The consumer packaged goods process

Stage 1 — Ideation — Gate 1
Stage 2 — Definition — Gate 2
Stage 3 — Development — Gate 3
Stage 4 — Launch — Gate 4
Stage 5 — Post launch

PLM
## *Consumer Packaged Goods and Life Sciences*

IBM PLM Solutions
2003
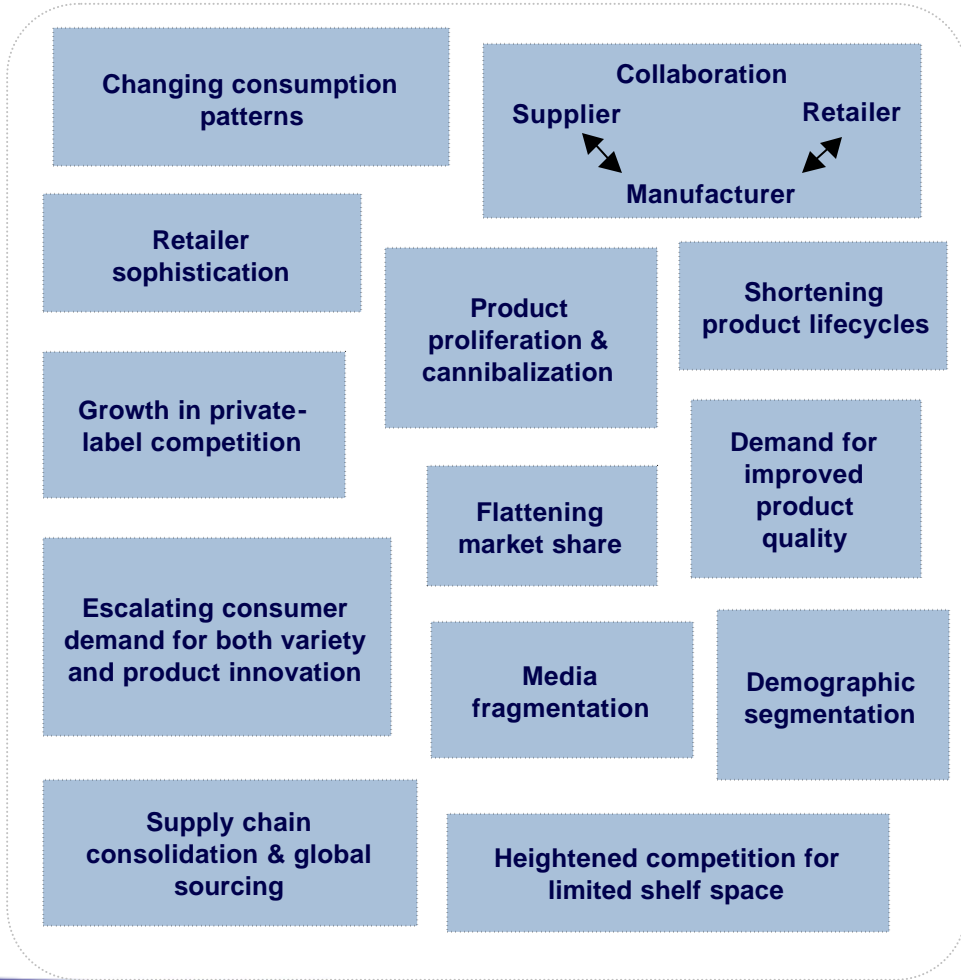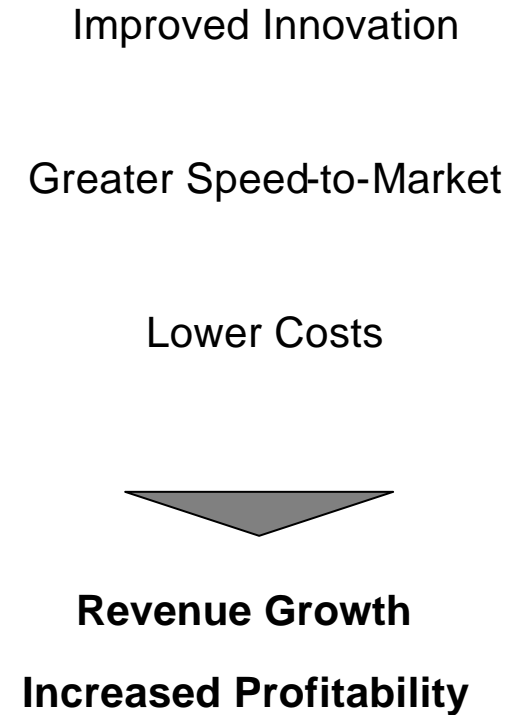
I. Industry POV

Typical CPG Product-to-Market Objectives

Launch new products that succeed with consumers

Get new products to market faster

Reduce costs and process inefficiencies

Improve payback, share & return on investment

Across New Products, Line Extensions, Formulation & Package Configuration Changes, Promotions Packs, etc.

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Major Marketplace Forces

Primary Industry Forces

Changing consumption patterns

Collaboration
Supplier   Retailer
Manufacturer

Retailer sophistication

Product proliferation & cannibalization

Shortening product lifecycles

Growth in private-label competition

Flattening market share

Demand for improved product quality

Escalating consumer demand for both variety and product innovation

Media fragmentation

Demographic segmentation

Supply chain consolidation & global sourcing

Heightened competition for limited shelf space

Core Objectives

Improved Innovation

Greater Speed-to-Market

Lower Costs

Revenue Growth

Increased Profitability

Key Focus: Developing the Right Products and Getting Them To Market On Time

Framework

Framework

Survey Results

Getting our new products to the market on time, as planned	
Improving the appeal & relevance of our new products to customers	
Developing our new products faster from ideation to launch	
Developing products that are efficient to manufacture, sell and service	
Reducing costs/investments related to new product development/introduction	
Reducing the payback period of our new products	
Increasing the number of new products we introduce to the market	

0   20   40   60   80

Percentage indicating they were devoting a high level of effort

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Only 4% of New Introductions Achieve Success

New Products Funnel

77,000 UPCs introduced → **20,000 UPCs remain** → **3,200 successful UPCs***
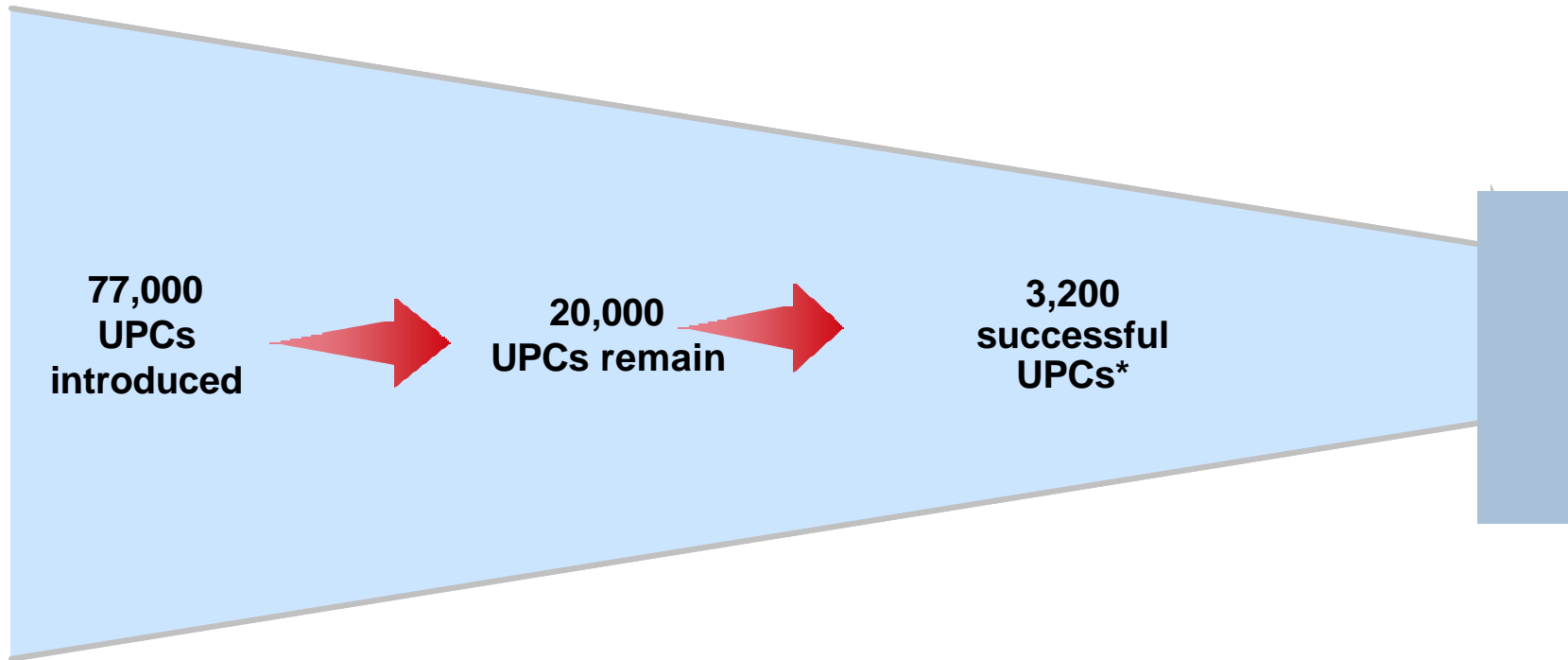
Source: Information Resources Inc.

* Successful defined as sales over $50M

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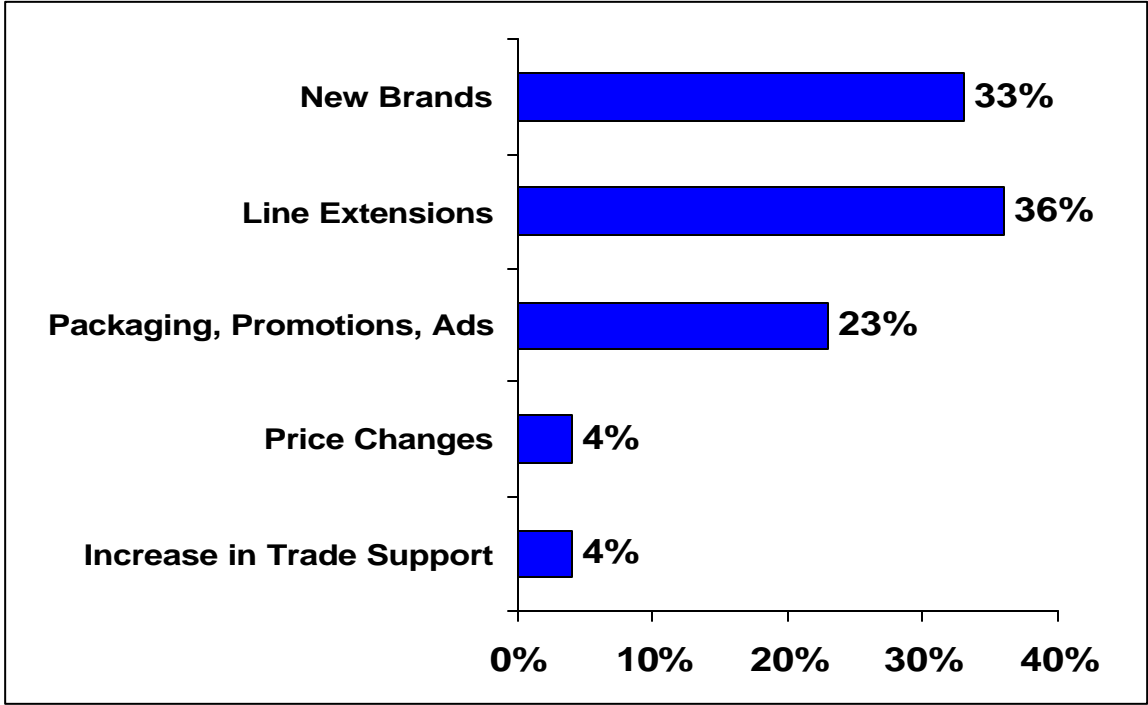# New product Innovation Success Rate…..0.3%
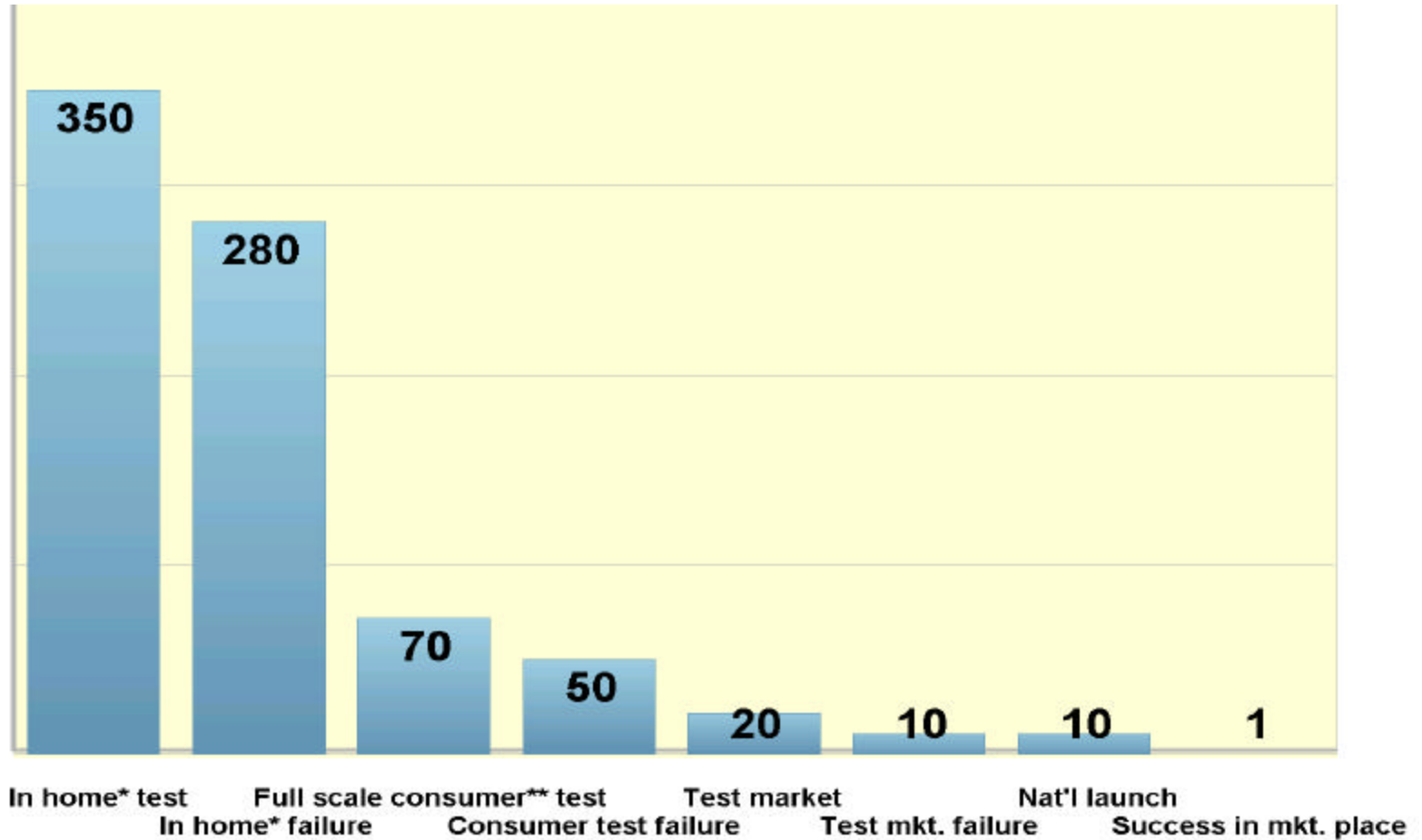
New Products, However, Drive Revenue Growth

Framework

Breakdown of the top 160 Brands*

33% of revenues are derived from products in the market less than 2 years*

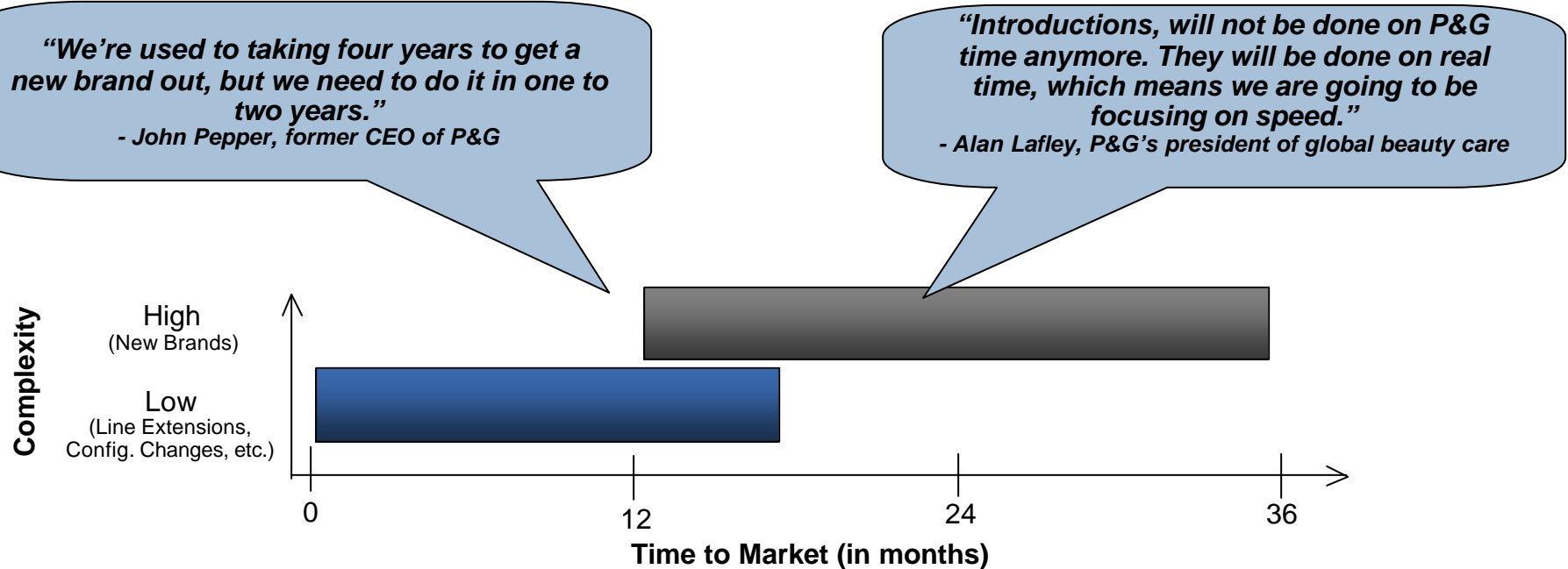|	
New Brands	33%
Line Extensions	36%
Packaging, Promotions, Ads	23%
Price Changes	4%
Increase in Trade Support	4%

0%   10%   20%   30%   40%

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* IRI and AC Nielsen all outlet (food, drug, and mass merchandise)
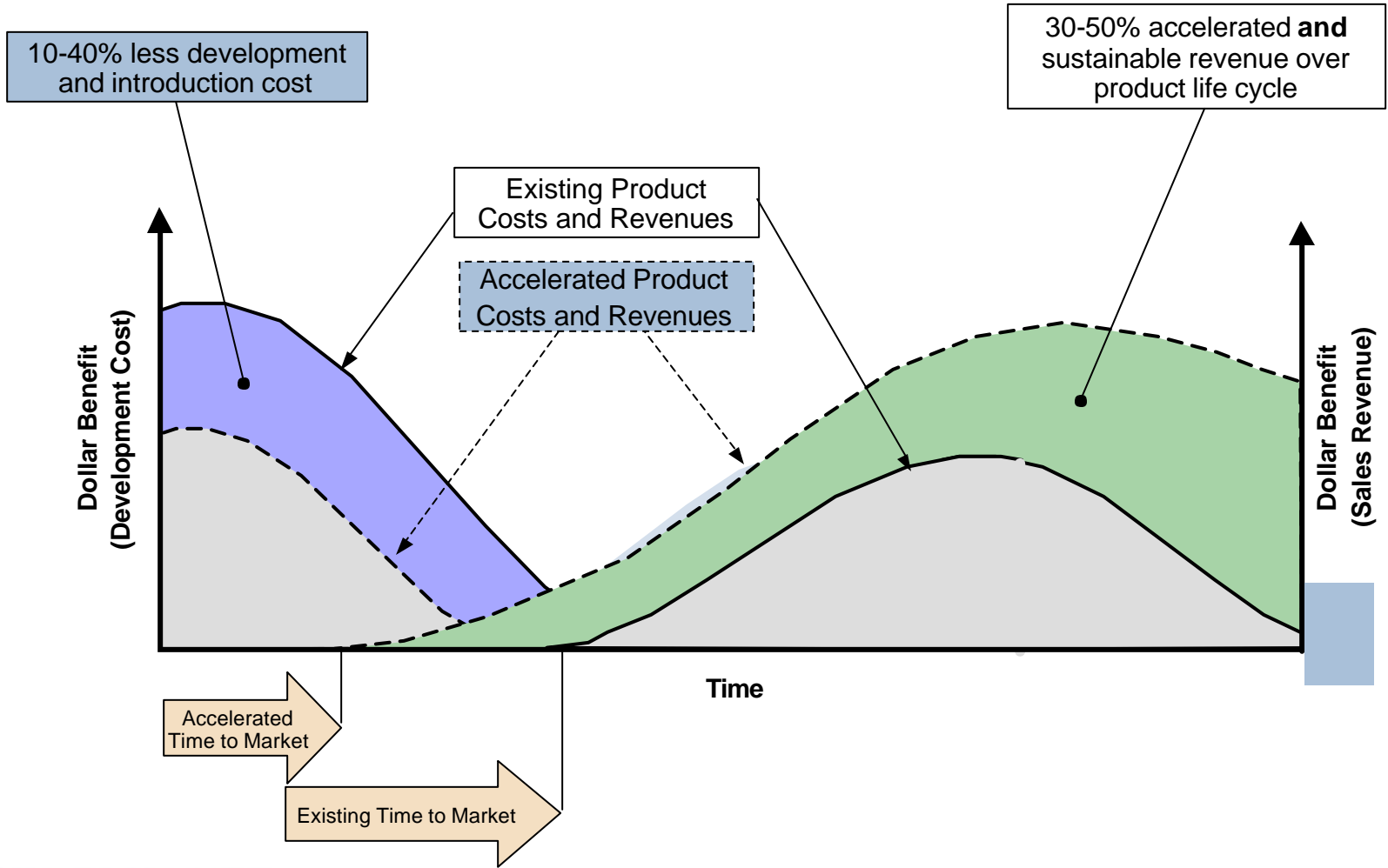
Time-to-Market Also Equates to Revenue Growth

"We're used to taking four years to get a new brand out, but we need to do it in one to two years."
- John Pepper, former CEO of P&G

"Introductions, will not be done on P&G time anymore. They will be done on real time, which means we are going to be focusing on speed."
- Alan Lafley, P&G's president of global beauty care

Complexity

High
(New Brands)

Low
(Line Extensions, Config. Changes, etc.)

0   12   24   36

Time to Market (in months)

Still, on average, P&G estimates that it takes five years to get a new product out. Typically it takes six months just to put through a request to start manufacturing a product. Creating a prototype takes five months.

Gillette took 10 years and spent over $1B on Mach3 razor. Within a few months, a British supermarket introduced its own product claiming that it was just as good for 40% cheaper.

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9

CPG PLM Benefits

10-40% less development and introduction cost

30-50% accelerated and sustainable revenue over product life cycle

Existing Product Costs and Revenues

Accelerated Product Costs and Revenues

Dollar Benefit (Development Cost)

Dollar Benefit (Sales Revenue)

Time

Accelerated Time to Market

Existing Time to Market
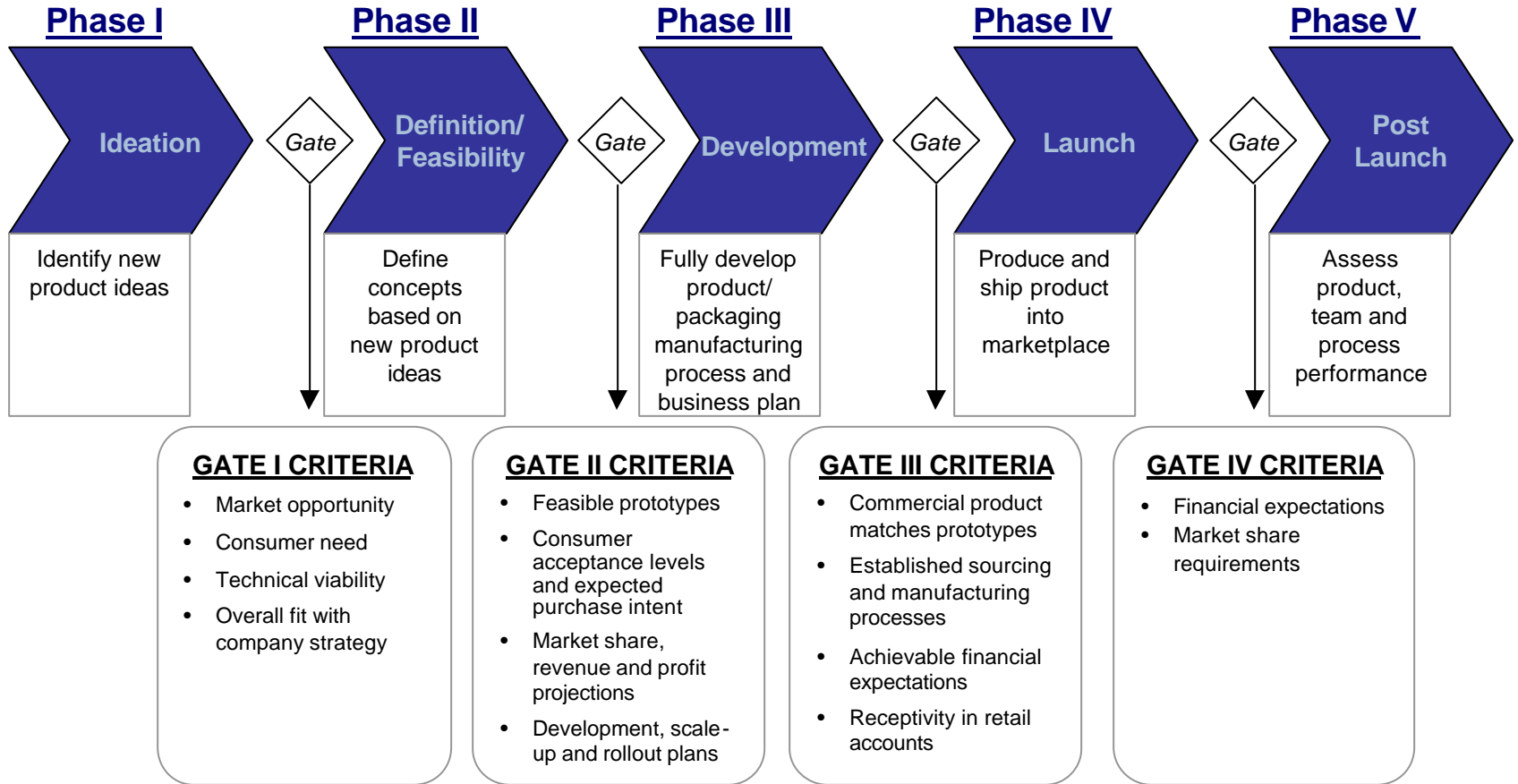
II. CPG PLM Process & Performance

Core Success Factors

Key Success Factors

- A comprehensive new product introduction strategy; new products are recognized as key part of overall Corporate strategy

- High quality project teams; representation for multiple disciplines

- Innovative culture and climate throughout the organization

- Commitment to Product Development as a key discipline with corresponding accountability

- A rigorous new product development and go-to-market process; investment in enabling technologies

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Product Development/Realization Process

Opportunities

Phase I		Phase II		Phase III		Phase IV		Phase V
Ideation	*Gate*	**Definition/Feasibility**	*Gate*	**Development**	*Gate*	**Launch**	*Gate*	**Post Launch**
Identify new product ideas		Define concepts based on new product ideas		Fully develop product/packaging manufacturing process and business plan		Produce and ship product into marketplace		Assess product, team and process performance

GATE I CRITERIA
- Market opportunity
- Consumer need
- Technical viability
- Overall fit with company strategy

GATE II CRITERIA
- Feasible prototypes
- Consumer acceptance levels and expected purchase intent
- Market share, revenue and profit projections
- Development, scale-up and rollout plans

GATE III CRITERIA
- Commercial product matches prototypes
- Established sourcing and manufacturing processes
- Achievable financial expectations
- Receptivity in retail accounts

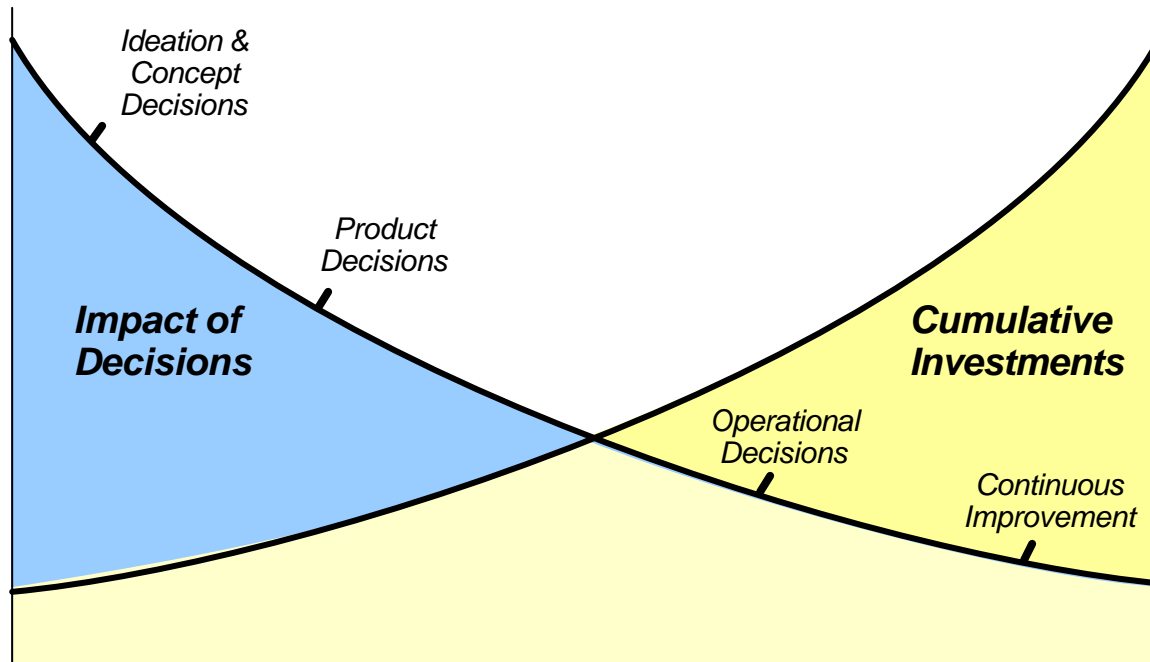**GATE IV CRITERIA**
- Financial expectations
- Market share requirements

The *sweet spot* occurs when process design, organization/performance management and enabling technologies are integrated and optimized across this value chain

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13

Early and Accurate Decisions Determine the Likelihood of Success

Opportunity

Ideation & Concept Decisions

Product Decisions

Impact of Decisions

Cumulative Investments

Operational Decisions

Continuous Improvement

Over 70% of the factors contributing to success are established by the time product is defined.

Core PLM Opportunities

Processes	Organizational	Technology
▪ Iterations & rework ▪ Proliferation of assets and specs – poor reuse of enterprise knowledge ▪ Compressed timelines ▪ Lack of routinized and easy-to-use processes ▪ Project plans not linked & synched ▪ Lack of metrics & dashboards ▪ Quality improvement	▪ Disperse people, departments, organizations and suppliers ▪ Collaboration disconnects ▪ Information silos ▪ Geographic disparity ▪ Changing deadlines	▪ Isolated departmental IT fixes ▪ Integration across legacy systems (ERP, CRM, etc.) ▪ Security and bandwidth ▪ Capital expense ▪ Training and ongoing user support

Opportunities Can Be Leveraged into Business Benefits

Many CPG Manufacturers are facing real challenges

- Knowledge, content, assets and specifications are scattered, inaccessible, inconsistent and recreated throughout the process.

- Best practices and processes are difficult to monitor and manage, are not visible, routinized or reusable, and must often be reinvented along the way

- Project plans & master timelines are not visible in real-time or linked to departmental and functional activities, causing disconnects, delays and rework.

- Project and process metrics are difficult to measure in across departments and divisions causing repeated decision reevaluation and process breakdowns.

- Critical input is not consistently solicited at the the right time across functions, geographies, suppliers and agencies.

…but, some have leveraged PLM to achieve substantive benefits

- Knowledge, information and content is captured and distributed in real time ensuring synchronous access, driving down the time/cost of unnecessary iterations.

- Building templated, menu-based best practices & workflows and building the mechanisms for easy reuse (e.g. plug & play) streamlines processes and maximizes speed/efficiency.

- Creating project-wide visibility and synchronizing tasks and milestones allows project constituents to dovetail critical activities and compress cycle times.

- Decisions can be made dynamically. Real-time measurement capabilities & dashboards enable tracking of key metrics across divisions, categories, projects and resources.

- Installing workspaces that are integrated with workflows and assets enable participants to ideate and collaborate earlier & more quickly.
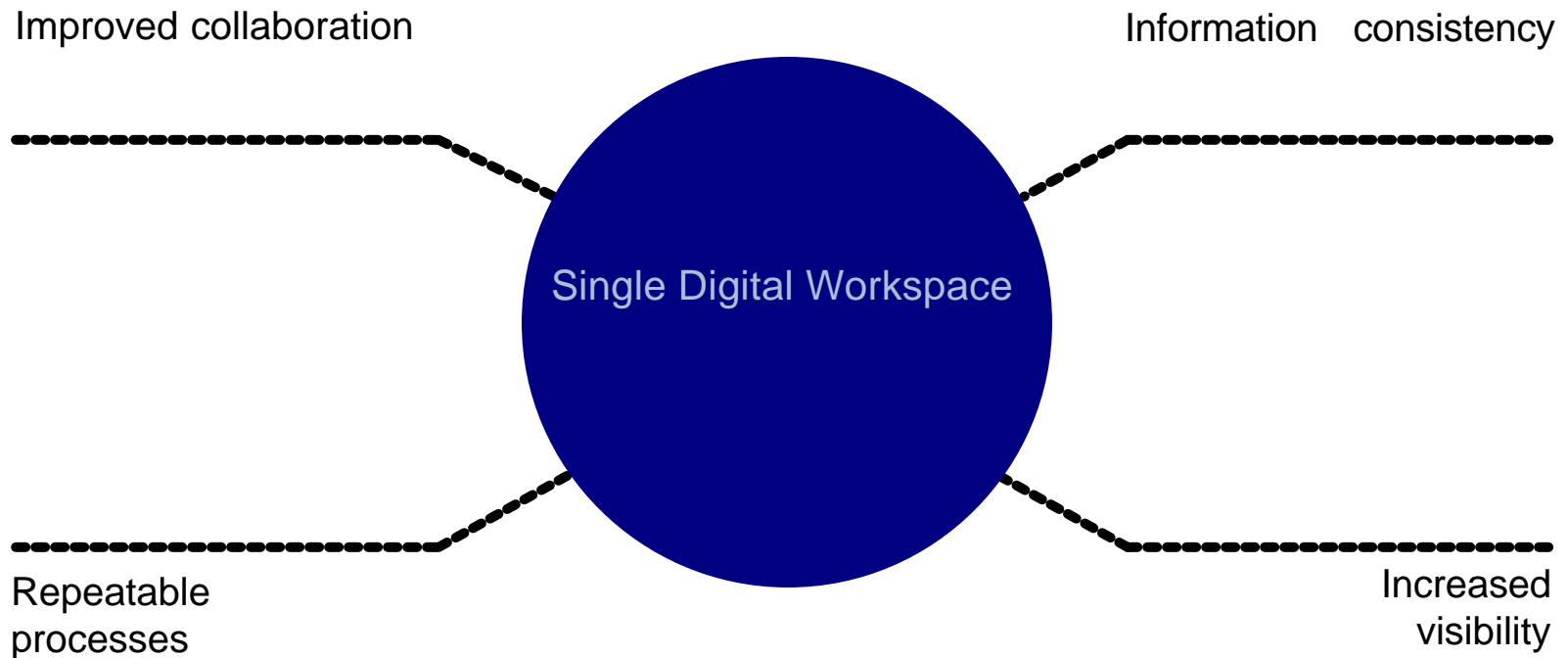
Value Proposition

Faster → **Revenue Acceleration**

Cheaper → **Lower Costs & Improved Productivity**
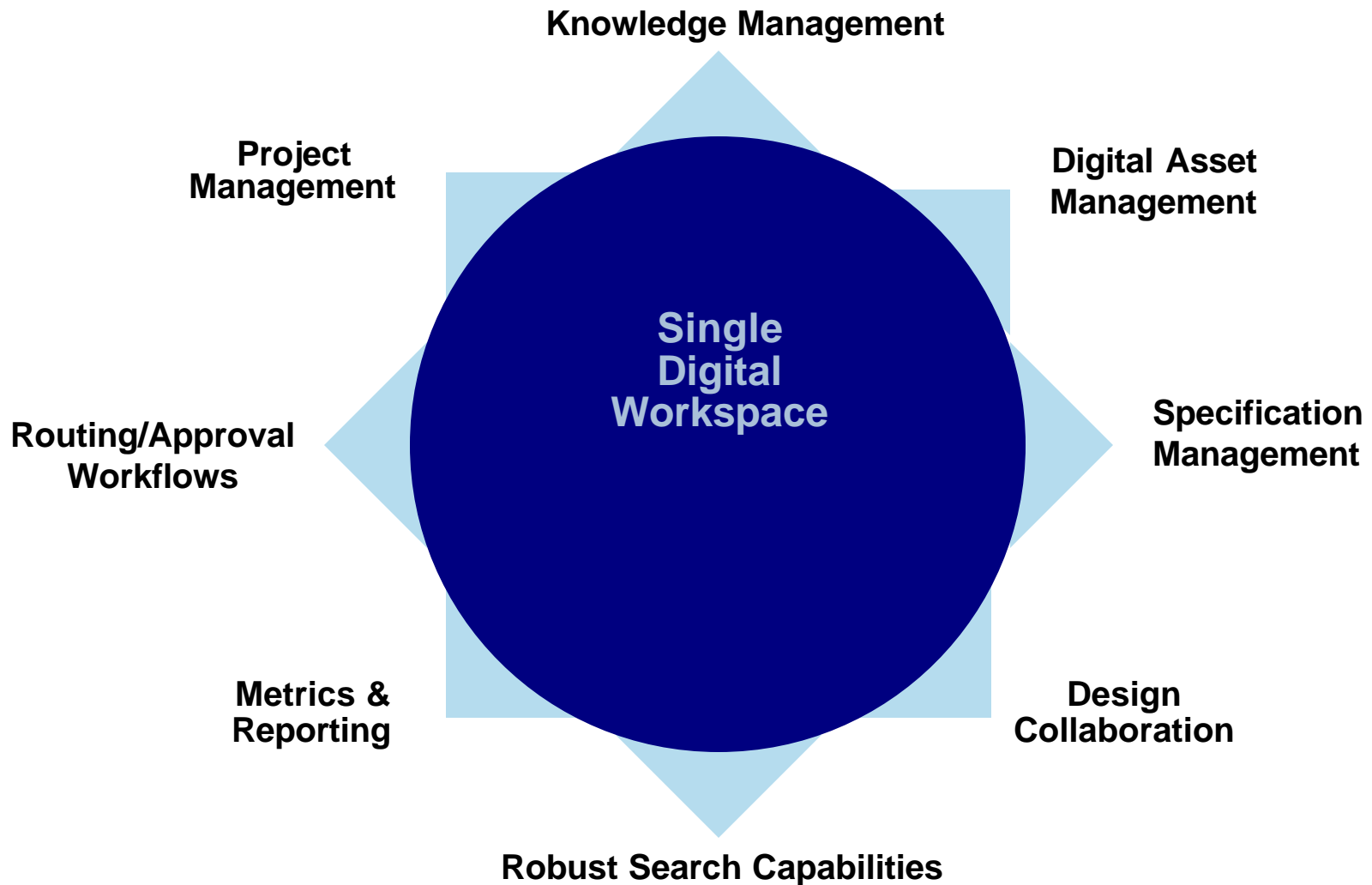
Better → **Improved Innovation & Quality**

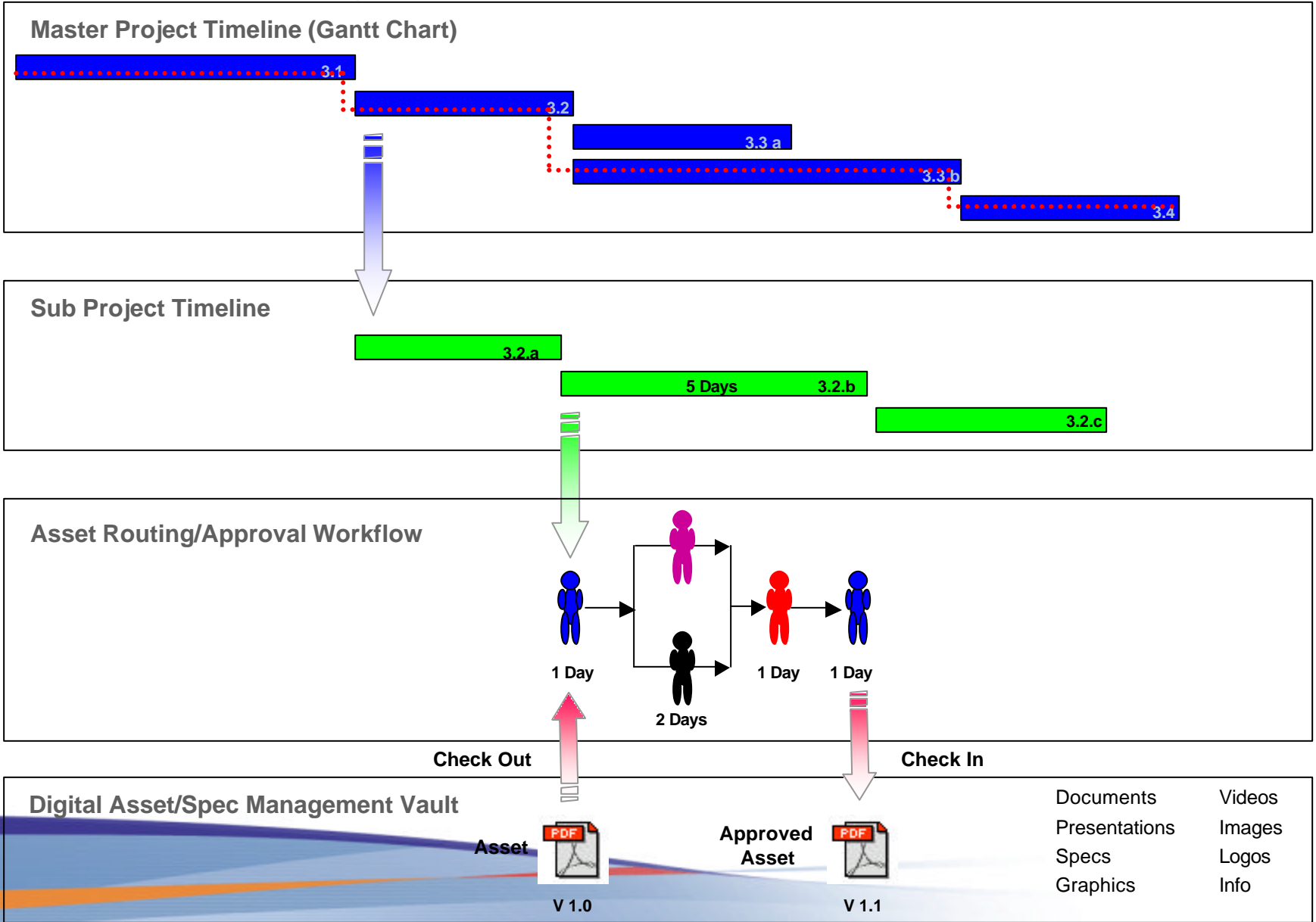**Enhanced CPG Profitability**
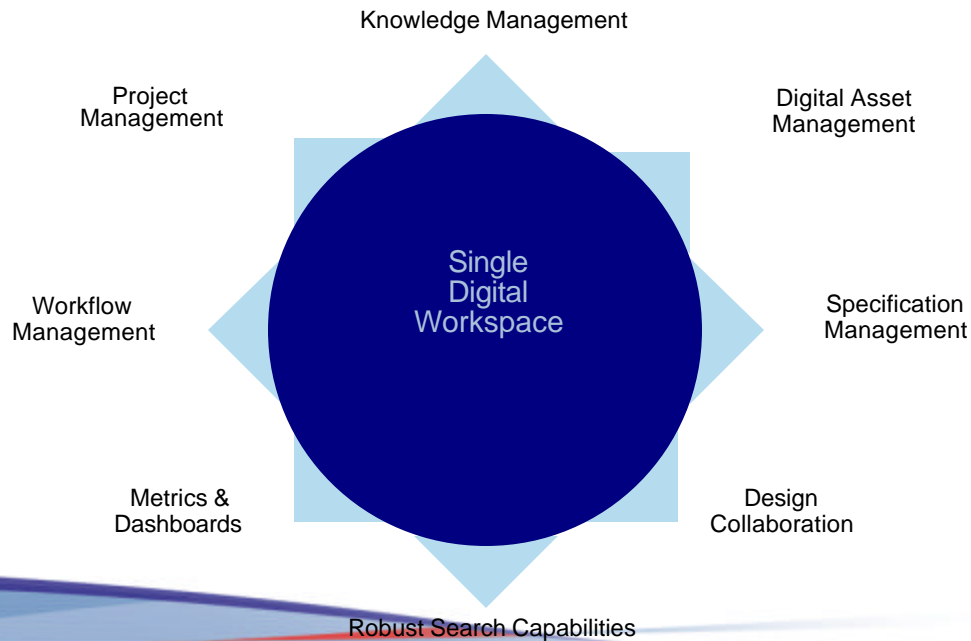
III. Typical Solution Components

PLM Solution Map

Improved collaboration

Information   consistency

Single Digital Workspace

Repeatable
processes

Increased
visibility

Components of an Integrated Solution

Knowledge Management

Project Management

Digital Asset Management

Single Digital Workspace

Routing/Approval Workflows

Specification Management

Metrics & Reporting

Design Collaboration

Robust Search Capabilities

Application Integration

Master Project Timeline (Gantt Chart)

3.1

3.2

3.3 a

3.3 b

3.4

Sub Project Timeline

3.2.a

5 Days   3.2.b

3.2.c

Asset Routing/Approval Workflow

1 Day   1 Day   1 Day

2 Days

Check Out   **Check In**

Digital Asset/Spec Management Vault

Asset   **Approved Asset**

V 1.0   V 1.1

Documents	Videos
Presentations	Images
Specs	Logos
Graphics	Info

Processes Coupled with an Integrated PLM Solution

Phase I		**Phase II**		**Phase III**		**Phase IV**		**Phase V**
Ideation	*Gate*	Definition/ Feasibility	*Gate*	Development	*Gate*	Launch	*Gate*	Post Launch

Process - Technology Integration

Knowledge Management

Project Management

Digital Asset Management

Workflow Management

Single Digital Workspace

Specification Management

Metrics & Dashboards

Design Collaboration

Robust Search Capabilities

IV. How IBM PLM can help

Diagnostic Workshop: Defining the Key Drivers of Value at the Prospect

Approach

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	Data Collection	**Process Mapping & Assessment**	**Solution Mapping & Value Analysis**	**Review Findings with Stakeholders**
Tasks				

Content	• Identify key constituents (internally & externally)
	• Assess strategic scope and process variations
		• Develop client process map & best practices
		• Expose gaps and breakdowns
		• Formulate possible root causes
		• Develop use cases
			• Evaluate value at breakdown points
			• Analyze technology & operational implications
			• Identify solution components
			• Financial/ROI analysis
				• Review recommendations:
				  – Product Process Development map and best practices
				  – Value drivers/ROI
				  – Investment plan
				  – Solution map

Output	• Understanding of macro process • Identification of major trends and gaps • Organizational assessment	• Process map and findings • Best practices • Root causes • Use cases	• Solution component map • Business impacts and associated value points • RO/Investment plan • Implementation recommendations and success criteria	• Implementation roadmap

PLM Diagnostic Workshop Approach

IBM will utilize its PLM Diagnostic Tool to evaluate the current product-to-market processes and technologies by helping the client understand:

1. **What are the current PLM environment solution requirements?**
2. **What are the gaps between where the client wants to be and where is now? How can these gaps be closed?**
3. **What are the steps to take, sequence or priority?**
4. **Will there be a payback?**

DIAGNOSTIC RESULTS

HIGH LEVEL SUMMARY

DETAILED SUMMARY

CAPABILITY POSITION

Key Findings

Steps to World Class

COST / BENEFIT ANALYSIS

Understanding the Current Situation

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PLM Assessment Diagnostic Workshop

The PLM Assessment Diagnostic will focus on the nine commonly used product lifecycle management categories...

1. **Document, Spec and File Management**
2. **Product Change Management**
3. **Product Configuration Management**
4. **Workflow Management**
5. **Collaboration Management**
6. **Project Management**
7. **Knowledge Integration**
8. **Virtual Product Design**
9. **Application Integration**

V. Customer References
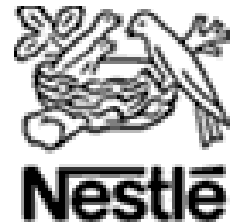
Evian - Danone Group

Popular European water distributor upgrades to CATIA V5 and takes advantage of the new features, including collaboration, that this product offers

Business Need:

Two main aspects govern the creation of a new water bottle model. First, designers collaborate with the marketing department to develop a shape and identity (health, purity, slimness, youth, vitality, etc.) for the product. Second, the industrial and economic feasibility of the new project must be examined

Solution:

Among the new features of V5 that Evian is leveraging are:
- Easy collaboration between marketing, design and development
- Ability to exchange 3-D images via Lotus Notes
- Increased visibility of project status

Benefits of the Solution:

Evian measures its expected gains in time and in quality. Evian's design requirements are becoming increasingly complex, and the upgraded CATIA solution will handle this complexity well. In fact, the company projects that it may be able to cut creation time for 3-D models from five days to two. And, as designs change, the company will be able to create new models without having to start over completely.

Customer Quote:

"CATIA V5 users were pleased with the flexibility and interactivity of the tool. We have complete confidence both in the tool and in our partners. We have a long history with IBM and its partners for CAD." -- Philippe LePreux, head of the plastics department at Evian.

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Campbell Soup Company

Customer Background:

Campbell Soup Company is a global manufacturer and marketer of premium quality soup, sauces, beverages, biscuits, confectionery and prepared food products. The company owns a portfolio of more than 20 market-leading brands, each with more than US$100 million in sales.

Campbell wants IBM to work with the company as a single, global team, leveraging its capabilities for the betterment of Campbell. It expects IBM to deploy its world-class skills and support, while simultaneously finding better and more economical ways to implement them.

Solution:

IBM Global Services - Worldwide Strategic Outsourcing (SO) is providing Campbell Soup with full-scope IT infrastructure support in North America and Europe under a ten year global outsourcing agreement.

Benefits of the Solution:

The customer has not quantified the benefits, but in qualitative terms, the following results have been achieved:
- Stable environment
- Improved service quality
- Cost effectiveness
- Access to IBM's skills and current technology.