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Building The New Economy

Creating Value Through Innovation

SUMMARY

Edison knew innovation meant much more than development of new products. That's even more true in the New Economy.

Quick! What image springs to mind when you hear the word “innovation?”

The new VW Bug, or one of the colorful new Macintosh servers, perhaps?

You’re not alone. The prevailing view is of gradual improvements in product or process – of incremental innovation. In fact, the innovation structures at many blue-chip businesses center around just that. But that obscures a whole realm of “disruptive” innovation – the kind of world-changing breakthroughs that drastically alter (and often kill off) old ways of doing things, and which catapult civilization forward for a while.

Examples? The telegraph ranks right up there. By liberating the delivery of communications from the limits of physical transportation and from humans’ sensory boundaries, the new medium soon began to change the way businesses were organized.

As a consequence, many firms reinvented themselves to exploit the telegraph’s advantages. Other sectors were annihilated; soon, who needed the Pony Express?

Of course incremental innovation is not a bad thing. In fact, as this booklet will explain, both incremental and disruptive types of innovation absolutely belong in your portfolio of options in the New Economy. But even the sharpest product advances aren’t what will help you gain a monopolistic hold on an entirely new market. After all, VW’s new Bug did not transform the business of personal transportation – no matter what the ads say.

This white paper puts the innovation discussion on a new plane. It explains how the Internet cranks innovation up a notch or two because its unique facility for slashing coordination costs – the costs of liaison between, say, a customer and a supplier – fosters unprecedented levels of business-model innovation. The paper lays out something we call “the innovation-value hierarchy.” It explains the link between innovation and value creation, and it finishes up with a self-diagnostic tool that will help demonstrate where you stand in the innovation stakes.

{Let’s make sure we’re talking the same language! Check out our “innovation lexicon” on p. 12.}

disruptive

Innovation Renovation

In 1942, economist Joseph Schumpeter coined the term “creative destruction” to describe one aspect of business innovation. Harvard professor Clayton Christensen, in his 1997 book *The Innovator’s Dilemma*, argues that many incumbents focus so much on improving existing products for today’s customers that they just don’t see disruptive changes coming until it is too late.

Encyclopedia Britannica initially scoffed at the concept of an encyclopedia on CD-ROM— an innovation that, once Microsoft got behind it, almost put Britannica out of business.

It has also happened, famously, in the computer industry. Mainframe manufacturers didn’t see a market for minicomputers, and in turn, most minicomputer firms were blindsided by the personal computer. If Digital Equipment had developed a portfolio approach that balanced incremental with disruptive innovation, the minicomputer giant’s story might have turned out differently.

Today, the Internet raises the stakes to unheard-of levels. When it combines global reach with decreasing transaction costs and increasing returns to scale, it makes business-model disruption much more pervasive. Networked like never before, tiny start-ups now suddenly deliver the clout of long-established corporations.

Take The Risk, Reap The Reward

Sure, those minicomputer makers just didn’t see the disruptive PC coming. But there’s more to it than being superseded by new product innovators. Although product and process innovations can be powerful drivers of profitability, disruptive innovation is key to market valuation. A recent study commissioned by *Forbes ASAP* magazine found that innovation was the dominant factor in boosting market valuations. In most cases, it proved far more influential than customer satisfaction.

	GOAL	INNOVATION FOCUS	
DISRUPTIVE INNOVATION	Reinvent Industry	Business Model	Value Creation ↑ High ↓ Low Power of Incumbency
	Reinvent Category	Product / Service	
INCREMENTAL INNOVATION	Refine Product or Service	Product / Service	
	Streamline Execution	Process	

Source: Cambridge Technology Partners

Internet As Incendiary

Obtaining uncontested market presence, even for a short time, is enough to fuel innovation. Efforts to be first to market can be rewarded with acceptance by crucial early adopters, which can lead to increasing returns to scale and potentially higher margins to subsidize the next round of innovation. Research by the Iacocca Institute at Lehigh University shows that **about 80% of profits are realized in the first half of a market window.** Get there first, and the bulk of those profits are yours.

It's a virtuous circle that can reinforce market dominance – and that dominance leads to premium market valuations.

The Internet only inflames things. In our white paper entitled “Business Models for the New Economy,” we argued that the Internet drives down transaction and coordination costs, giving small networked firms the same kinds of advantages as large vertically structured hierarchical corporations. Instead of building or acquiring all the competencies needed to win new markets, **they can bring to bear the strengths of coordinated competencies** – even if only for a short time.

Plus, the Internet unleashes a powerful network effect that accelerates information flows. Look at what happened with free e-mail service Hotmail: one user told another, who signed up several others, who each got a few more people onto their buddy lists. In no time at all, this “viral marketing” had pulled in 10 million users. The only way Microsoft could deal with the competitive threat was to buy Hotmail Corp. For \$385 million.

That's value creation. That's the power of the Internet.

Got The Necessary Tools?

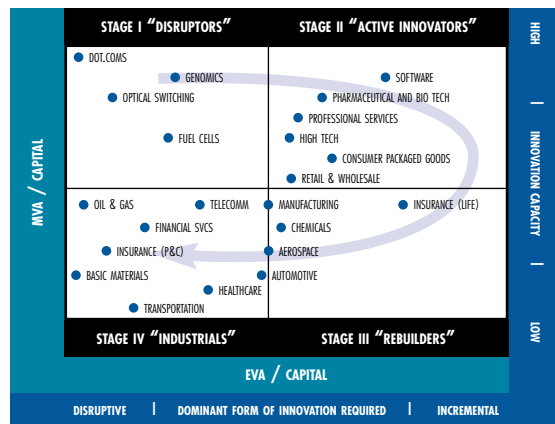
So we're agreed that a measure of disruptive innovation is a very good thing. But having what it takes to succeed in incremental innovation doesn't translate to an ability to master disruptive innovation. So what does it take, then? In their 1995 book *The Discipline of Market Leaders*, authors Michael Treacy and Fred Wiersema proposed that firms focus primarily on one of three value dimensions. Customer-oriented firms leverage relationships with customers and business partners. **That's relationship capital.** Product- or service-oriented firms tap into their employees' brainpower to create new offerings. **That's intellectual capital.** And operations-focused companies leverage their assets – **that's structural capital** – to outperform their rivals. Cambridge Technology Partners argues that each dimension has an associated set of core competencies, and that disruptive innovation strategies demand different competencies than do incremental innovation strategies (see chart below).

		STRATEGY COMPONENTS					
		GOAL	FIRST MOVER TO INTRODUCE...	TARGET USER NETWORK	COMPETENCY CAPITAL BASE	LEVERAGABLE COMPETENCIES	EXAMPLES
DISRUPTIVE INNOVATION	Reinvent Industry	New Tech-enabled Business Model	Early Adopters within Incumbent's Customer Base	Intellectual	<ul style="list-style-type: none"> Customer Acquisition Partner/and Alliance Management 	<ul style="list-style-type: none"> Dot coms eMarkets MP3 	
	Reinvent Category	New Technology into Existing Market	Early Adopters outside Incumbent's Sweet Spot	Relationship Structural	<ul style="list-style-type: none"> Research Expertise Design and Development Experience Transfer 	<ul style="list-style-type: none"> Biotechnology Online Brokerages 	
INCREMENTAL INNOVATION	Refine Product or Service	New Product Improvements and Features	Mainstream Customer Base	Intellectual Relationship	<ul style="list-style-type: none"> Design and Development Project Management Best Practices Brand Management 	<ul style="list-style-type: none"> Pharmaceuticals Software 	
	Streamline Execution	Time and/or Cost Savings	Business Partners	Structural	<ul style="list-style-type: none"> Supply Chain Management Efficient Fulfillment Asset Utilization 	<ul style="list-style-type: none"> Manufacturing Telecom 	

Source: Cambridge Technology Partners

Disruptive Is Forever

But today's innovations are tomorrow's utility products and processes. Just look at the Web browser. Once the innovation has diffused throughout its natural market, it becomes incumbent. Will today's disruptors be tomorrow's dinosaurs? Will disruptors such as fuel cells spell extinction for old-economy industries such as Oil and Gas? (Hint: look how fast many dot.coms have gone sliding down what Cambridge calls the "innovation continuum lifecycle.")



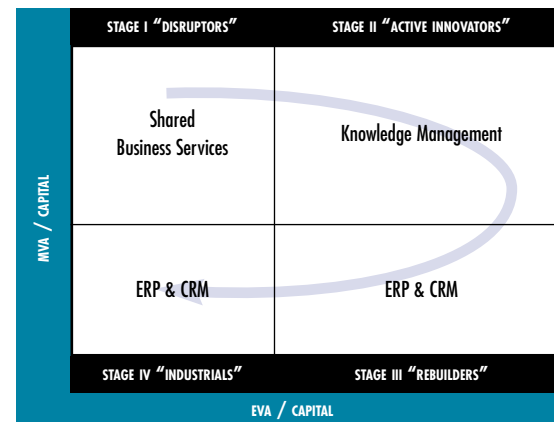
Source: Cambridge Technology Partners, Stern Stewart & Co.

Does ERP Spell Stifled Innovation?

Is it a coincidence that firms in mature industries are more likely to focus on customer relationship management and enterprise resource planning applications? Or that firms focused on rapid innovation rely more on messaging and collaboration tools?

Recent data from Gartner Research on IT spending proves the point. Example: the property and casualty branch of the insurance industry – look where it is on the Innovation Lifecycle curve on page 8 – spends 20.6% of its IT budget on ERP. Compare that to the innovation-driven software industry, which spends just 4.4% on ERP.

A quick scan of the application portfolios of the industries that occupy the four stages of the Innovation Lifecycle shows that where you're positioned says a lot about the types of IT applications your firm is most likely to be using or considering. Memo to CIO: ensure that your IT budgets map the organization's innovation stance.



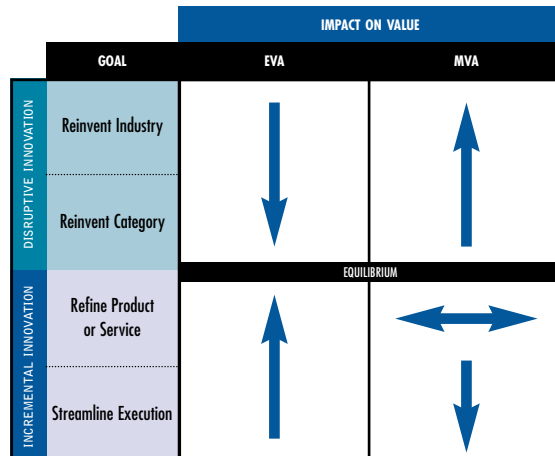
Source: Cambridge Technology Partners

Balancing Your Innovation Portfolio

The forces of economic value added – measuring profit efficiency – and market value added, which gauges shareholder value, reach an equilibrium that straddles disruptive and incremental innovation. Here's the implication: **you need incremental innovation to sustain your current business and disruptive innovation to renew your business.**

Firms obsessed with streamlining their processes may boost short-term profitability while sacrificing long-term viability. An emphasis on, say, manufacturing improvements or customer service at the expense of other forms of innovation is a harbinger that your firm is in decline.

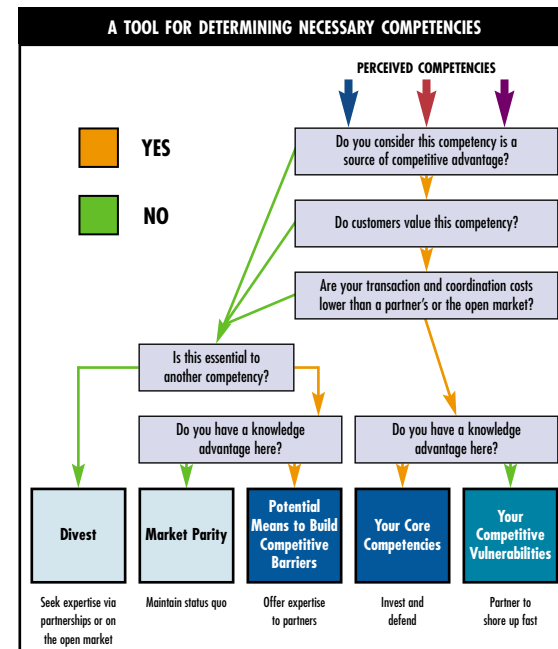
Firms that themselves act as disruptive forces, or that excel at translating intellectual capital into innovative products, are leading the charge to create shareholder value.



Source: Cambridge Technology Partners

Rating Your Innovation Capacity

Use this self-diagnostic tool to determine the health of your innovation effort. Its filters will leave you with a set of true core competencies, a set of supporting competencies, and a set that would be better executed by partners. The group of core competencies represents your sweet spot – where your firm truly creates value – and deserves serious defensive investment.



Source: Cambridge Technology Partners



Get Your Vocabulary Straight

Incremental Innovation: The continual refinement and enhancement of existing products, services, or processes within a relatively stable competitive environment.

Disruptive Innovation: The focused exploitation of emerging technologies to radically reinvent industries (via new business models) or to displace incumbent product or service offerings in existing markets.

Value: The market valuation of a publicly traded firm (market value of outstanding shares) or market-value assessment of a privately held firm.

Value Creation: Period-to-period appreciation of existing capital, all other factors held constant.

Market Value-Added: A gauge of shareholder value, expressed as the difference between the market valuation of the firm (share price times shares outstanding) and the capital employed by the firm.

Economic Value-Added: A measure of profit-making efficiency, expressed as net after-tax operating profit minus an opportunity cost for capital invested.

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Cambridge Technology Partners provides management consulting and systems integration services to transform its clients into e-Businesses. Working in collaboration with Global 1000, high-velocity middle market companies and dot-com companies, Cambridge combines a deep understanding of New Economy issues with integrated, end-to-end services, and a proven track record of shared risk and rapid, guaranteed delivery.

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And for a broader view of how the Internet is reshaping business models, visit the same site to read one of our earlier white papers, "Business Models for The New Economy." You can call author Kirk Klasson, Vice President of Strategic Solutions, at 617.914.8588, or e-mail him at kirk.klasson@ctp.com.