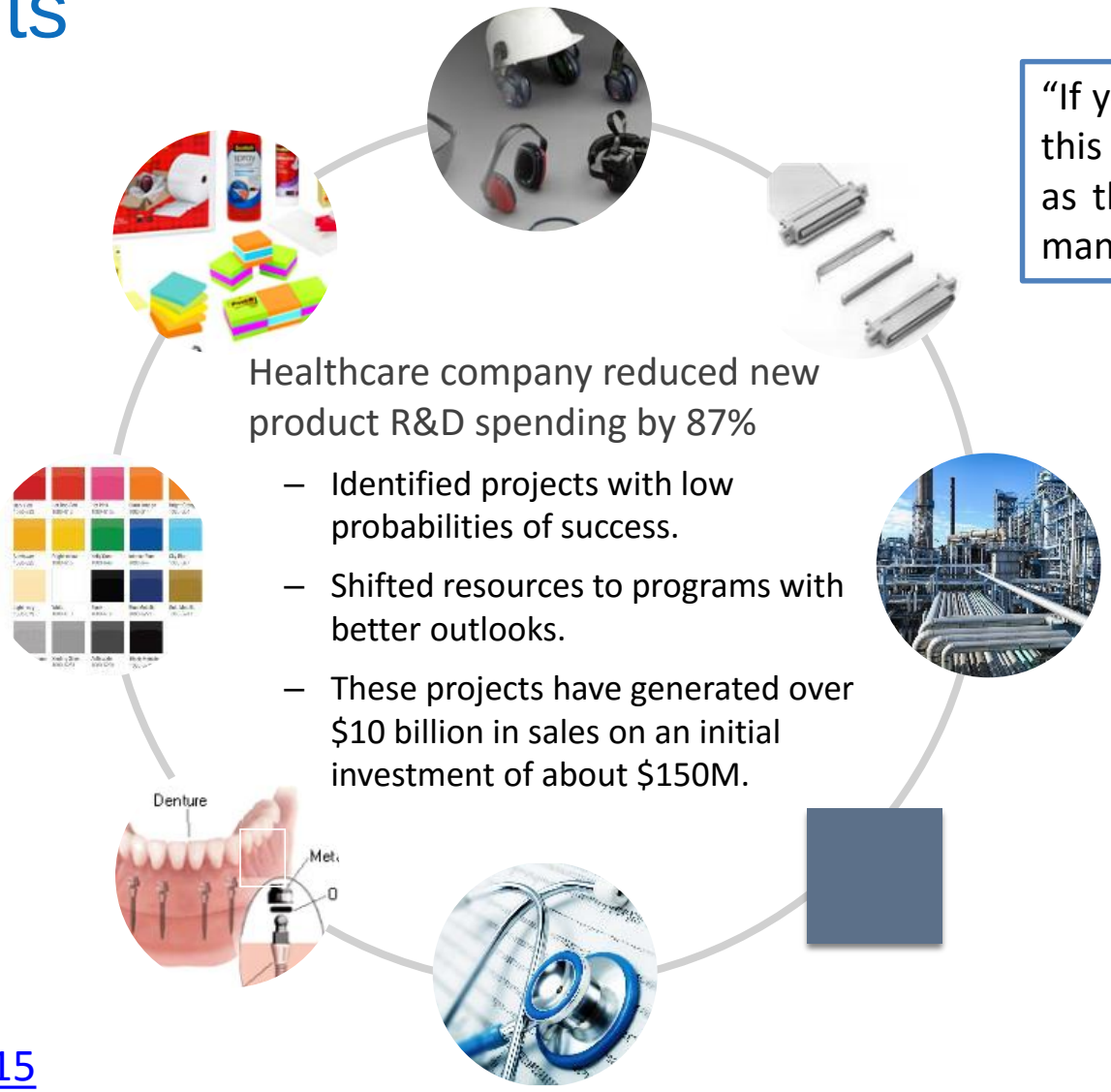
Proven Results

"As our company looked at different opportunities to apply our unique technology more broadly in the market, we partnered with Growth Science and leveraged their data-driven model and analytic tools to help us get insight and predict market success rates for new and different offerings." - Cray



"If you look at the future of management, this is something people will look back on as the first tool to introduce data-driven management" – 3M

"I would suggest that others examine the work of a former Intel colleague, Thomas Thurston, who has shown how a data-based model can be distilled from theory and be very influential in decision making." – Intel

[Fortune Article – August 5, 2015]

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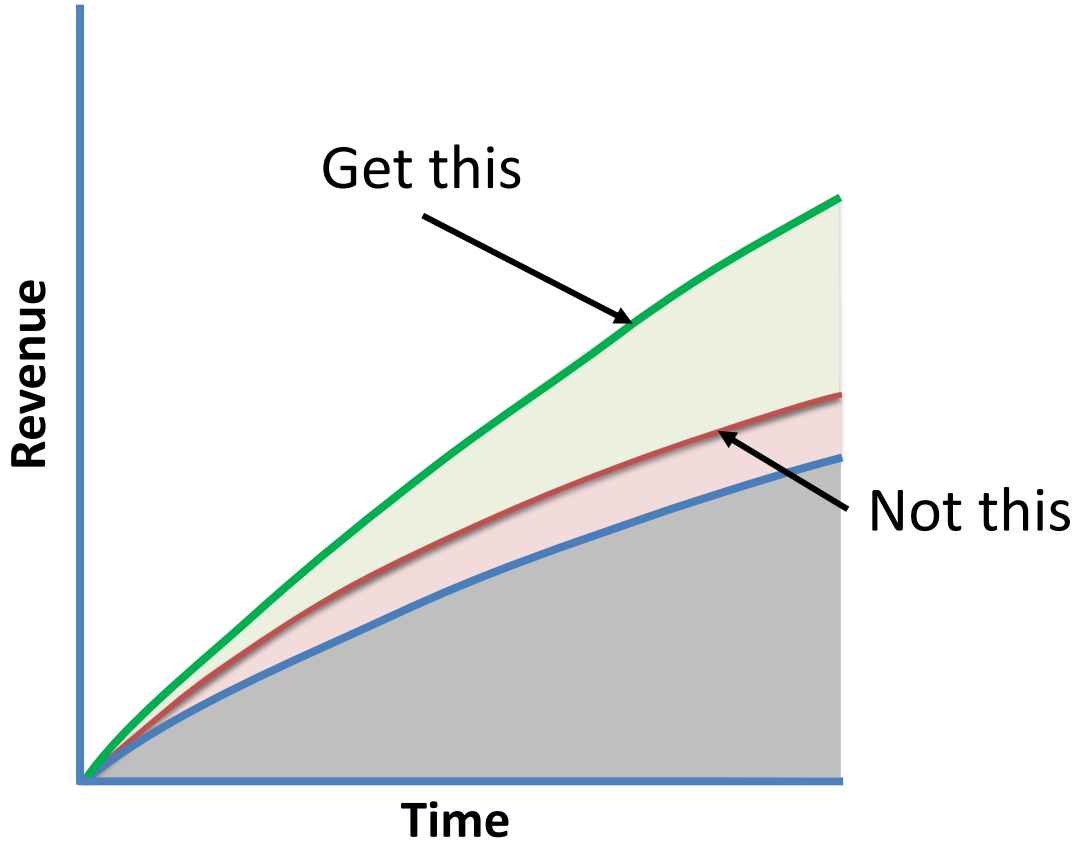
Improving Your Prospects for Growth

- Fix the growth gap you probably know you have
- Get rid of projects that will never succeed
- Turn marginal projects into highly successful ones
- Get an immediate return on your investment of over 10:1



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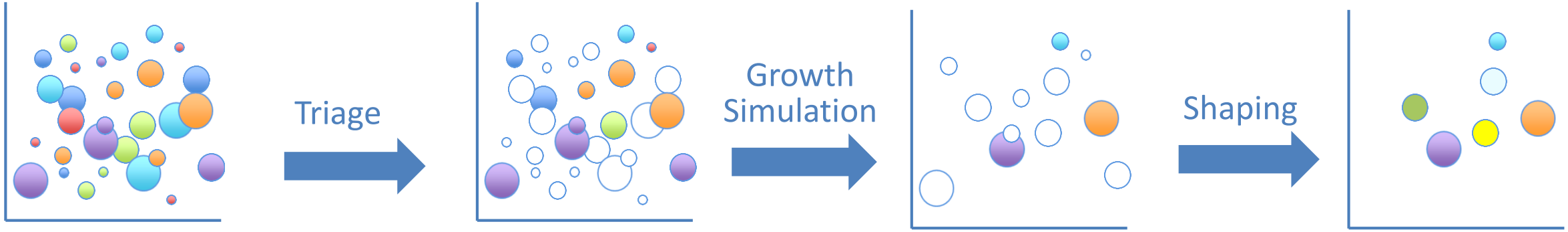
What You Get



Portfolio Triage

Identify the high-impact projects that are required to achieve accelerated growth.

Gather and extract information about the projects through interviews and written content.

Simulation of High-Impact Projects

Preparation of input forms and simulation execution.

Report creation – findings, implications, mortality adjusted NPV.

Workshop

Shape existing portfolio projects to bend them toward success.

Identify areas (domains) for future opportunity exploration to fill gaps.

Portfolio Assessment

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A *Predictive Testing of Opportunities* Project

Schedule

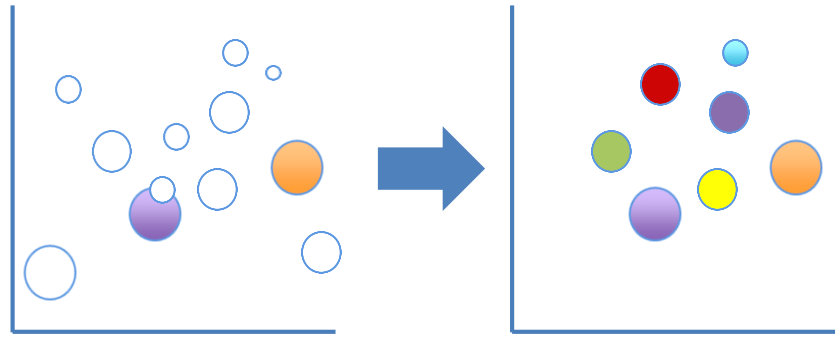
- Approximately a 1 - 3-month effort
- 1/3 triage and info gathering, 1/3 simulation and report generation, 1/3 analysis & shaping workshop

Resources

- One client liaison with knowledge of the portfolio
- Inovo team of innovation specialists
- Client team for Portfolio Opportunity Shaping Workshop

Offerings

- Single opportunity test
- Portfolio analysis
- Subscription service
- Trial – 3 opportunity assessment



YOUR COMPANY

Powered by Growth Science

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Background on Growth Science – Inovo's Partner

- Based on research started in 2006 by Thomas Thurston, looking at Intel's growth investments to discern patterns that could predict business survival or failure
- Went to work with Clayton Christensen to pursue this research and further develop the algorithms at Harvard
- Growth Science was founded in 2008 to provide a home for the fundamental research and analytics engine
- Became the basis of WR Hambrecht Ventures, the world's first quant venture capital fund and one of the top performing portfolios in Silicon Valley

- Analytics Engine
  - More than 3,500 documented real-time corporate and startup predictions
  - More than 10 billion data points harvested
  - More than 1,000 data sources accessed
  - More than 24,000 possible outcomes simulated per analysis
  - Guided billions of dollars in growth investments for Fortune 500 firms

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Get in Touch with Us Today to Find out How to…

- Identify your high-impact projects
- Predict if they will succeed
- Shape certain low-success projects into high-success ones
- Terminate the others
- Get 10:1 or more returns on your investment in a Portfolio Growth Gap Assessment

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Growth Science

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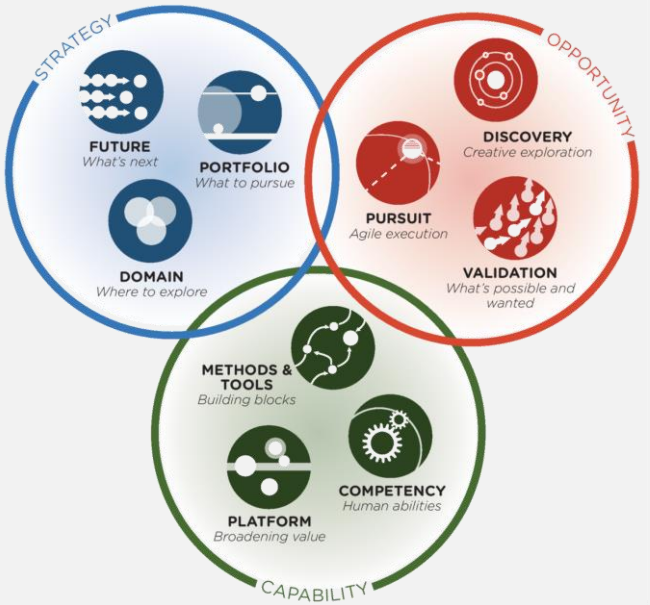
The Inovo Group

With Inovo as collaboration partner and guide, clients transform their portfolios, cultures and future potential.



For more information, check out the portfolio resources on our website, or drop Larry an e-mail.

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Predictive Testing of Opportunities

Behind the Scenes

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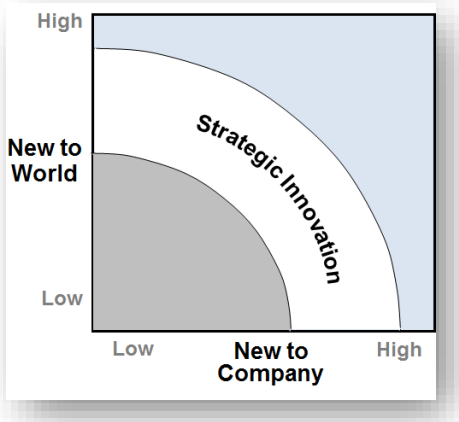
Identifying High-impact Projects

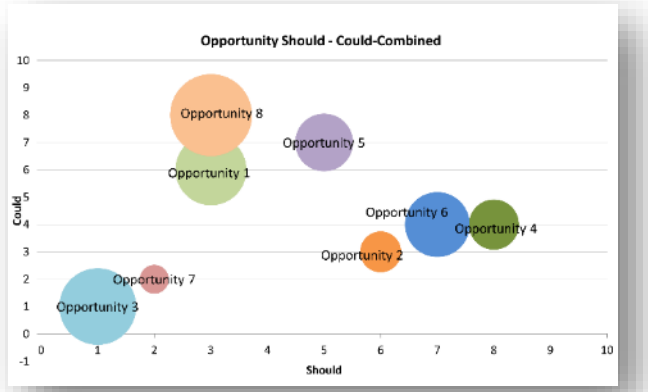
A number of tools used in addition to normal portfolio management metrics

New factors taken into account besides risk, size, and effort

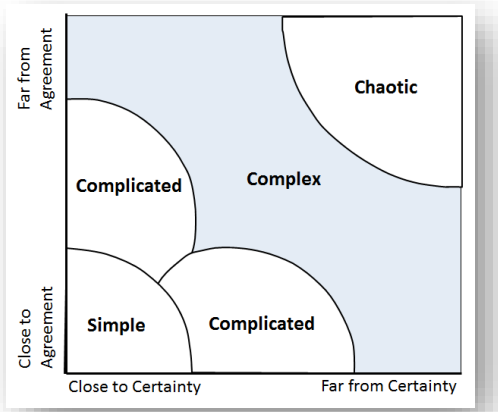
Identify the 20% (approximately) of projects that are key to accelerated growth



Strategic Innovation Assessment



Should-Could Assessment



Agreement – Certainty Assessment

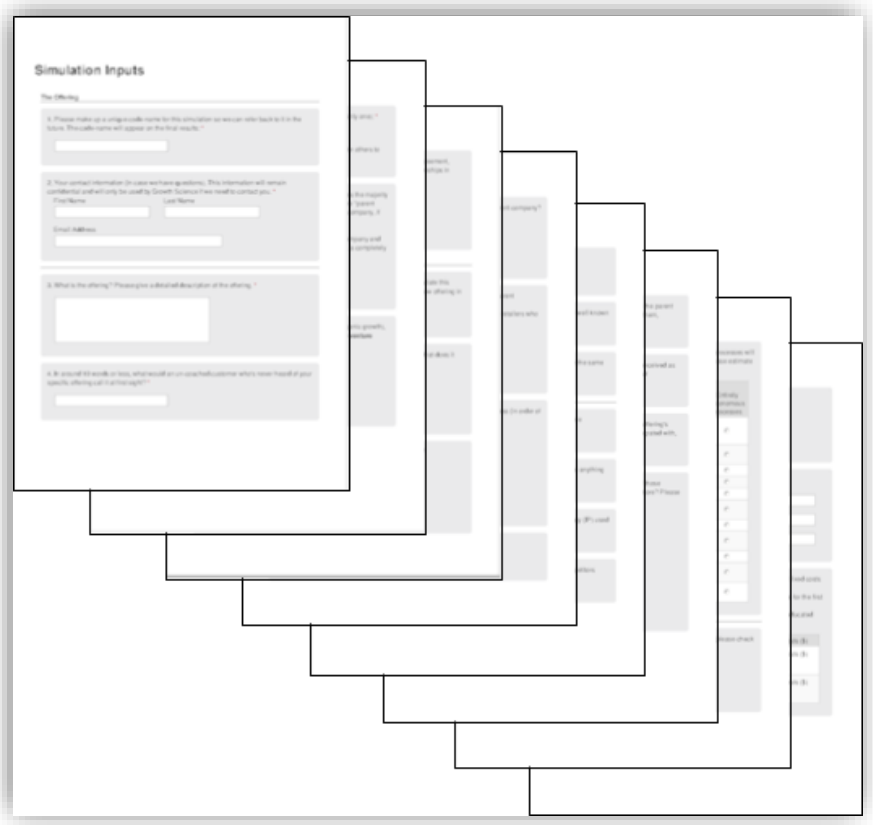
Information Gathered

A 13 page input form filled in by Inovo who gathers the information from the client

Information about both **internal** and **external** factors

Qualitative, best available information can be very ‘fuzzy’ (ambiguous, incomplete, etc.)

Works for ‘front-end’ opportunities that are very early in the process as well as for opportunities farther along in development



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Predicting Success

Input is coded and fed into the simulation

Doesn’t rely on just what the company says – uses independent information gathered from public and private sources

Does not require precise quantitative data – works with the imprecise descriptions of new opportunities.

Proven predictive accuracy of 67%. Tested with double-blind studies. Proven cash returns.

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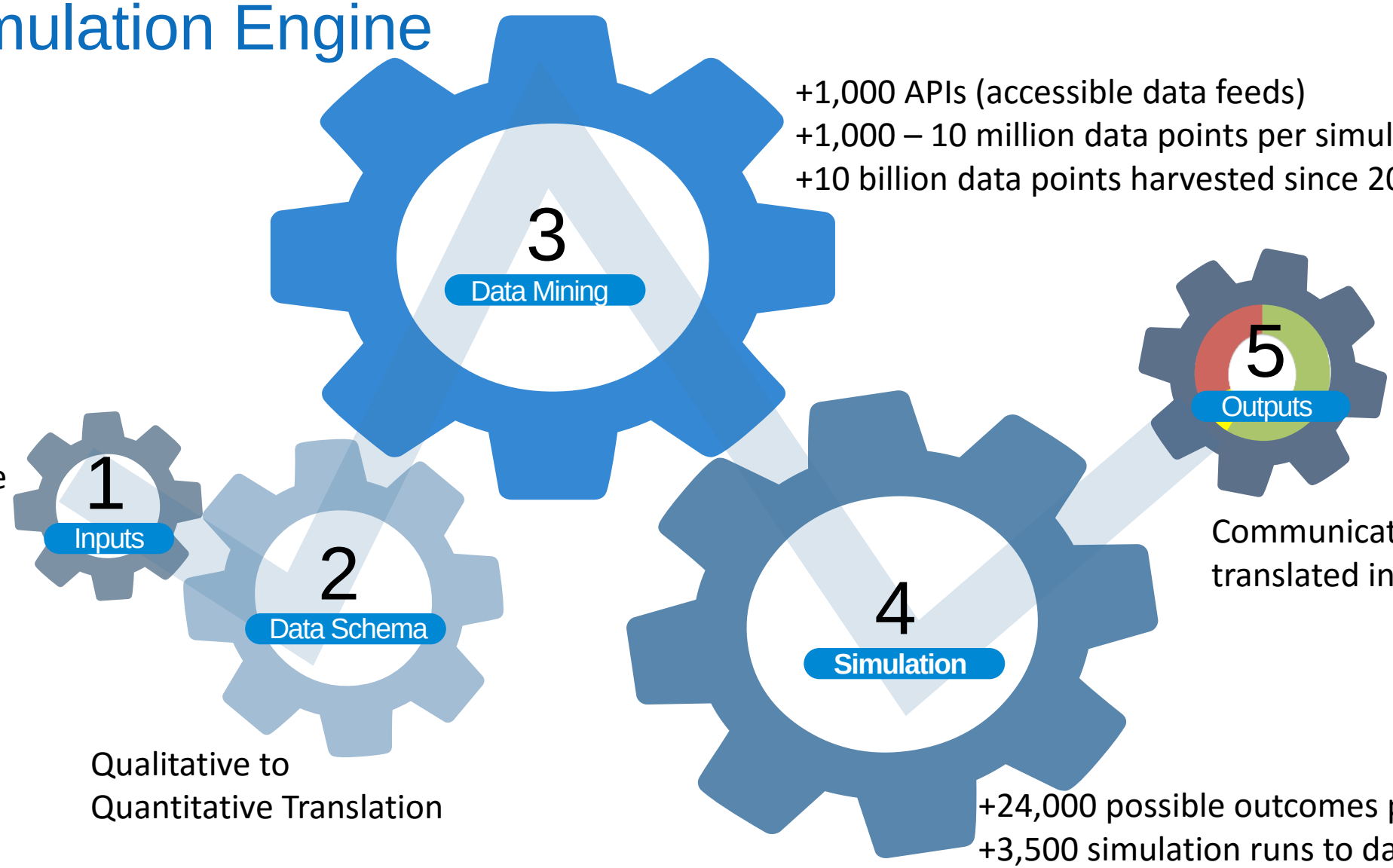
The Simulation Engine



+1,000 APIs (accessible data feeds)
+1,000 – 10 million data points per simulation
+10 billion data points harvested since 2008

Qualitative description of the business or idea

Qualitative to Quantitative Translation

+24,000 possible outcomes per simulation
+3,500 simulation runs to date

Communicated and translated into action

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How Simulation is Different

Current Portfolio Approach - Intuition

- Method
  - Income and NPV estimates are discounted by technical, market or other risk factors
  - Monte-carlo techniques used to determine sensitivity and error bars
- Issue – Income estimates, discount rates and risk factor estimates are derived from subjective assessments – e.g. scorecards – highly biased
- Issue – Uses potentially dozens of weighted factors with presumed correlative significance
- **Predictive accuracy of ~30%**

Predictive Testing Approach - Simulation

- Method
  - Inputs are derived from a description of the opportunity – not from subjective estimates of risk
  - Results are based on the known outcomes of demonstrated patterns using thousands of independently gathered data inputs.
- Instead of a tornado diagram, you get a detailed pattern tree showing why success or failure.
- The mortality adjusted numbers are the real options value of the projects.
- **Predictive accuracy of ~70%**

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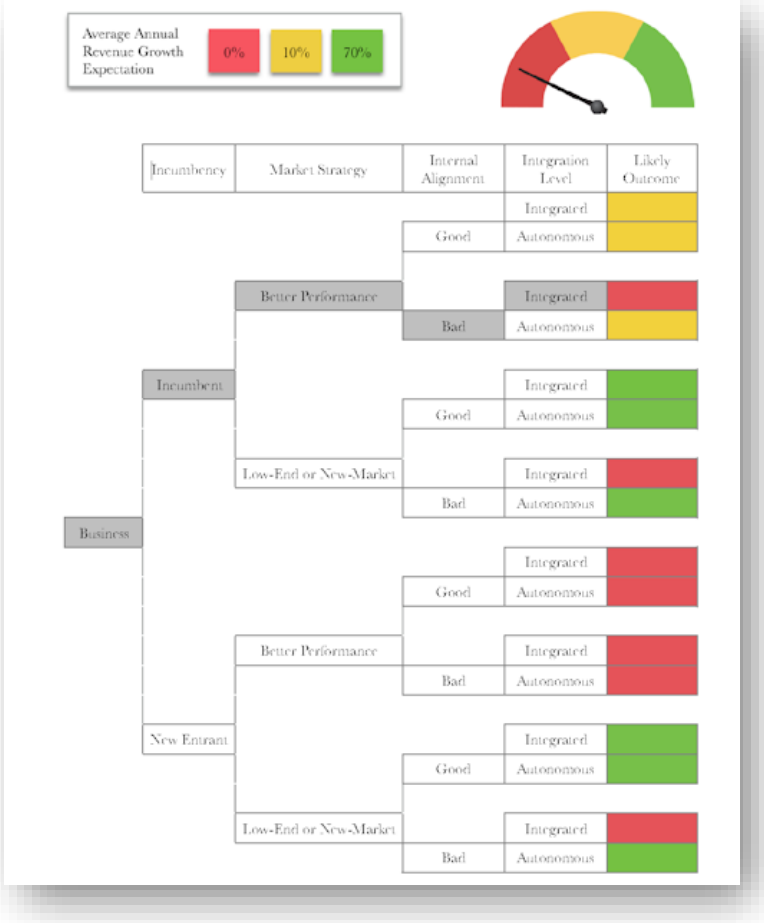
Shaping Low-success Opportunities

Simulation report indicates alternative decision paths

Some paths may be possible – others not

Workshop identifies potential alternatives for each opportunity and charts a new path.

Some go from red to yellow, some from yellow to green



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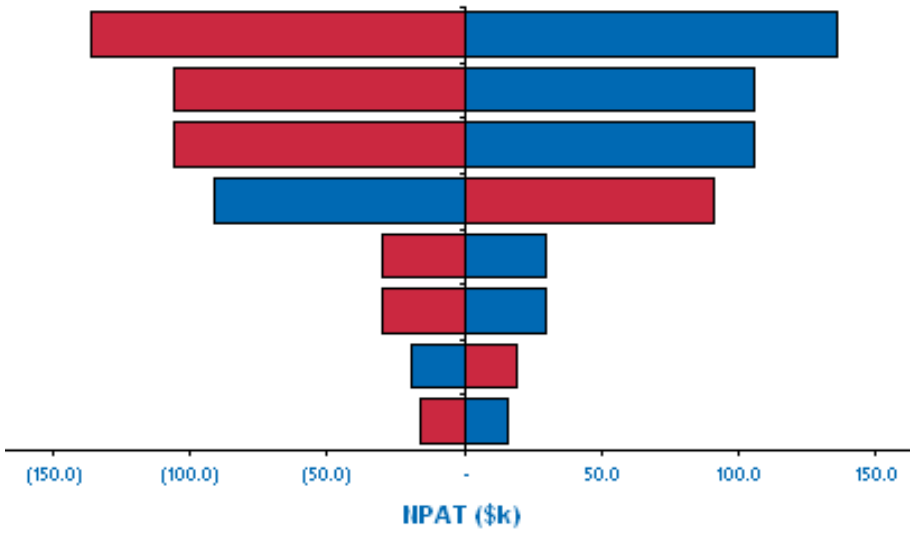
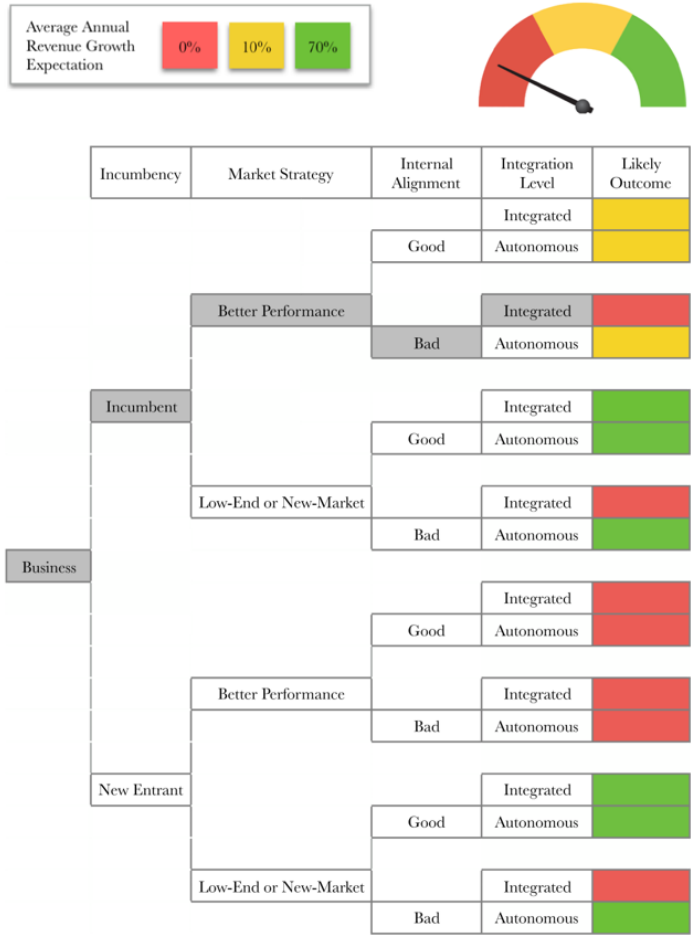
Enhance This Analysis



With This Insight



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Do What Was Not Possible Before

- Get an **accurate** measure of your portfolio's value
- Identify which specific projects are the **problems**
- Determine what to do with the problems – shape them to be successful or **drop** them
- Understand how to specifically **shape** a project to be more successful
- See the portfolio **gaps** that were hidden

QUANTITATIVE TOOLS HAVE HELPED THE WORLD

NOW THESE TOOLS ARE AVAILABLE
FOR CORPORATE INNOVATION

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