



Creating a Culture of Innovation



Practicing Lean Product Development

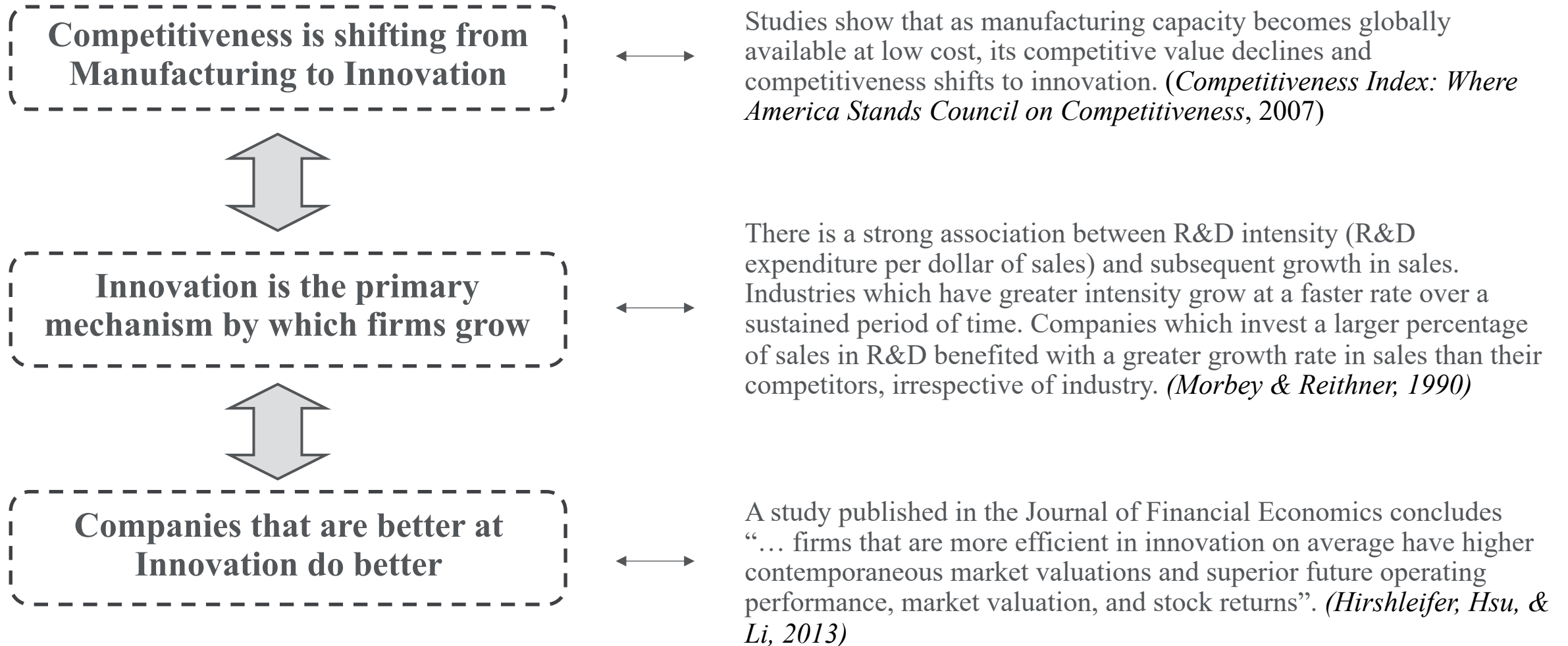
Dantar P. Oosterwal

Why do we Innovate?

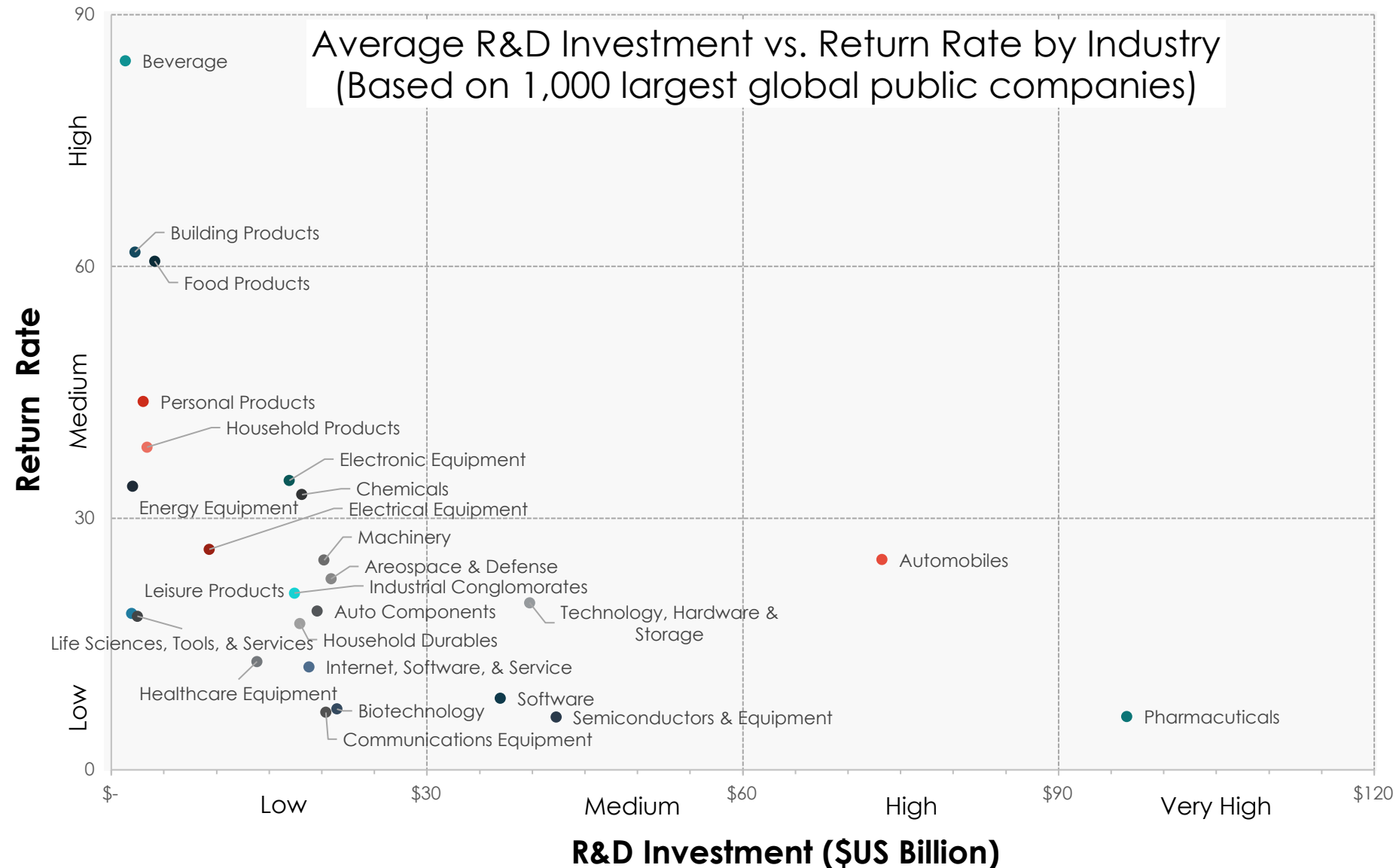


WHY DO LPPD?

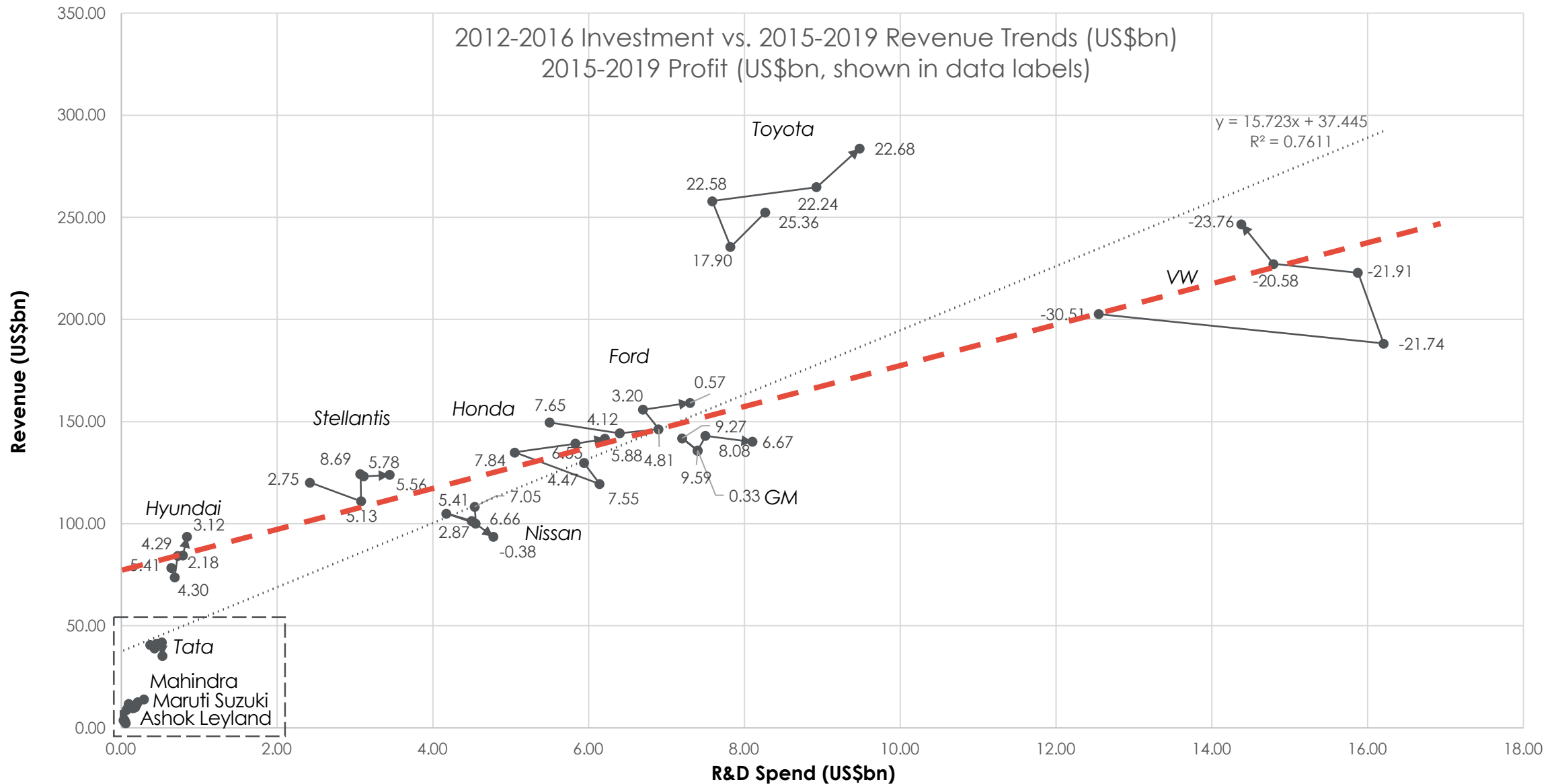
Innovation Powers Performance



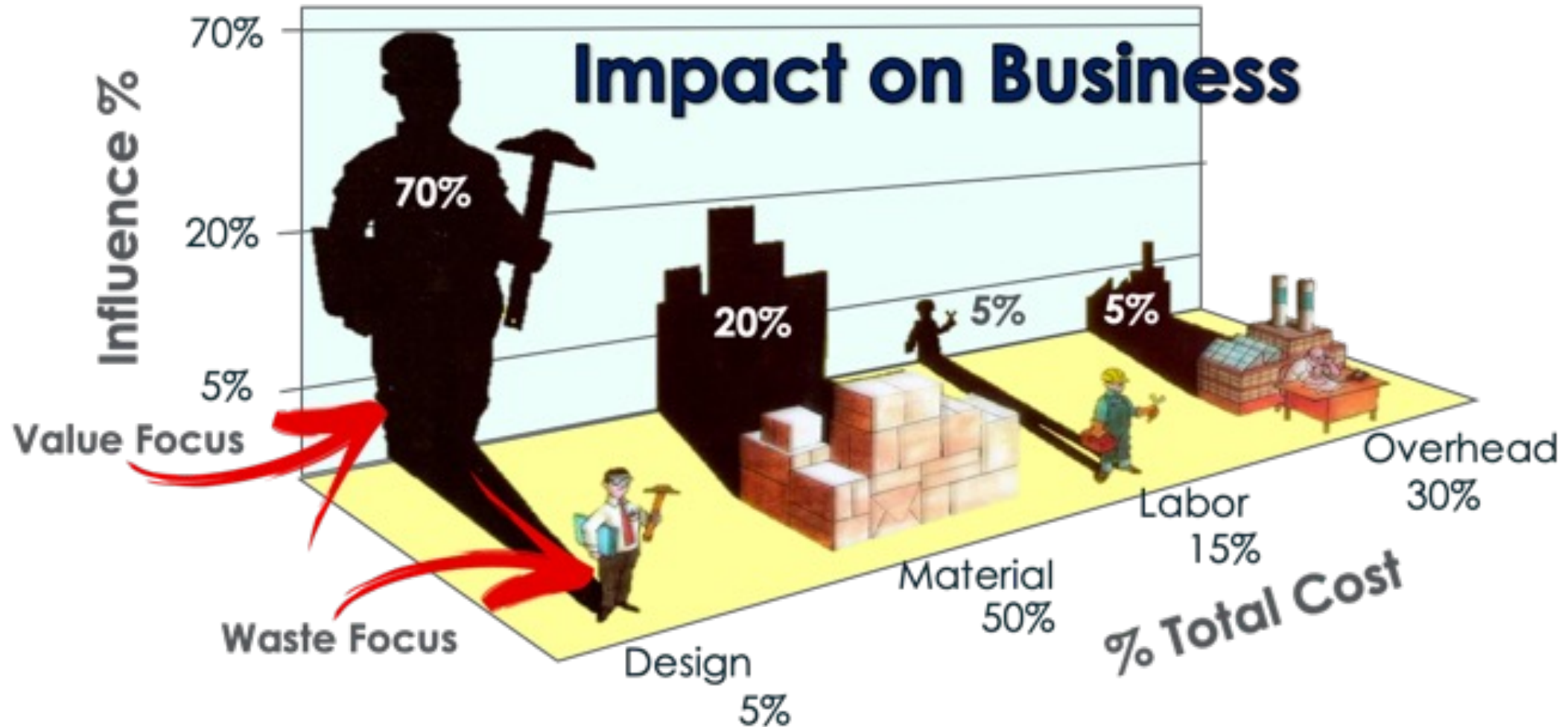
DEVELOPMENT RETURN BY INDUSTRY



AUTOMOTIVE OEM



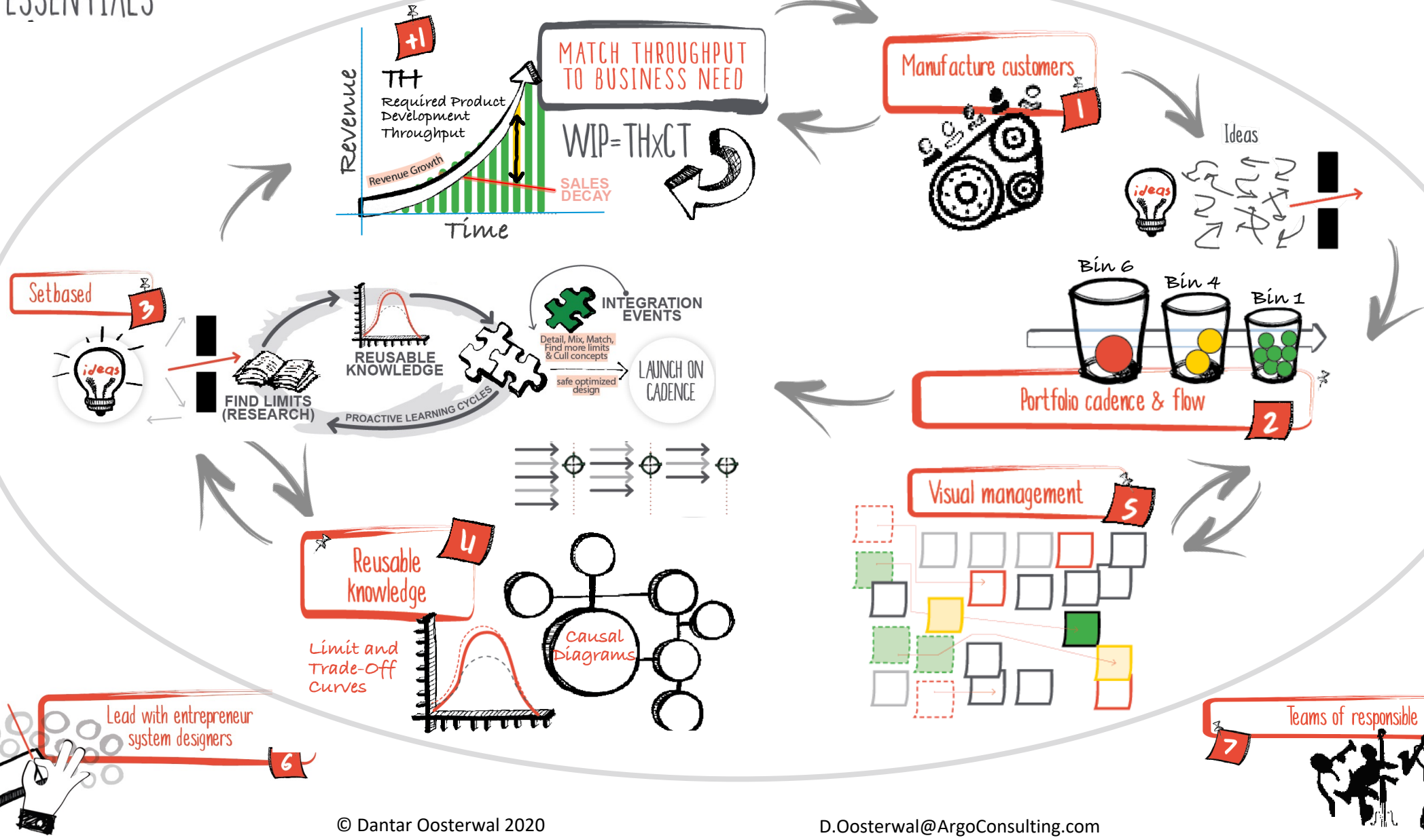
LPPD improvement focuses on value



LEAN PRODUCT DEVELOPMENT (in a nutshell)

7 ESSENTIALS

PURSUE PERFECTION AND DRIVE IMPROVEMENT EVERY DAY

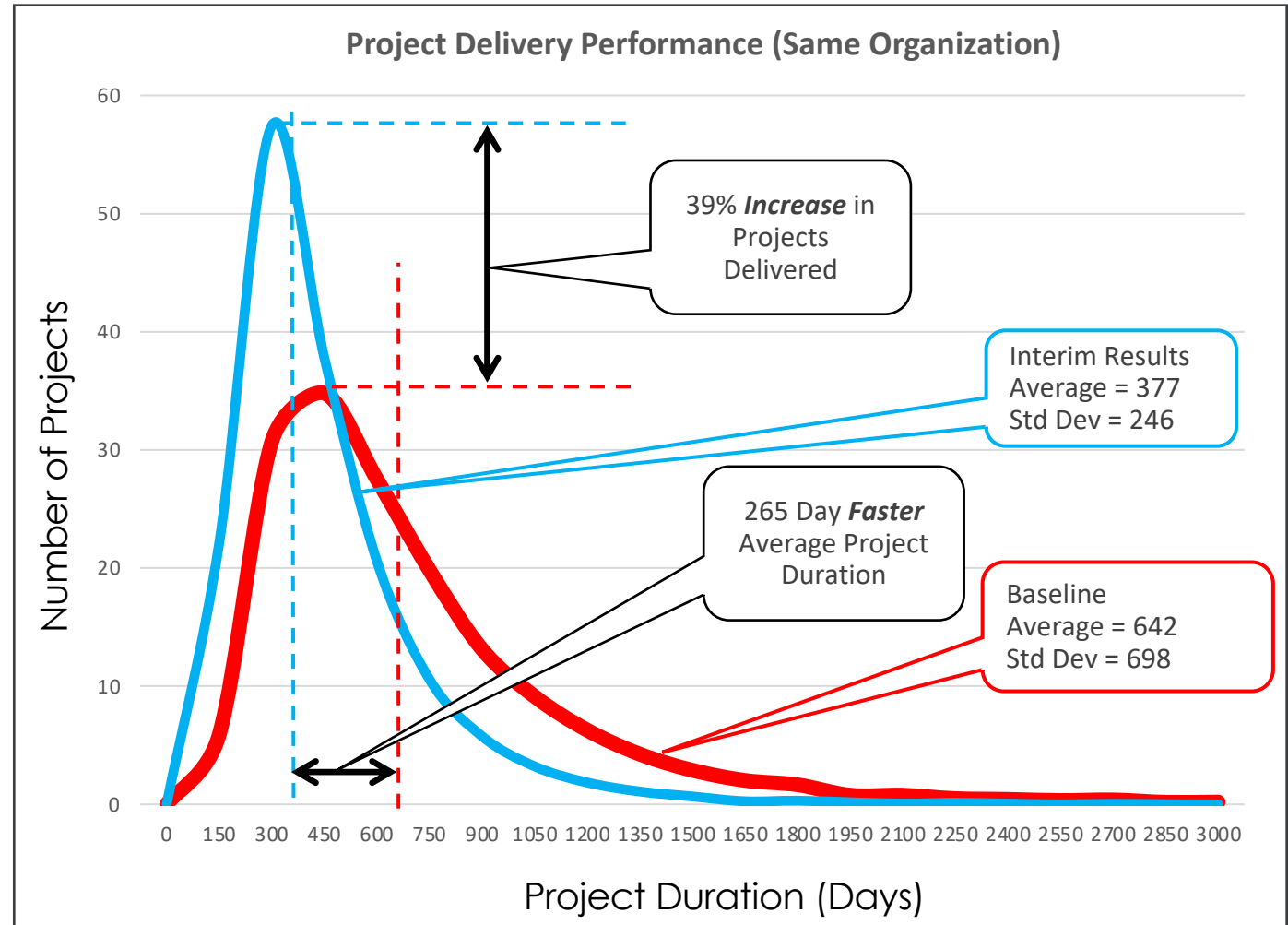


WHAT HAS BEEN ACHIEVED:

CUSTOMER EXAMPLE

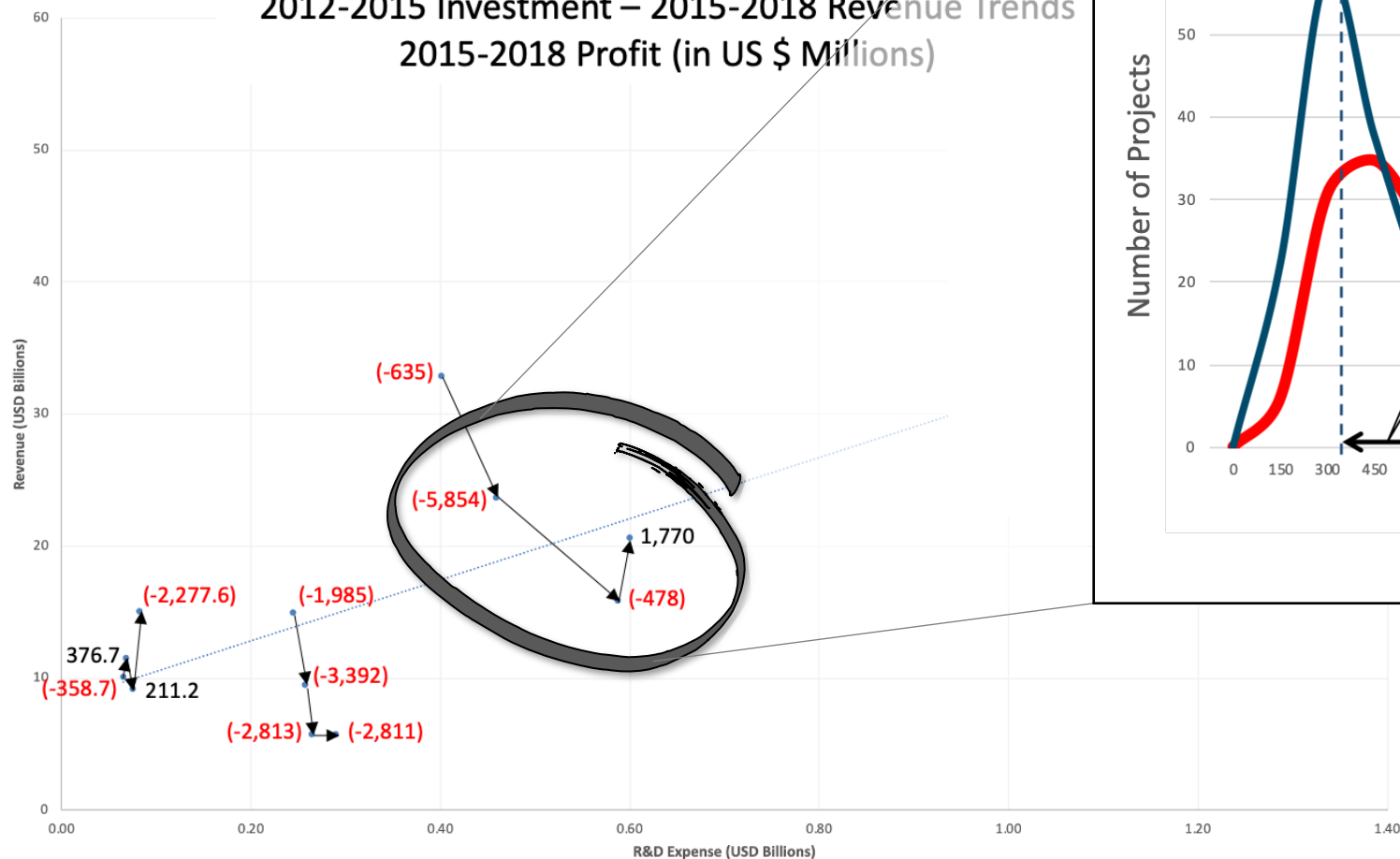
Implementing LPD has led to:

- **\$160 Million** Annual **revenue increase**
- **42% reduction** in average project **Time-to-Market**
- **65% reduction** in **std dev.**
 - Variation reduction leads to predictable delivery
- **39% Increase** in **Projects delivered.**
- **# of projects (WIP)** was held constant – duration reduction is relational to throughput increase
- **3% reduction in workforce** due to drop in price of oil

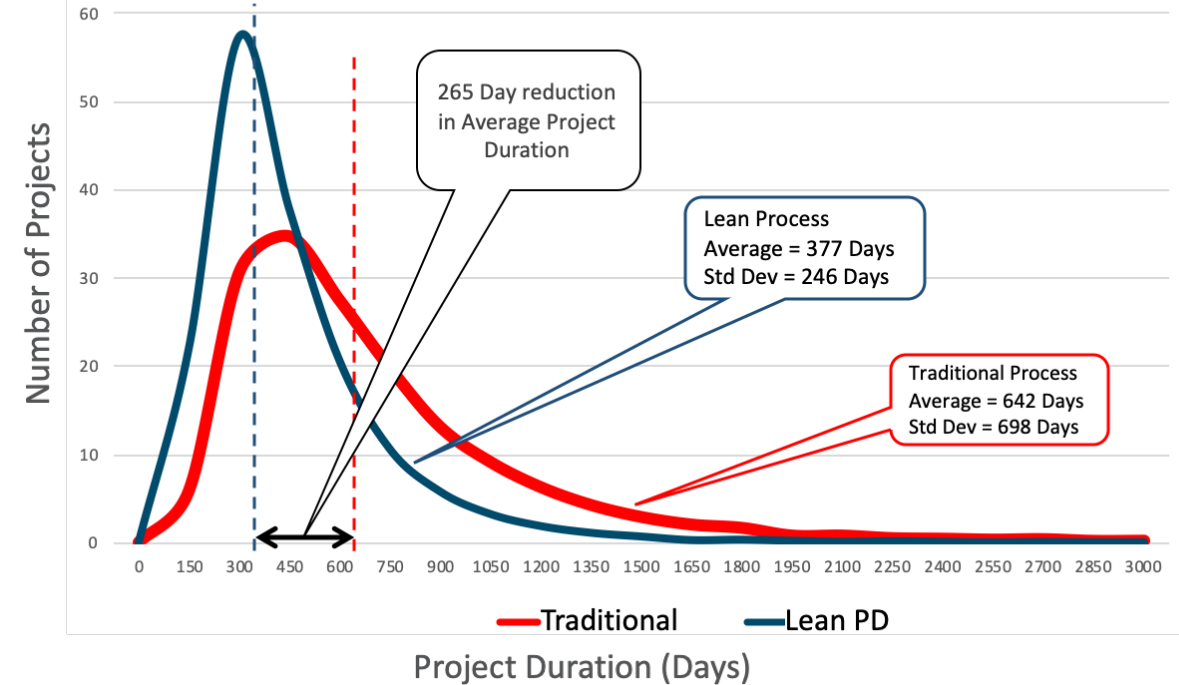


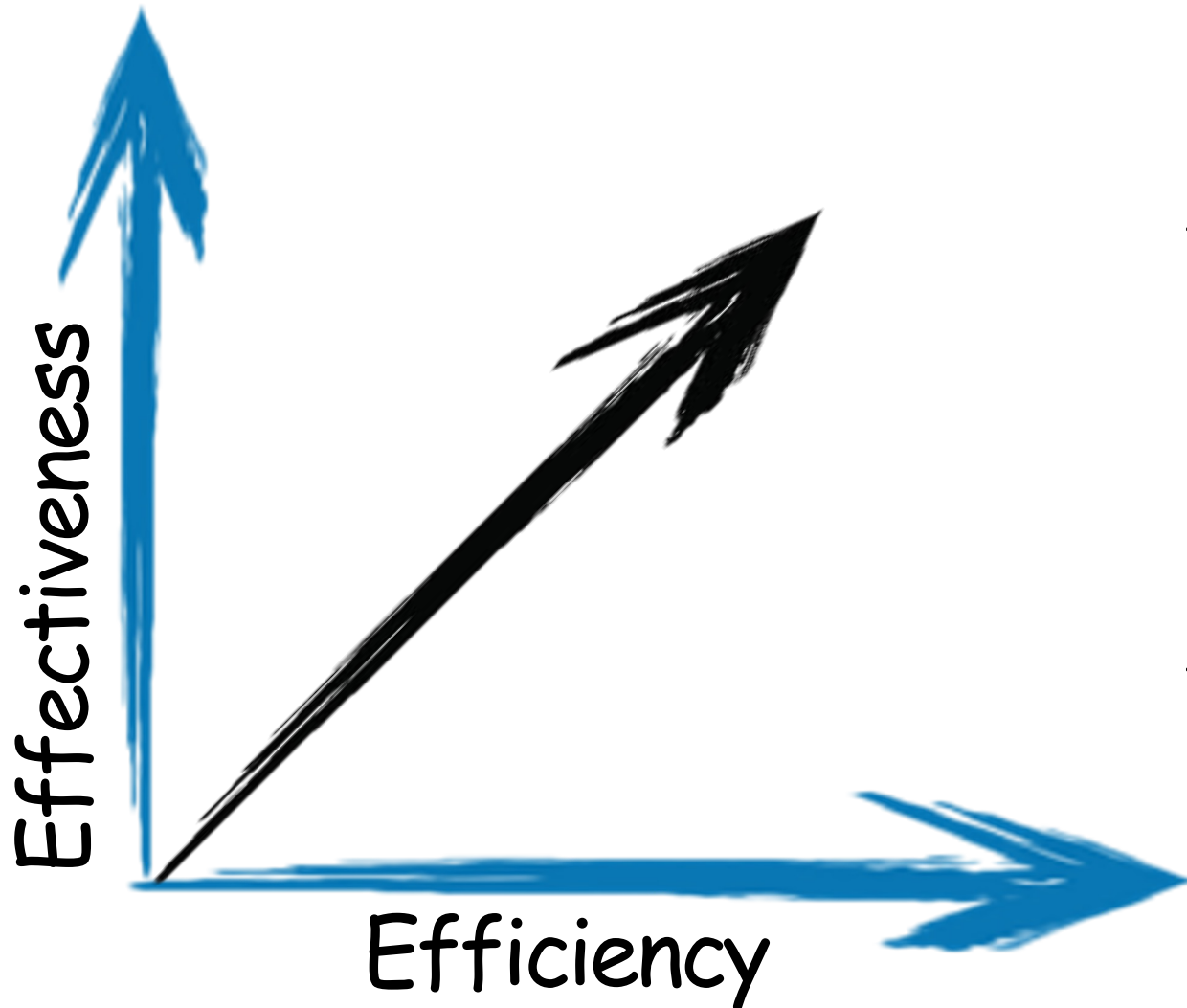
RETURN ON R&D INVESTMENT & PROFIT VARY OVER TIME

Energy Equipment & Services
2012-2015 Investment – 2015-2018 Revenue Trends
2015-2018 Profit (in US \$ Millions)



Product Development Portfolio Performance





Effectiveness: The impact a new product or innovation has in the market, which we refer to as the “*lift*.” This is generally measured in terms of return on R&D investment, either in the form of revenue, profit, market share, or some direct business metric.

Efficiency: The amount of innovation, change, or number of new products a given organization can produce, which we refer to as ‘*throughput*’. This is generally measured in terms of the number and type of products introduced per month, quarter, or year, depending on the business, in relation to the size of the organization.

THE JOURNEY FROM A \$300M TO \$500M COMPANY

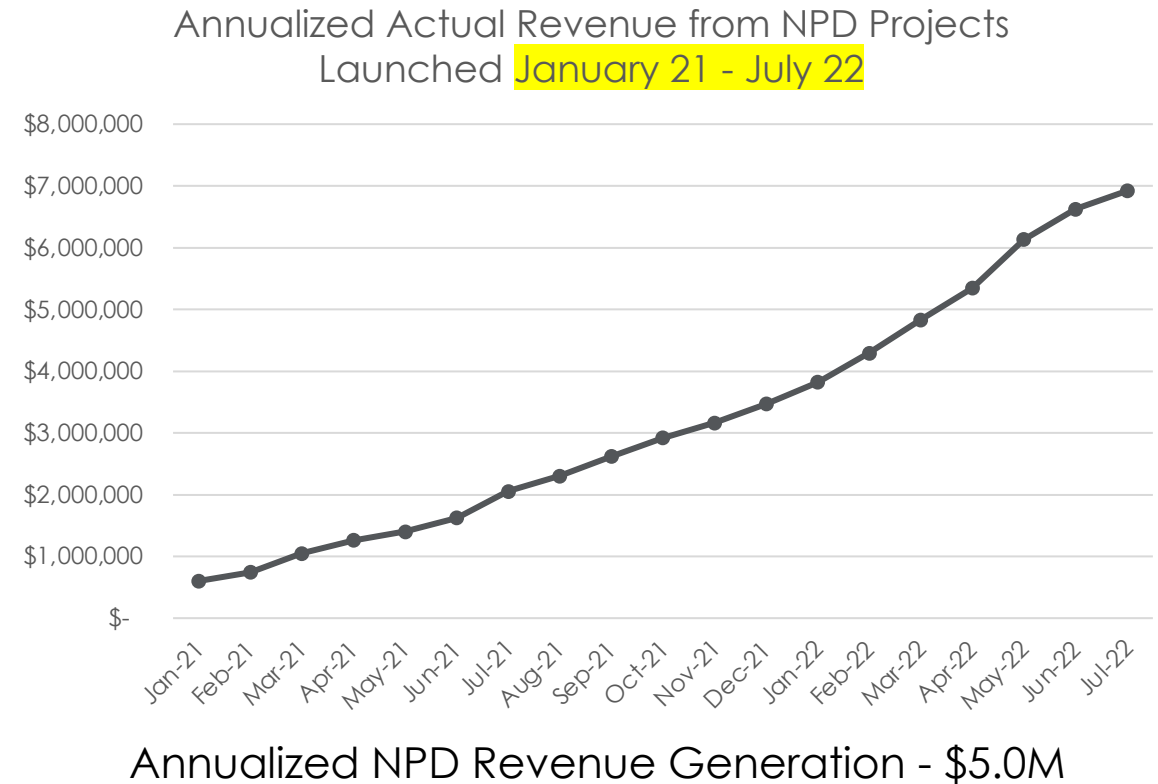
A Case Study:

From a 'back-of-the-envelope' calculation perspective, we identified that we needed to double the throughput capacity (reduce the time-to-market by half) and double the lift per project.

This is further supported from some basic heuristics where 20% of the revenue should be from new products 3 years or newer. At a current revenue basis of roughly \$300,000,000, this would indicate an annual contribution from new products of approximately \$20,000,000.

Doubling the '*throughput*' from \$5M to \$10M would contribute 1/2 of the goal

Doubling the '*lift*' contributes the other 1/2 from \$10M to \$20M

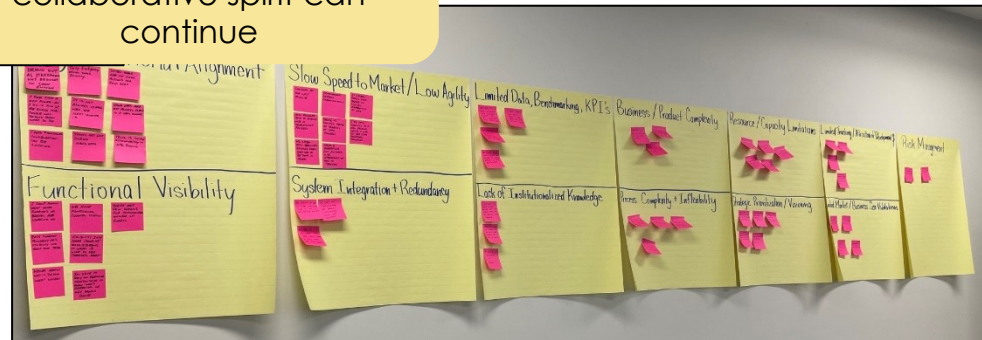


BEGAN WITH A WORKSHOP TO INTRODUCE LEAN PRODUCT DEVELOPMENT PRINCIPLES AND FACILITATED CROSS-FUNCTIONAL DISCUSSION OF WHAT THE FUTURE NPD PROCESS COULD LOOK LIKE

Participants expressed a new understanding of how NPD could be improved through lean product development

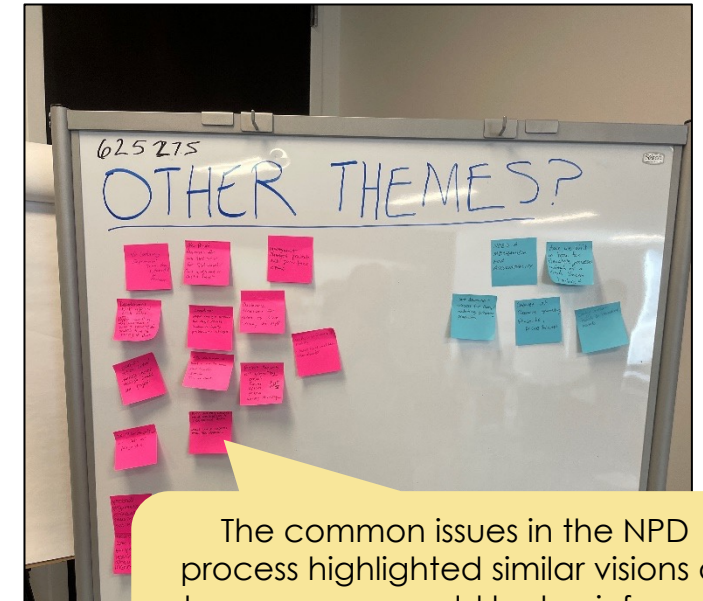


Many attendees expressed cautious hope that the collaborative spirit can continue



- TEAM #1
- WHAT DID YOU HEAR/KEY TAKEAWAYS?
 - defining process & gaps (knowledge)
 - PRIORITYZATION
 - Bin development important
 - Firewall implementation
 - roles/contracts clearly defined
 - dedicated project/category teams
 - WHAT DOES SUCCESS LOOK LIKE?
 - no litigation / audits / recalls
 - strategic alignment
 - fully compliant product / labels
 - ONE delivery
 - data tracking / reliability
 - accountability metrics
 - understanding of core project requirements
 - CONCERNS
 - transparency
 - strategic alignment
 - complexity of business / # of projects
 - no buy-in / resistance to change
 - momentum

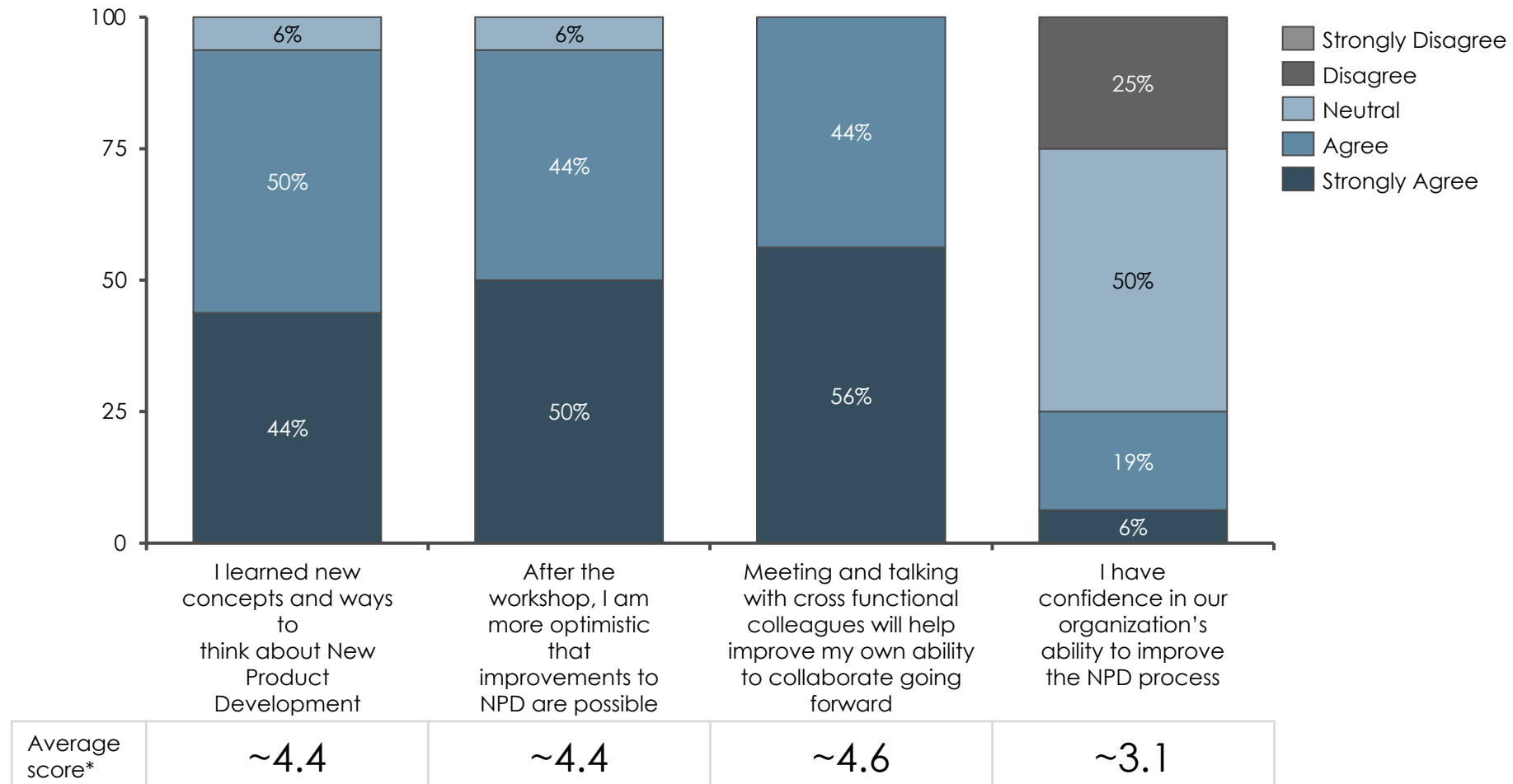
Teams recognized that they share a desire to be successful, to collaborate more effectively, and ultimately deliver the best product to consumers



The common issues in the NPD process highlighted similar visions of how success would look reinforced the idea that we should be in this together

WORKSHOP PARTICIPANTS LEARNED NEW NPD CONCEPTS AND EXPRESSED CAUTIOUS OPTIMISM, WHILE MANY HAVE LIMITED CONFIDENCE IN THE COMPANY'S ABILITY TO IMPROVE

Post NPD Workshop Survey Responses



THE LPD WORKSHOP RESULTED IN SEVERAL KEY 'WINS' FOR THE ORGANIZATION

LPD workshop key 'wins'



Brought key stakeholders from across functions together to discuss the NPD process



Helped break down siloes between functions through breakout sessions



Created an opportunity for engagement and team building



Generated excitement in the organization around improving the NPD process



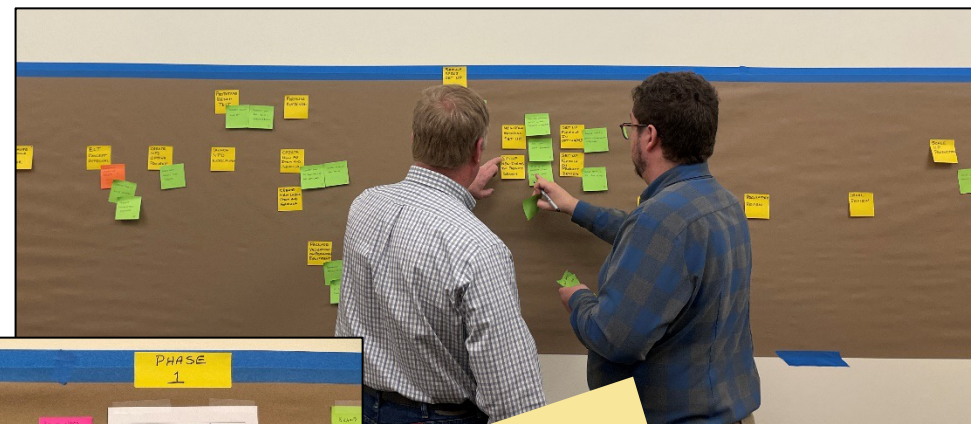
Allowed different functions to feel heard and to 'buy-in' to the project

THE BROWN PAPER SESSIONS HELPED TO CRYSTALLIZE KEY ISSUES AND HIGHLIGHT POTENTIAL SOLUTIONS

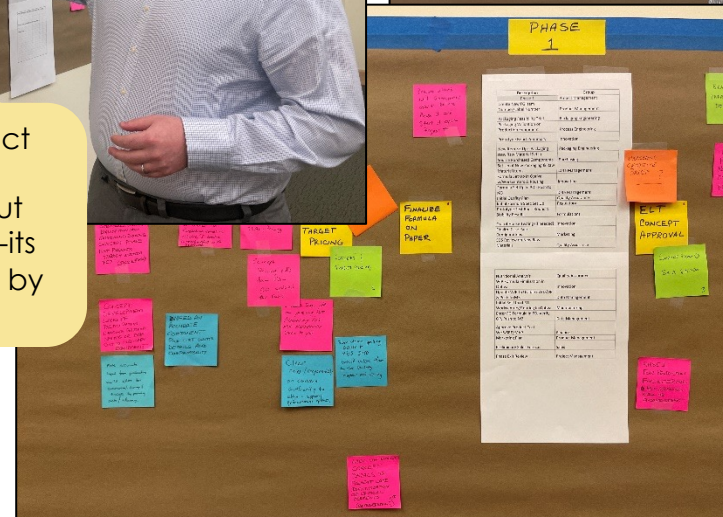
Overview of 'Brown Paper' sessions



The process for new product introductions (the most complex) was mapped out represented by green post-its and processes represented by yellow post-its

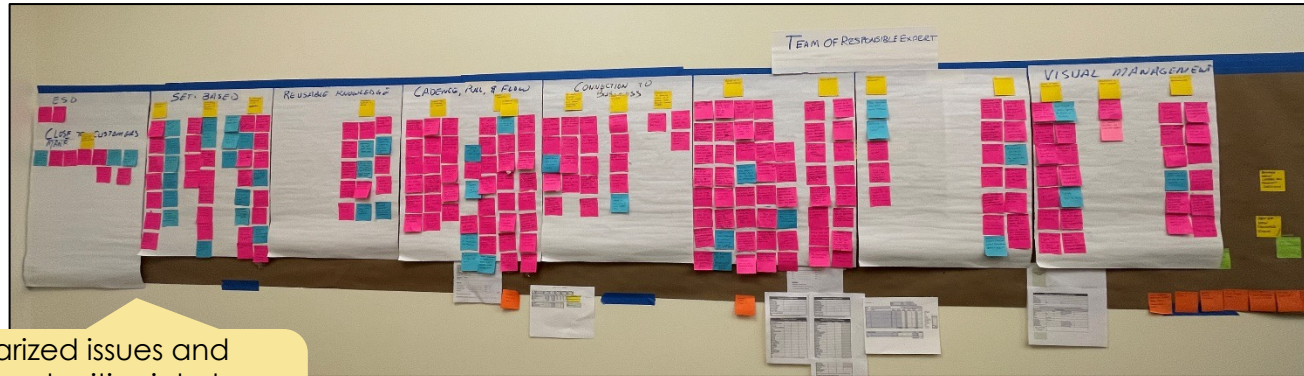


Participants from different functional areas described key issues in depth and added pink post-its to indicate issues as well as blue post-its to highlight potential solutions / opportunities



WE THEN CONVERTED THE LEARNINGS FROM OUR BROWN PAPER DISCUSSIONS INTO DETAILED RECOMMENDATIONS ACCORDING TO 7 +1 PRINCIPLES

Transitioning learnings into solutions



We summarized issues and potential opportunities into key themes on the physical brown paper

We also created an exhaustive list of issues included in the brown paper and made sure that each were tagged to at least 1 solution

Argo_Nutra Brown Paper Items_v01.xlsx - Last Modified: Just now					
File	Home	Insert	Draw	Page Layout	Formulas
Data Review View Help Refinitiv					
G1					
	A	B	C	D	E
1	Framework Applicability	Issue or Solution	Text	Solution	Framework or Solution type
2	C,D	I	Finance does not always work with Sales to validate pricing / costing prior to ELT	Have finance and sales validate pricing / costing prior to ELT	D Overarching
3	C,D	I	Costing sheet and detail in Optiva trigger not included for Finance to sign off costing	Ensure there is a trigger in Optiva for Finance to sign off	E Tactical
4	E,F	?	Testing process Proto testing verification testing, validation testing, how is this done?		
5	E,F	N	I run 100 vitamin C products so I know what is going to do in stability testing but I do it anyway because it is part of the process		
6	F	N	Final forecast trigger by email—outside of Optiva—or 120 day SOP deadline. For NPD, we just just enter when received		
7	C,D	I	International formulas done in separate projects rather than in parallel	Ensure projects are duplicated for international projects when domestic projects are created if applicable	A Tactical
8	E,F	S	Pencils down after approval		
9	All	I	Unclear delineation of roles & responsibilities between functional groups	Clearly define roles and responsibilities within and across functional groups	B Overarching
10	All	S	Clear delineation of roles & responsibilities between functional groups		
11	E	N	Formulator will run stability test at Prototype if unknown or high risk material		
12	E	I	Bench test prototype not matching claims developed earlier	Marketing to communicate with formulation	E Overarching
13	All	I	No lessons learned process to prevent repeat issues	Ensure there is a standardized database where knowledge is captured throughout the NPD process is captured	G Overarching
14	C,E	I	Innovation sometimes misrepresents what they need or want to Purchasing	There should be a form that is auto populated based on the raw materials needed for the prototype and scale up and if they need more it requires escalation	E Overarching
15	C,D	S	More customer validation could be an improvement (consumer testing or review)	Create a standardized consumer validation process with certain	D Overarching
16	C,E	I	Formulators and Marketing agree on pricing with Raw suppliers w/o purchasing, limiting ability to negotiate cost	Purchasing should be the point of contact with suppliers and all conversations should have purchasing included	E Overarching
17	E,F	I	Updated costing only happens at scale up—not updated at end of prototype	Costing must be required at the end of prototype phase before it can move on to scale up	E Tactical
18	D,E	I	Project work will sometimes start before Phase 1 and start of Optiva project #	Enforce adherence to the PLM system and that all work is tracked	B None
19	All	I	Lack of traceability in any kind of change in pricing, sourcing, etc. through development	Add traceability function in Infor systems	F Tactical
20	F	I	Forecast is never right for ANYTHING 90% overinflated	Have marketing finance and sales vet forecasts	D Overarching
21	E,F	I	There is not a prototype material code to ensure material is available to run	Segregate production materials from experimental orders	F Tactical
22	C,D,E	I	Innovation at times picks new raw suppliers	Purchasing should be the point of contact with suppliers and all conversations should have purchasing included	E Overarching
23	C,D,E	I	Formulators work on what Max tells them—do not necessarily know if ELT approved	Any escalation or project prioritization over existing projects should require ELT approval	B Overarching
24	All	I	Missing drawing or details of components w/in Optiva	Enforce discipline across all functional groups	B Overarching
25	E,F	I	Production engineer is not working to defined timelines	ELT to enforce MBO	B Overarching
26	B,D,E,F	I	Lack of escalation pathway to approve risky workflows	ELT agenda item escalation topics to be discussed	E Tactical
			Structure/Function Validation now happening during concept phase. Products not through the		

TRANSFORMATION APPROACH INVOLVED SEVERAL WAVES OF EFFORT ORDERED BASED ON PRIORITY, DIFFICULTY, AND DEPENDENCIES



Wave 1: ***Stabilize & Connect*** (1-3 Months)

- Bring accountability to the process
- Conduct initial 'clean-up' of active projects to prioritize, pause, or cancel to free capacity
- Establish a 'firewall' at the ELT to feed development based on a rigorous criteria to optimize project selection
- Improve fiscal oversight & control within project approval
- Define key metrics to measure project contribution

Wave 2: ***Visualize & Sanitize*** (4-6 Months)

- Improve project-level cross-functional project team collaboration
- Establish standard weekly meeting cadence to focus on project execution, decision making, and issue resolution
- Introduce standard project tracking format
- Promote 'Help-chain' to effectively address issues in a timely way

Wave 3: ***Build & Align*** (7-12 months)

- Link work sequence and handoffs through SIPOC exercise involving people doing the work
- Create and document standard work elements
- Clarify & Establish ownership, accountability, and roles & responsibilities for work elements
- Establish integration events to align across Claims, Formula, Label, and Go-to-Market

Wave 4: ***Lock in the gains*** (12 months plus)

- Institute standard schedule-centered Learning Cycles based on project and customer types
- Create visible knowledge and rubrics for decision making and handoffs
- Ensure check sheets capture new learning
- Training documents for new people
- Focus on sustaining the changes and use After Action Reviews (AARs) to continually improve the development process

AN OVERALL CHANGE ROADMAP WAS DEFINED BASED ON A PRIORITIZATION OF THE INITIATIVES (1 OF 4)

Change initiatives		Change roadmap	Month 1-3	Mo. 4-	Mo. 7-	Mo. 10-12
		Change initiative	Wave 1	Wave 2	Wave 3	Wave 4
A	Portfolio management	A1. Establish and communicate overarching financial targets & strategic vision to the organization				
		A2. Determine organizational resource investment according to brand roles And gaps in company objectives				
		A3. Implement a true Sales & Operations Planning (S&OP) process to match revenue and the expected incremental growth against the production capacity				
		A4. Assign standard project categories and lengths to determine project mix and quantity of initiatives				
		A5. Create a single, broadly accessible portfolio management framework to enable the categorization of NPI projects according to value and innovation				
		A6: Provide visibility of project performance for the ELT through a regular cadence of portfolio management reviews and resolution of issues that prevent smooth flow				
B	Management by objectives	B1. Translate financial goals related to NPD into specific ELT and BU Head objectives				
		B2. Cascade NPD objectives to functional groups to align on priorities				
		B3. Assign KPIs that are meaningful in tracking progress against objectives across all functions and continuously evaluate performance				
		B4. Define clear roles and responsibilities throughout the organization and evaluate organizational structure for both functions & individuals				
		B5. Develop a RACI to identify which stakeholders within the NPD process for specific tasks				
		B6. Ensure project data widely distributed so that managers can provide coaching where necessary and develop enforcement mechanisms to ensure that individuals and functions are fulfilling roles				

AN OVERALL CHANGE ROADMAP WAS DEFINED BASED ON A PRIORITIZATION OF THE INITIATIVES (2 OF 4)

Change initiatives		Change roadmap		Month 1-3	Mo. 4-	Mo. 7-	Mo. 10-12
		Change initiative	Wave 1	Wave 2	Wave 3	Wave 4	
C	Ideation	C1. Host cross-functional workshops run by Marketing with an established cadence focusing on gaps identified in the ELT portfolio management reviews					
		C2. Understand customer needs by refreshing consumer ethnography / category appraisals on a regular cadence					
		C3. Implement a true Sales & Operations Planning (S&OP) process to match revenue and the expected incremental growth against the production capacity					
		C4. Define key knowledge gap areas to better understand drivers of complexity and categorize potential projects by type and duration					
		C5. Generate enough ideas to significantly outnumber the quantity of projects the organization can execute to enable a steady flow of potential projects					
D	Pipeline fulfillment	D1. Ensure that the selection and delivery of projects is tied to customer cadence					
		D2. Create development budgets and resource requirements for all expected initiatives, matching the budget to the actual organizational capacity					
		D3. Calculate expected ROI on potential initiatives to aid in optimizing the idea into action process					
		D4. Fill portfolio gaps with the best projects that meet the brand's needs					
		D5. Define clear project success criteria across all functions for ELT approval					
		D6. Identify both synergies and potential discord between channels / brands					
		D7. Focus development / prototyping activities around closing the defined knowledge gaps					
		D8. Institute a formalized cross-functional 'make-buy' decision-making process					
		D9. Host a pre-ELT connect with cross-functional representatives across the organization to provide feedback and align on key decisions					

AN OVERALL CHANGE ROADMAP WAS DEFINED BASED ON A PRIORITIZATION OF THE INITIATIVES (3 OF 4)

Change initiatives		Change roadmap	Month 1-3	Mo. 4-	Mo. 7-	Mo. 10-12
		Change initiative	Wave 1	Wave 2	Wave 3	Wave 4
E	Ideation	E1. Enable cross-functional project teams to meet on a regular cadence to tackle project execution				
		E2. Create central source of truth visual management project boards across project teams				
		E3. Conduct pre-planned evaluations of project adherence to original success criteria at iterative integration events				
		E4. Decouple the project management workflows from PLM data entry activities and follow industry best practices				
		E5. Separate pilot test runs that occur within the development process post-handover production scale up				
		E6. Track budget adherence and on-time-delivery by project				
F	Pipeline fulfillment	F1. Require a 'go-to-market' plan which includes detail on channel strategy, sales collateral, and production start-up procedures etc.				
		F2. Develop and standardize technical transfer documentation				
		F3. Track and review success criteria adherence with ELT and stakeholders to provide final review and alignment prior to start of production				
		F4. Ensure that BOMs include the cost of manufacturing				
		F5. Enable audit functionality in Infor systems				
		F6. Establish launch event "celebration" to bring together stakeholders for final review				
		F7. Institute cross-functional Change Control board to adjudicate post-handover requests				

AN OVERALL CHANGE ROADMAP WAS DEFINED BASED ON A PRIORITIZATION OF THE INITIATIVES (4 OF 4)

Change initiatives		Change roadmap		Month 1-3	Mo. 4-	Mo. 7-	Mo. 10-12
G	Ideation	Change initiative	Wave 1	Wave 2	Wave 3	Wave 4	
		G1. Define and track post launch KPIs on a quarterly basis					
		G2. Schedule cross functional project meeting post-launch and discuss lessons learned					
		G3. Establish a function specific role to curate knowledge sharing repositories and institutionalize organizational know-how					
		G4. Institute changes as result of post-launch learnings across the NPD process					
		G5. Utilize 3 rd party software to standardize and automate marketing communication review process increasing regulatory / legal bandwidth					
		G6. Define standard testing procedures by modality					

SCOPE OF WORK: WAVE 0 (FIRST 30 DAYS)

Wave 0 (First Month) Stabilize the Process

Action No.	Activity	Owner
Clean-Up/Rationalize/Prioritize - Get The Top Efforts Moving To Generate \$\$\$		
D10	Establish temporary criteria (e.g., BOM, size of prize, expected resource commitments) and enforce concept brief requirements to filter new projects being added to the commercialization process	ELT
E8	Conduct initial 'clean-up' of active projects to determine which projects should be prioritized, paused, or canceled to help alleviate the burden on the system	ELT
E9	Assemble a 'SWAT team' to bundle together like projects and address as a group decisions designed to alleviate organizational capacity burdens (e.g., outsourcing development, adding temporary surge capacity to address bottlenecks associated with certain tasks)	ELT
Measure The Process & Begin Creating Oversight & Discipline		
E14	Develop a standardized charter document that must be completed immediately after ELT approval	Marketing
E15	Create a product label form to evaluate claims, ingredients, and supplemental fact panel for quality, legal, and regulatory review	PMO
Build New Process		
E11	Expand read-only access in M3 to allow users visibility into key pieces of information (e.g., allow marketing to access M3)	Innovation
E12	Expand access to OEI / sales cube data to brand managers	Marketing
E10	Evaluate additional project management tools, including tools available through existing software suites	PMO, IT
B7	Create a transformation office and assign a dedicated transformation owner to lead the initiatives; designate PMO to own the day-to-day NPD process	ELT
Product Planning/Connection to The Business & Revenue/Profit Generation		
A7	Define the expected contribution NPD will have on BBCO's overall financial goals	ELT
E13	Perform lot and limit testing in development to avoid formulation scale up issues at formulation bookends points in production	IT

SCOPE OF WORK: WAVE 1 (MONTHS 1-3)

Wave 1 (Months 1-3) Bring Accountability To The Process

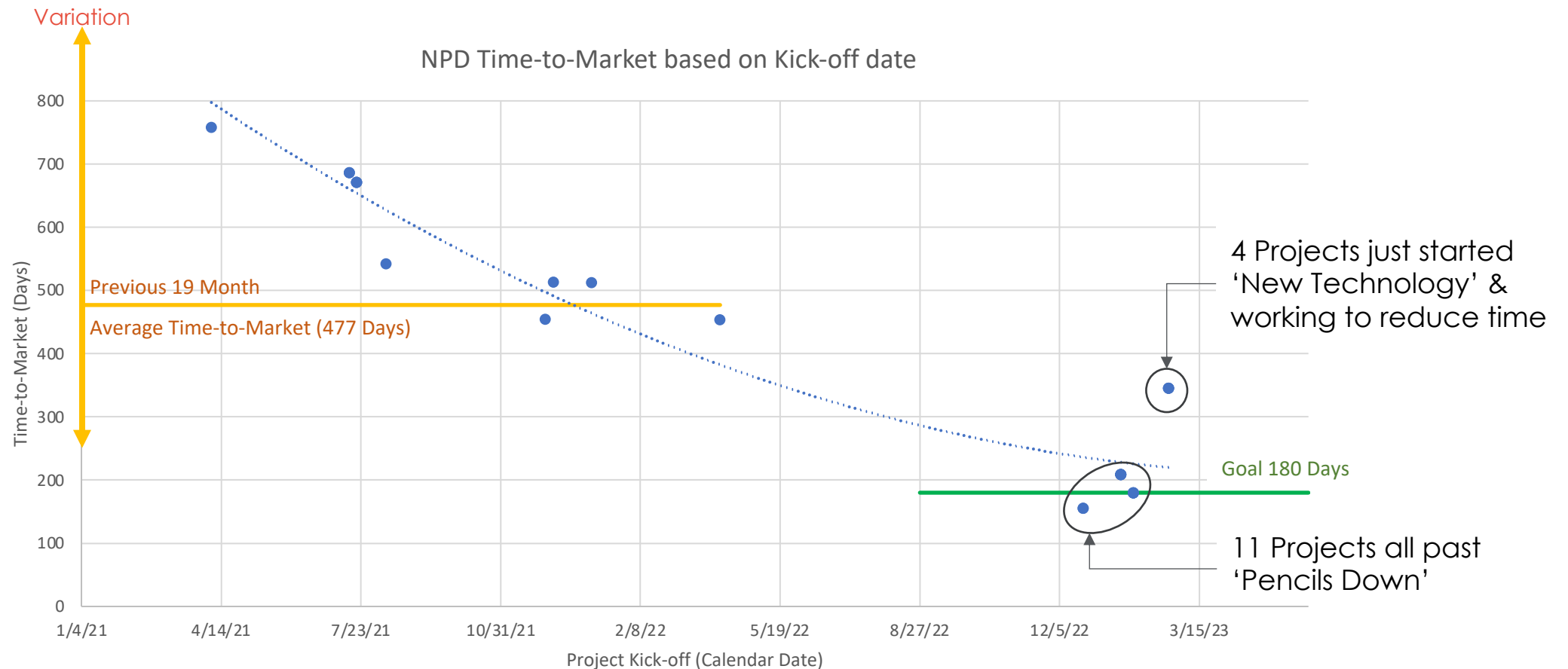
Action No.	Activity	Owner
Clean-Up/Rationalize/Prioritize - Get The Top Efforts Moving To Generate \$\$\$		
Measure The Process & Begin Creating Oversight & Discipline		
D5	Segregate idea generation from product development by implementing a 'firewall' at the ELT meeting with a strict set of criteria (e.g., size of prize, margin, consumer sentiment, expected distribution, etc.) that must be met before a project is 'greenlit' in ELT review to start development activities	ELT
D2	Create development budgets (e.g., plant trial expenses, quality testing, prototype material sourcing, etc.) and resource requirements (e.g., FTEs by function, CAPEX, out of house development, etc.) for all expected NPD initiatives, matching the need to the actual organizational capacity	Marketing, Finance
D3	Calculate expected ROI on potential initiatives to aid in project optimization / prioritization process	Marketing, Finance
D4	Define clear project information and required format across all functions for ELT approval, such as guardrails for what type of consumer validation is required by project type and a robust business case detailing the size of prize, margin, etc. (e.g., all RTDs require a focus group, generate \$2M in sales, etc.)	ELT
Build New Process		
E14	Develop a standardized charter document that must be completed immediately after ELT approval	Marketing
E15	Create a product label form to evaluate claims, ingredients, and supplemental fact panel for quality, legal, and regulatory review	PMO
B4	Define clear roles and responsibilities within the NPD process and evaluate the organizational structure for both functions and individuals to prioritize NPD initiatives, improve accountability, remove overlapping efforts (e.g., <i>project</i> management & <i>product</i> management, purchasing exclusively sources new raw materials, data entry into PLM system), and increase functional utilization (e.g., flex R&D resources to the highest value work)	ELT
C1	Conduct cross-functional (Innovation, sales, marketing) product planning workshops chaired by the PMO on an established cadence to identify basket of projects to fill gaps identified in the ELT portfolio management reviews. Meeting deliverables should include an aligned product plan	PMO
D1	Identify the customer cadence (e.g., retailer cut-in windows, industry conventions, etc.) tied to an NPD initiative and ensure that the idea selection and delivery timing match the specific channel go-to-market dynamics (e.g., HFS pre-sell window, launch window, customer regulatory review, etc.)	Marketing, Sales
Product Planning/Connection to The Business & Revenue/Profit Generation		
A1	Establish overarching financial targets & strategic vision and communicate these goals to the organization through townhalls, planning cycles, and formalized internal marketing documentation (e.g., \$500M revenue and \$100M EBITDA goal, becoming the most trusted natural source for health and wellness)	CEO
A2	Focus organizational efforts on aligning the brand portfolio roles (e.g., position Zhou as a growth brand) against the needs of the business (e.g., the revenue gap between today and strategic goal) and size the resource investment (e.g., development / in-market support budget, headcount, CAPEX, etc.) in proportion to the lift required to meet the organizational objective	CEO
B1	Translate financial goals related to NPD into specific ELT and BU Head objectives (e.g., distribute revenue gap amongst the brand heads in proportion to the size of their business and or forecasted growth rates)	CEO
B2	Cascade NPD objectives (e.g., revenue growth) to all functional groups to align on priorities (e.g., sales would define specific ACV targets by customer to meet revenue goals on new product launches)	ELT
B3	Assign KPIs (e.g., revenue, market penetration, net promoter score, sales velocity) that are meaningful in tracking progress against objectives across all functions and continuously evaluate performance	ELT, Function Heads

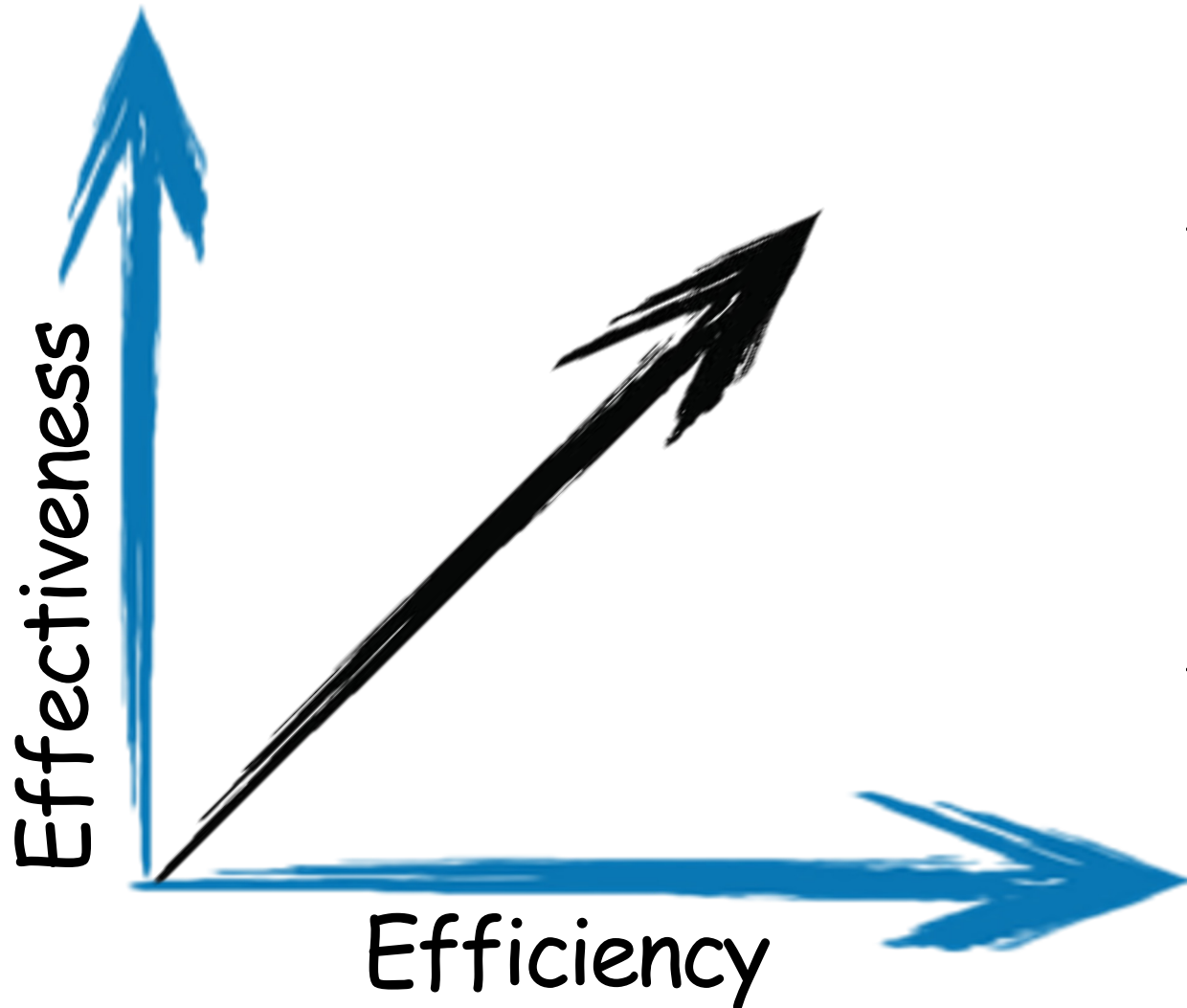
SCOPE OF WORK: WAVE 2 (MONTHS 4-6)

Wave 2 (Months 4-6) Increase Visibility, Build The System		
No.	Activity	Owner
Clean-Up/Rationalize/Prioritize - Get The Top Efforts Moving To Generate \$\$\$		
Measure The Process & Begin Creating Oversight & Discipline		
E1	Establish project-level cross-functional (Innovation, ops product development, quality, packaging development, production management, marketing, sales, purchasing, regulatory, legal, finance, and planning) project teams to meet on a regular cadence to tackle project execution, focused on decision making and issue resolution with a clear escalation chain when the team experiences out-of-scope changes	PMO
E3	Conduct pre-planned evaluations of project adherence to original success criteria at iterative integration events (e.g., formula development, scale-up, and go-to-market plans) with representatives across functions focused on decision making and issue resolution	PMO
E6	Track budget and timing adherence by project step to diagnose project slippage; In partnership with finance, the project team should track timing by step and function, R&D hours, material costs, scale up expenses and available-to-offer date	PMO; Finance
F2	Track and review success criteria adherence with ELT and stakeholders to provide final review and alignment prior to the start of production, confirming 'pencils down' for development activities.	PMO
Build New Process		
A5	Create a single, broadly accessible visual representation of projects that map the categorization of NPI projects according to customer value (e.g., truly new product, new product benefit, minor improvement to existing product, new product variation, or no change to customer / more efficient production method) and level of innovation (e.g., brand support, incremental improvement, next generation, or breakthrough innovation) to align across brands and properly prioritize organizational initiatives by brand portfolio roles to make informed tradeoff decisions	ELT, BU Heads
A6	Provide visibility into project performance (e.g., status, refreshed contribution to financial objectives, resource allocation, adherence to project scope, etc.) to the ELT through a regular cadence of portfolio management reviews to support the mitigation of risks and resolution of issues that prevent smooth flow of NPD activities	PMO
D9	Establish a regular pre-ELT connect cadence with cross-functional representatives (i.e., Innovation, ops product development, quality, packaging development, production management, marketing, sales, purchasing, regulatory, legal, and planning) across the organization to provide feedback and align on key decisions (e.g., claims, make-buy, budget, etc.) within the product concept brief	Cross-functional Leadership
E2	Create centralized visual management digital dashboards to act as a 'single source of truth' across project teams for timelines, actions, and status, issues and risks that is accessible to all stakeholders; dashboards should be used to support prioritization, alignment, and accountability across functions and be linked to ELT leaderboard portfolio reviews (see A6)	PMO
Product Planning/Connection to The Business & Revenue/Profit Generation		
A3	Implement a true Sales & Operations Planning (S&OP) process to match revenue and expected growth against current production capacity	CRO, COO
A4	Define project complexity by determining the gap between what we know today (e.g., market, consumer, technology, etc.) and what we need to learn to launch, which helps us identify resources and timing required to develop the product	ELT
C3	Define key knowledge gap areas (material, formula, production capability) to better understand drivers of complexity and categorize potential projects by type and duration (Please note: this will often be a cross-functional team and functional involvement will vary by project)	Various
C4	Develop idea generation process (utilizing secondary research, gathering consumer suggestions, third-party partners, etc.) that continuously brings forward enough ideas to significantly outnumber the quantity of projects the organization can execute; this will enable a natural competition of ideas and result in a steadier flow of potential projects expected to be most impactful for the business. Deliverable would include initiation of preliminary concept briefs	Marketing

WHAT WAS THE OUTCOME:

The **Time-to-Market for NPD** was **cut in half** between projects launched in the old process and the new process, indicating **throughput capacity has doubled** (holding the WIP constant).

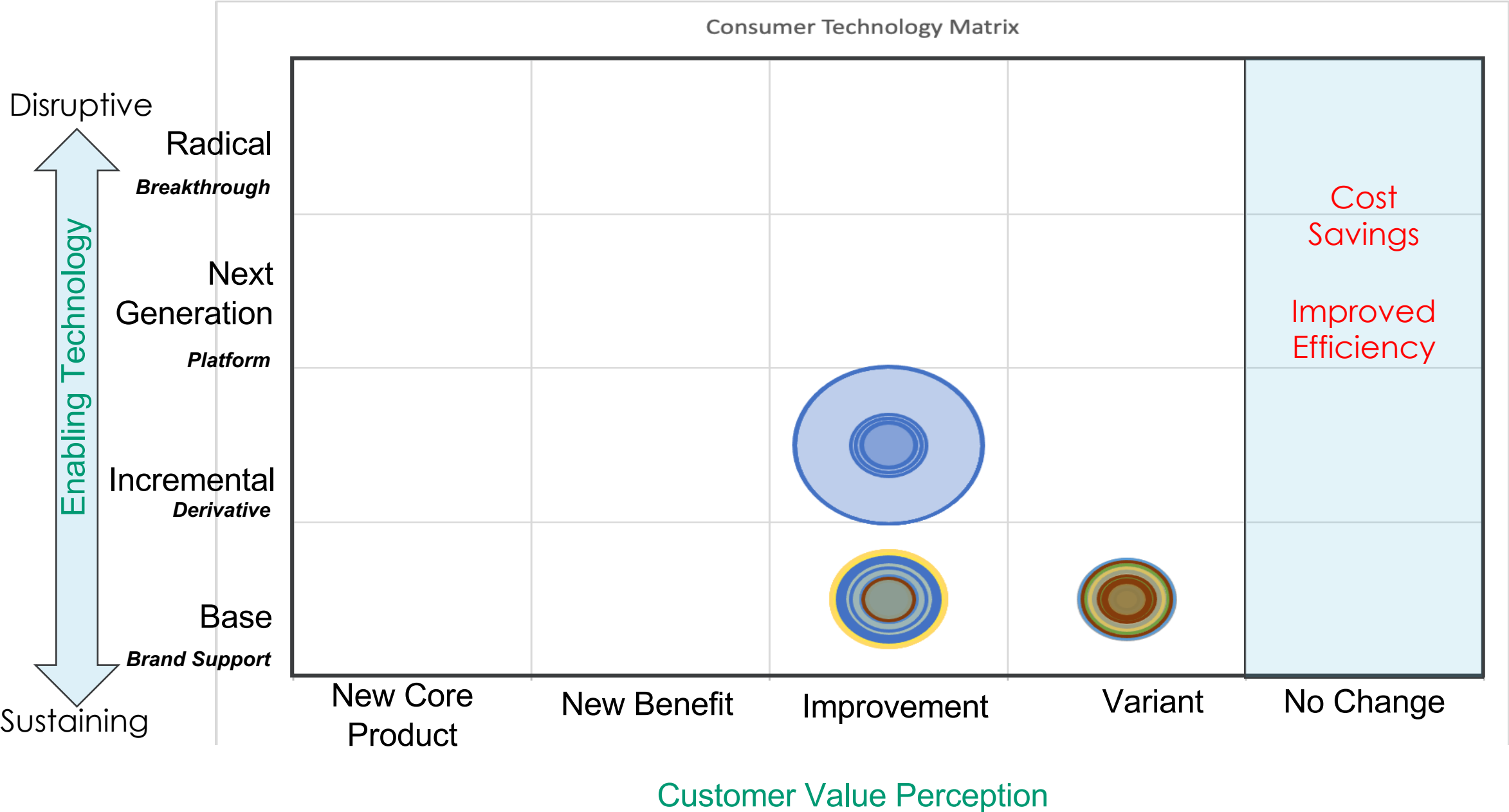




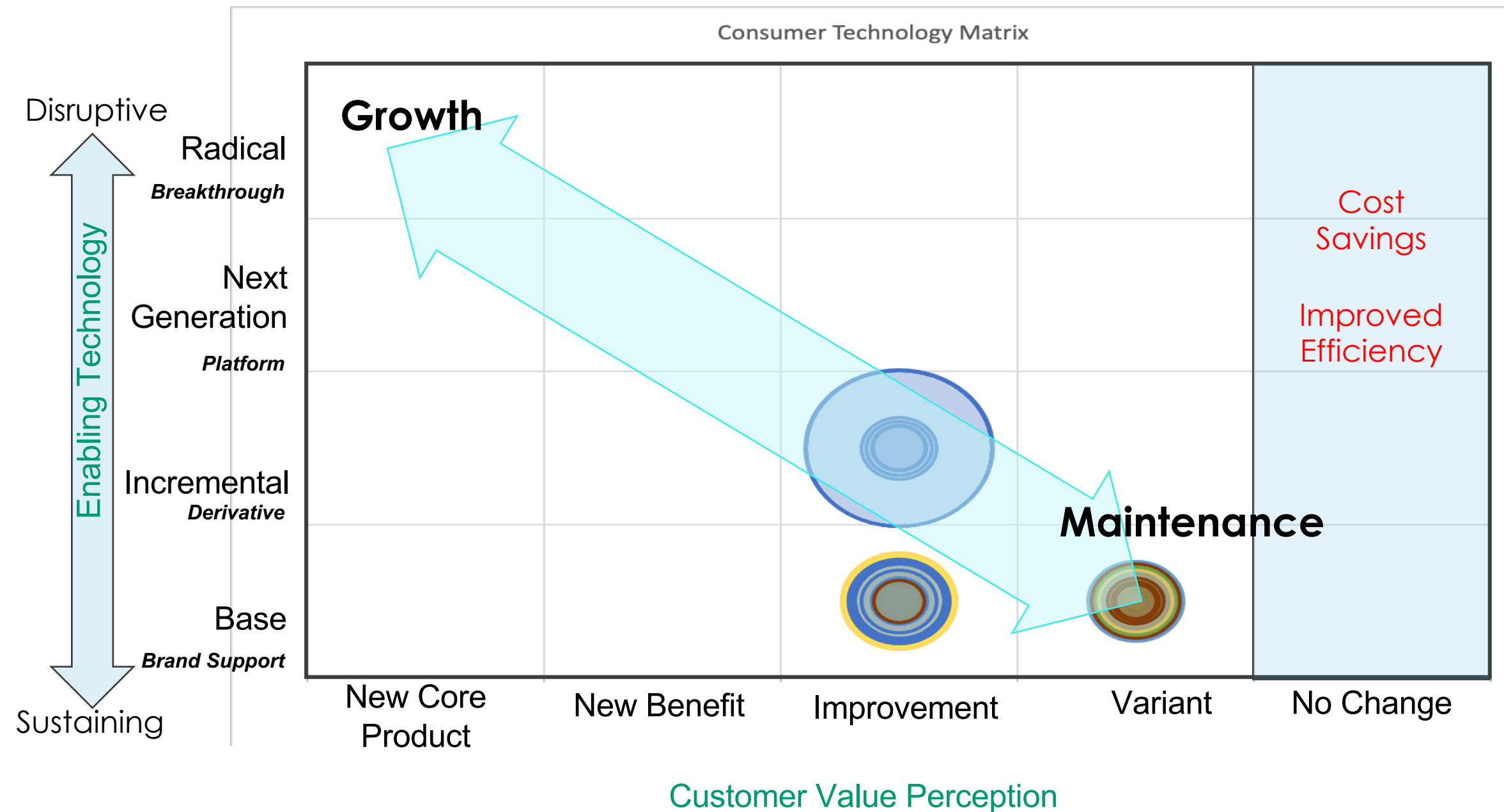
Effectiveness: The impact a new product or innovation has in the market, which we refer to as the “*lift*.” This is generally measured in terms of return on R&D investment, either in the form of revenue, profit, market share, or some direct business metric.

Efficiency: The amount of innovation, change, or number of new products a given organization can produce, which we refer to as ‘*throughput*’. This is generally measured in terms of the number and type of products introduced per month, quarter, or year, depending on the business, in relation to the size of the organization.

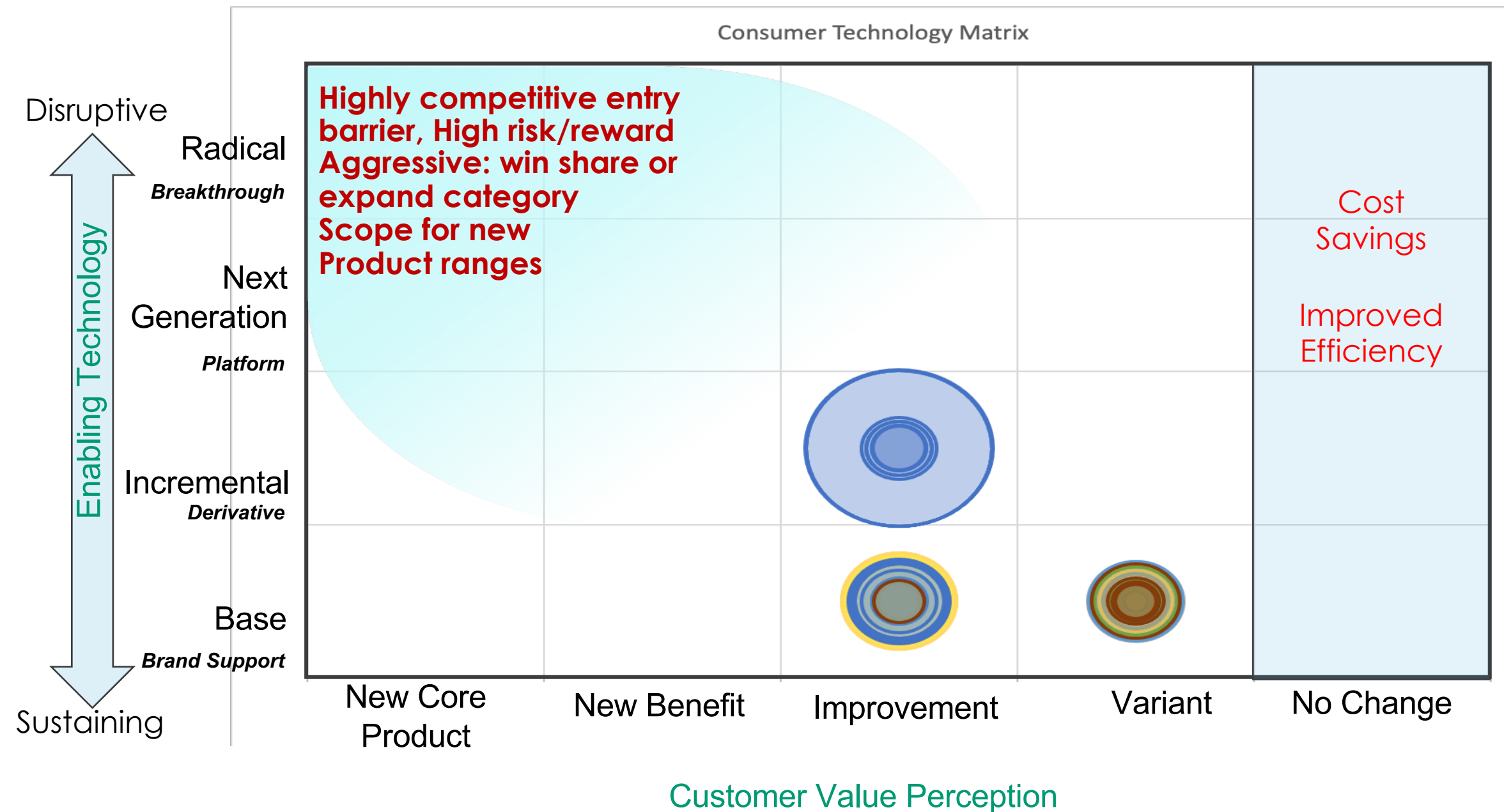
Consumer / Technology Matrix (CTM)



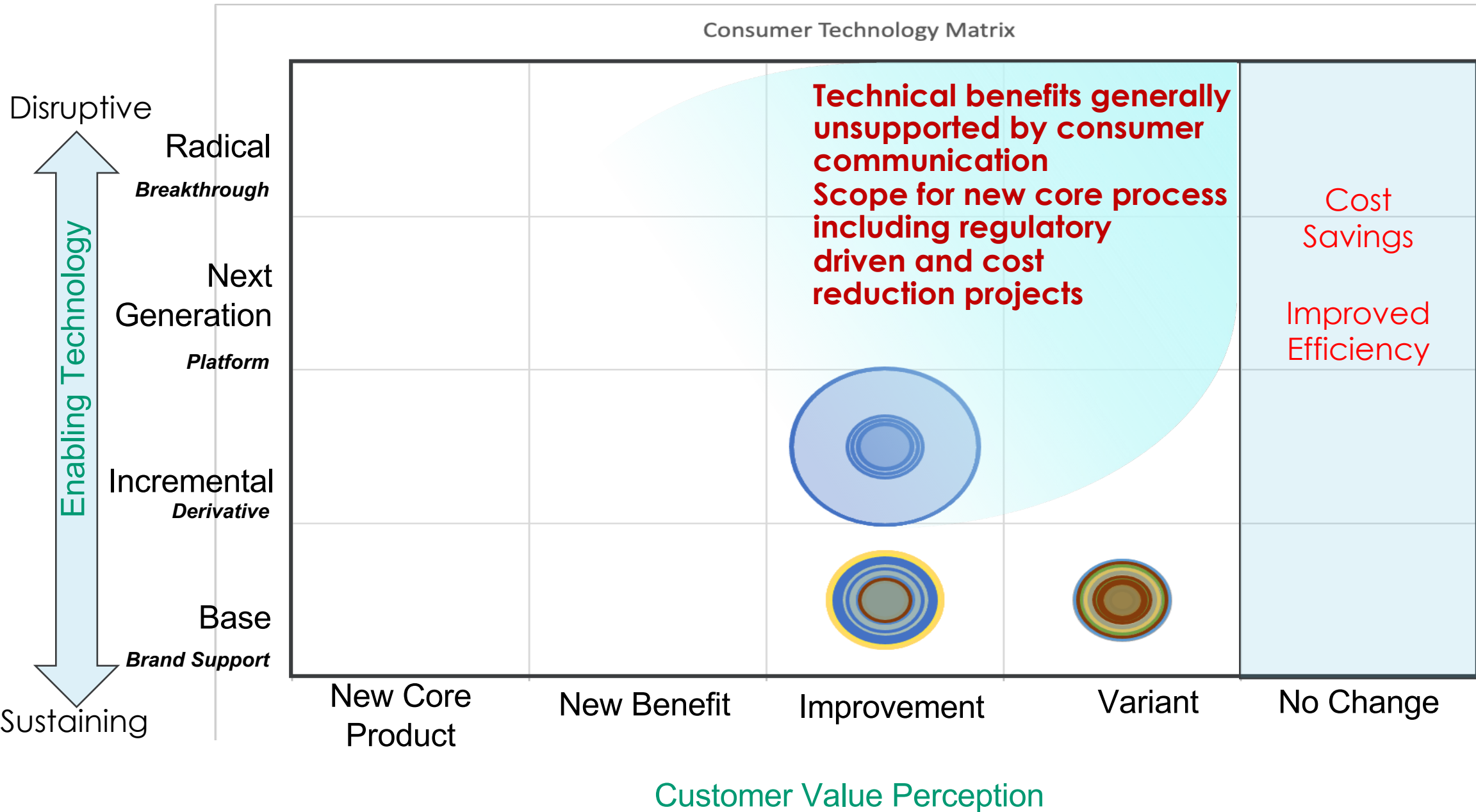
Consumer / Technology Matrix (CTM)



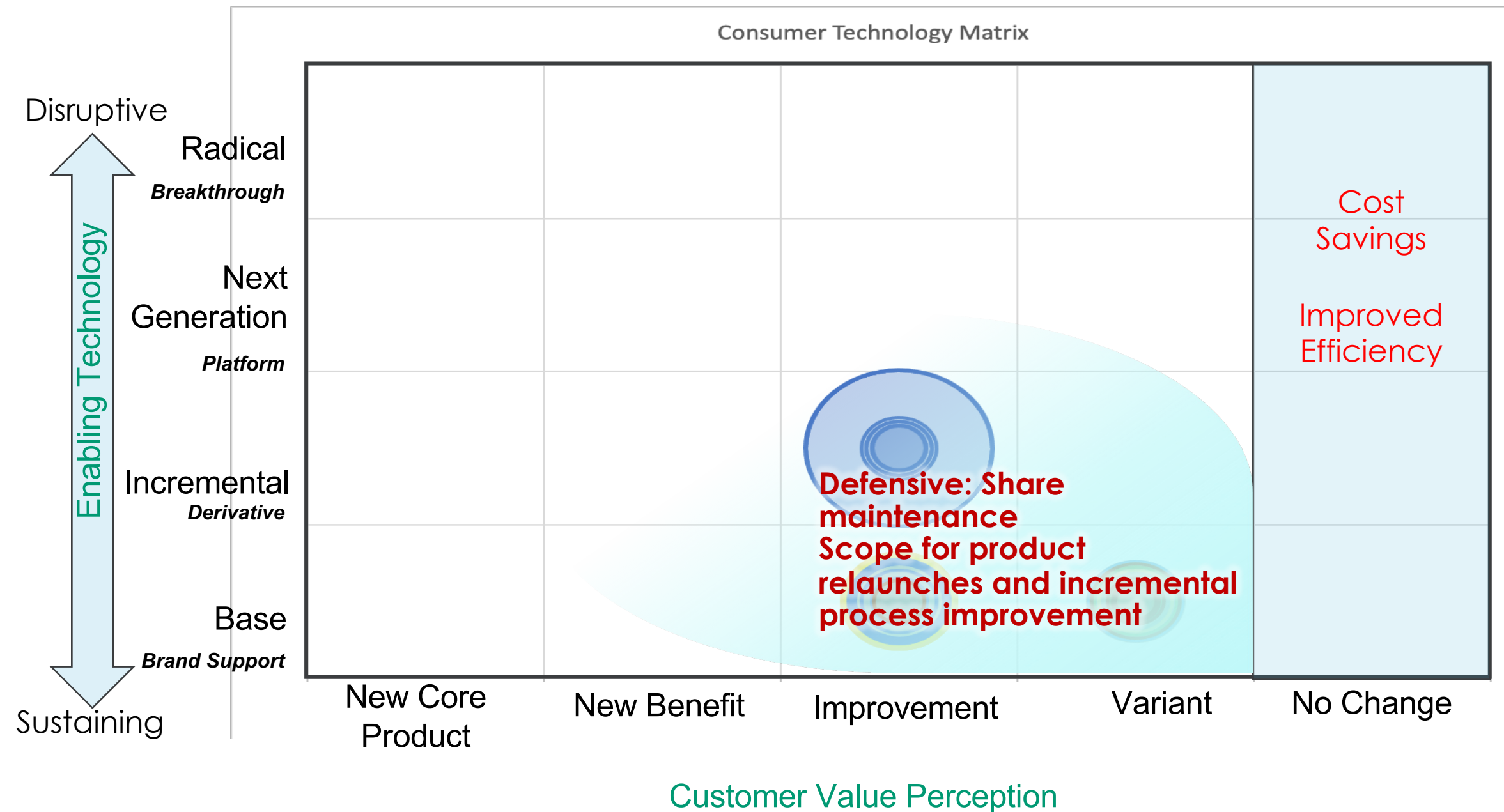
Consumer / Technology Matrix (CTM)



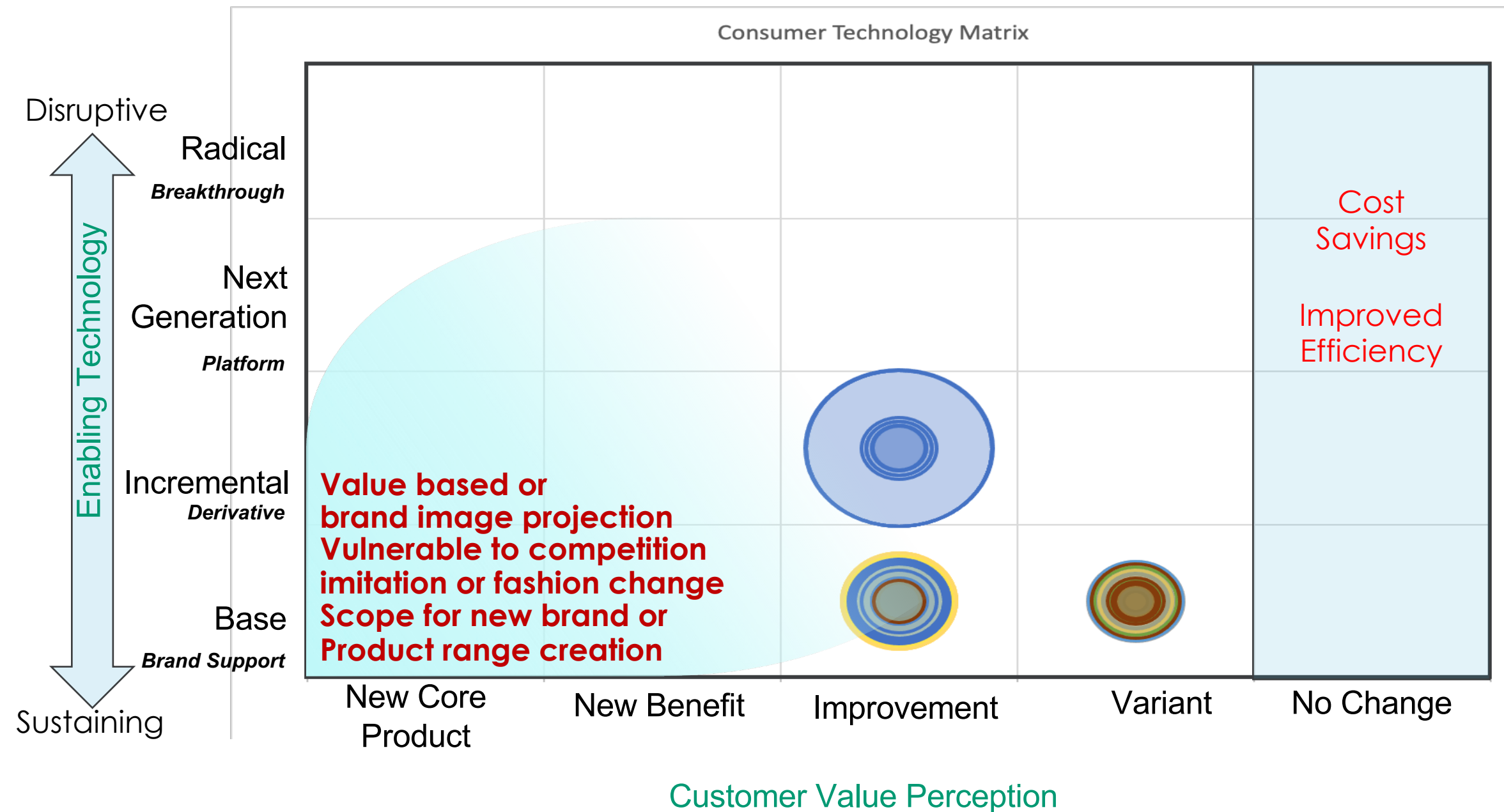
Consumer / Technology Matrix (CTM)



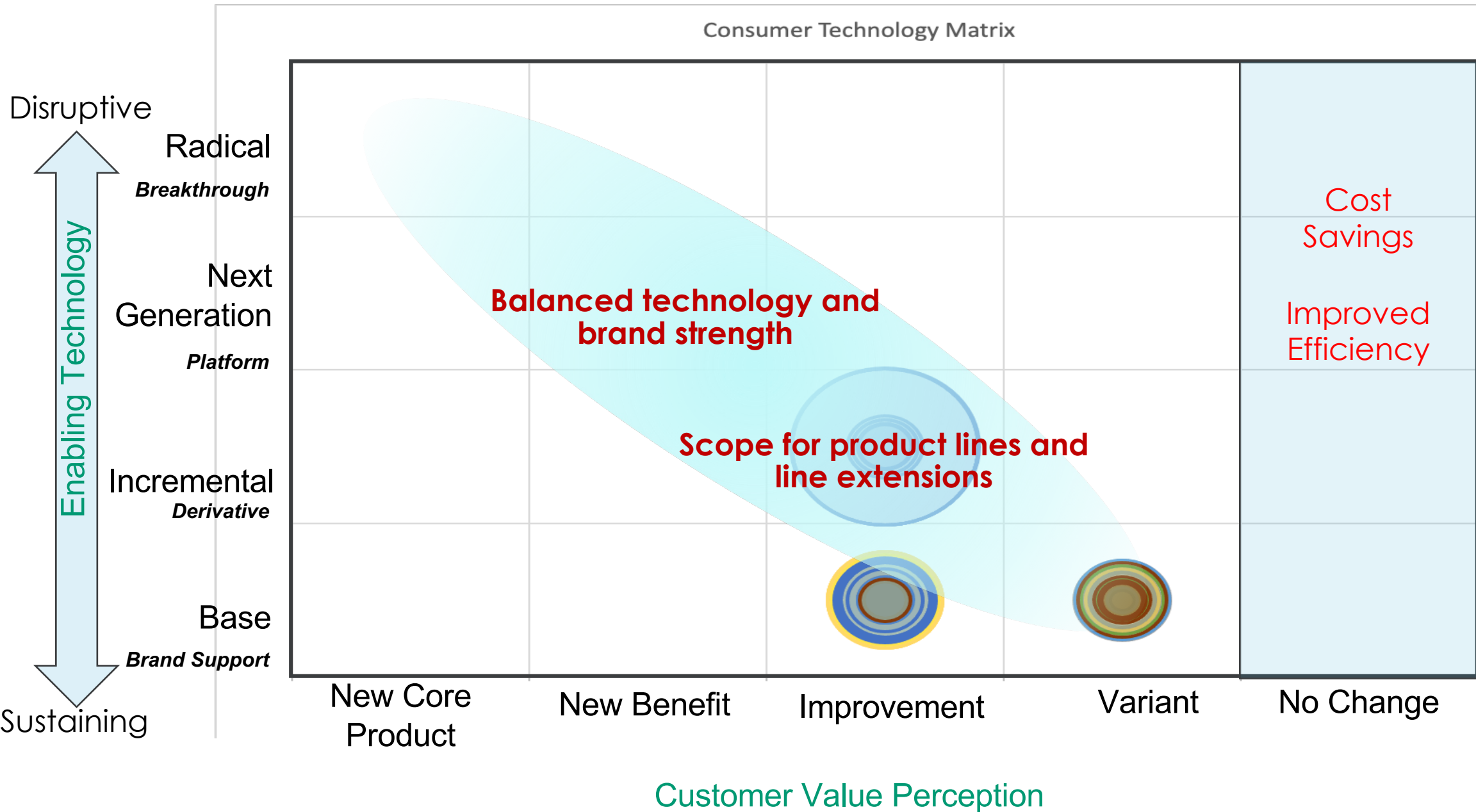
Consumer / Technology Matrix (CTM)



Consumer / Technology Matrix (CTM)



Consumer / Technology Matrix (CTM)





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