



# UP AND DOWN THE CAPABILITY HIERARCHY – THE NATURE OF CHANGE IN BUSINESS ENVIRONMENT AND ITS IMPLICATIONS FOR COMPETITIVE ADVANTAGE

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## BACKGROUND AND RESEARCH AIM

- Organizations' business environment is under constant *change/flux/turbulence*, and it has always been that way
- So what is new?
- The nature of change is changing
- Change is...
  - Faster than before
  - Of larger magnitude than before
  - More disruptive than before
  - Harder to predict
- *How do firm's gain and sustain competitive advantage in such circumstances?*

## DYNAMIC CAPABILITIES OF A FIRM

- Dynamic capabilities perspective as an explanation for competitive advantage under change in business environment
- *“the firm’s ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments”* (Teece et al., 1997: 516)
- *“a learned and stable pattern of collective activity through which the organization systematically generates and modifies its operating routines in pursuit of improved effectiveness”* (Zollo and Winter, 2002: 340)
- Dynamic capability = meta-capability which governs the rate of change of “ordinary” capabilities

## CAPABILITY HIERARCHY

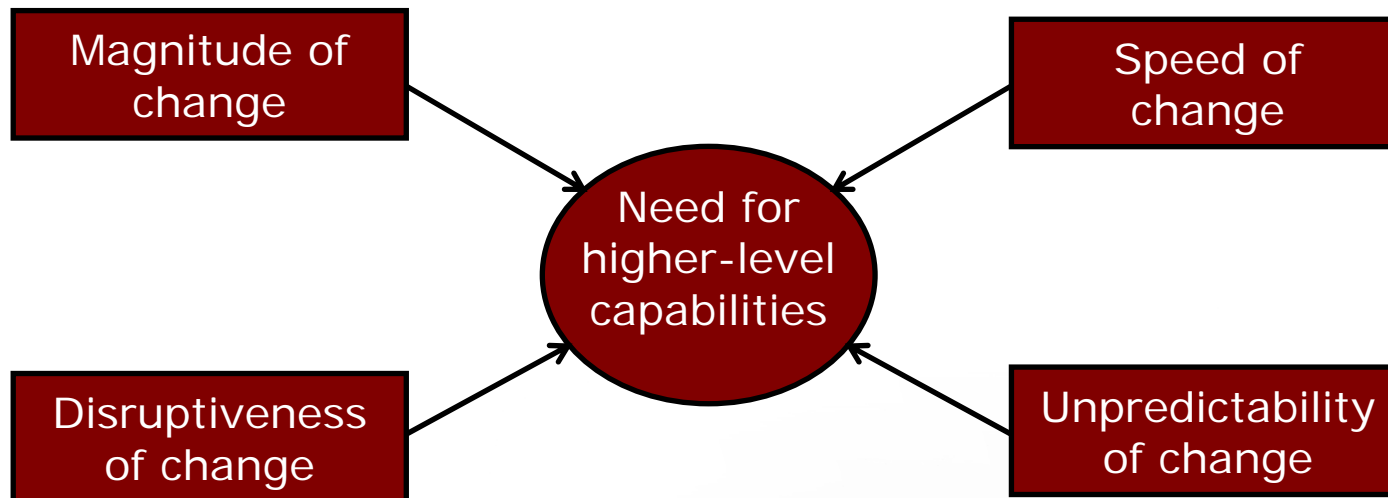
- All capabilities (also dynamic capabilities) are learned, patterned, and repeatable = that is why they are called *capabilities*
- An alternative way to change can be called ad-hoc problem solving (Winter, 2003)
- Capabilities differ from each other by their ability to affect other capabilities (Collins, 1994; Winter, 2003)
- Capabilities can thus be categorized in a hierarchy
  - Zero-level capabilities
  - First-order dynamic capabilities, that affect the change in zero-level capabilities
  - Higher-order capabilities

# CAPABILITY HIERARCHY

- **Zero-level capabilities**
  - “How we earn living –capabilities”
  - Focused on exploitation
  - Learned, stable, and repeatable
  - E.g. selling, delivery process
- **First-order dynamic capabilities**
  - Focused on modification, transformation, and creation of zero-level capabilities
  - Learned, stable, and repeatable
  - E.g. acquisition capability, R&D capability, alliance capability
- **Higher-order capabilities**
  - Focused on exploration
  - Learned, stable, and repeatable, but less concrete and more vague
  - E.g. connectivity, learning culture, and knowledge management

## NATURE OF CHANGE AND CAPABILITY HIERARCHY

- Dynamic capabilities are needed in...
  - “rapidly changing environments” (Teece, 1997)
  - “high velocity markets” (Eisenhardt & Martin, 2000)
- The *nature of change* can thus define the “level of the game”, i.e. the *needed level of capabilities*



# NATURE OF CHANGE AND CAPABILITY HIERARCHY

- **Magnitude**
  - Determines how much current (zero-level) capabilities are needed, and the subsequent effort of changing them
- **Speed**
  - Determines how fast a given capability must be modified or created
- **Disruptiveness**
  - Determines how well the organization is equipped to deal with the change with its current capabilities
- **Unpredictability**
  - Determines how well the organization can anticipate the change

## PRELIMINARY CONCLUSIONS

- Different levels of capabilities are needed at different situations
- The nature of change determines the “level of the game”, the needed capabilities, and subsequent competitive advantage
- Magnitude, speed, disruptiveness, and unpredictability of change have different implications with respect to capabilities

## PRELIMINARY CONCLUSIONS

- Rapid and substantive change does not require questioning the prevailing business logic of a firm (emphasis on first-order dyn.cap)
- Disruptive and unpredictable change requires a new mental frame (emphasis on higher-order dyn.cap)
- Higher-order capabilities related to *efficient knowledge transfer, decision making, and execution* are needed, when the change is rapid
- Higher-order capabilities related to *clear vision and strategy, resource acquisition* are needed, when the change is substantive
- Higher-order capabilities related to *flexibility, creativity, and improvisation* are needed, when the change is disruptive and unpredictable



**THANK YOU !**



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