

From Fusion to Finance:

Commercialization of Research and Financial Value

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Learnings from :

1. Fusion Research
2. Strategy Consulting
3. Manufacturer
4. Venture Capital

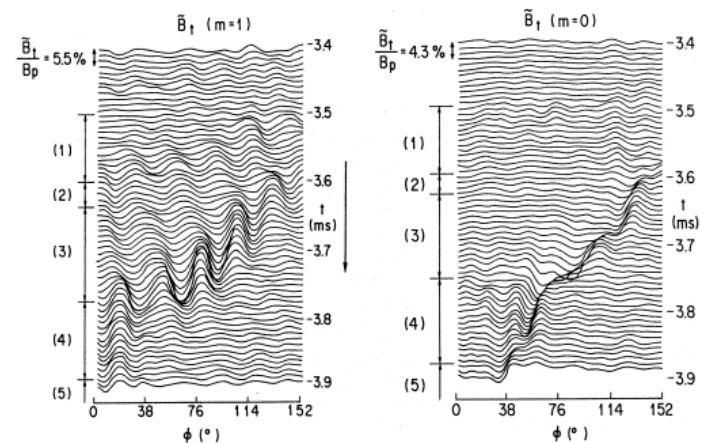
Transition with
Every Two Olympic Cycles
(~ 8 years)

1. Fusion Research

MHD Instabilities of Torus Plasmas

(Tokamak, Reversed Field Pinch)

- Univ. of Tokyo (TORIUT, REPUTE), PhD
- Princeton Plasma Phys. Lab. (TFTR)
- Electro Technical Lab. (TPE)



Plasma Performance = Results of Total System Integration

→ 「A small Leak Can Sink a Great Ship」 小さな事も疎かにすべからず

「God is in the Details」

2. Strategy Consulting

<Application of Technology on Business>



- 「Client Interest First」
- Framework: 3C, etc.
(Customer, Competitor, Company)

- Innovation Management
<Nonconformist> 異端児
<New Combination> 新結合

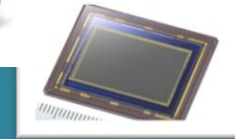
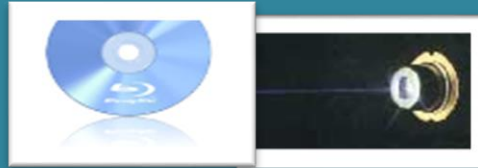
3. Elec. Manufacturer

SONY



● Execution

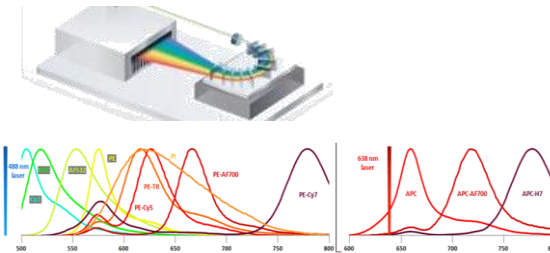
- Biz. Portfolio Management
- New Biz. Launch (Healthcare)
(Life Science Research Equip., Personal Health, etc.)



Cons. E Tech + Pro. Products

Flow Cytometry

Digital Pathology



- 「Interdivisional Cooperation/ 部門間連携+ Startups連携」
- 「Threshold of Success & Failure/ 成功失敗の境い目」

4. Venture Capital

- Accelerate Innovation by Power of Finance
- Understand relation of technology and financial value
- Invested Startups : IT, Electronics, Materials, etc. : Total Gain >>1

NOT

Start-ups

- Appeal only dreams & strength
- Hide inconvenient factors, unaware of risks
- Overvalue oneself

But

- Disclose weakness and risks
- Take counterplans
- Right self-valuation

Investors

- Judge by only book cover, taking it for granted (鵜呑み)
 - invest on wrong eggs
 - overlook/miss real eggs
- Little Study, Intuition w/o backgrounds

- Judge by content and reality
 - exclude fake
 - identify real authentic
- Study + Smart intuition

- Fame and/or speaking fluency do not mean anything.
- Content is Essential: 中身が大切
 - Grasp of user unmet needs
 - (Quantitative analysis) of technology-function relationship
- (After screening out wrong eggs,) 「Strategic Intuition」
- Keen Eye is important. 目利きのアンテナ: 第一人称・自己責任での実行経験が重要

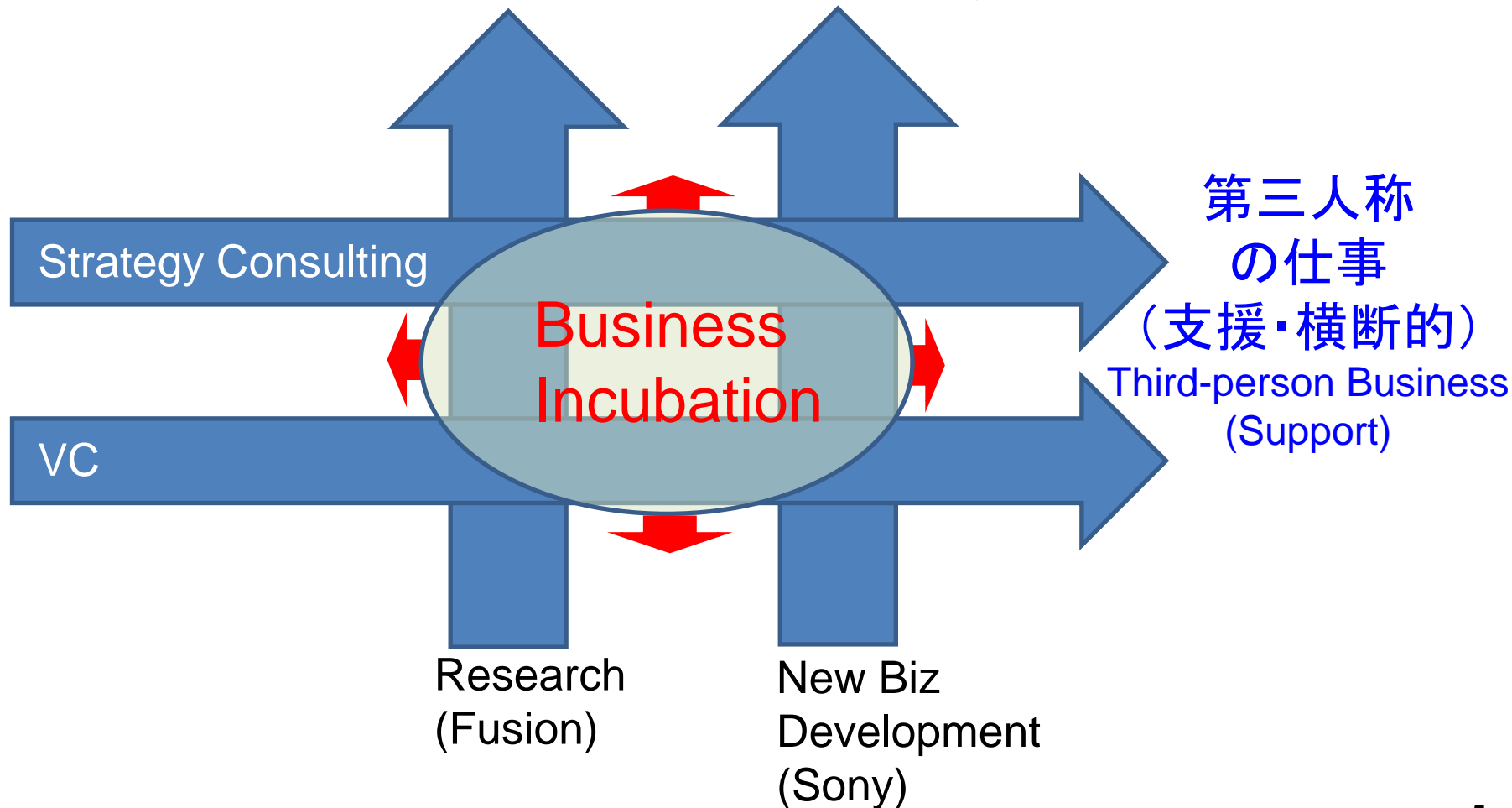


Summary 1

For business incubation,
both experiences of 1st person business and 3rd person business are important.

第一人称の仕事(自己責任・個別深掘り)

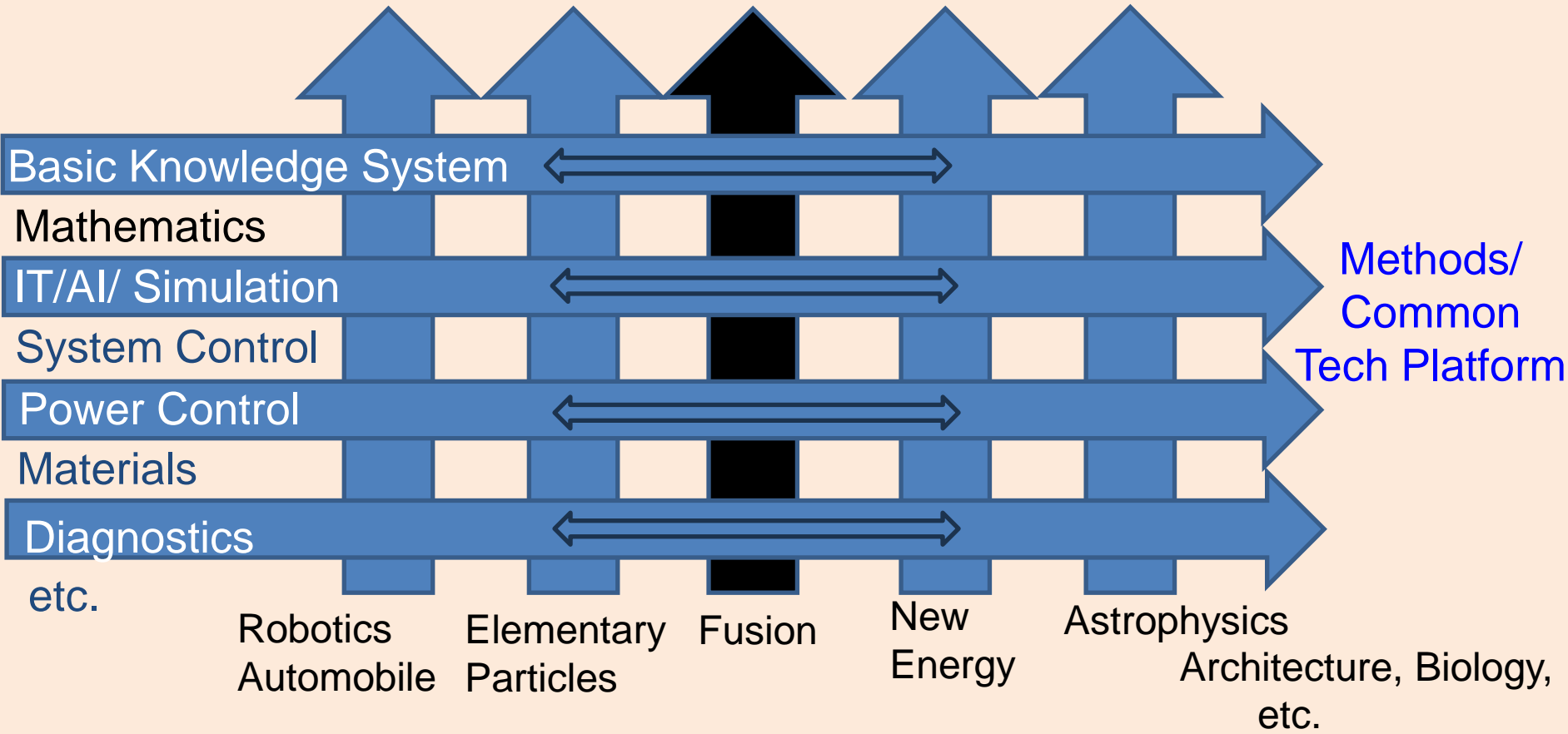
First-person Business (Self responsibility)



Summary 2: Expectation on MS10:

New Disruptive Idea through Cross Learning

Research Domain



Summary 2: Expectation on MS10:

New Disruptive Idea through Cross Learning

Commercialization	<h3>Simple Fusion Reactor for Zero Carbon</h3> <ul style="list-style-type: none">- Evolution of Existing Concepts<ul style="list-style-type: none">-FRC, Pinch, Magnetized Target, Muon, etc.-Tokamak, Helical, Inertial- New Concept
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Basic Knowledge System

Screening Criteria

- Simple to Make
- Fit for Application, etc.

Mathematics

Methods/

IT/AI/Cloud

System
Physics
Materials
Diagnostics

- Deeper Understanding of Physics
(Confinement /transport/ Instabilities)
- Suppression of μ -Turbulence/Instabilities
- New Scientific Concept
- New Reactor Concept (Energy Extraction)

Approach

- Expand Space of Hypothesis/Model: Disruptive Level
 - by Human x Math, AI, Advanced Simulation, Big Data
 - Quantitative Analysis, Theoretical Model
- Flexible Experiment System
- Diagnostics (Higher Resolution, Total 3D)
- Iteration of PDCA