

“Customer Value Method” which change
technology into customer value & new
business
~Professional Consulting that fuses theory & practice~

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Innovating Force

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Abstract



Over 30 years, our R&D division produces new business through technology & skills. This presentation explores some recent method which creates new business and execution examples in Japan's company. We call this "Customer Value Method" which changes technology into customer value & new business.

The feature of "Customer Value Method" consists of the visible planning process which engineers and marketers connects the technology strong points into customer value in the concurrent meeting. In this paper the authors present the procedure to develop customer value and implement on B2B examples, especially material resource company.

Background



Over 10 years(2002~2014), our R&D team have been applied this method for several companies.

The types of companies are material resource companies, parts components companies, such as Nippon light metal (aluminum material resource)

Yazaki (automobile parts components)

Nippon signal(railway parts components)

Toyo seikan (rapping parts components)

Nippon valqua (seal parts components)

Sekisui resin (infrastructure parts components) etc.

Our team member consists of 12members now, Suzuki, kondou etc.

This method have been applied

3~4 projects per year × 10 years = about 40 projects

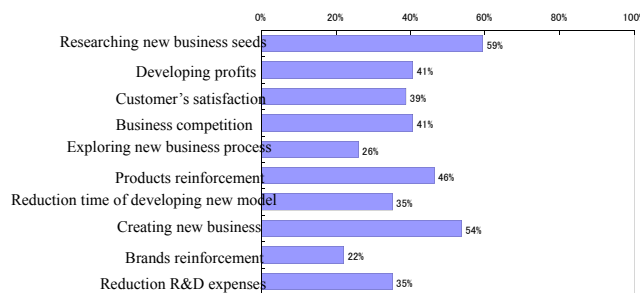
We have been got consulting fee for our company: 0.1~1million dollars per each company

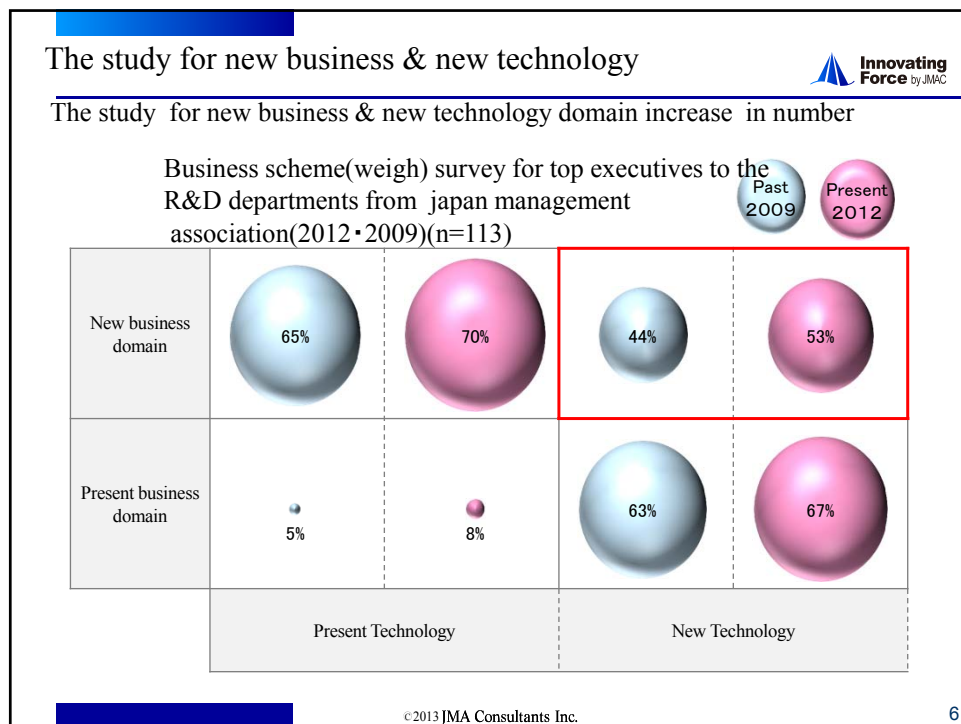
I . INTRODUCTION

Business scheme for R&D departments

It is great problem that R&D departments cannot create new business in Japan considerably. Although, they intend to research new technology seeds. Top executives and CTO (Chief Technology Officer) annoy how to make new business schemes. This tendency cannot change from survey(2002) to recent time.

Business scheme(issues) survey for top executives to the R&D departments from japan management association(2002)





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II. THE PRINCIPLES OF NEW BUSINESS

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The Principle of new business



New Business = Customer's Value × Differentiation × Sales mechanism

New Business definition:

0→1 We can earn 1~10 million dollars after 3~5 years sales from 0 start

Customer definition: normally B2B2B2C pattern

(B2B2B2C: Business to Business to Business to Customers)

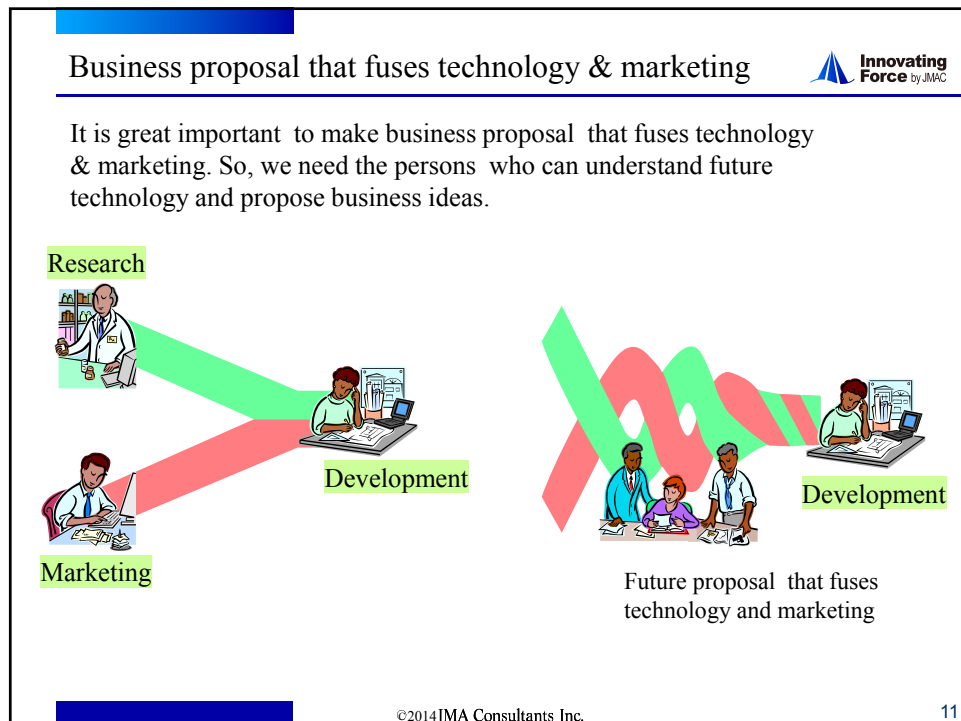
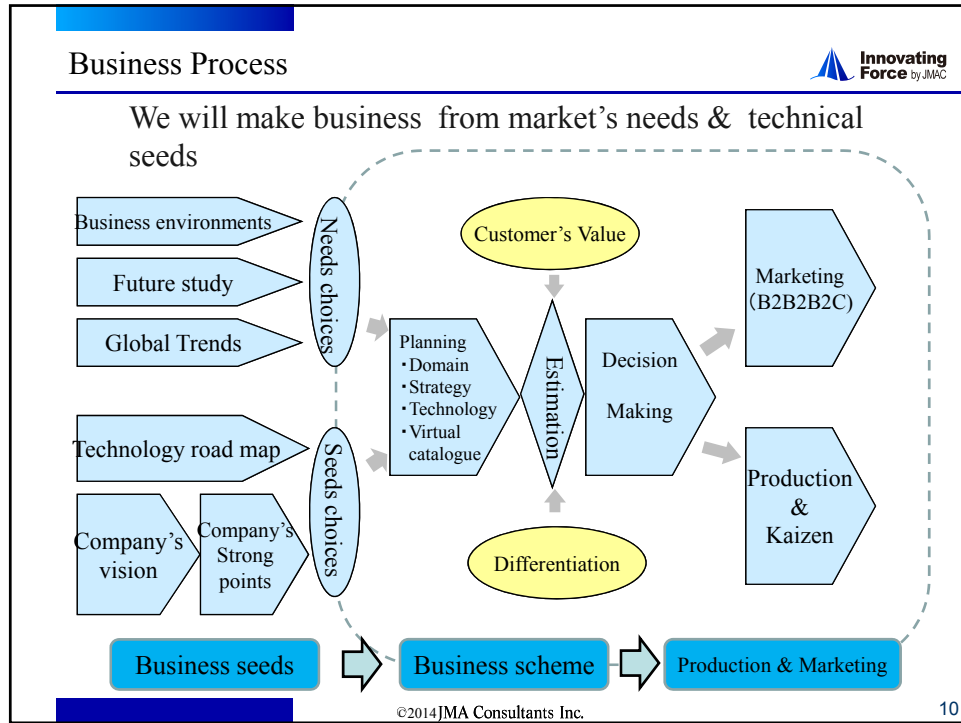
for example B(material company) to B(automobile parts company) to B(automobile assembly company) to C(customers)

Differentiation: Niche Technology & Core Technology

Sales mechanism: Distribution channel is very important
we would pay particular attention to our sales



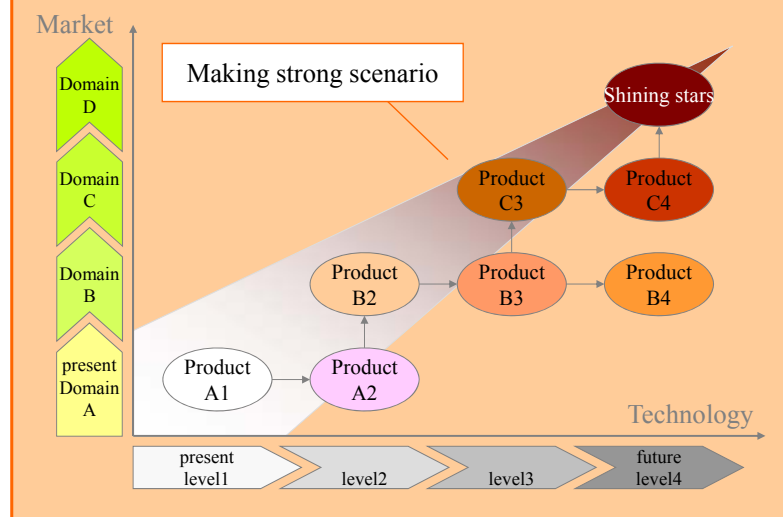
III. NEW BUSINESS PROCEDURE



Something new products on the way of Shining Stars



It is great important to sell something new products on the way of shining star



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IV. CUSTOMER VALUE METHOD

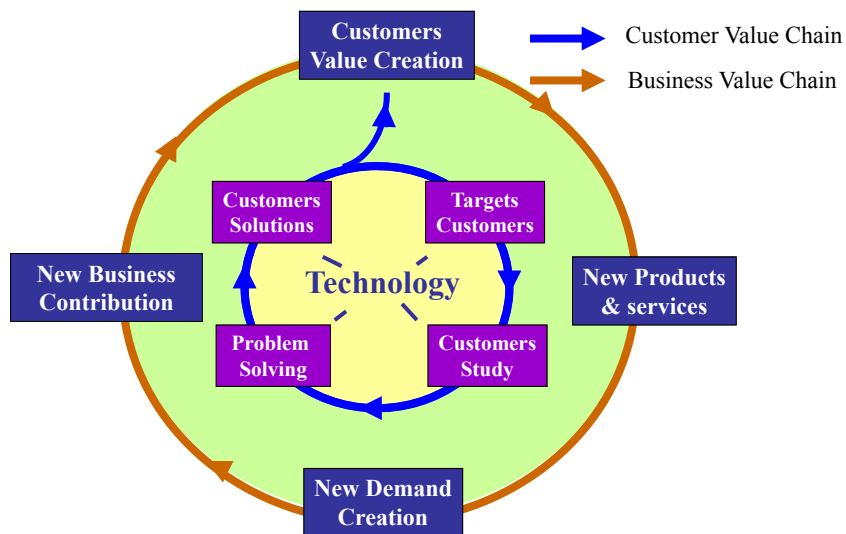
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“Customer Value Method” Concept



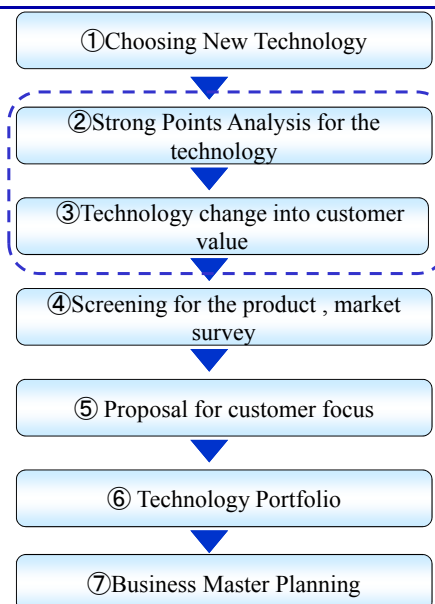
We make a big point of creating customer's value as much as possible.
Then creating business value chain.



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Visible Planning Procedure of customer value method



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Strong Points Analysis for the technology



We can analyze and estimate by the VERIO analysis. Differentiation Points, such as Rarity & Hard to imitation are very important definitely.



Vision/

Contribution to the business vision



Expansion/

The broad expanse of the technology



Rarity/

Rarity Value



Hard to imitation



Organization/

Resource management

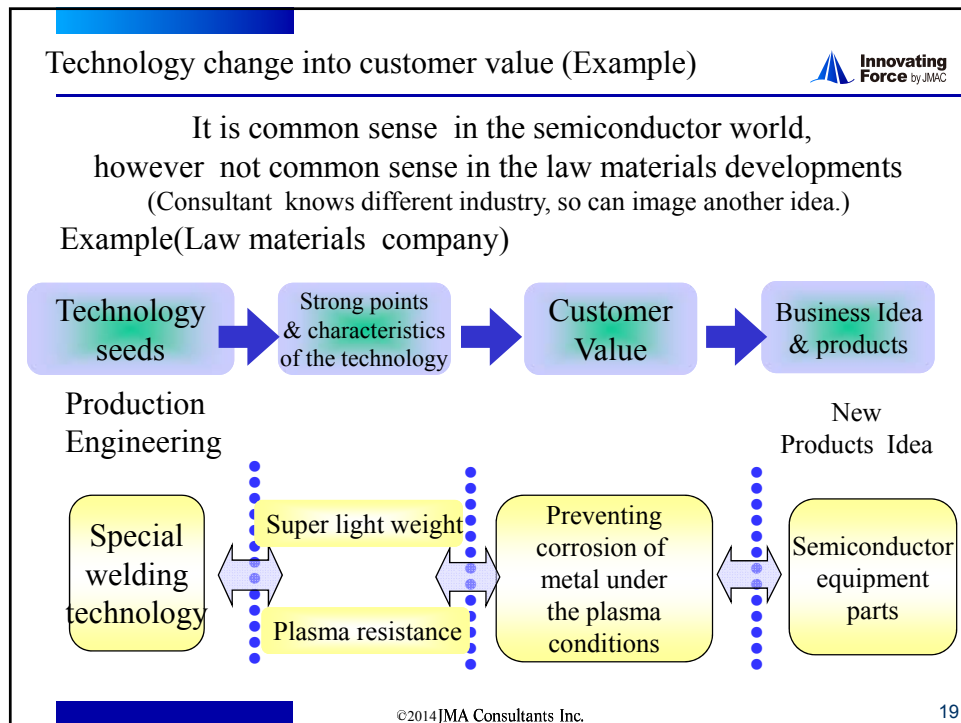
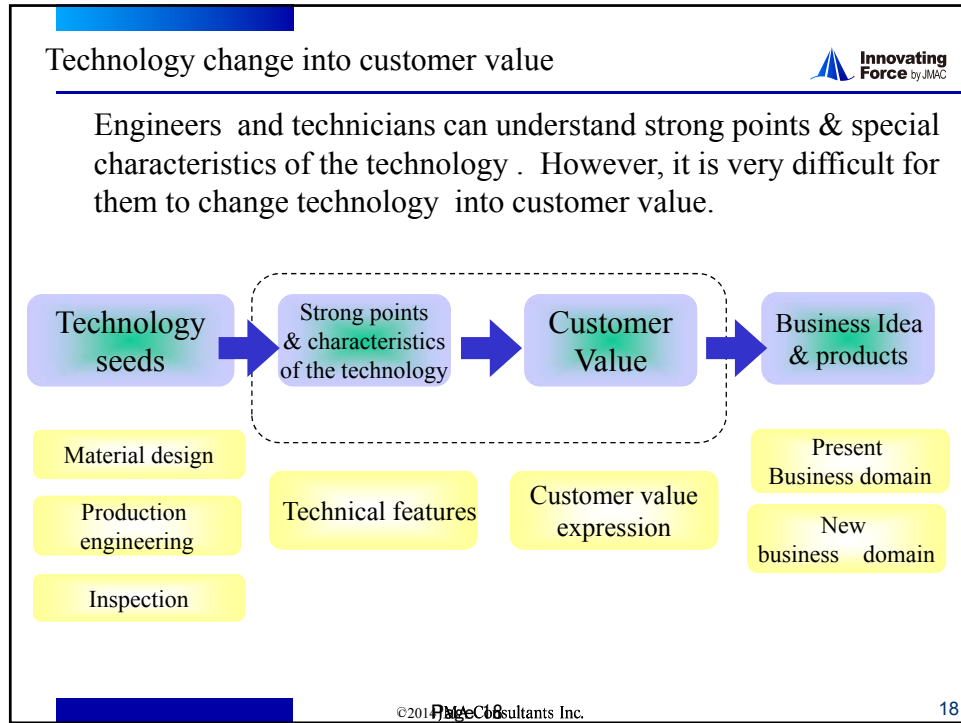
Strong Points Analysis for the technology



There are so many strong points & special characteristics in design , production engineering and inspection fields so-called kaizen in Japan.

Technology	Characteristics of technology	Base Technology	Analysis					Total Estimation
			V	E	R	I	O	
Material Design	Material selection technology	Materials science & engineering	+	+	+	+	+	Differentiation Points(7+)
	Device simulation technology	Vibration analysis	+		+	+	+	Differentiation Points(4+)
		...						
Production Engineering	High accuracy Fabrication technology	sputtering						
		CVD*1						
		...						
Inspection	Nondestructive Inspection technology	X-ray radiographic inspection						
		...						

*1:chemical vapor deposition



Customer Value Method Basic Frame works



We think up business ideas efficiently by special characteristics of technology into customer values in each market.

If the present business domains are existing, we classify customer value firstly at those domains.

Growth business domain definition: automobile, smartphone, water and power supply, etc.

Easier entry business domain definition comparatively: sport goods, clothing, etc.

Future business domain definition: medical & nursing care, environment protection, etc.

Technology seeds	Characteristic of technology	Customer value of Technology seeds	Present business domain	Growth business domain	Easier entry Business domain	Future business Domain
			Market A	Market B	Market C	Market D
A	Characteristic a	Customer value a	Idea a	Idea b	Idea c	Idea d
	Characteristic b	Customer value b	...	...	...	...
	...	...	...	...	...	...

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Customer Value Method Basic Frame works(example)

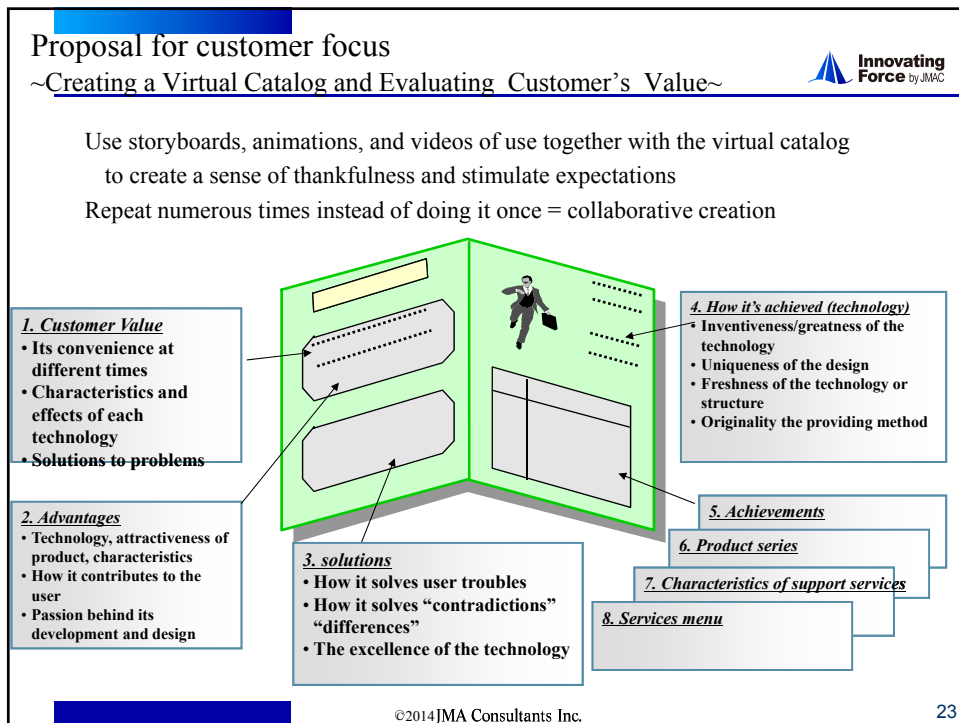
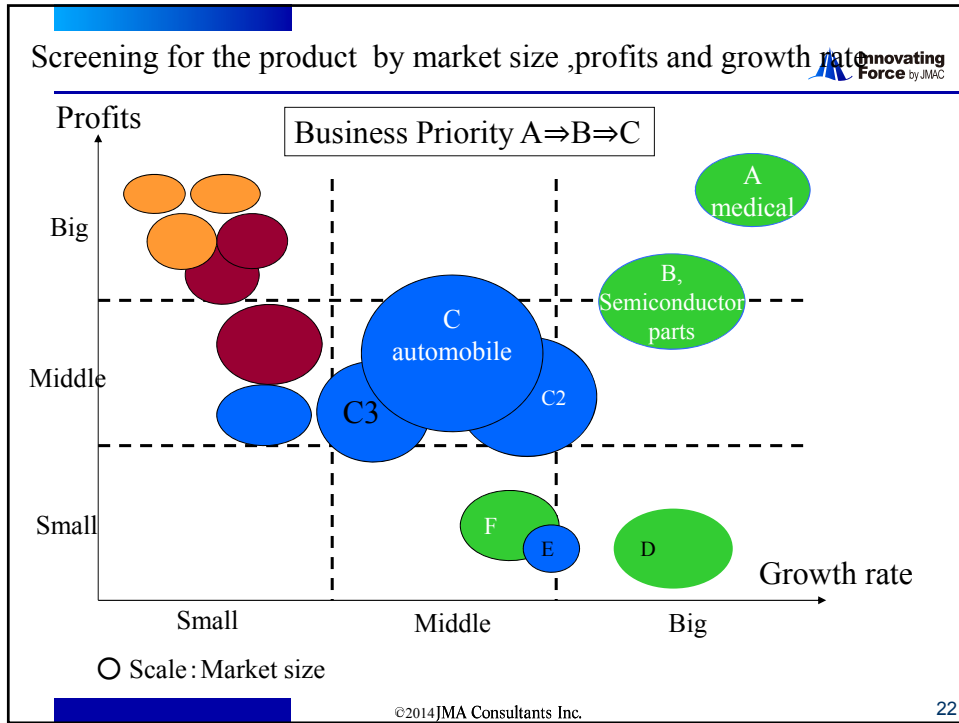


A case study involving photo catalyst

Technology seeds	Characteristic of technology	Customer value of technology seeds	Present business domain		Growth business domain	Easier entry Business domain	Future business Domain
			Civil/construction related	Housing related	Automobiles	Sports	Medical
Photocatalyst	Hyper-hydrophilic technology	Will not sweat or fog	Road reflectors	Bathroom mirrors	Door mirrors	Ski goggles	Endoscope
		Dirt can be washed off easily with water	Exterior tiles	Glass windows	Paint	...	...
	Organic matter decomposition technology	Antibacterial, stain prevention	Construction interior material	Interior material	Seats	Sporting wear	Contact lenses

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Proposal for customer focus
~Creating a Virtual Catalog and Evaluating Customer's Value(Example)

It is more easier for CEO or TOP executives to make decisions by Virtual Catalog

The purpose of business ...	preconditions Preparing a lots of contents	Business domain medical	Sales targets ...billion yen per year
Customer Value It will not sweat or fog the pictures Dirt can be washed off easily with water Antibacterial, stain prevention	Products Outline – Endoscope  Reference::: http://www.onaka-kenko.com/column/col_02.html		How it's achieved (technology) Hyper-hydrophilic technology Organic matter decomposition technology
Advantage It can be more correct operation as usual		Product series 241/244/246/248	
Solutions Antibacterial Systems	...	Characteristics of support services Scope cleaning	Application Mirrors Recycle Systems

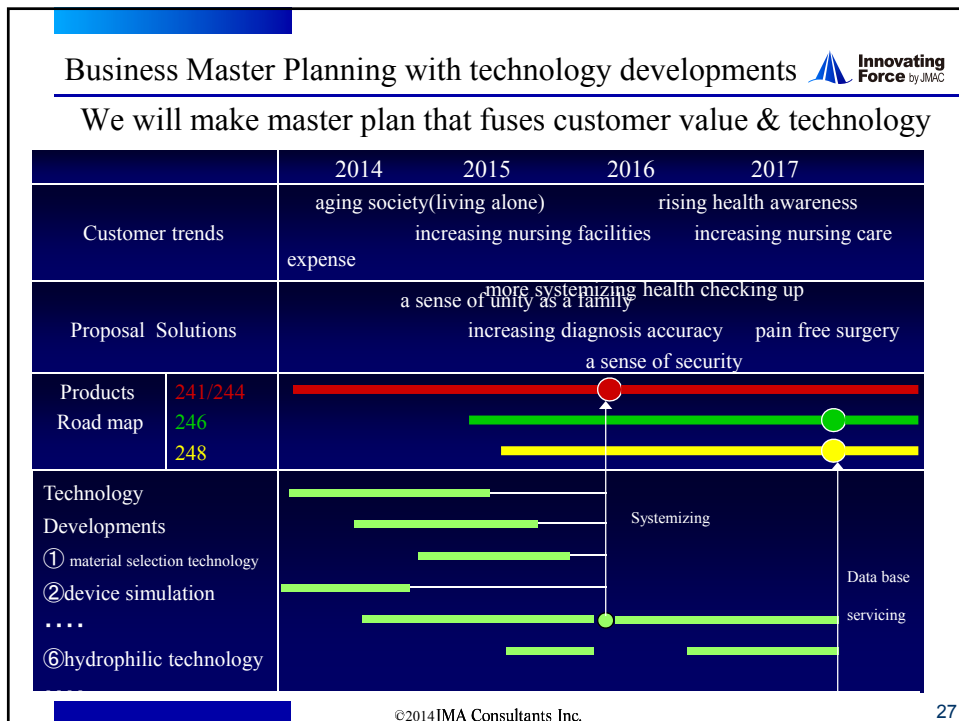
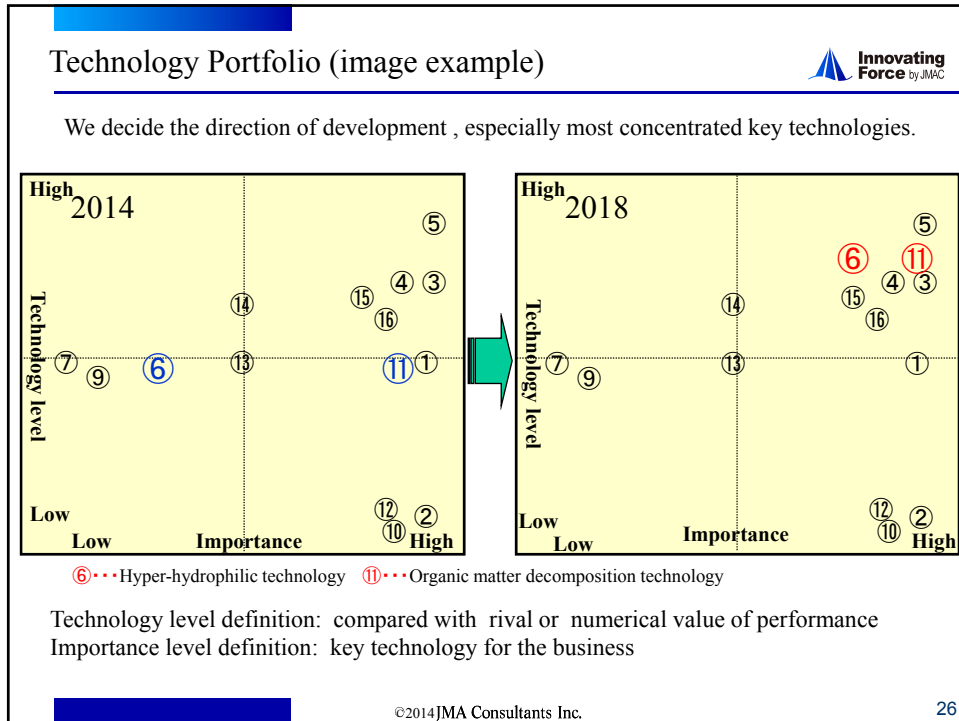
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Proposal for customer focus
Business model Frame works(example)

Think totally from products ideas to business solutions

Product ideas		Business model Application		
Endo Scope mirrors	Antibacterial Systems	Scope cleaning	Full Cleaning systems	Mirrors Recycle Systems
Product	Solutions	Service	Maintenance	Disposal

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V. THE CASE STUDY OF MATERIAL RESOURCE COMPANY

B2B examples

In this case B(material resource company) to B(parts components company)

The case study of material resource company

We have been consulting for ten years to make new business in this Company. We have 6 themes per year. We'll make cross-organized development team across different functions. Each theme will take about 6 month to produce new scheme. This photograph will show the meeting of the project groups. (the man standing in front of the picture is me)

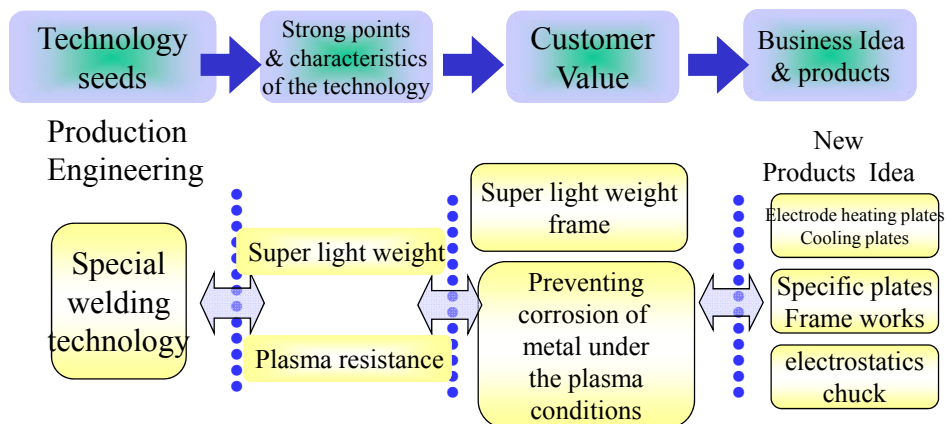


Nikkei business 28 Jun. 2004

Proposal products & solutions for equipment maker

Technology change into customer value (Example)

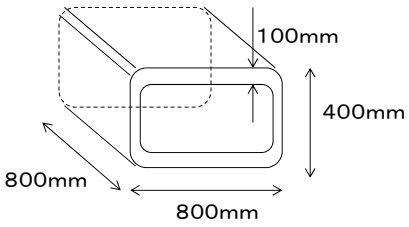
It is common sense in the semiconductor world,
however not common sense in the law materials developments
(Consultant knows different industry, so can image another idea.)



Proposal products & solutions for equipment maker					
Products & solutions					
Technology		New light alloy & New surface treatment	Special welding technology		
Products		electrostatics chuck	Specific plates Frame works	Electrode heating plates Cooling plates	
Markets	Semiconductor	stepper			
		deposition			
		etching			
	Liquid crystal	sputtering	3maker targets (...billion dollars)		
		CVD	2maker targets (...billion dollars)		
		etching			
		exposure			
		cleaning			

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Proposal for customer focus(Example of Specific plates Frame works)				Innovating Force by JMAC
The purpose of business	preconditions	Business domain	販売目標	
new entry into semiconductor & liquid business domain	Introducing Specific facilities	Semiconductor & liquid crystal equipment	1 billion yen(2018)	
Customer Value - ensuring a long time (the stability of welding points) - energy & resource saving - quick turnaround	Products Outline -Specific plates Frame 		How it's achieved (technology) - internal welding facilities - stably supplying resource - reduction in the generation of strain - improving dimensional accuracy - uniformly cooling waterway design - nondestructive inspection	
Advantage - manufacturing with no material loss - can make cooling waterway	Characteristics of support services 24H turnaround			
solutions - cannot leak at all - no defects at sealing points				

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Business Master Planning with technology developments							
Market trends		2003	2005	2007	2009		
	semiconductor	8inch(200mm)	12inch(300mm)	16inch(400mm)			
	Liquid crystal	reducing particle contamination		Integration of each reaction systems			
Proposal solutions		5 th generation	6 th generation	7 th generation	8 th		
		Specific welding High purity resources	⇒integrated manufacturing systems →materials +specific welding+ →surface treating + short turnaround		proposing new alloy + new surface treating		
Products Road map		①waterway structure products	②multilayer welding products	③high purity products	Structural members Sus→Al	•high temperature high strength alloy •hybrid structure	
					VACUUM CHAMBER	High temperature Vacuum chamber	
Technology development		①Complicated waterway design	②reduction control in the generation of strain	③Plasma resistance reducing particle contamination	④THERMAL ANALYSIS METHOD	⑤Mass production technology	⑥new alloy & new surface treating technology
investment for facilities		••million yen	••million yen	••million yen	••million yen		

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The results of the consulting



It took 3~5 years to increasing 10million dollars sales figures after launching. Theme3 is about automobile and increasing 50million dollars per year. Theme4 is about semiconductor's equipment and increasing 10 million dollars sales per year. Theme5 is about new radioactive waste vessels and it took 8years to start new business. At those 3 themes, there were great passions of the leaders to continue.

Visible planning process is important for top executives to make decisions.

2003		2004		2005		2006	
theme1	○	theme7	×	theme13	○	theme19	○
theme2	○	8	◎	14	○	20	○
theme3	◎	9	×	15	×	21	×
theme4	◎	10	×	16	×	22	△
theme5	◎	11	○	17	×	23	△
theme6	×	12	○	18	○	24	△

◎increasing 10million dollars sales figures after launching

○stating to business

△studying business or reconsidering

× giving up business

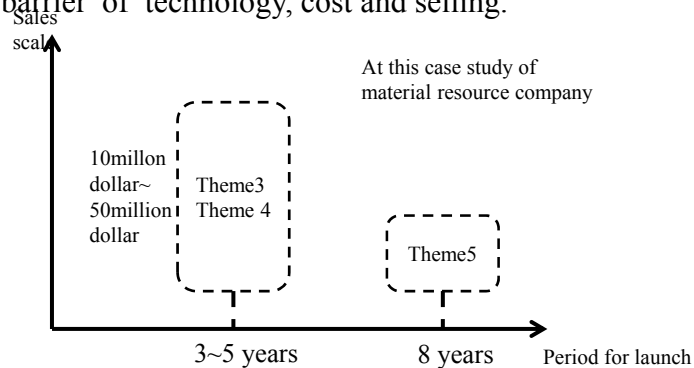
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VI. LUNCH PERIOD FOR SAILING

Top executives and CTO make great effort to be patient.

It will take 3~8 years to increasing 10million dollars sales figures after launching. It is necessary for Top executives and CTO to make great effort to be patient. We will always overcome the barrier of technology, cost and selling.



VII. CONCLUSION

CONCLUSION

“Customer Value Method” is effective for creating new business.

Doing visible planning process is important between engineers and marketers who connect the technology strong points into customer value .

It will take 3~8 years to increasing 10million dollars sales figures after launching. It is necessary for Top executives and CTO to make great effort to be patient. And it is necessary for the theme leader to have the passion to continue.

We will always overcome the barrier of technology, cost and selling.

ACKNOWLEDGMENT



The authors are grateful for the contribution of Nippon light metal company.

This study was supported by Japan Management Association Consultants Inc.
,especially our R&D teams.

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