Now's the Time to Shift Your Business Architecture Function to the Future

Mike J. Walker
Research Director – Strategist and Futurist
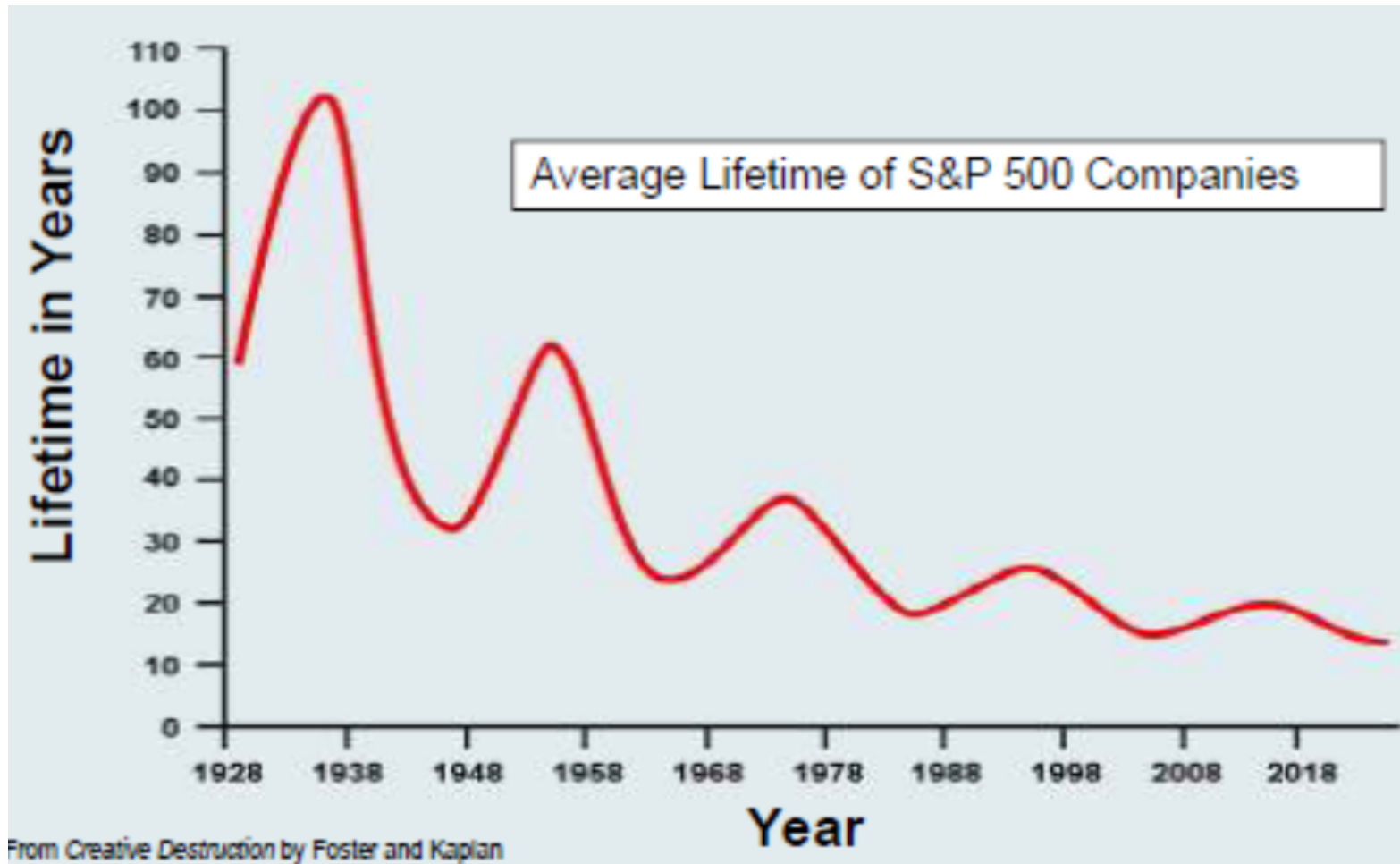
@mikejwalker | More Info

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"It is **not the strongest** of the species that survive, nor the **most intelligent**, but the ones **most responsive to change**."
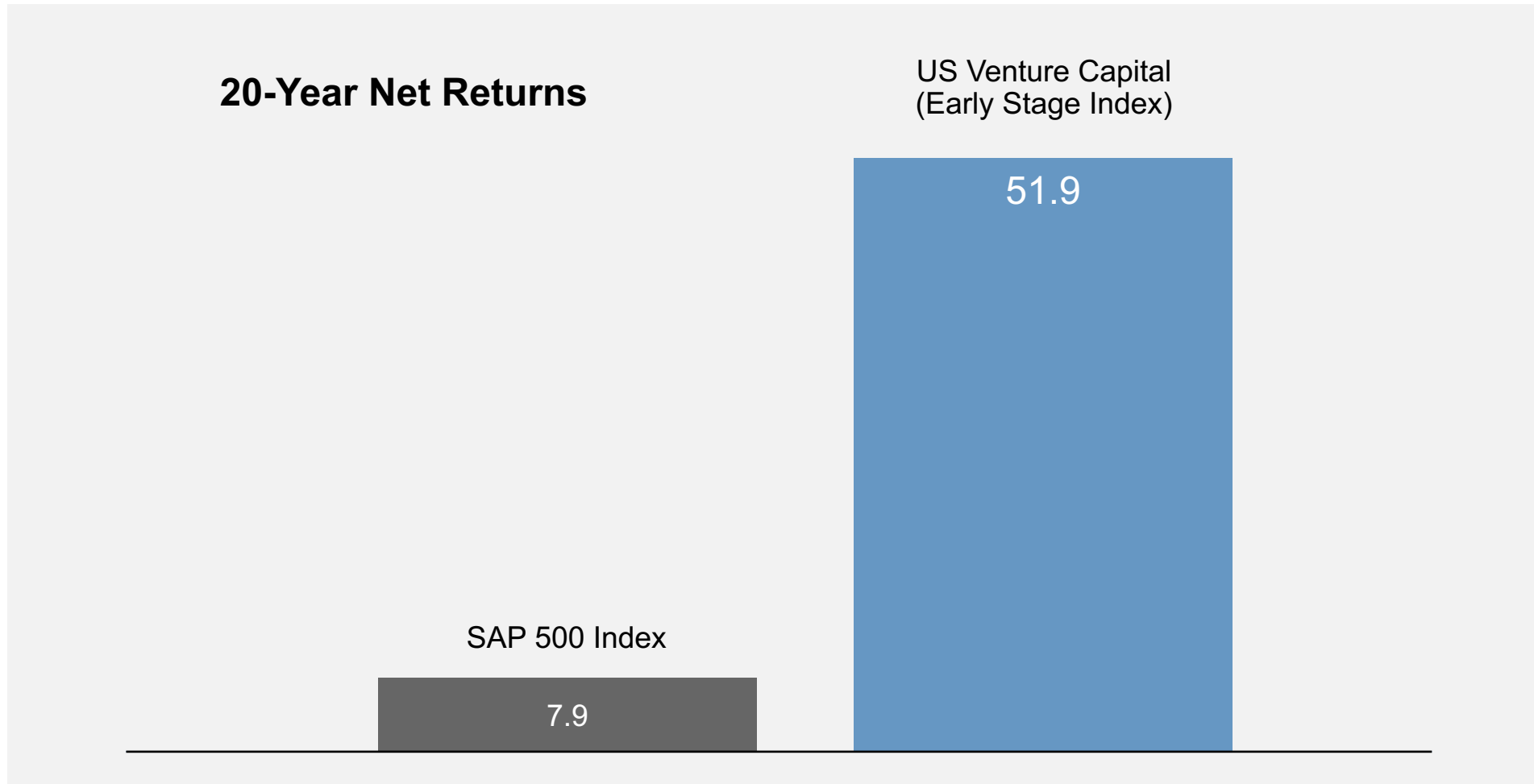
— Charles Darwin

Corporate **Vitality** is Plummeting

Average lifetime of S&P 500 companies has decreased from ~60 years to ~15 years.

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Digital Age **Success** is Skyrocketing

20-Year Net Returns

US Venture Capital
(Early Stage Index)

51.9

SAP 500 Index

7.9

Source: Cambridge Associates 2Q16 VC Benchmark

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Exponential Growth of Technology
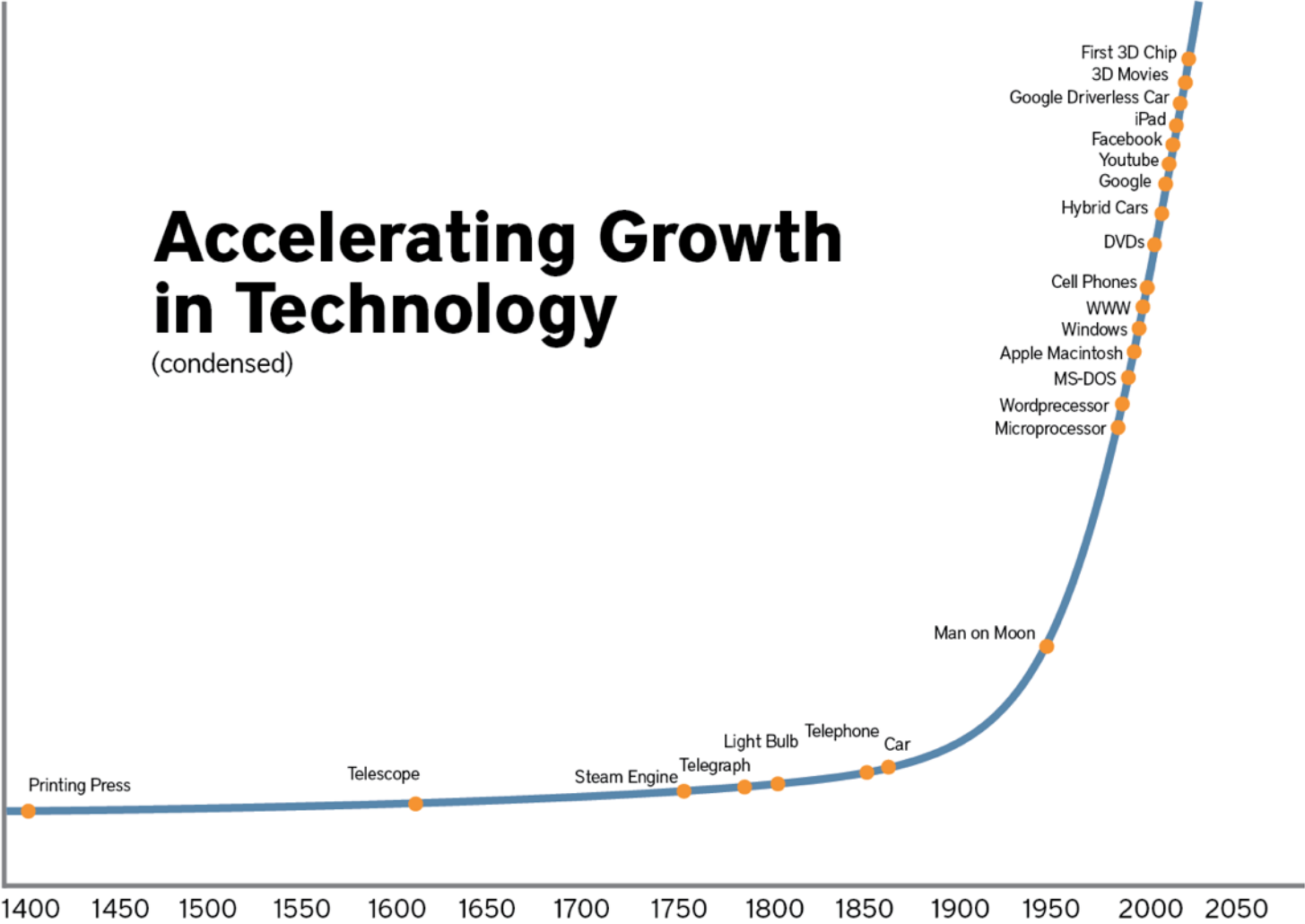
It's About Creating **New** Markets

31b Valuation
2nd most valuable start-up

Hotel Company Market Cap/Valuation

Company	Valuation
Airbnb	$31.0
Hilton	$23.6
Marriott	$18.0
Host	$12.7
Accor	$9.0
Wyndham	$8.4
InterContinental	$7.5
Hyatt	$6.9
Starwood	$5.0
Extended Stay	$3.2

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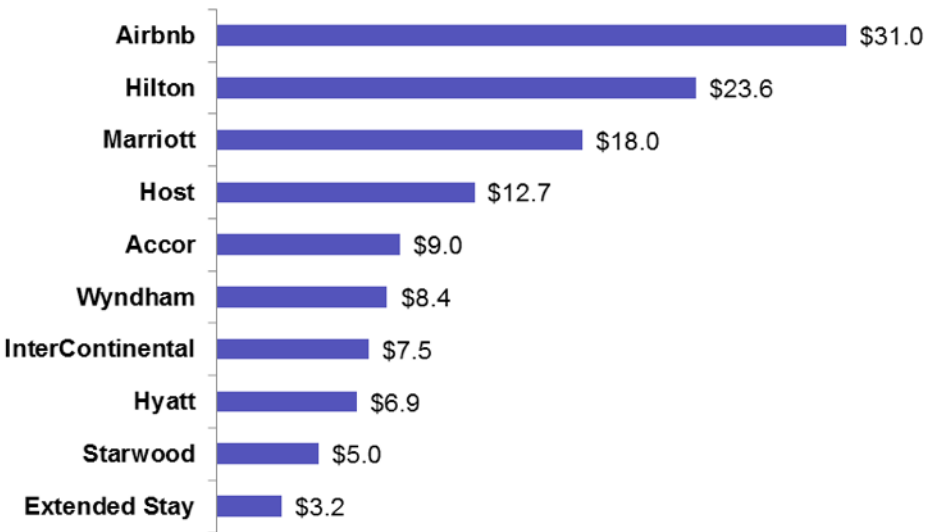
The Hospitality Industry Reshaped

Hotel guests are greeted by 10 lifelike robots at Henn-na Hotel in Nagasaki, Japan, removing all human staff from reservations.

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The Retail Industry Reshaped

Amazon patented delivery drones to get packages to you in half an hour, regardless of where you are. Dominos reinventing pizza delivery.
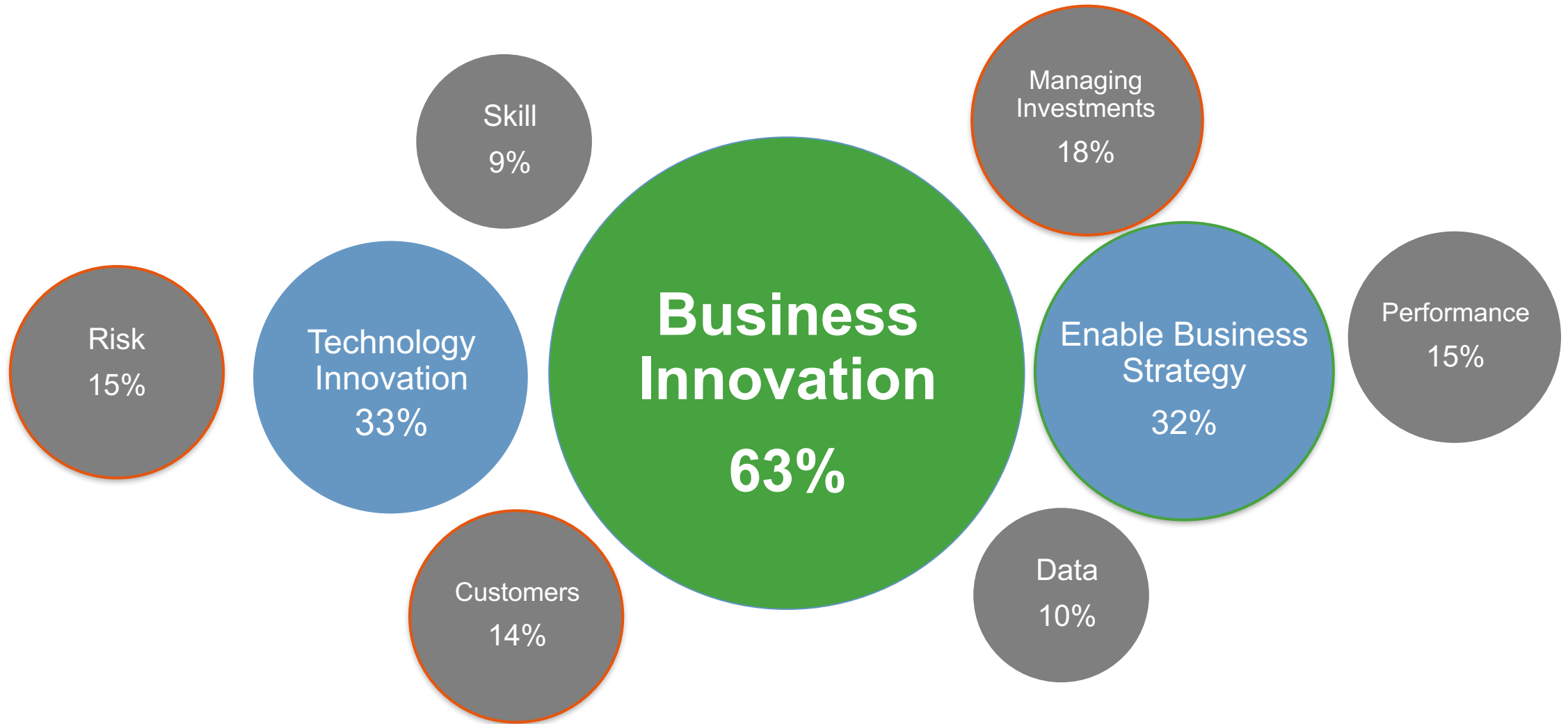
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The Automotive Industry Reshaped

By 2030, Autonomous Vehicles Will Represent Approximately 25% of the Passenger Vehicle Population in Use in Mature Markets.

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Disrupt or be Disrupted

The Shift of BA Priorities Is Clear

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Business Architecture **Connects** Strategy to Execution
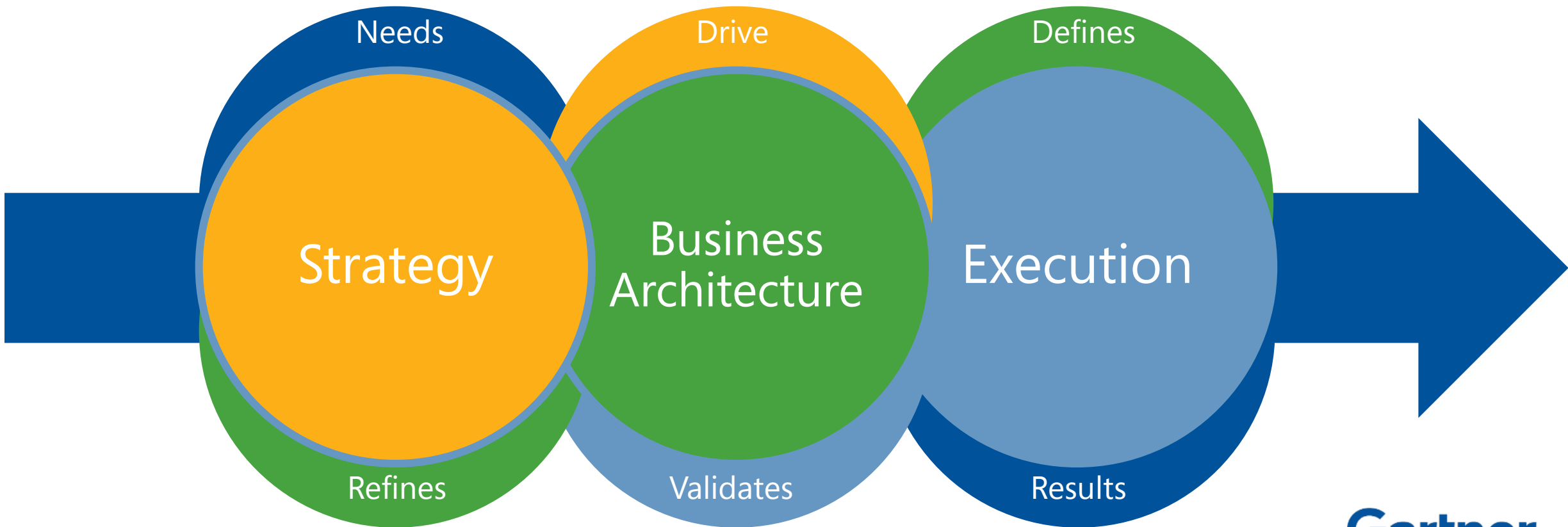
Business
Architecture

A formal **method** and a set of **descriptions** that **distill** the business **environment** and the **needs** of a business into set of **models** representing business **information**, **concepts**, **value** and **risk** that are expressed through an **architectural view of a business**.

Source: Mike The Architect: Defining Business Architecture (2013) - http://bit.ly/1aVdAgJ

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Business Architecture Adds Open Innovation

Which Path Will You Take?

Digital Business Optimization

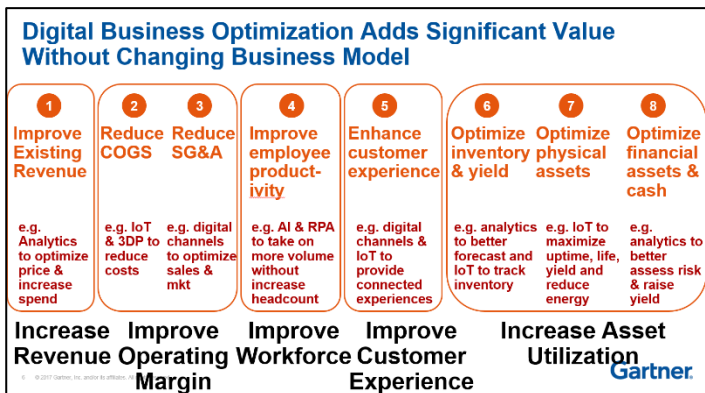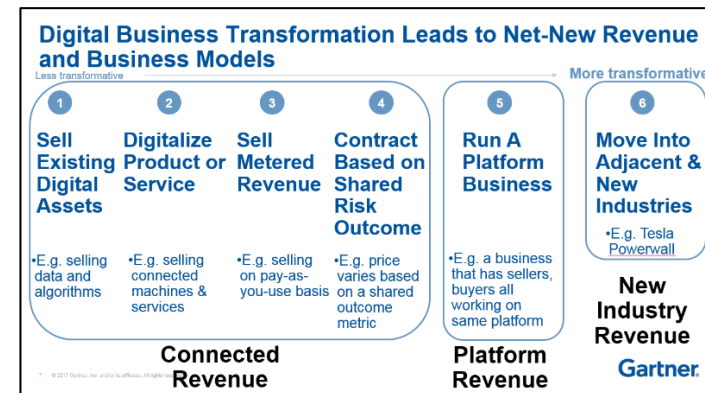### Digital Business Optimization Adds Significant Value Without Changing Business Model

1	2	3	4	5	6	7	8
Improve Existing Revenue	Reduce COGS	Reduce SG&A	Improve employee product-ivity	Enhance customer experience	Optimize inventory & yield	Optimize physical assets	Optimize financial assets & cash
e.g. Analytics to optimize price & increase spend	e.g. IoT & 3DP to reduce costs	e.g. digital channels to optimize sales & mkt	e.g. AI & RPA to take on more volume without increase headcount	e.g. digital channels & IoT to provide connected experiences	e.g. analytics to better forecast and IoT to track inventory	e.g. IoT to maximize uptime, life, yield and reduce energy	e.g. analytics to better assess risk & raise yield

Increase Revenue   **Improve Operating Margin**   **Improve Workforce**   **Improve Customer Experience**   **Increase Asset Utilization**

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Digital Business Transformation

Digital Business Transformation Leads to Net-New Revenue and Business Models

Less transformative   More transformative

1	2	3	4	5	6
Sell Existing Digital Assets	Digitalize Product or Service	Sell Metered Revenue	Contract Based on Shared Risk Outcome	Run A Platform Business	Move Into Adjacent & New Industries
•E.g. selling data and algorithms	•E.g. selling connected machines & services	•E.g. selling on pay-as-you-use basis	•E.g. price varies based on a shared outcome metric	•E.g. a business that has sellers, buyers all working on same platform	•E.g. Tesla Powerwall

Connected Revenue   **Platform Revenue**   **New Industry Revenue**

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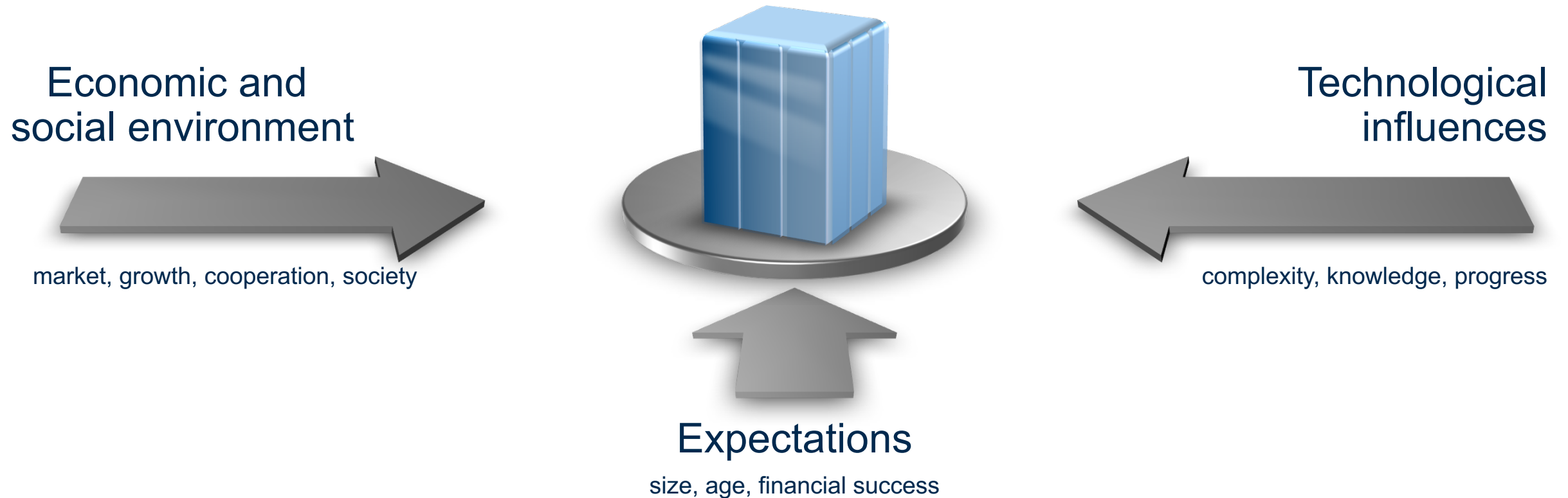**Degree of Digital Impact & Value**

L   H

Improved Productivity and Existing Revenue

Better Customer Experience

Net-New Revenue Product and Services

New Business Models

Understand the Disruptions that will determine **your Strategy**

Economic and social environment

market, growth, cooperation, society

Technological influences

complexity, knowledge, progress

Expectations

size, age, financial success

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Explore Full Range of Trends

Top **Five** Business and Societal Trends

1. A Hyper Aging Society

2. Mass Urbanization Emerges

3. Rise of the Millennial Mindset

4. The Sharing Economy

5. Emerging Markets Continuously Adjust

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Changes in the Business Architecture Approach

Adopt an Approach that Connects Idea to Execution

Innovative Approaches

Disruptive Idea

Actionable Digital Initiatives

Highly Tailored

Focused

Unconstrained

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Three Steps to Understanding Digital Disruptions

1	Explore
2	Rationalize
3	Realize

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Define an Open Innovation-Led Approach

Explore Disruptive Trend Ideation

Rationalize Business Outcomes

Evaluate Opportunities and Risks

Create Business Transformation Road Maps

Creation of Transformation Initiatives

Qualified & Quantified Opportunities

Unconstrained Innovation

Rapid Idea Prototyping / Testing / Experimenting

Iterate   Waste   Iterate   Waste   Iterate   Waste   Iterate   Waste

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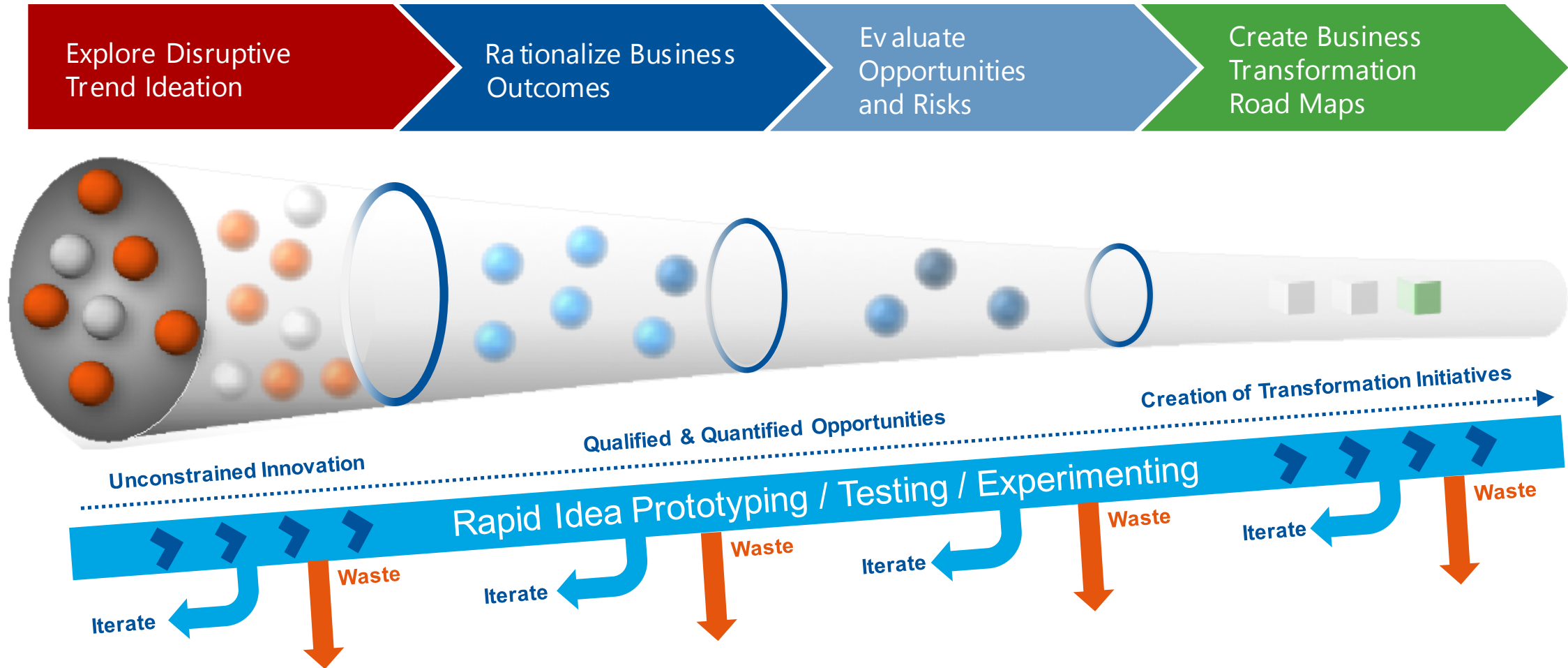
Business Architecture Fuels Digital Business Strategy

Business Strategy:
- Business moments
- Business outcomes
- Business triggers
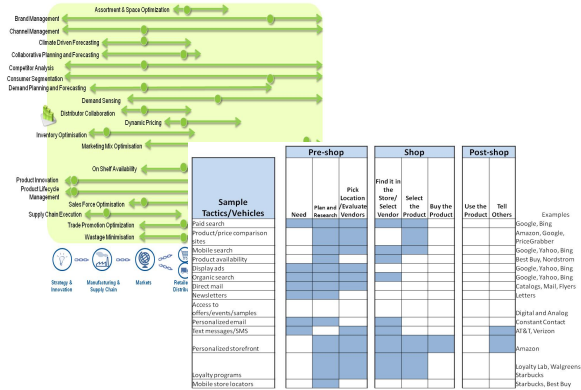
Business Benefit Analysis:
- Assess the digital enterprise opportunity and the key business benefits — looking at growth, services, costs and agility
- Prioritize business capabilities and associated disruptive digital technologies based on analysis of business value and impact

a **Explore Disruptive Trend Ideation** → **Rationalize Business Outcomes** → **Evaluate Opportunities and Risks** **c** → **Create Business Transformation Roadmaps**

A Mobile Future:
- Empowered customers
- Digital advisor in your pocket

Economic Uncertainty:
- Consumers withdraw
- Demand stagnates

Hyperdigitization:
- Digital everything
- Low barriers to entry

b **Business Capabilities and Technology Requirements:**
- Identify business capabilities that can be enabled by disruptive technologies and business designs
- Identify the key disruptive digital technologies and services that could enhance key business capabilities
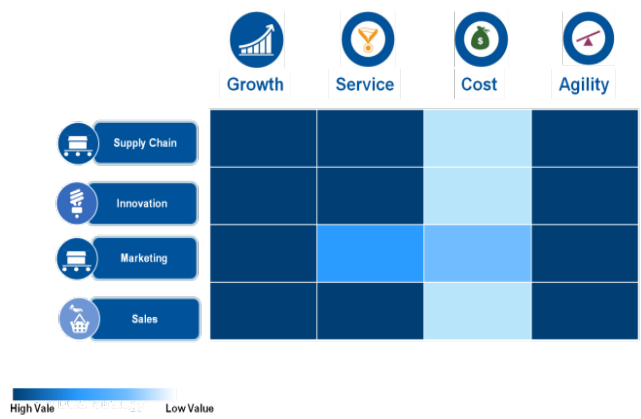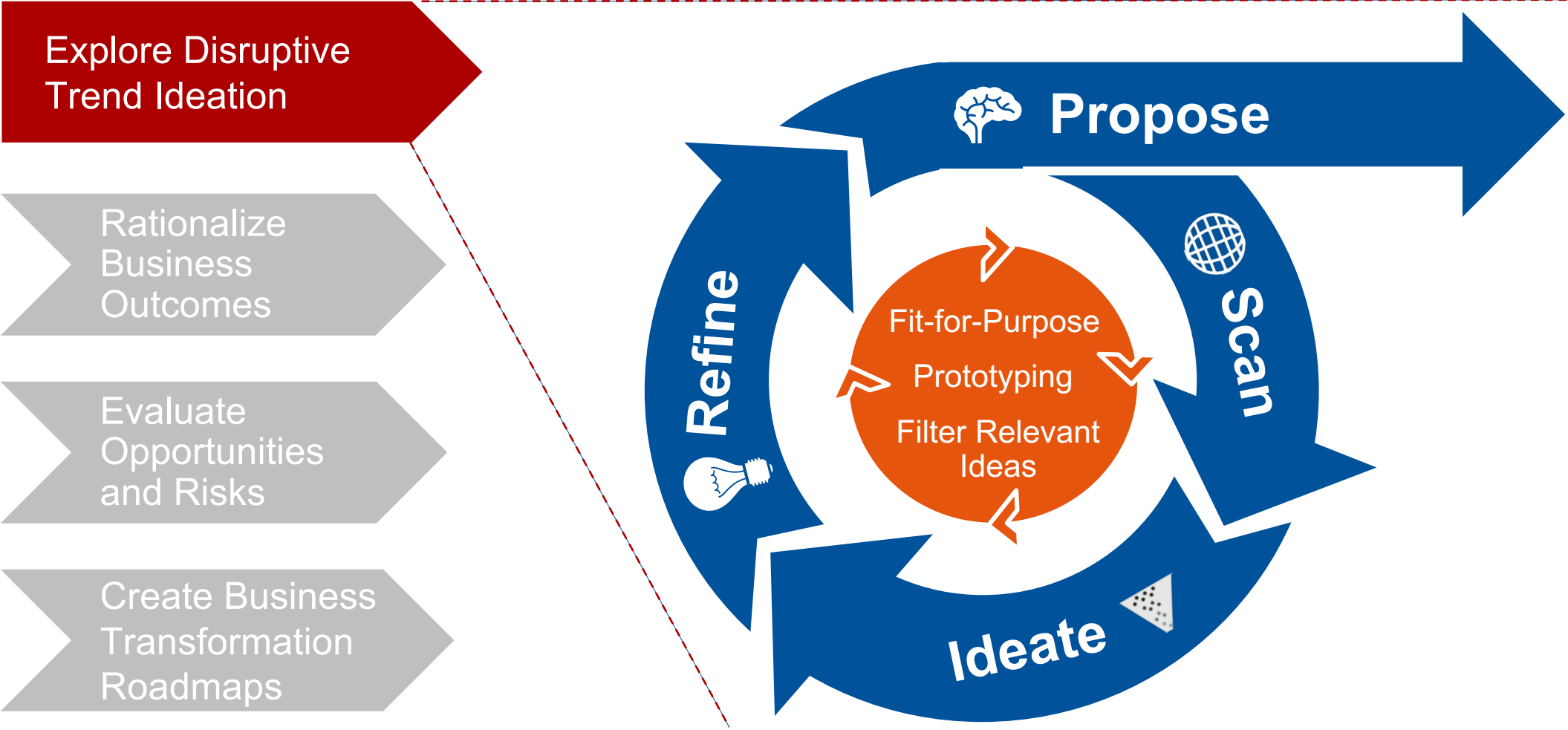
Summary Approach Stages

1

Explore Disruptive Trend Ideation

Identify highly impactful disruptions that can be ideated to determine their strategic fit.

Outcomes: Well understood impacts of disruptions, highly impactful list of ideated technologies and opportunities.

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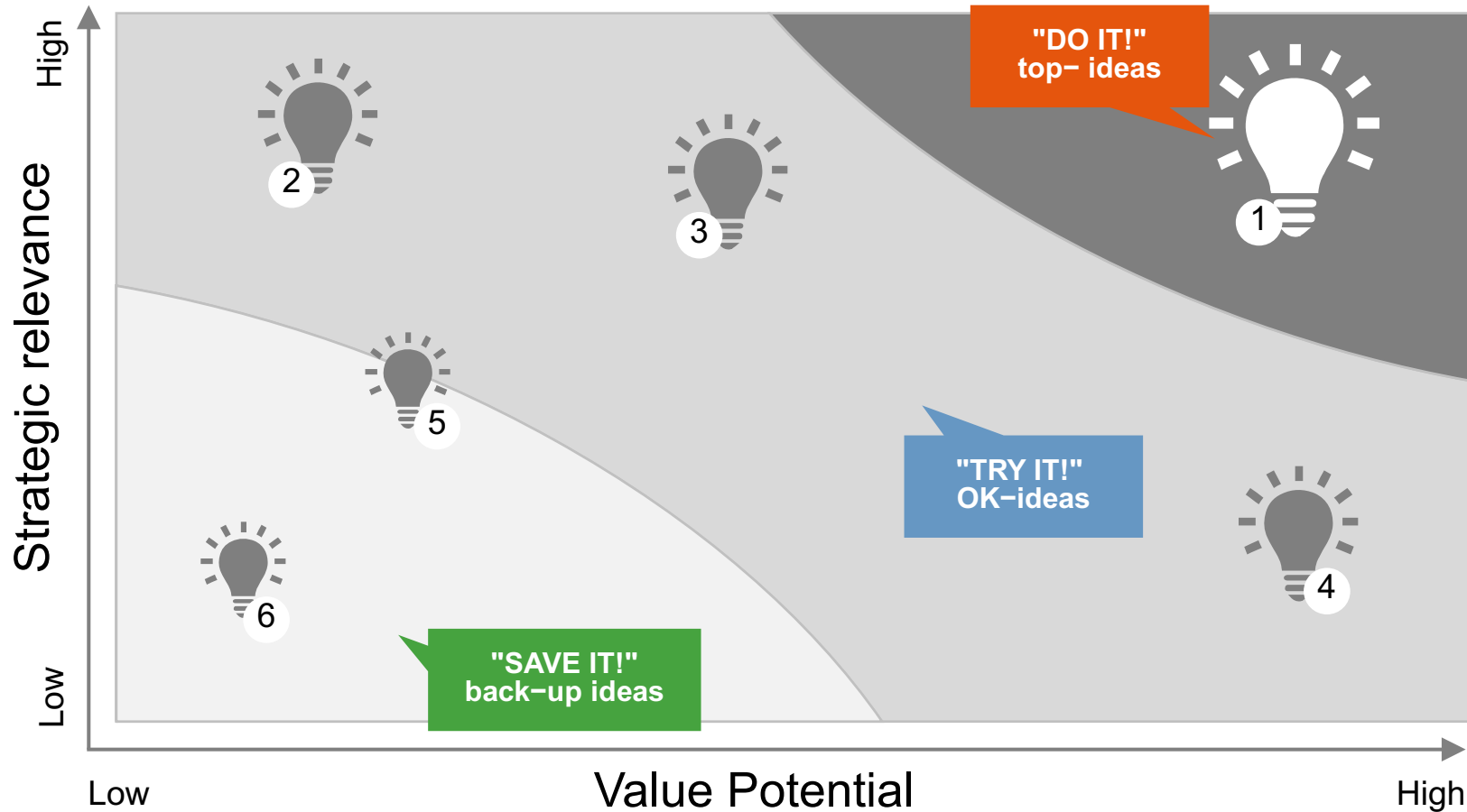# Ideation Is Iterative: Understand the Disruptions, and Ideate to Create Opportunities

Explore Disruptive Trend Ideation

Rationalize Business Outcomes

Evaluate Opportunities and Risks

Create Business Transformation Roadmaps

Propose

Scan

Refine

Ideate

Fit-for-Purpose

Prototyping

Filter Relevant Ideas

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Example: Opportunity and Threat Grid

Emerging Trend	Potential Opportunities			Challenges		
Societal						
Majority of population will live in cities.	Higher market potential.	Effective asset deployment.	Take share from smaller players	Higher operating costs.	Competition.	Rural operations?
Business						
Millennial workforce.	Drive innovation.	Build future leaders.		Traditional workplace.	Competing for talent.	
Technology						
Drones.	Faster and more reliable property appraisal.	Fraud detection on foreclosures.		Airspace regulations.	Customer privacy.	

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Explore and Qualify Ideas

NAME/TITLE OF THE IDEA	…
TYPE OF INNOVATION	○ Radical Innovation ○ Improving Innovation ✓ Routine Innovation

DESCRIPTION	BENEFITS/ADVANTAGES

OBJECTIVES	RISKS

FEASIBILITY OF THE IDEA

○ Very High   ✓ High   ○ Medium   ○ Low   ○ Very Low

MARKET POTENTIAL

✓ Very High   ○ High   ○ Medium   ○ Low   ○ Very Low

NECESSARY INVESTMENTS

○ Very Low   ○ Low   ✓ Medium   ○ High   ○ Very High

COMPLEMENTS STRATEGY

○ Very High   ✓ High   ○ Medium   ○ Low   ○ Very Low

CONCLUSION

OVERALL EVALUATION

○ Very High Potential   ✓ High Potential   ○ Some Potential   ○ Small Potential   ○ Very Small Potential

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Not all Ideas are Equal
Matrix with strategic relevance and the potential value derived from the idea

Strategic relevance (vertical axis: Low to High)

Value Potential (horizontal axis: Low to High)

"DO IT!" top- ideas

"TRY IT!" OK-ideas

"SAVE IT!" back-up ideas

1. Name of the idea — Description
2. Name of the idea — Description
3. Name of the idea — Description
4. Name of the idea — Description
5. Name of the idea — Description
6. Name of the idea — Description

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Summary Approach Stages

1

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Outcomes: Well understood impacts of disruptions, highly impactful list of ideated technologies and opportunities.

2

Rationalize Business Outcomes

Qualify the strategic value and feasibility of a set of disruptive opportunities.

Outcomes: Identification of strategically aligned opportunities, business impacts analyzed, and identified digital transformation

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Humanistic Driven Innovation

Digitalized Shopping Experience: Purchases

Scenario Description

Create enhanced customer experience to drive increased customer loyalty in target markets and age groups 16 to 25 and thus increase sales by 20% with seamless cross Internet, mobile and physical experiences.

Step 1
Engaged experience

Digital customer experience enabled in store

Step 5
Always notified

Notification that package was delivered

Step 2
Digital interaction

Interaction with shelves lighting up, extended information on phone, and related products.

Step 3
Simple purchasing

Mobile device adds product to the digital shopping cart.

Step 4
Pay now, deliver later

Customer wants to continue shopping at other establishments in the area. Customer uses mobile application to trigger same day delivery of the purchases.

Required Inputs

- Existing mobile apps will need to support in-store experiences
- Shelf sensors, RFID tags, beacons and other enabling Wi-Fi technology
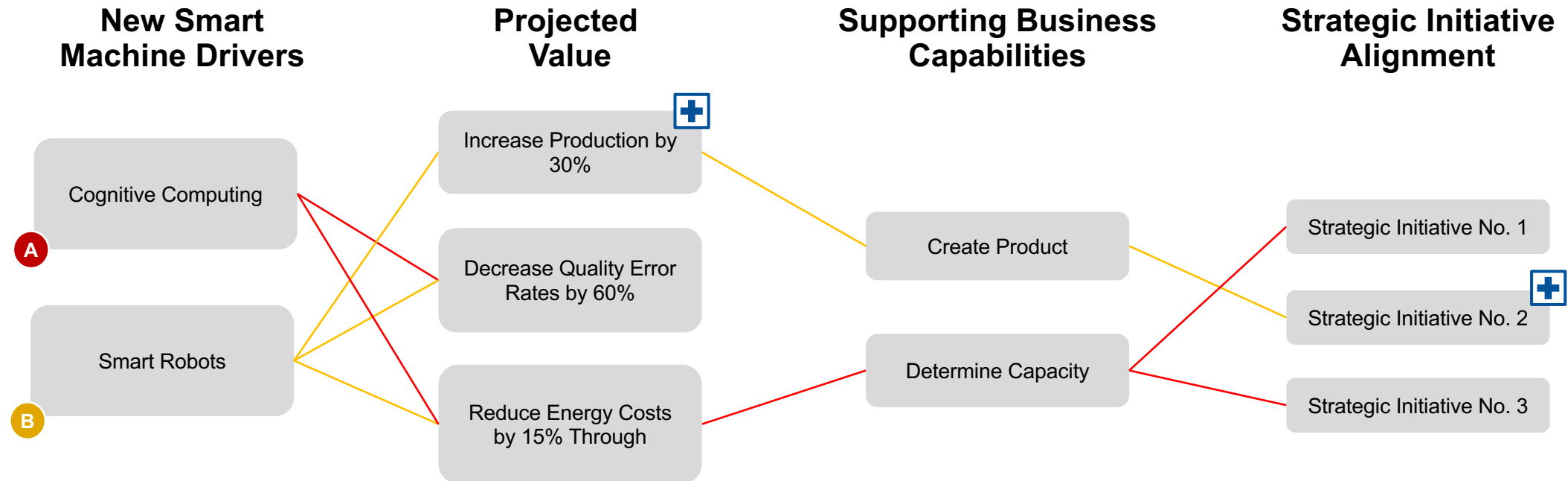
Change Required

- Business process streamlining of end-to-end distribution
- Changes in the following systems: point-of-sale systems, payment systems and inventorying systems

Business Outcomes

- Create a new business model to increase competitive position.
- Increase sales by 20%.
- Enable seamless cross Internet, mobile and physical experiences.

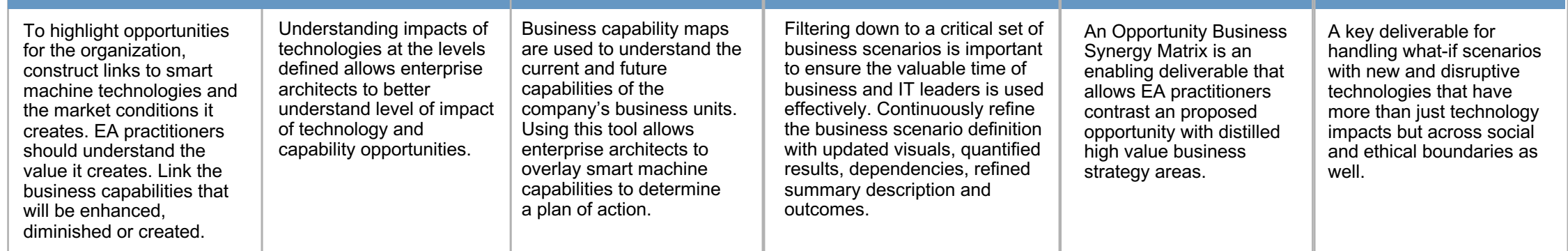**Gartner**

Tracing Value to Business Outcomes

Tracing why and how value is generated from smart machines technologies (or from the market conditions they create as drivers) is essential. It's imperative for EA practitioners to create diagnostic deliverables that illustrate value in the context of business outcomes.

New Smart Machine Drivers	Projected Value	Supporting Business Capabilities	Strategic Initiative Alignment
Cognitive Computing (A)	Increase Production by 30% ⊞	Create Product	Strategic Initiative No. 1
Smart Robots (B)	Decrease Quality Error Rates by 60%	Determine Capacity	Strategic Initiative No. 2 ⊞
	Reduce Energy Costs by 15% Through		Strategic Initiative No. 3

n — Disruptive trend identification

⊞ — Identification of new capability or value as a result of a disruptive trend

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Rationalize the Impact of Disruptions

Qualify the strategic value and feasibility of a set of disruptive opportunities. With the goal of identifying strategically aligned opportunities, business impacts analyzed, and identified digital transformation.
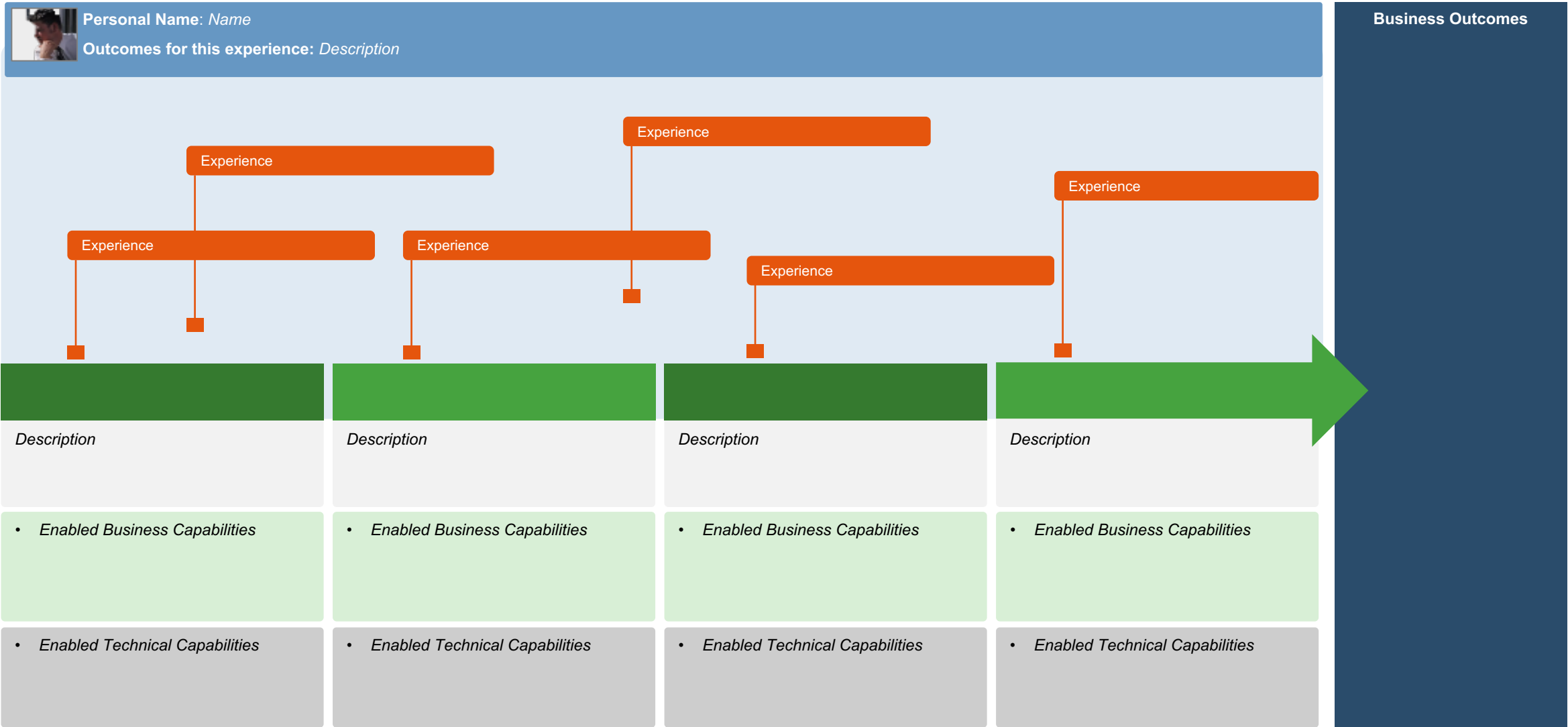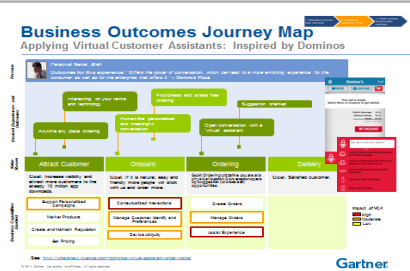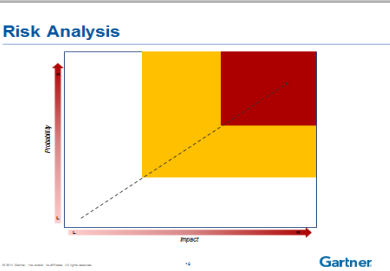
Value Traceability Model	Business Impact Analysis	Business Capability Analysis	Business Scenario Analysis	Opportunity Business Synergy Matrix	Social and Ethical Roadmap
To highlight opportunities for the organization, construct links to smart machine technologies and the market conditions it creates. EA practitioners should understand the value it creates. Link the business capabilities that will be enhanced, diminished or created.	Understanding impacts of technologies at the levels defined allows enterprise architects to better understand level of impact of technology and capability opportunities.	Business capability maps are used to understand the current and future capabilities of the company's business units. Using this tool allows enterprise architects to overlay smart machine capabilities to determine a plan of action.	Filtering down to a critical set of business scenarios is important to ensure the valuable time of business and IT leaders is used effectively. Continuously refine the business scenario definition with updated visuals, quantified results, dependencies, refined summary description and outcomes.	An Opportunity Business Synergy Matrix is an enabling deliverable that allows EA practitioners contrast an proposed opportunity with distilled high value business strategy areas.	A key deliverable for handling what-if scenarios with new and disruptive technologies that have more than just technology impacts but across social and ethical boundaries as well.

Diagnostic Deliverables

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Summary Approach Stages

1

Explore Disruptive Trend Ideation

Identify highly impactful disruptions that can be ideated to determine their strategic fit.

Outcomes: Well understood impacts of disruptions, highly impactful list of ideated technologies and opportunities.

2

Rationalize Business Outcomes

Qualify the strategic value and feasibility of a set of disruptive opportunities.

Outcomes: Identification of strategically aligned opportunities, business impacts analyzed, and identified digital transformation

3

Evaluate Opportunities and Risks

Quantifiably valuate the benefits and risks of an opportunity to determine business viability.

Outcomes: Quantified opportunities through a risk-adjusted valuation based on opportunity benefit and risk tolerance

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Business Outcomes Journey Map

Personal Name: *Name*

Outcomes for this experience: *Description*

Business Outcomes

Experience

Experience

Experience

Experience

Experience

Experience

Experience

Description	Description	Description	Description
• *Enabled Business Capabilities*	• *Enabled Business Capabilities*	• *Enabled Business Capabilities*	• *Enabled Business Capabilities*
• *Enabled Technical Capabilities*	• *Enabled Technical Capabilities*	• *Enabled Technical Capabilities*	• *Enabled Technical Capabilities*

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Evaluate Opportunities and Risks

Qualify the strategic value and feasibility of a set of disruptive opportunities. With the goal of identifying strategically aligned opportunities, business impacts analyzed, and identified digital transformation.

Business Criticality to Realization Matrix	Business Outcomes Journey Map	Risk Assessment	Opportunity Risk Profile	Business Capability Profiling
Understand the criticality of how enabling capabilities of an opportunity will fulfill desired business outcomes along with how significant the gap between where the organization is today and the future state potential.	Used to help EA practitioners in having a macro framework to tie experience and focus on the capabilities that the organization needs to deliver to achieve its strategy.	Assessing how an opportunity will impact an organization is a critical component to ensuring that the opportunity is a value-add viable opportunity that doesn't put the organization at unneeded risk.	An Opportunity Risk Profile provides business leaders with the risk adjusted value of a proposed opportunity based on specific risks such as reputational, business, monetary, etc.	A tool that allows EA practitioners classify business capabilities with risk and benefit measures.
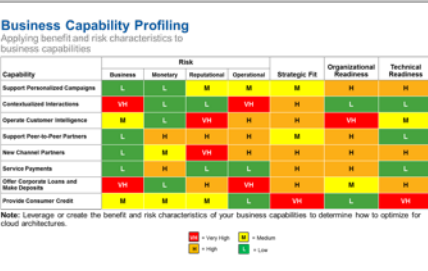
Diagnostic Deliverables

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4

Create Business Transformation Road Maps

Creation of a highly actionable set of strategic options for business and IT leaders.

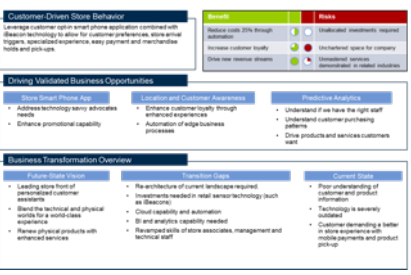**Outcomes**: Opportunities shift to actionable initiatives with options-based transformation plans.
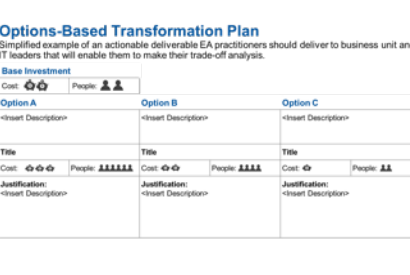
Gartner.
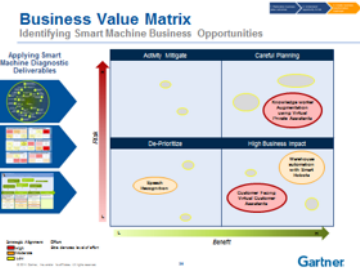
Opportunity on a Page

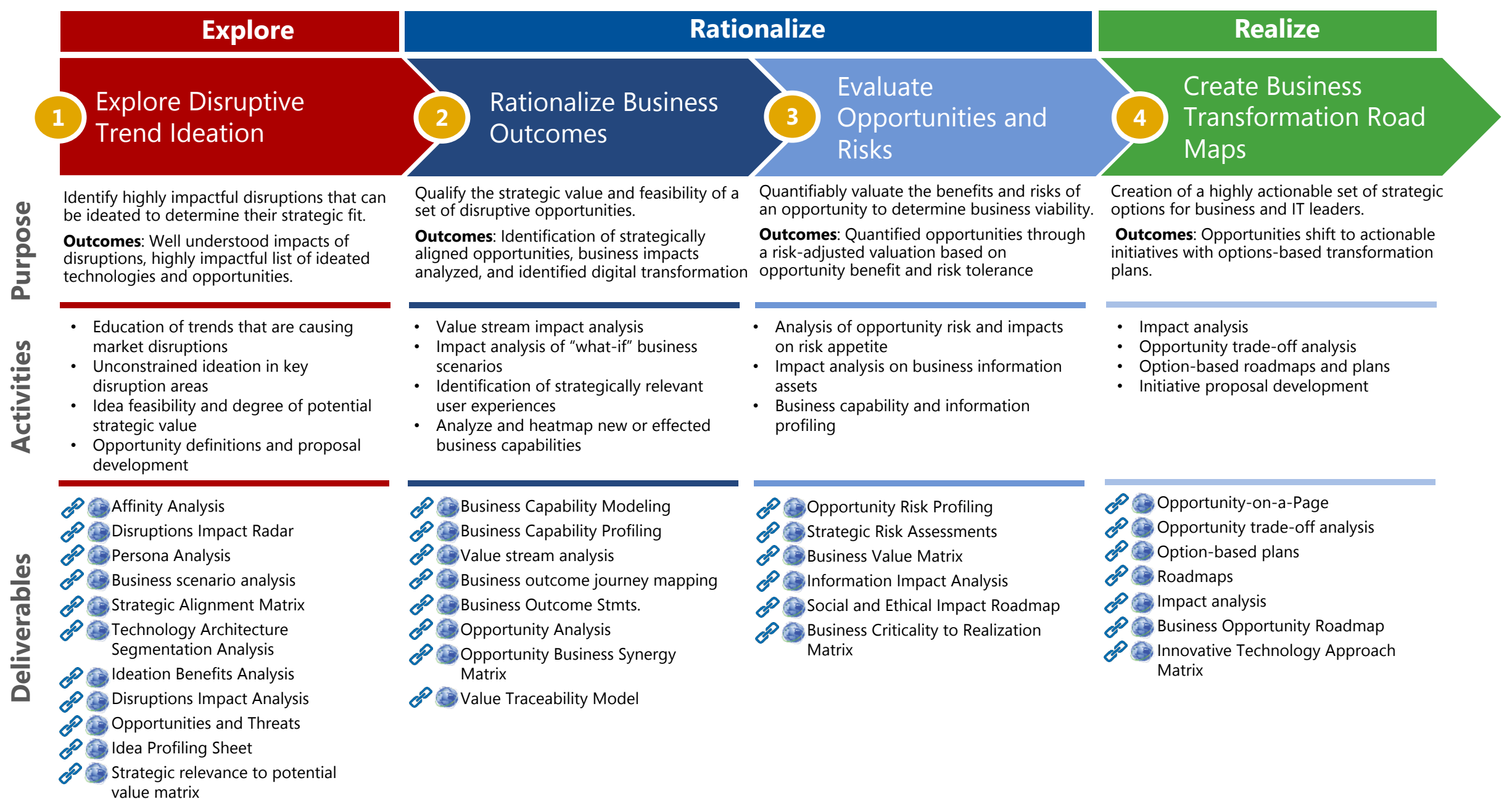| Initiative Overview									
<Insert Description>									

Value (scale: 1 – value not likely realized, 5 – value very likely realized)						Risk (scale: 1 – marginal risk, 5 – likely catastrophic damage)					
Key Benefits	•					Key Risks/Challenges	•				
Technology Benefits	Business Unit Benefits	Customer Benefits	Competitive Benefits	Corporate Benefits	<> Highest Value	Business Risk	Governance Risk	Technical Risk	Operational Risk	<> High Risk
<>	<>	<>	<>	<>		<>	<>	<>	<>	

Readiness					
Technical Readiness			Organizational Readiness		
Maturity	Integration Dependencies	Technical Readiness Score	Organizational Concerns	Staff Concerns	Organizational Readiness Score
		<> Proven Technology			<> Prepared Organization

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The Digital Transformation Framework

Creation of a highly actionable set of strategic options for business and IT leaders that shifts opportunities to actionable initiatives with options-based transformation plans.
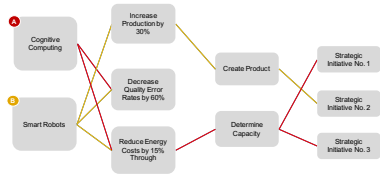
Business Value Matrix	Roadmaps	Opportunity On a Page	Options-Based Transformation Plan	Innovative Technology Approach Matrix
Understand the criticality of how enabling capabilities of an opportunity will fulfill desired business outcomes along with how significant the gap between where the organization is today and the future state potential.	Used to help EA practitioners in having a macro framework to tie experience and focus on the capabilities that the organization needs to deliver to achieve its strategy.	Assessing how an opportunity will impact an organization is a critical component to ensuring that the opportunity is a value-add viable opportunity that doesn't put the organization at unneeded risk.	Simplified example of an actionable deliverable EA practitioners should deliver to business unit and IT leaders that will enable them to make their trade-off analysis.	By understanding the source technologies and the level of innovation that the business will support or is tolerable will help EA practitioners identify which solutions will be the appropriate fit for the organization.

Diagnostic Deliverables

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Explore	Rationalize		Realize

1 Explore Disruptive Trend Ideation	**2** Rationalize Business Outcomes	**3** Evaluate Opportunities and Risks	**4** Create Business Transformation Road Maps

Purpose

Identify highly impactful disruptions that can be ideated to determine their strategic fit. **Outcomes**: Well understood impacts of disruptions, highly impactful list of ideated technologies and opportunities.	Qualify the strategic value and feasibility of a set of disruptive opportunities. **Outcomes**: Identification of strategically aligned opportunities, business impacts analyzed, and identified digital transformation	Quantifiably valuate the benefits and risks of an opportunity to determine business viability. **Outcomes**: Quantified opportunities through a risk-adjusted valuation based on opportunity benefit and risk tolerance	Creation of a highly actionable set of strategic options for business and IT leaders. **Outcomes**: Opportunities shift to actionable initiatives with options-based transformation plans.

Activities

• Education of trends that are causing market disruptions • Unconstrained ideation in key disruption areas • Idea feasibility and degree of potential strategic value • Opportunity definitions and proposal development	• Value stream impact analysis • Impact analysis of "what-if" business scenarios • Identification of strategically relevant user experiences • Analyze and heatmap new or effected business capabilities	• Analysis of opportunity risk and impacts on risk appetite • Impact analysis on business information assets • Business capability and information profiling	• Impact analysis • Opportunity trade-off analysis • Option-based roadmaps and plans • Initiative proposal development

Deliverables

Affinity Analysis Disruptions Impact Radar Persona Analysis Business scenario analysis Strategic Alignment Matrix Technology Architecture Segmentation Analysis Ideation Benefits Analysis Disruptions Impact Analysis Opportunities and Threats Idea Profiling Sheet Strategic relevance to potential value matrix	Business Capability Modeling Business Capability Profiling Value stream analysis Business outcome journey mapping Business Outcome Stmts. Opportunity Analysis Opportunity Business Synergy Matrix Value Traceability Model	Opportunity Risk Profiling Strategic Risk Assessments Business Value Matrix Information Impact Analysis Social and Ethical Impact Roadmap Business Criticality to Realization Matrix	Opportunity-on-a-Page Opportunity trade-off analysis Option-based plans Roadmaps Impact analysis Business Opportunity Roadmap Innovative Technology Approach Matrix

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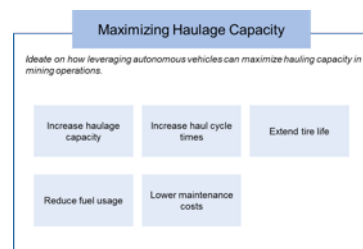# Using Gartner Research for your Innovation Efforts

Value Traceability Model

To highlight opportunities for the organization, construct links to the business capabilities that will be enhanced, diminished or created.

See: "Toolkit: What Enterprise Architects Need to Know About Smart Machines"

Affinity Analysis

Grounding technology innovation in the context of business issues or gaps. Using this technique surfaces the views, ideas and responses to issues, including the emotional and behavioral aspects.

See: "Toolkit: What Enterprise Architects Need to Know About Smart Machines"

Business Outcomes Journey Map
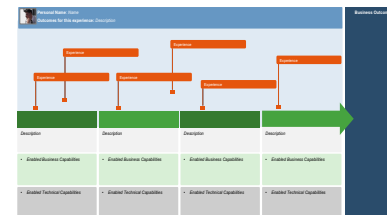
Understanding business outcomes in terms of experiences to be enabled by the capabilities that are delivered is a key way to ensure that business outcomes are maximized.

See: "Toolkit: How EA Enables Digital Humanism via Business Outcomes Journey Maps to Exploit Digital Disruptions"

Business Impact Analysis
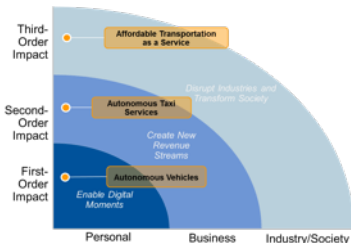
Tool to understand direct and indirect impacts of technologies.

See: "Toolkit: What Enterprise Architects Need to Know About Smart Machines"

Business Capability Analysis

Business capability maps are used to understand the current and future capabilities of the company's business units.

See: "Toolkit: Business Capability Modeling Workshop"

Business Scenario Analysis

Filtering down to a critical set of business scenarios is important to ensure the valuable time of business and IT leaders is used effectively.

See: "Toolkit: How to Create Business Scenarios That Drive Digital Disruption Innovation"

Opportunity Business Synergy Matrix

Contrasts a proposed opportunity with distilled high value business strategy areas.

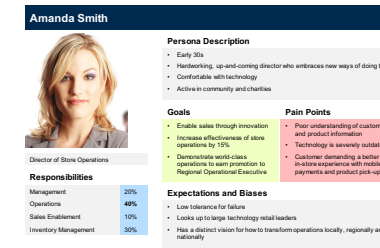See: "Toolkit: What Enterprise Architects Need to Know About IoT Technologies"

Social and Ethical Roadmap
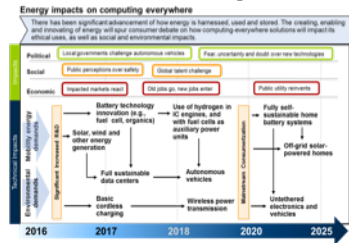
Defines what-if scenarios with new and disruptive technologies that have more than just technology impacts but across social and ethical boundaries as well.

See: "Toolkit: What Enterprise Architects Need to Drive Computing-Everywhere Strategies"

Persona

Aids in driving decisions and providing recommendations, whereby increasing understanding about many people through abstracting them into an archetype.

See: "Toolkit: Workshop for Creating EA Personas in Digital Business Diagnostic Deliverable Analysis"

For more information, stop by Gartner Research Zone.

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Author

Mike J. Walker
Research Director

More Info

My Latest Research

- Emerging Technology Hype Cycle, 2016
- Top 10 Strategic Technology Trends for 2017
- Information of Everything
- Advanced Machine Learning
- Autonomous Agents and Things
- Advanced System Architecture
- Vanguard Enterprise Architects Will Lead Bimodal Mode 2 Innovations
- Using Enterprise Architecture to Maximize Cloud Strategy Business Outcomes
- Toolkit: The Information Architect's Playbook for EIM

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