

**Meta-Technologies and Innovation
Leadership:**

*Why There May Be Nothing New
Under The Sun*

Professor Rashi Glazer

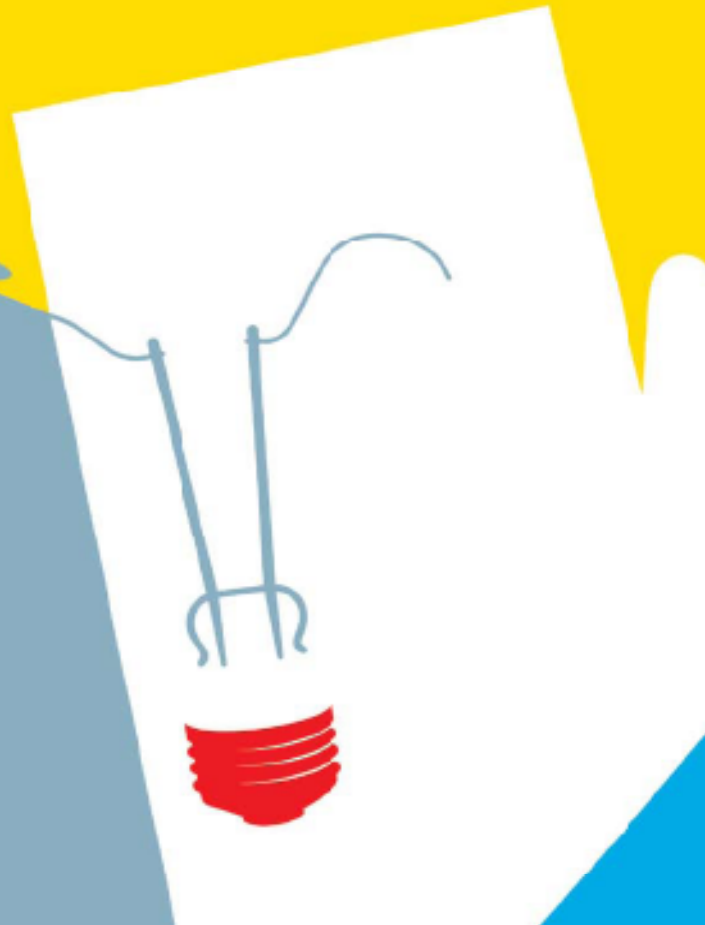
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Something new under the sun

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A new communications technology was developed that allowed people to communicate almost instantly across great distances, in effect shrinking the world faster and further than ever before. A worldwide communications network. . . , it revolutionized business practice, gave rise to new forms of crime, and inundated its users with a deluge of information. Romances blossomed. . . Secret codes were devised by some users and cracked by others. The benefits of the network were relentlessly hyped by its advocates and dismissed by its skeptics. Governments and regulators tried and failed to control the new medium. Attitudes toward everything from news gathering to diplomacy had to be completely re-thought. . . . Meanwhile, a technological subculture with its own customs and vocabulary was establishing itself. . . .

From The Victorian Internet, Tom Standage

The Problem(s)

- How to be “market driving” and “market driven” at the same time? (*Do consumers know what they want?*)
- How to avoid the “innovator’s dilemma – i.e., becoming a victim of “disruptive” technology?

The Solution

- *Innovative firms need to focus on:*
 - **Generic Benefits**
 - **Meta-Technologies**

A Taxonomy of Technology

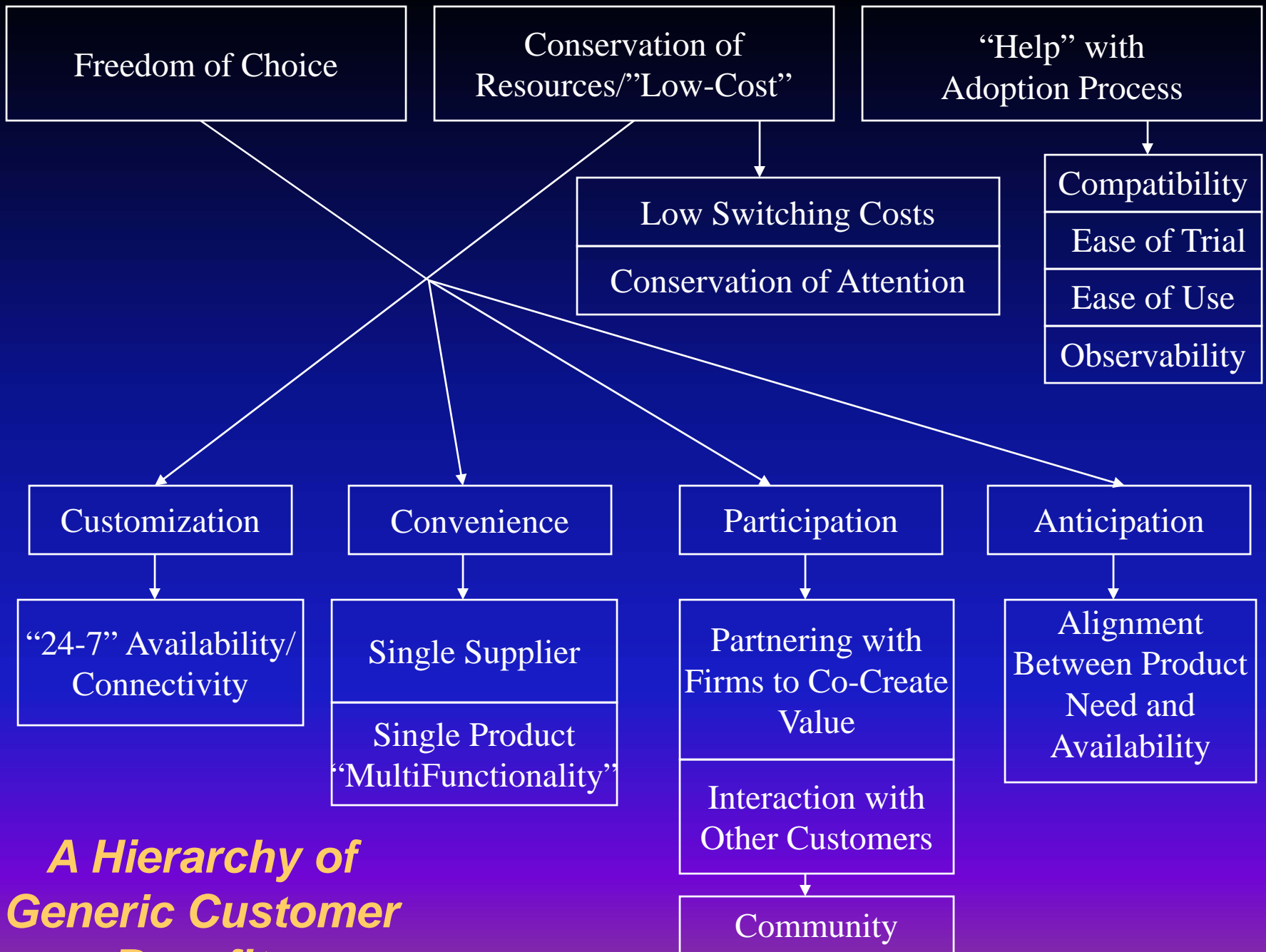
- Technology is the “know-how” required to produce and/or sell a product or service.
 - **Product Technology** – the know-embodied in the product
 - **Process Technology** – the know-how involved in the manufacture of the product or the steps necessary to combine materials to produce a product
 - **Management Technology** – the set of management procedures associated with selling the product and administering the business

Benefits and Technologies

- (a) Firms produce a set of (technical) *features*, but consumers purchase *benefits*;
- (b) Most benefits are *generic* in nature; and
- (c) The core “technologies” on which innovations are based –*meta-technologies* – are also generic in nature.

While innovation may exist at the functional level of features or technical solutions, the benefits, needs and problems at the root of the innovation are pre-existing. “New functionality” may not be so new after all:

- Consumers “know what they want” without “knowing it.”
- **There’s Nothing New Under the Sun!**



***A Hierarchy of
Generic Customer
Benefits***

Ecological

Ephemerization
Mobility
Miniaturization
Action at a Distance
Non-Toxicity

Self-Referential

Meta-knowledge
Automization
By-wire systems
Branding

Holistic

Interactivity
Networking
Coordination
between top down
and bottom up
processing
Contingency based
planning

Meta- Technologies

Smart

Software
Decentralized
Personal Computing
Customization
Sense and Respond
The Menu
Modularization
Analogue Processing

Meta technologies

- **Ephemerization** (*doing more with less*)
- **Action at a Distance**
- **Networking**
- **By-Wire Systems** (*fly-by-wire; manage-by-wire*)
- **Branding**
- **Sense and Respond**
- **The Menu**

Meta-Technology	Generic Benefits
Ephemerization	Help in making choices conservation of attention; convenience; customization; 24-7 availability
Action at a Distance	Convenience; customization; 24-7 availability; conservation of attention
Networking	Participation; co-creation of value; community; compatibility
By-wire systems	Help in making choices; conservation of attention
Branding	Observability; compatibility; conservation of attention
Sense and Respond	Customization; Co-Creation of Value
The Menu	Customization; help in making choices; conservation of attention; convenience; ease of use; compatibility

BIZARRO / By Piraro

