
A NEW MODEL OF HUMAN NEEDS FOR MOTIVATING INNOVATION

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OUTLINE

- ❖ Innovation: A Simple Definition, a Dynamic Process, and Major Insights
- ❖ Major Participants: An Investment Perspective
- ❖ Goal of Innovation Management
- ❖ Major Elements of Innovation Management: Creativity, Marketing, and Organization
- ❖ Heart of Innovation Management: A New Perspective on Human Needs & Motivations
- ❖ A Key Question

INNOVATION A Simple Definition

***Innovation:
Idea Implemented with Impact.***



Implementation



Idea

$0 \rightarrow 1$

INNOVATION

Impact

$1 \rightarrow \infty$

- *Magnitude*
- *Duration*

THE SIMPLE DEFINITION APPLIES TO A WIDE RANGE OF INNOVATIONS

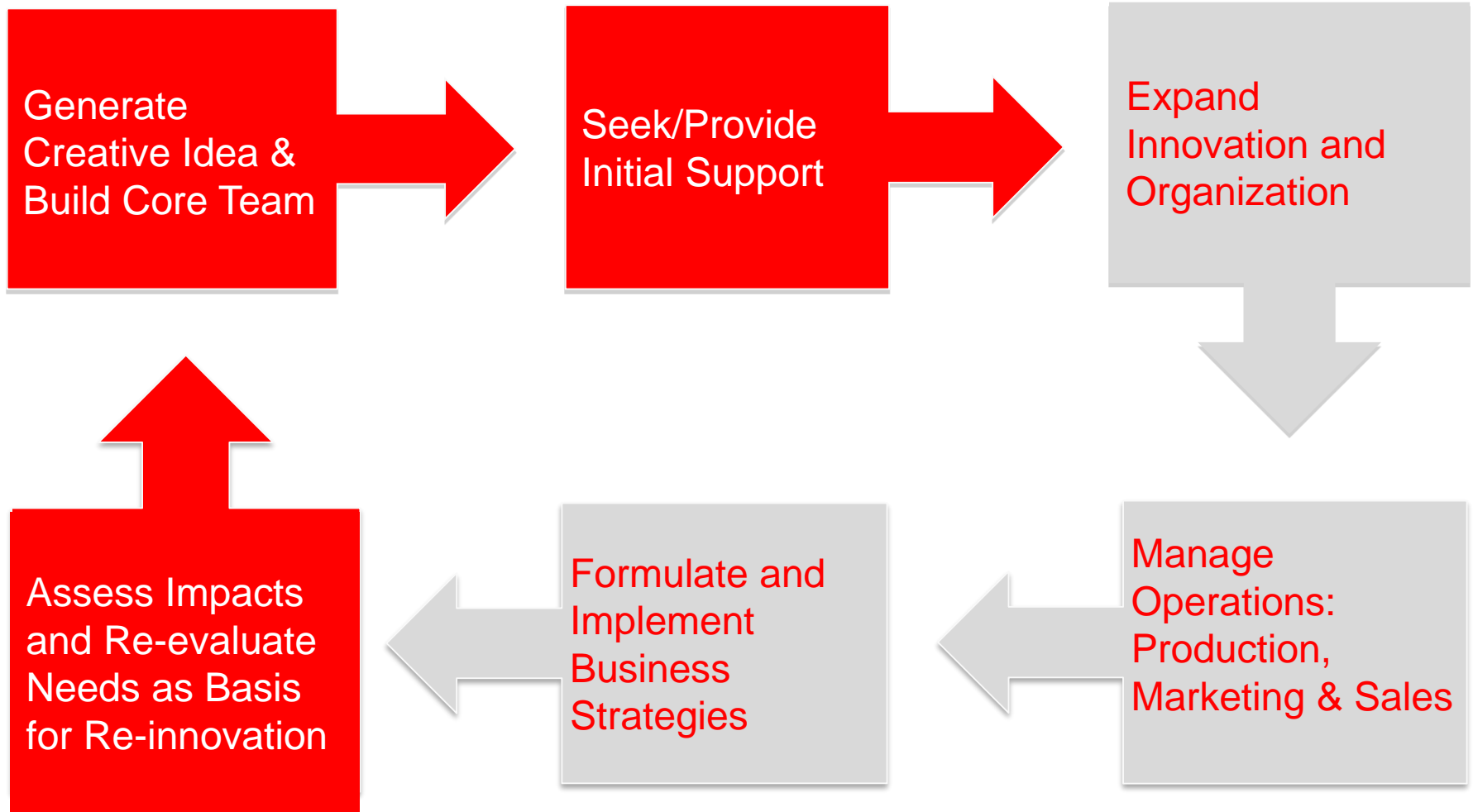
Examples:

- ❖ Technologies: nuclear fission, semiconductor
- ❖ Products: light bulb, iPhone
- ❖ Services: labor intensive, technology intensive
- ❖ Social: social network, micro-lending
- ❖ Management practices: standardization, quality control
- ❖ Theoretical concepts: evolution, relativity
- ❖ Ideological principles: democracy, Marxism
- ❖ Philosophical tenets: Confucianism, Buddhism

INSIGHTS FROM THE SIMPLE DEFINITION

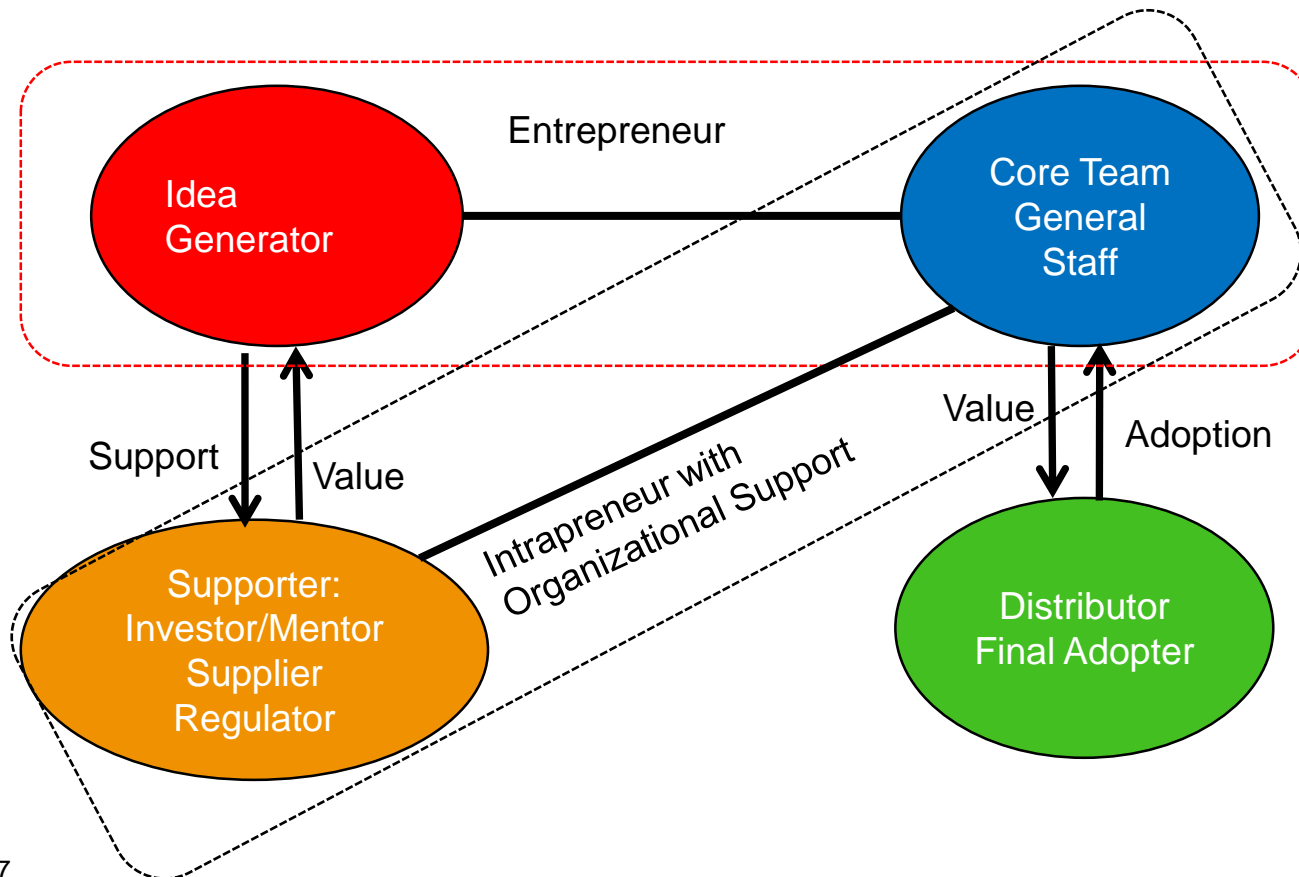
- ❖ Innovation is *not a static idea* but a *dynamic process* involving implementation to produce impact.
- ❖ We are *ALL Innovators* with differences in *Impact*.
- ❖ For an innovation to have significant impact, idea is important, but *implementation is critical* as well as *complex and difficult*, because it will involve the collaboration and coordination of many participants in the process over a long period of time, a fact generally *sensed*, but often not fully appreciated.

INNOVATION PROCESS: **An *Interactive System* with Common Key Elements**



KEY PARTICIPANTS OF THE INNOVATION PROCESS

The key participants of the innovation process: *Idea Generator*, *Core Team*, *Supporter*, and *Adopter*.



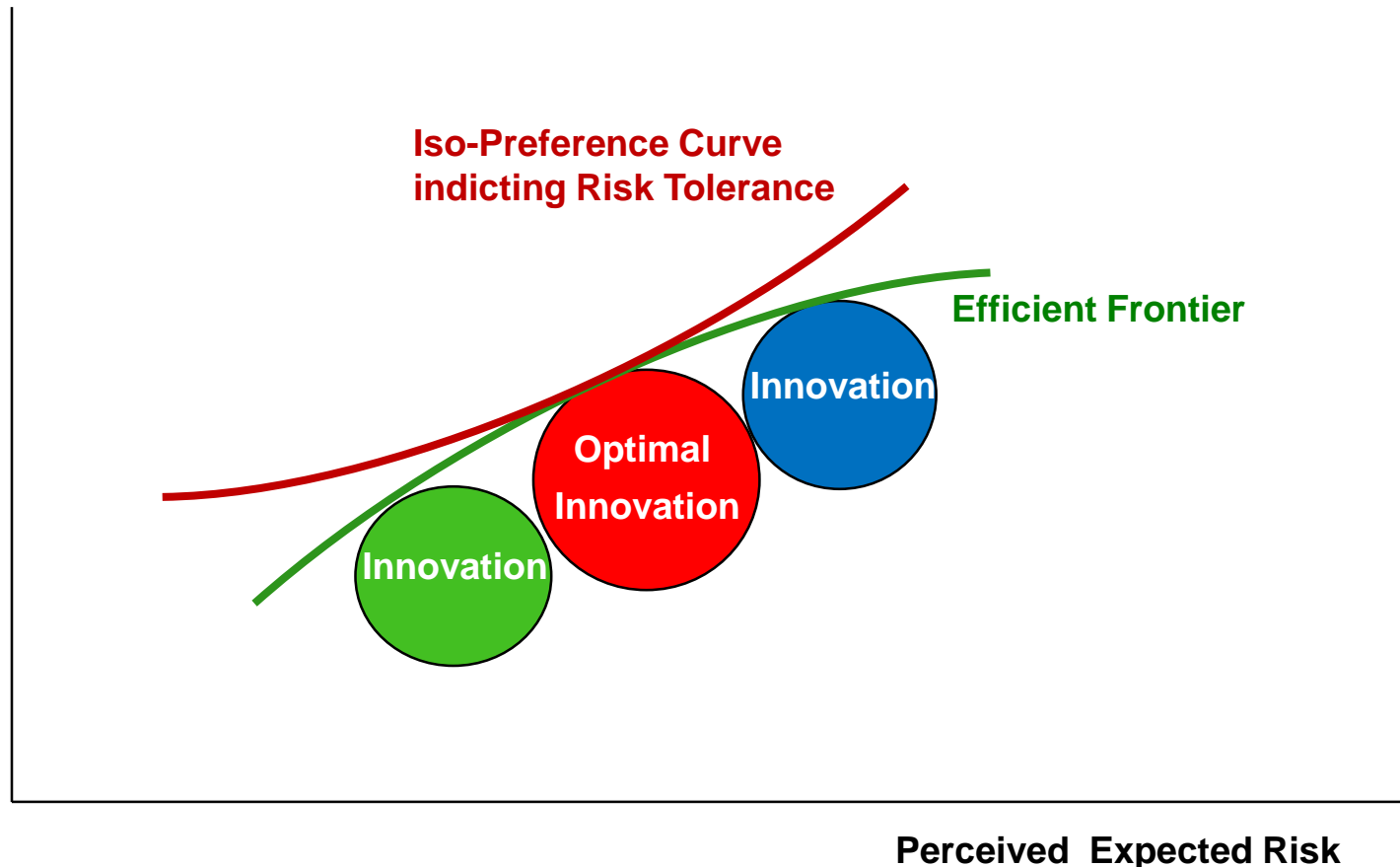
KEY INSIGHTS FROM THE INNOVATION PROCESS

- ❖ *Entrepreneurship is innovation* with external support and independent organization formation.
- ❖ *Research and technology development is another special form of innovation* generally within an existing organization.
- ❖ All workers in an organization can be *internal entrepreneurs or intrapreneurs* by following the same innovation process.
- ❖ *Motivating and managing workers to be intrapreneurs by creating an innovative culture* is essential for an organization to be continually innovative and competitive.

INVESTMENT PERSPECTIVE FOR A PARTICIPANT IN THE INNOVATION PROCESS

A participant in the innovation process makes *resource* (time, money, effort, etc.) *investment decisions based on Perceived Expected Net Values & Risks*. *Modern Portfolio Theory* can be used to identify the *optimal innovation*.

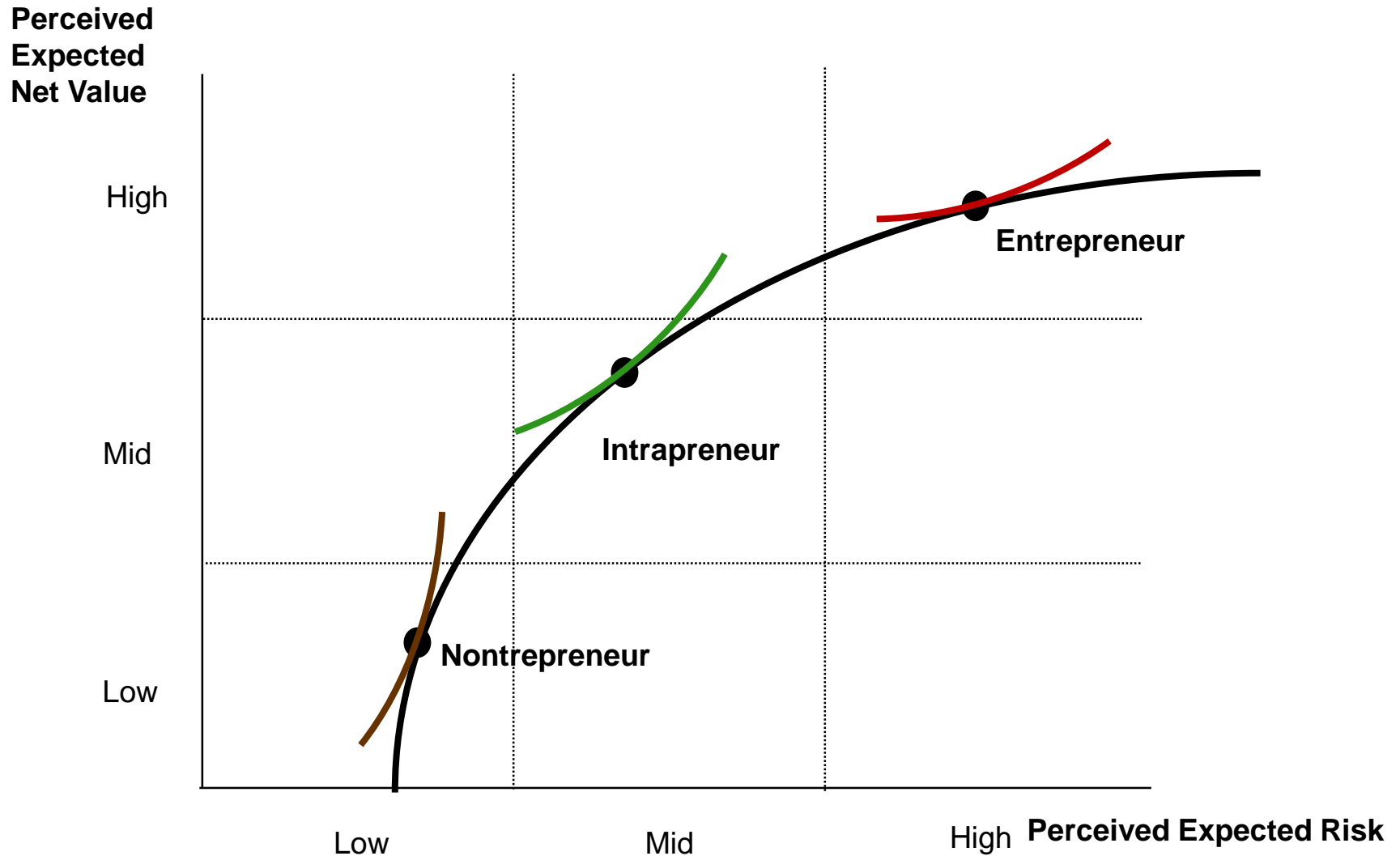
Perceived
Expected
Net Value
(Benefit –
Cost)



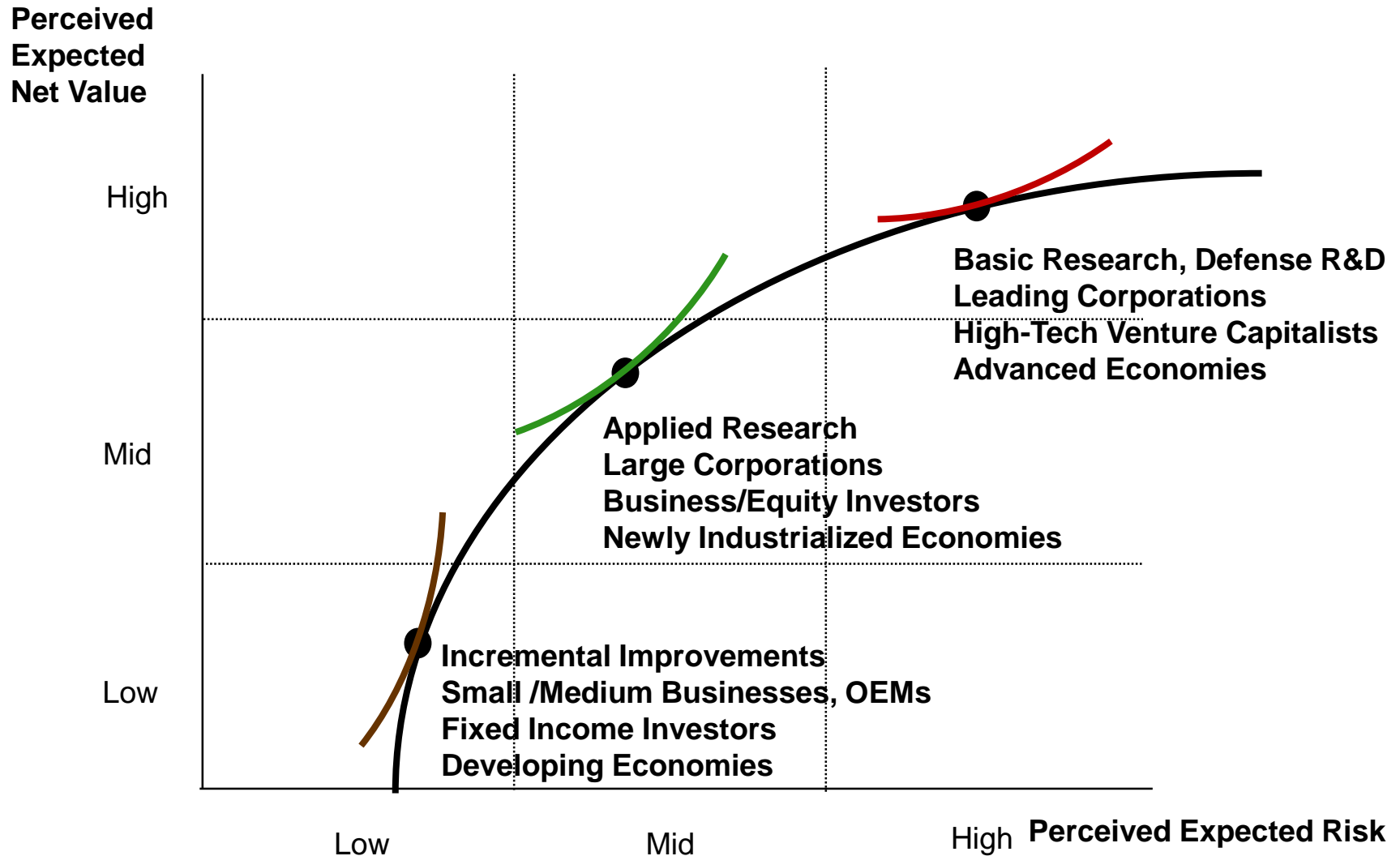
DIFFERENT VALUE-RISK BALANCES

- ❖ Dependent on *individual value and risk preferences*, these optimal innovations can be *different* not only among participants, but also within a participant class.
- ❖ For example, the optimal innovation for an *Idea Generator*, who is:
 - an *Entrepreneur*, generally has high value/high risk.
 - an *Intrapreneur*, tends to have medium risk/medium value.
 - a *Non-trepreneur*, largely will have low risk/low value.

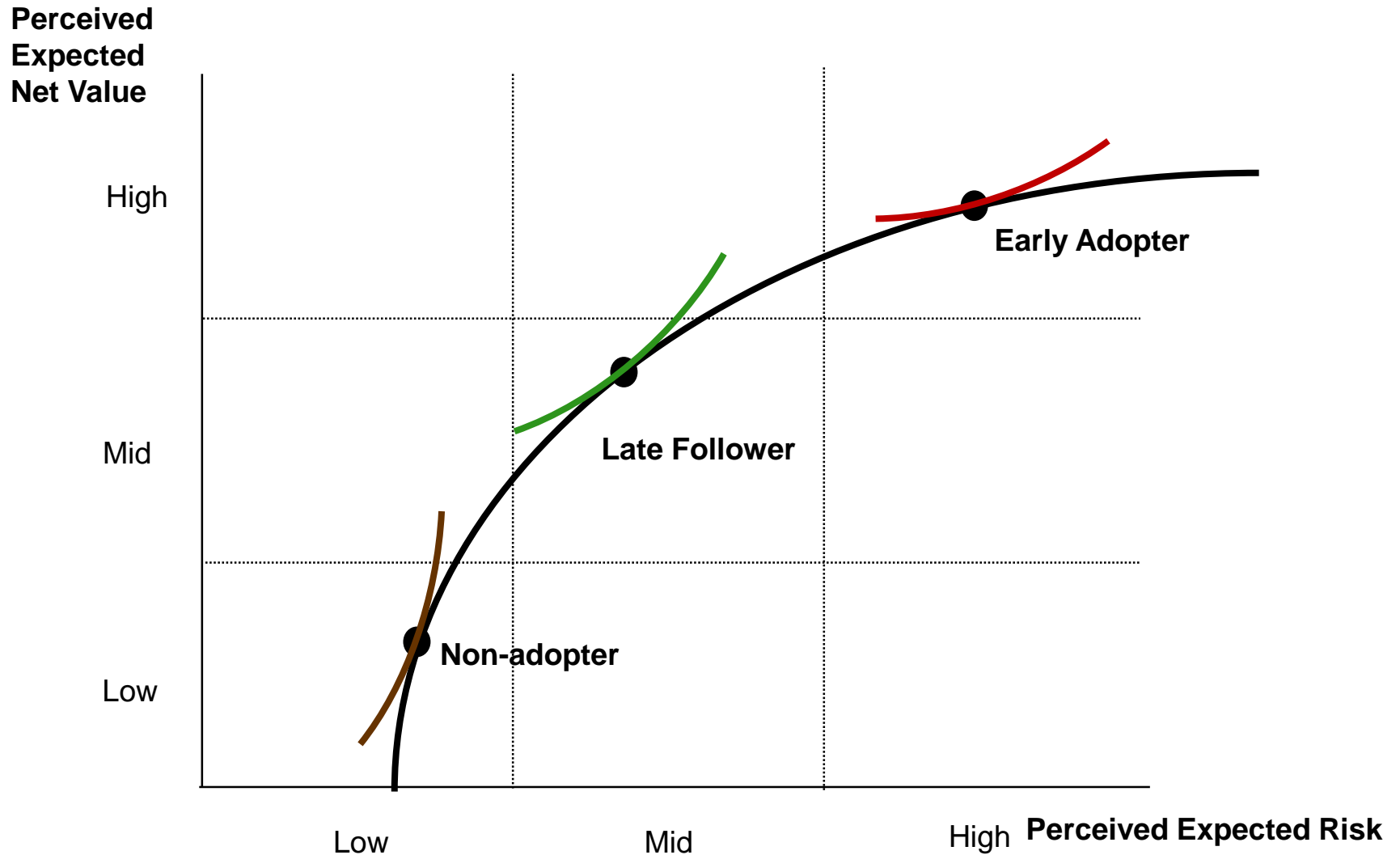
INVESTMENT PERSPECTIVE FOR IDEA GENERATOR AND CORE TEAM



INVESTMENT PERSPECTIVE FOR INNOVATION SUPPORTER



INVESTMENT PERSPECTIVE FOR INNOVATION ADOPTER



GOAL OF INNOVATION MANAGEMENT

- ❖ ***Innovation Management:*** *In addition to* traditional management functions, like organization, operations, marketing, strategy, etc., it emphasizes ***effective implementation to achieve impact*** through:
 - ***Productive creativity for idea generation***
 - ***Impactful marketing for participant synergy***
 - ***Adaptive organization for meeting evolving challenges***
- ❖ Statistics indicate that the commercialization rate of patented ideas in the U.S. has been less than 0.2%*; An important goal of Innovation Management is to ***increase this rate.***
- ❖ ***The Goal of Innovation Management is to motivate all participants through their needs to create values from the impact of effective implementation of an idea.***

KEY ELEMENTS OF INNOVATION MANAGEMENT

❖ ***Productive Creativity:***

- *Focus on the needs as the value bases of all participants*
- Efficient Thinking: Systematic development of tools

❖ ***Impactful Marketing:***

- *Focus on the needs as the value bases of all participants.*
- Communication and persuasion: Channel, message, and delivery.

❖ ***Adaptive Organization:***

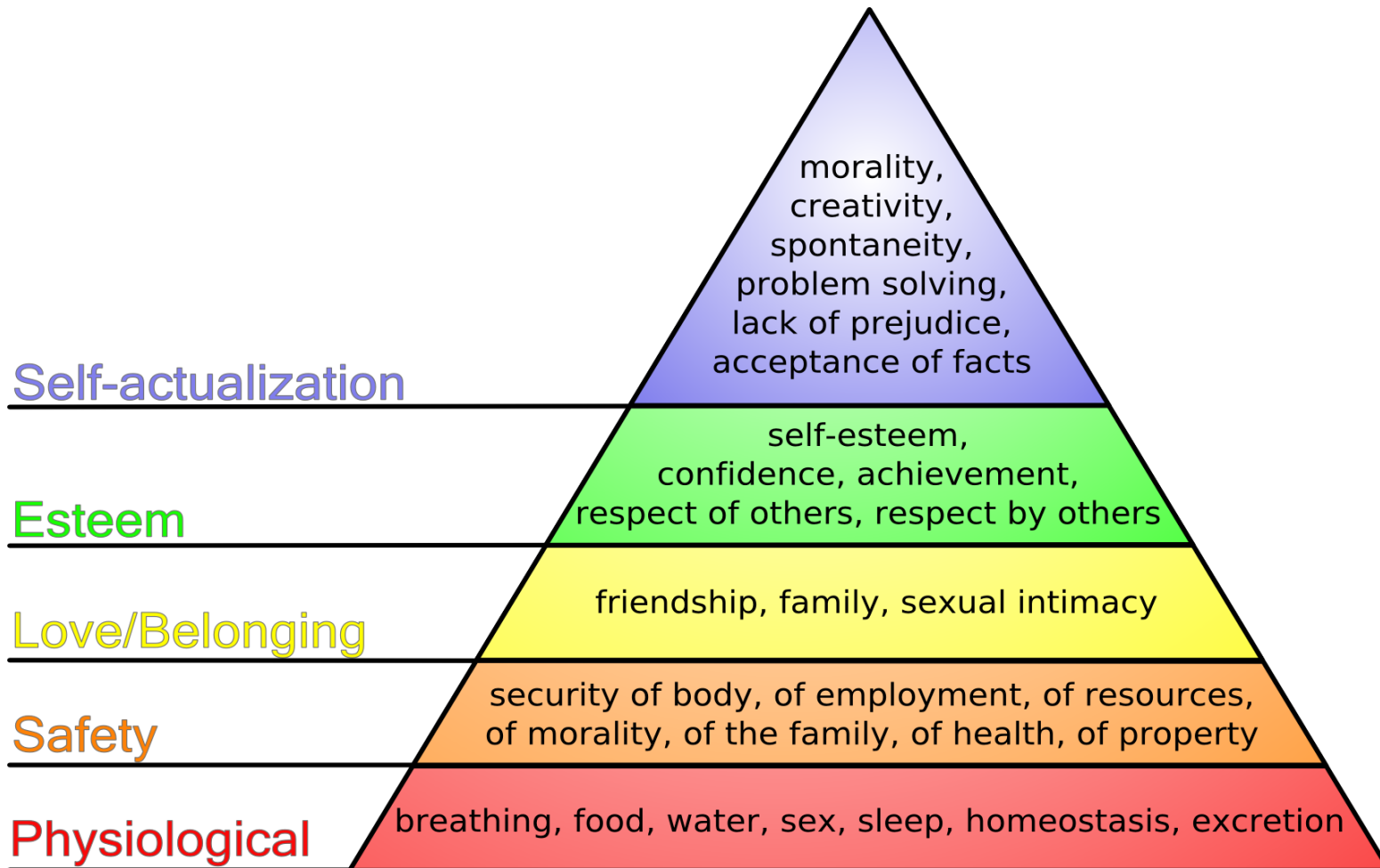
- *Focus on the needs of as the value bases of all stakeholders*
- Sustained innovative culture
- Responsiveness to evolving organizational challenges

HEART OF INNOVATION MANAGEMENT

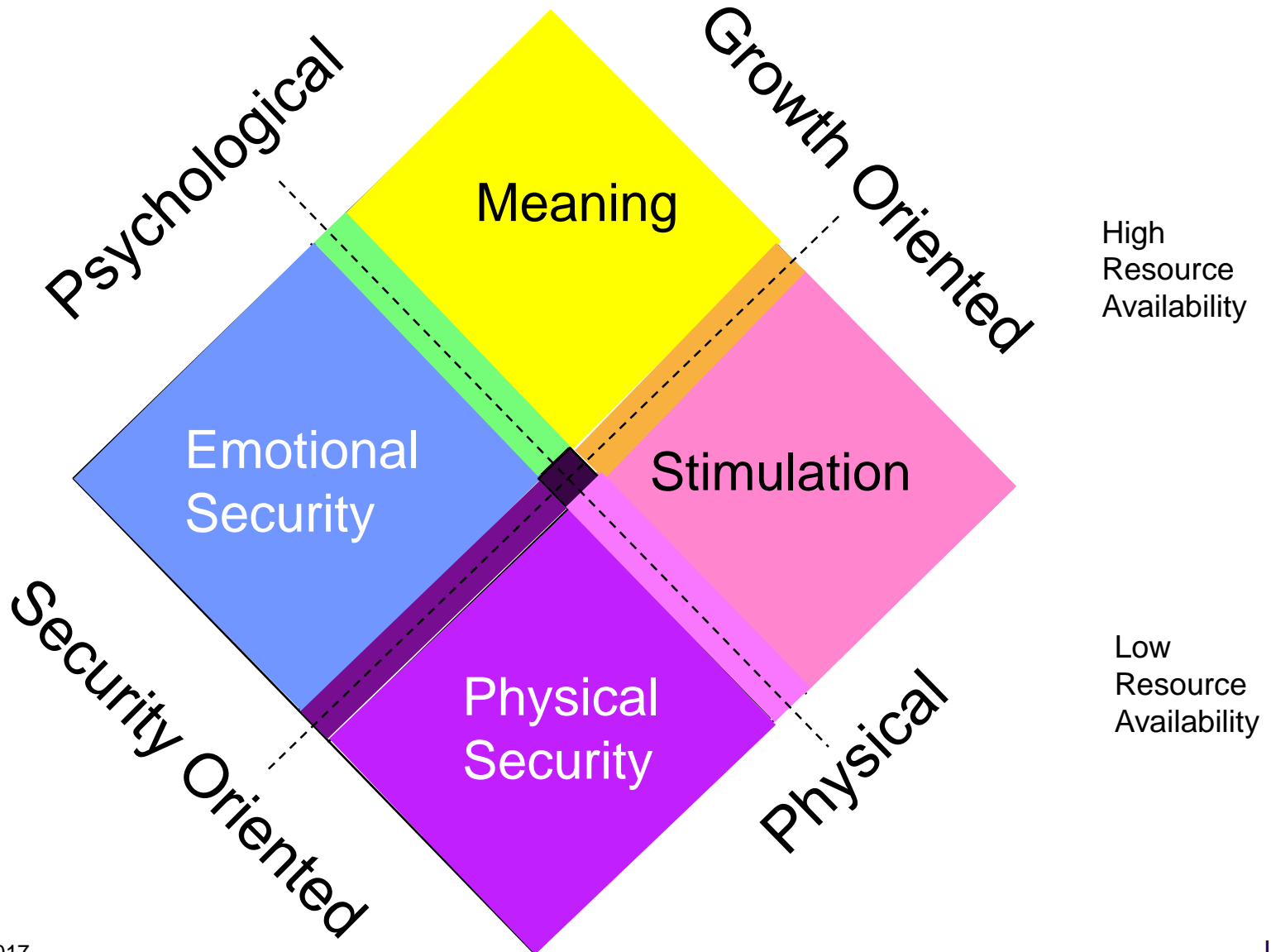
Human Needs and Motivations

- ❖ Participants in the innovation process all seek to fulfill their individual needs, which is the basis for value creation.
- ❖ Basic needs can be simply viewed as seeking real or perceived pleasure from stimulation and/or growth, and avoiding real or perceived pain from fear and suffering.
- ❖ Pleasure is related to the value and pain is related to the risks of making an investment of their limited resources (time, money, effort, etc.) to an innovation.

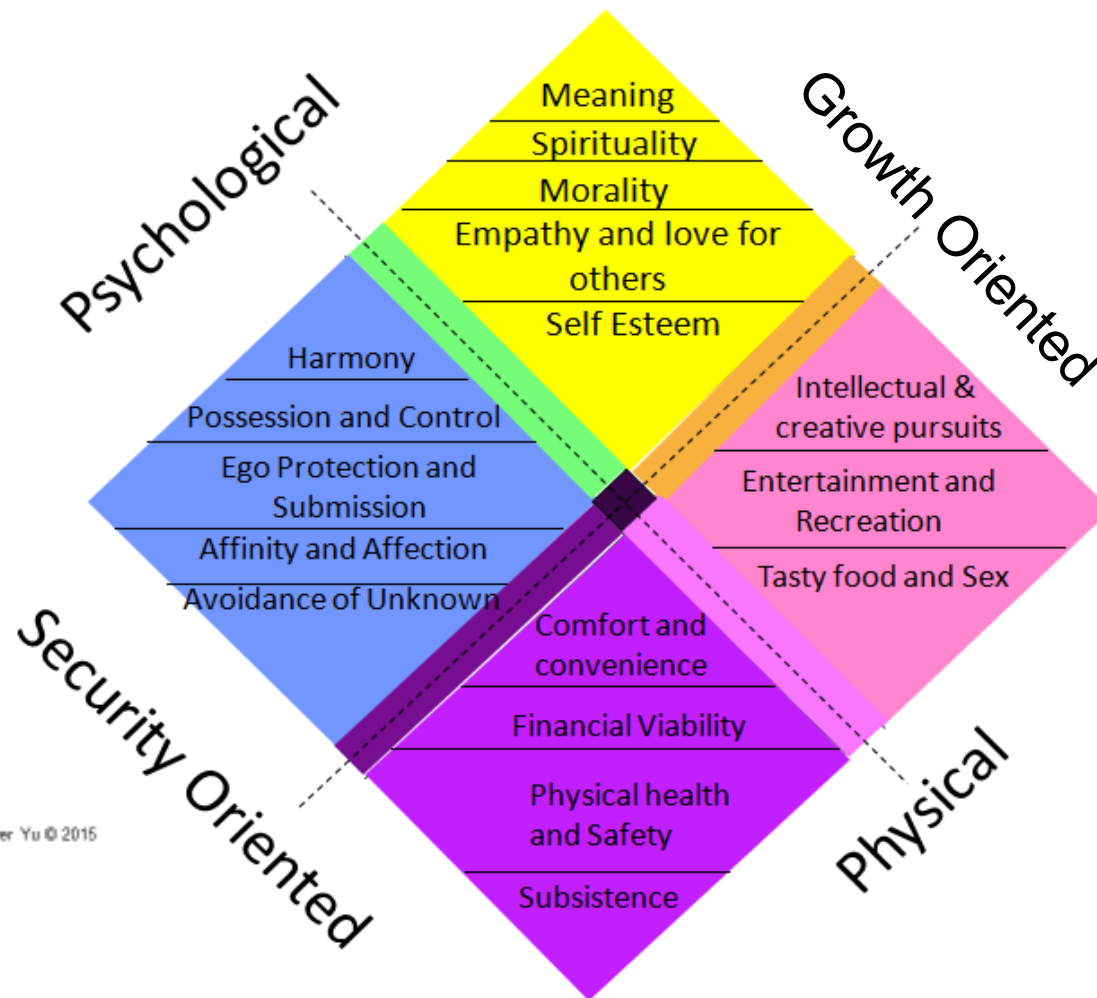
TRADITIONAL VIEW OF HUMAN NEEDS



A NEW PERSPECTIVE OF HUMAN NEEDS



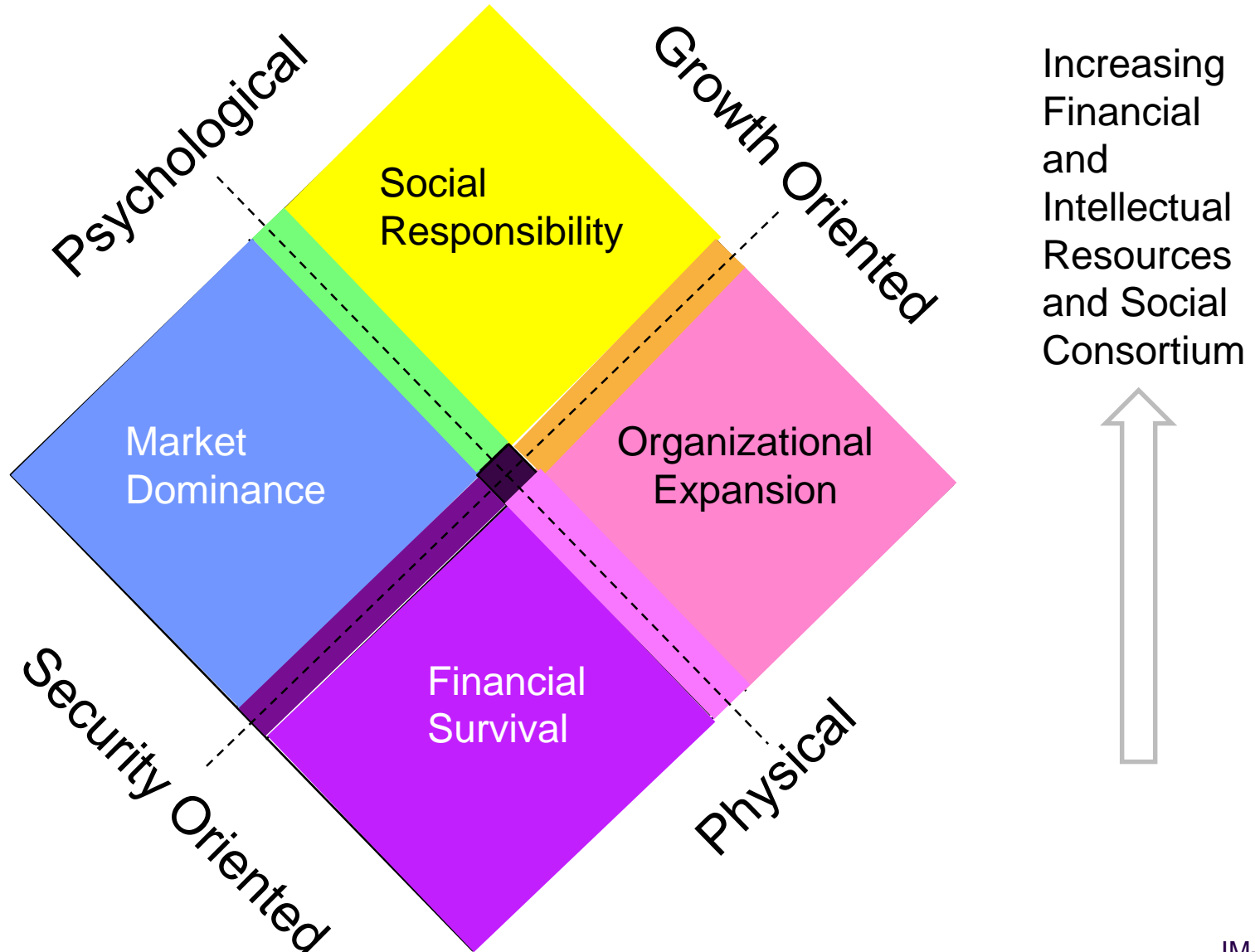
MODEL OF INDIVIDUAL NEEDS



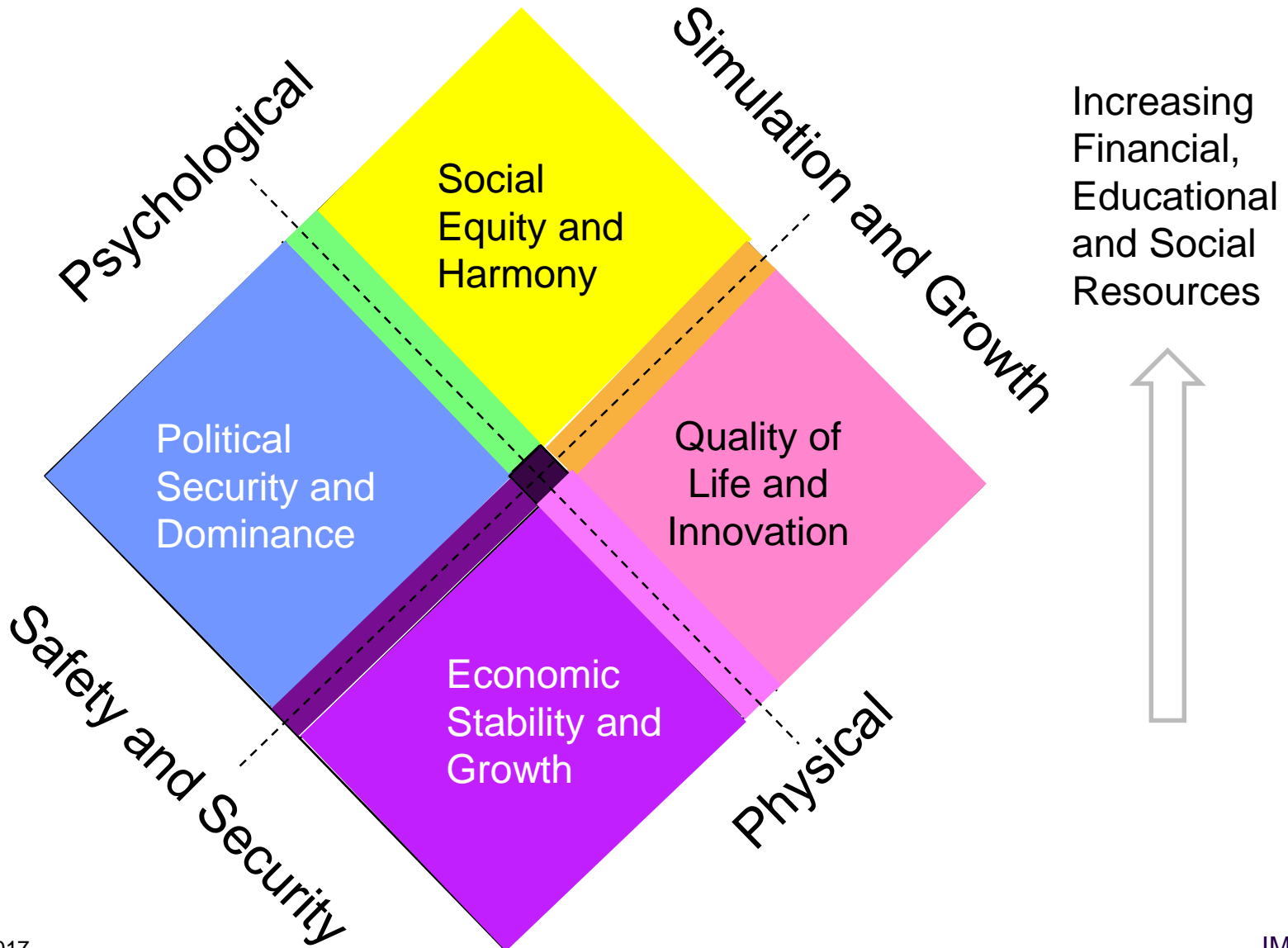
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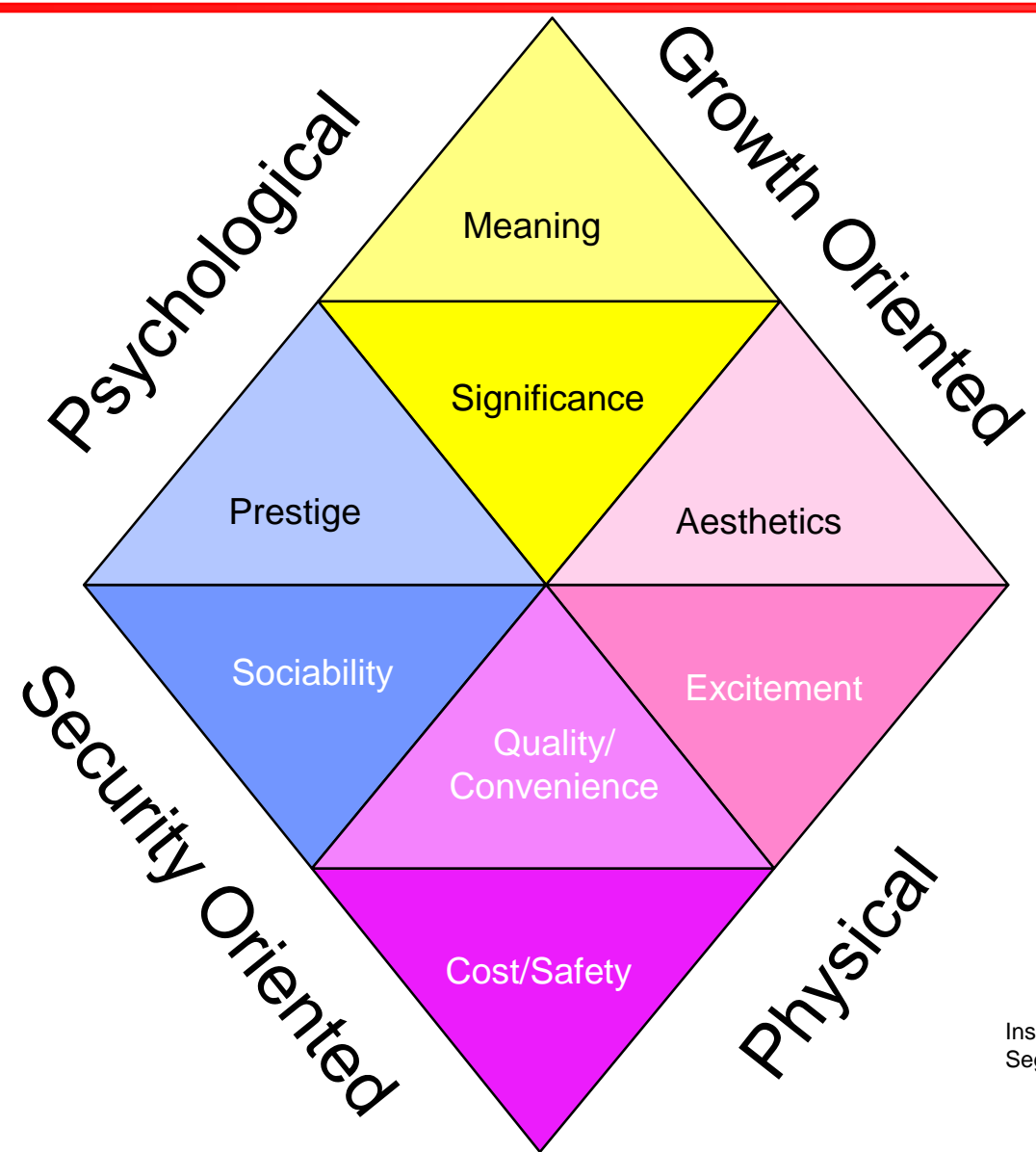
APPLICATION TO ORGANIZATIONAL NEEDS



APPLICATION TO SOCIETAL NEEDS



APPLICATION TO INNOVATION ADOPTION
Creative Idea Generation based on Need Segmentation
to Motivate Innovation Adoption



Inspired by Arnold Mitchells, Psychographic Segmentation, SRI International 1968

A KEY QUESTION

How to identify the specific needs of different individual participants and develop effective targeted motivating incentives?

One possible answer:

Further relate the needs of individual participants to different personality types.