In search of Strategic Agility in the digital age: Open Strategizing in a traditional French medium-sized company
A multiple perspective Insider Action Research

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THESIS COMMITTEE

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Proposed Agenda

o Research Problem / Motivation

o Literature Review

o Research Proposition & Questions

o Inquiry Methods

o Key findings (IAR* 1st and 2nd Cycles)

o Results from empirical data analysis

o Proposed Framework for Strategic Agility Implementation

o Contributions

o Limitations & Future Research

*NB: IAR = Insider Action Research

Research Problem / Motivation

As practitioner manager, I was confronted with the following **management problem**

How do established firms navigate turbulent conditions in the digital age?

- **Collapse of well-established firms** (DEC, Kodak, Blockbuster, Toys R Us, Blackberry, Motorola or Nokia,…)
- Increasing **VUCA** Business Environments (Volatility, Uncertainty, Ambiguousness, Complexity)
- **Technology** as **game changer** and new entrants from outside traditional industries
- Accelerating pace of change requiring more **Speed and Flexibility**

The holy-grail quest for **strategic agility** as response?

Meanwhile, this management problem is also addressed by several other research streams

How can the strategic agility construct be grounded in various research fields and how can bridging different theoretical concepts then help practitioners solve concrete managerial problems?
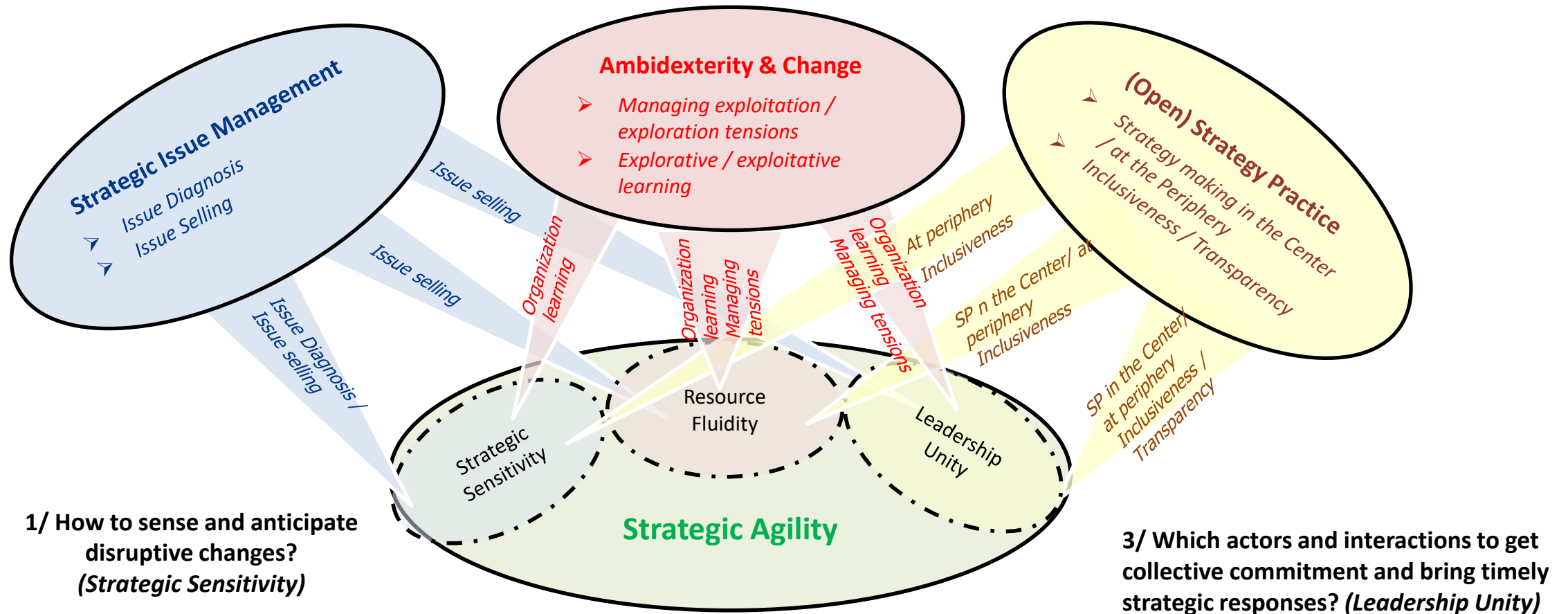
Literature review
Inter-relationships between Strategic Agility construct and key concepts from other research fields

		Strategic Agility			Main Authors
		Strategic Sensitivity (Open strategy process Heightened strategic alertness High quality internal dialogue)	**Resource Fluidity** (Dynamic resource allocation Mobilizing people Modular structures and processes)	**Leadership Unity** (Mutual dependency Collective commitment CEO leadership style)	**Doz and Kosonen 2008a, 2008b, 2010,** Morgan & Page 2008, Schneider & Spith 2012, Brannen & Doz 2012, Weber & Tarba 2014, Brueller, Carmeli, Drori 2014, Fourné, Jansen & Mom 2014, Shin et al 2015, Juni et al. 2015, Batistella et al. 2017, Bouwmans et al. 2018, Morton et al. 2018, Wagner and Wagër 2019, Clauss et al 2019, **Doz 2020**, Debellis et al 2020, Shams et al 2020
Research fields	***Main focus***	***Cognition***	***Organization***	***Relationships / Interplay***	
Strategic Issue Management (SIM)	***(Collective) Cognition***	Issue Diagnosis Issue Selling	Issue Selling	Issue Selling (Collective buy-in)	**Ansoff 1980, 1975,** Daft & Weick 1984, **Dutton 1993**; **Dutton & Ashford 1993, Dutton & Duncan 1987a** , Dutton & Ottensmeyer 1987; **Ocasio 1997;** Dutton et al 2001; Howard-Grenville 2007; **Dutton et al 2007**; Nadkarni & Barr 2008; Eggers & Kaplan 2009
Corporate change & Ambidexterity	***Temporal and structural interplay***	Explorative Learning	Organization learning (exploit. / explorative) Managing exploitation / exploration tensions	Organization learning (exploit./ explorative) Managing exploitation / exploration tensions	**March 1991**; Levinthal & March 1993; Tushman & O'Reilly 1996; Homquist 2004; **Crossan et al 1999**; Markides & Charitou 2004; **Raisch et al 2009**; Doz & Kosonen 2010; **Raisch & Birkinshaw 2008;** Taylor & Helfat 2009; Andriopoulos & Lewis 2009; Rothaermel & Alexandre 2009; **Turner et al 2013**; Chesbrough & Brunswicker 2014
(Open) Strategy Practice	***Interactions between actors***	Strategy at the Periphery Inclusiveness	Strategy in the Center / at the Periphery Inclusiveness	Strategy in the Center / at the periphery Inclusiveness / Transparency	Eisenhardt 1989, **Burgelman 1998;** Floyd & Lane 2000; **Regner 2003,** Prahalad 2004; Paroutis & Pettigrew 2007; Kaplan & Tripsas 2008; Doz & Kosonen 2008; Argawal & Helfat 2009; **Jarzabkowski et al 2007**; Schoemaker et al 2013; **Birkinshaw 2017, Hautz, Seidl & Whittington 2017**, Luedicke et al. 2017, Appleyard and Chesbrough 2017, Tavakoli et al 2017, Burgelman et al. 2018

Research Proposition & Questions
Bringing interrelated Theoretical Fields to answer Management Questions

How to implement a strategic management process and develop agility over time?

Strategic Issue Management
- Issue Diagnosis
  ▷ Issue Selling
  ▷

Ambidexterity & Change
➤ Managing exploitation / exploration tensions
➤ Explorative / exploitative learning

(Open) Strategy Practice
▷ Strategy making in the Center / at the Periphery
▷ Inclusiveness / Transparency

Issue selling

Issue selling

Issue Diagnosis / Issue selling

Organization learning

Organization learning Managing tensions

Organization learning Managing tensions

At periphery Inclusiveness

SP n the Center/ at periphery Inclusiveness

SP in the Center/ at periphery Inclusiveness / Transparency

Resource Fluidity

Strategic Sensitivity

Leadership Unity

Strategic Agility

1/ How to sense and anticipate disruptive changes? *(Strategic Sensitivity)*

2/ How to articulate exploration and exploitation to initiate strategic change decisions? *(Resource Fluidity)*

3/ Which actors and interactions to get collective commitment and bring timely strategic responses? *(Leadership Unity)*
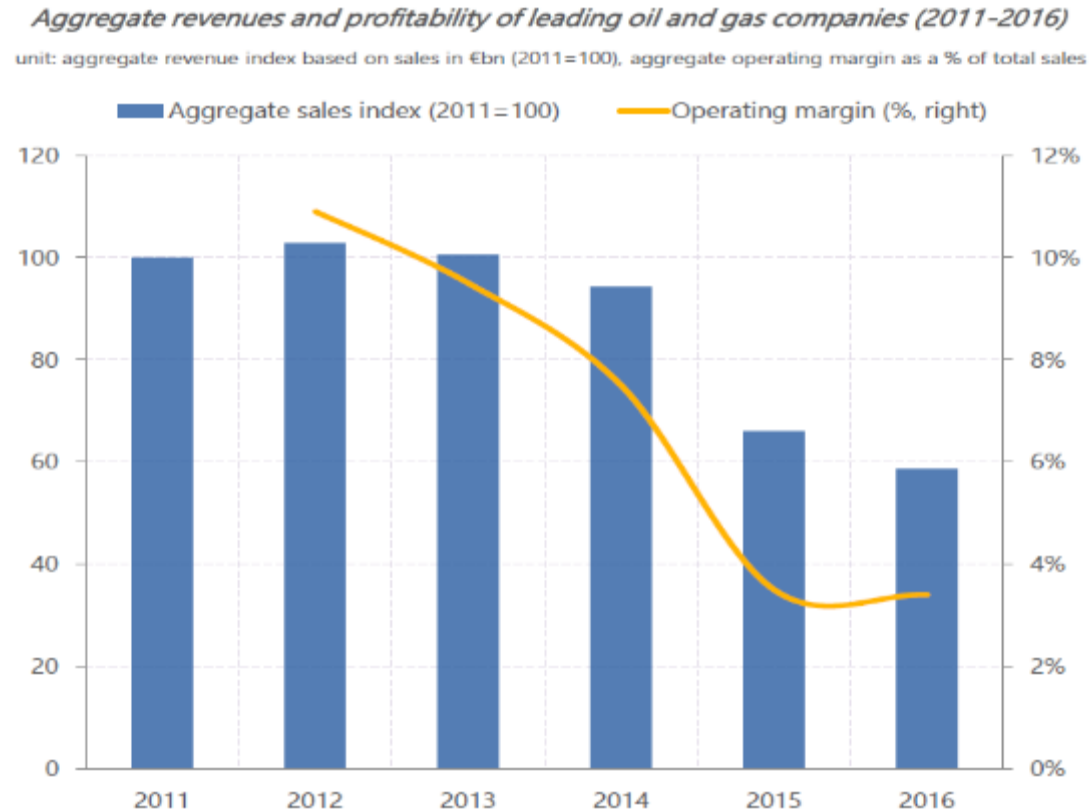
Inquiry Methods
Using multiple frames of reference to understand complex reality and address the rigor-relevance gap

- Combining different **inquiry methods**

  - *insider action research*: solve concrete management problems and generate research insights (Coghlan & Brannick 2014, Coghlan 2007)

  - (*auto)ethnography*: use own experiences as data in the forms of narratives and build intimate knowledge of how everyday strategy work was conducted (Vesa and Vaara 2014, Sandberg & Tsoukas 2011)

  - *process research*: longitudinal social and organizational processes and interplay between actors (Langley et al 2013, Paroutis & Pettigrew 2007, Van de Ven and Poole 2005)

- **Three voices** perspectives in IAR (Coghlan 2007, Reason & Torbert 2001)

  - *1st person* practices (or ***individual level***): own experiential learning as a practitioner, reflecting on my practices, my assumptions or my understanding of the managerial problem to be solved, through personal notes & narratives .

  - *2nd person* activities (**group**, **organizational, intra** or **inter-organizational levels**): collaborative field work and dynamic interactions with different actors and stakeholders, through face-to-face dialogues, meetings and joint actions.

  - *3rd person* inquiry (**organizational level**): more impersonal, with an **objective observer-researcher stance** in the longitudinal data process analysis, contribute to the dissemination and extension of the learning and knowledge.

Key Findings from IAR 1st Cycle (May 2016– Feb. 2017)

Using multiple theoretical lens to assess management problems

Aggregate revenues and profitability of leading oil and gas companies (2011-2016)

unit: aggregate revenue index based on sales in €bn (2011=100), aggregate operating margin as a % of total sales

Legend: Aggregate sales index (2011=100) — Operating margin (%, right)

Major market changes:
- O&G Crisis (crude oil price drop by more than 50% between 2014 and 2016)
- Aggressive (local) competitors
- Digitization threats (digital learning, drone inspection, automated reports, real time asset monitoring, predictive maintenance ...)

Lack of **Strategic Sensitivity**

- **Strategy practice** mainly **in the center** with **dominant exploitative logic** resulting from past success
- **Weak issue diagnosis and selling process** bogged down in internal politics: impacts of O&G market downturns and reforms in vocational training under-evaluated
- Limited **external collaborations** and **explorative leaning**
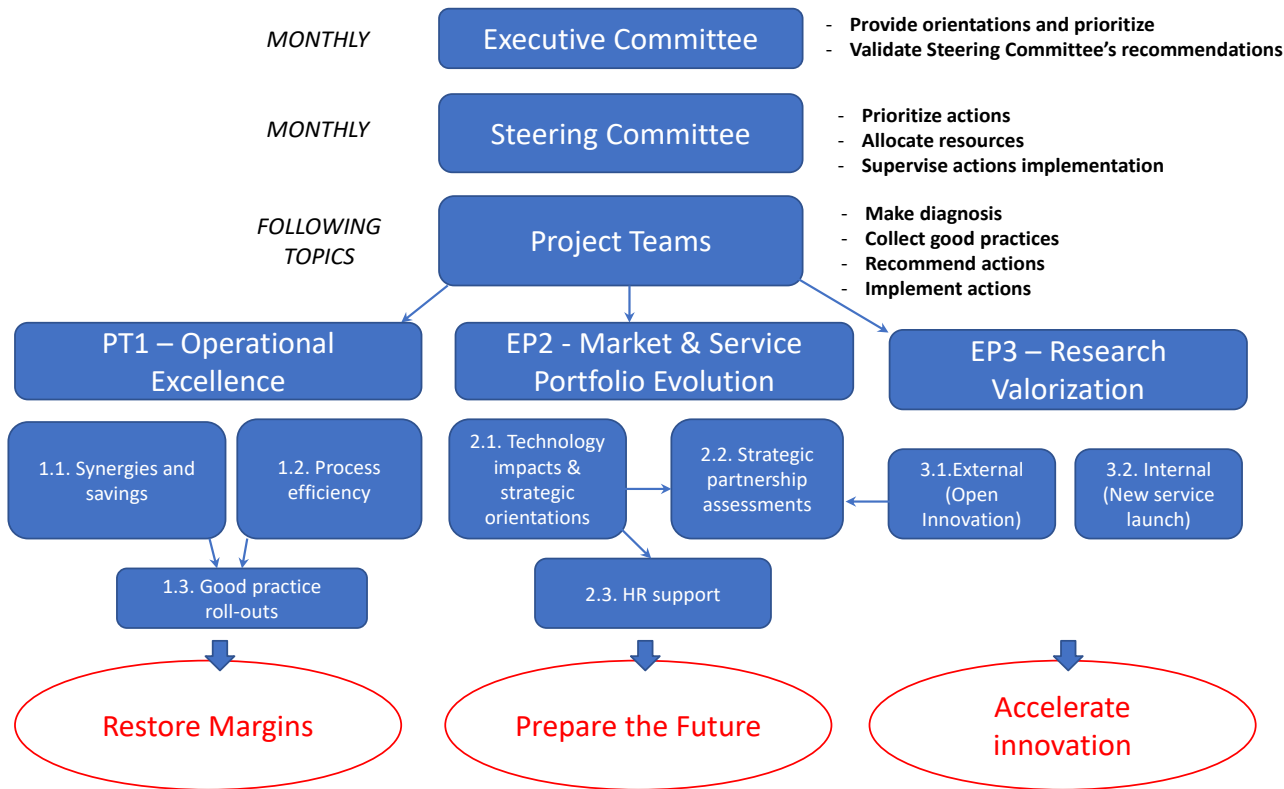
Limited **Resource Fluidity**

- Decoupling / **differentiation** of Exploration and Exploitation, separated two 2 different legal entities
- Multi-local activities with complex internal pricing transfer, limiting internal **collaborations** and generating **tensions**

Unclear **leadership unity**

- **Strategic planning** process led and validated **from the center,** short term result oriented, not anticipating and integrating quickly enough environmental shifts
- Decoupling between 5-year **strategic plan and day-to-day operations** (lack of middle management involvement and plan monitoring)

Key Findings from IAR 2nd Cycle (Feb. 2017– March 2018)

Opening up Strategic Process to enhance Agility

MONTHLY	Executive Committee
	- **Provide orientations and prioritize**
	- **Validate Steering Committee's recommendations**
MONTHLY	Steering Committee
	- **Prioritize actions**
	- **Allocate resources**
	- **Supervise actions implementation**
FOLLOWING TOPICS	Project Teams
	- **Make diagnosis**
	- **Collect good practices**
	- **Recommend actions**
	- **Implement actions**

PT1 – Operational Excellence
- 1.1. Synergies and savings
- 1.2. Process efficiency
- 1.3. Good practice roll-outs
→ **Restore Margins**

EP2 - Market & Service Portfolio Evolution
- 2.1. Technology impacts & strategic orientations
- 2.2. Strategic partnership assessments
- 2.3. HR support
→ **Prepare the Future**

EP3 – Research Valorization
- 3.1.External (Open Innovation)
- 3.2. Internal (New service launch)
→ **Accelerate innovation**

Strategic Transformation Project Organization
(Presentation to executive committee in Feb. 2017)

Improve **Strategic Sensitivity**

- **Inclusiveness:** involve middle and front-line managers and external parties (clients, technology / technical partners …) to assess threats and opportunities and define strategic orientations
- Develop **external collaborations** (open innovation), enhancing **explorative leaning**

Enhance **Resource Fluidity**

- Set up communities of practices to share good practices and break down internal silos, while improving **organizational learning**
- Better serve clients with **resource arbitration** between business units
- Develop **external partnerships** with technical / technology providers to gain flexibility

## Restore **leadership unity**

- Involve both **the center and the periphery** in an **inclusive** company strategic transformation project
- Mobilize teams to answer to both **short term exploitative** and **mid-long terms explorative** imperatives and get **collective commitment**
- Communicate "**transparently**" along the process to different stakeholders.

Results from Data Analysis (1)
## Dimensions Occurrence & Relevance

Dimensions occurrence during 1st IAR Cycle and 2nd IAR cycle
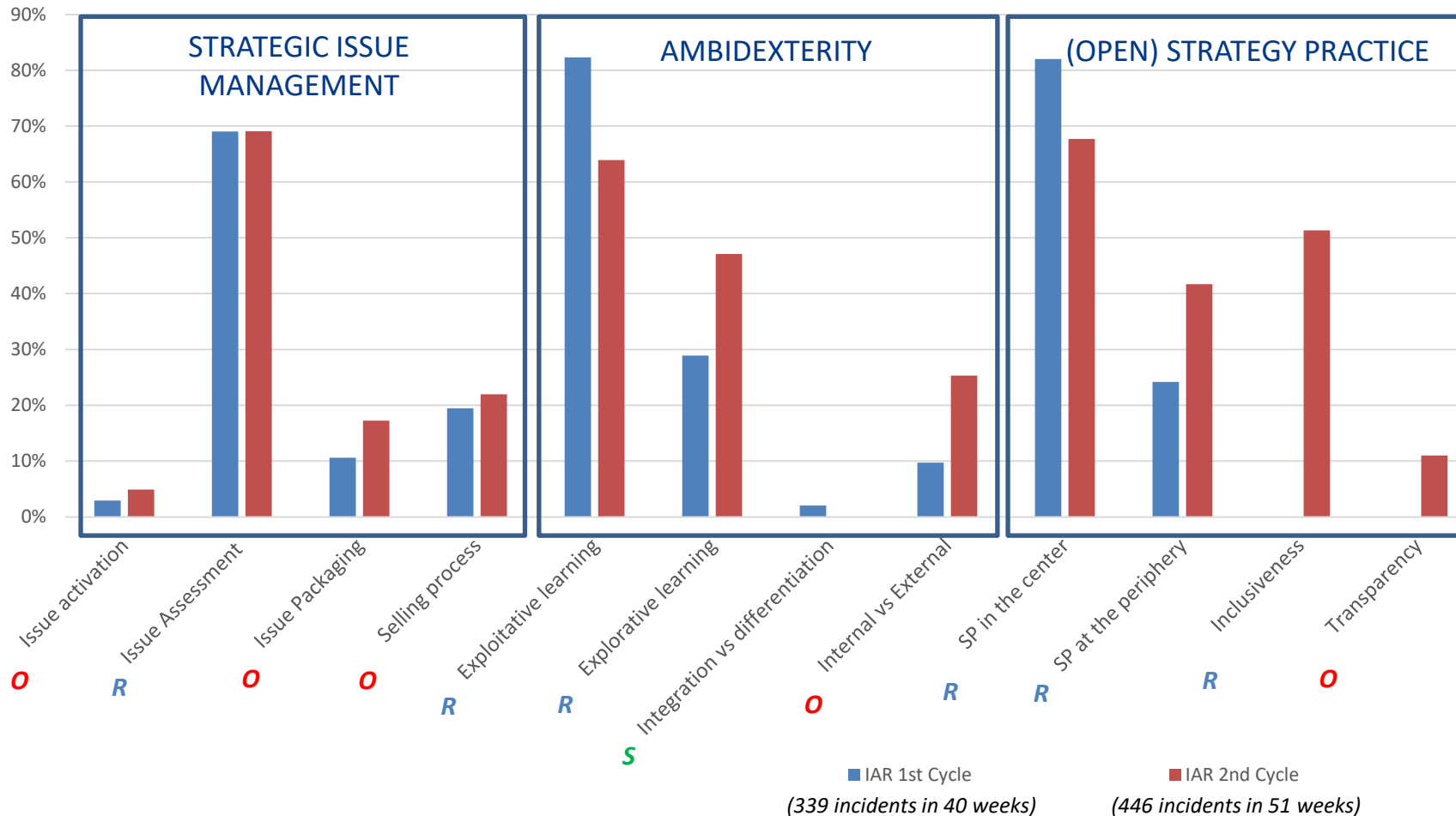
- **Different natures and temporality** of dimensions: **recurrent** (*R*), more **occasional** (*O*), or **structural** (*S*)

- **Simultaneous occurrences reflecting interconnectedness:**
  - *SP in the center - exploitative learning,*
  - *SP at the periphery - explorative learning,*
  - *Issue assessment - SP in the center / periphery*
  - *Issue assessment & Organizational learning (exploitative or explorative)*

■ IAR 1st Cycle   ■ IAR 2nd Cycle

(339 incidents in 40 weeks)   *(446 incidents in 51 weeks)*

Results from Data Analysis (2)
Open Strategy and Agility Dimensions & Interactions with Actors Levels - IAR 2nd Cycle
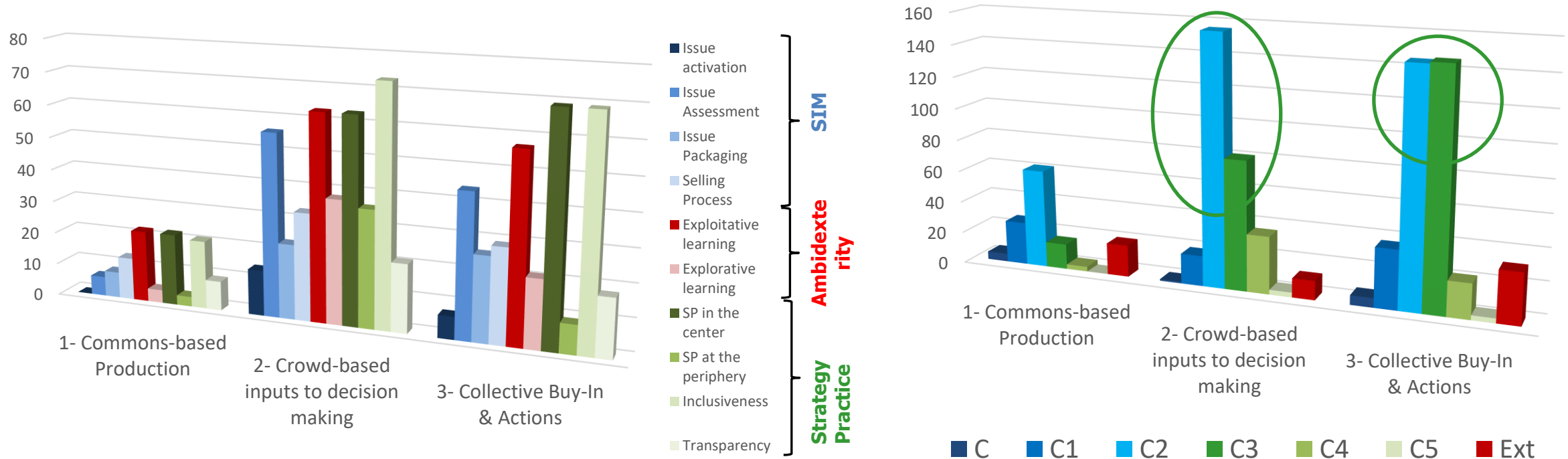
Adapted from Birkinshaw 2017

NB: C= Chairman, C1= Executive Committee members, C2= Directors in the center and at the periphery, C3= Managers in the center / periphery, C4/ C5= Front-line employees, Ext = External parties

- **Relevance:** all selected dimensions from the 3 research streams were present at different phases of the Open Strategy process

- **Importance of middle managers** in the open strategy process

Proposed Framework for Strategic Agility Implementation

Practitioners	Board, TMT, middle managers, external parties	(TMT), middle managers, frontline employees, external parties	Board, TMT, middle managers, frontline employees, external parties
Praxis episodes	**Commons-based PRODUCTION** Open, transparent and participative dialogs around strategic issues	**Crowd-based inputs to DECISION MAKING** Generating new ideas, evaluating options, from multiple perspectives	**Collective BUY-IN & ACTIONS** Legitimation of strategic decisions and collective commitment

Practices

SIM	Issue Assessment **Issue Selling**	Issue Activation **Issue Assessment** Issue Selling	Issue Assessment **Issue Selling**
Ambidexterity	Exploitative Learning Explorative Learning	**Exploitative Learning** **Explorative Learning**	Exploitative Learning Explorative Learning
(Open) Strategy Practices	**SP in the center** SP at periphery **Inclusiveness** Transparency	**SP in the center** **SP at periphery** **Inclusiveness**	**SP in the center** **SP at periphery** **Inclusiveness** Transparency

Strategic Agility attributes

Leadership Unity → Strategic Sensitivity ↔ Strategic Sensitivity → Resource Fluidity ↔ Resource Fluidity → Leadership Unity

(Adapted from Birkinshaw 2017, Jarzabkowski, et al.2007 et al.)

Contributions
Balancing rigor and relevance

Theoretical contributions

- **Bridge key concepts** from three research fields (SIM, Ambidexterity, Strategy Practice) to complement / enhance the understanding of Strategic Agility

- **Combine different inquiry methods** (IAR, autoethnography, process analysis) to provide a holistic view on micro/macro activities of individuals and organization in their context (logic of practice)

Managerial contributions

- Apply a theoretical frame to **solve / improve real case problems**

- **Understand and experiment** open strategy making at multiple levels within the organization to bring timely / adapted answers to changes

- Propose a **practical guideline** (questionnaire) to identify main traps, pitfalls, obstacles or points of vigilance in more complex and fast evolving business environments.

Limitations & Future Research

Limitations & challenges

- One **single case** & generalizability

- **Dual role** researcher-practitioner with **dialectic tensions** (deliberation and serendipity, engagement with data and detachment from it, knowing and not knowing, and self-expression and social connection, Klag and Langley 2013)

Further research

- 2 other dimensions could be introduced and further studied: **speed and timing**

- Certain **aspects / attributes** of Strategic Agility can be further investigated in other types of organizations with different sizes, industries, cultures, settings or contexts or interrelationships with **other research streams** (ex: dynamic capabilities)

- Explore **new innovative methods** in the research agenda, combining insider action research with more traditional research methodology

Q&A
Back-Up

Literature Review
Various Strategic Agility Definitions

Several attempts to define the **holistic** construct of **Strategic Agility**

Authors (year)	Strategic agility definition
Roth (1996)	**Ability** to leverage enterprise-wide operations to **provide** the **right product**, at the **right price**, at the **right place**.
Morgan and Page (2008)	**Ability** to **support and at times drive business transformation** through ICT in order to capitalize on changing market opportunities
Doz and Kosonen (2008a, 2008b, 2010)	Ongoing **capability** for real-time **strategic sensitivity**, quick **collective commitments**, and fast and strong **resource redeployment** to renew itself and stay flexible without sacrificing efficiency
Schneider & Spith (2012)	**Capability** to **anticipate and quickly react** to unpredictable environmental changes by **sensing opportunities**, and **showing operational as well as managerial responsiveness** to exploit these chances
Brannen & Doz (2012)	**Ability** to develop **strategic alternatives** and make well-grounded, thoughtful **decisions in a timely manner** in rapidly changing conditions
Weber & Tarba (2014)	**Ability** of management to **constantly and rapidly sense and respond** to a changing environment by intentionally **making strategic moves** and consequently **adapting the necessary organizational configuration** for successful implementation
Brueller, Carmeli, Drori (2014)	**Capacity** of **making knowledgeable, nimble, rapid strategic moves** with a high level of precision
Fourné, Jansen & Mom (2014)	**Meta-capability** that enables organizations to create, deploy and embrace tensions between **3 capabilities: sensing local opportunities, enacting global complementarities, and appropriating local value,** in a dynamic balance over time

Strategic Agility = managerial practices allowing the firm to sense and anticipate discontinuities, nimbly articulate exploration and exploitation and quickly adjust, renew its strategy to adapt to rapid environmental changes.

Insider Action Research (IAR) Design

Engaged scholarship addressing both research and management problem-solving imperatives from the inside

Preliminary phase

March 2015 - April 2016

Literature Review
Research Questions
Theoretical Frame

Berlin 2016

SMS Strategic Management Society

Core AR phase (Field Work)

Cycle 1: Assessing Situation
(May 2016– Feb. 2017)

Assessing and understanding
the strategy process in place

Role duality: Strategist & Researcher

Diagnosing → Planning action → Taking action → Evaluating action

Cycle 2: Open Strategizing
(Feb. 2017– March 2018)

Implementing open strategizing
to bring more agility

Diagnosing → Planning action → Taking action → Evaluating action

Reflections & Conclusions

(April 2018 – Dec 2020)

Thesis Drafting

ACTIONABLE KNOWLEDGE

1/ How to sense and anticipate disruptive changes?

2/ How to articulate exploration and exploitation to initiate strategic change decisions?

3/ Which actors and interactions to get collective commitment and bring timely strategic responses?

Strategic Issue Management
Issue Diagnosis
Issue Selling

Ambidexterity & Change
➤ Managing exploitation / exploration tensions
➤ Explorative / exploitative learning

(Open) Strategy Practice
Strategy making in the Center / at the Periphery
Inclusiveness / Transparency

Resource Fluidity

Strategic Sensitivity

Leadership Unity

Strategic Agility

Source: Adapted from Zuber-Skerrit and Perry 2002 & Coghlan and Brannick 2014, Coghlan 2007

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Key Concepts

Theoretical Frameworks	Key Concepts	Events / Subprocesses	Process outcomes	Literature
Strategic Issue Management & Organization attention	Issue Diagnosis	- Issue activation / Organizational attention - Issue Assessment / Interpretation	Momentum for change: incremental or radical change	Eggers & Kaplan 2009; Nadkarni & Barr 2008; Nigam & Ocasio 2010; Ocasio & Joseph 2005, **Ocasio** 1997; **Dutton** 1993; Dutton & Jackson 1987; Dutton & Duncan 1987a , Dutton & Ottensmeyer 1987; Barr, Stimpert & Huff 1992; Daft & Weick 1984
	Issue Selling	- Issue Packaging - Selling Process	- TMT's attention - Seller's credibility for future selling	Vuori & Hui 2015; Maula et al. 2013; Howard-Grenville 2007; **Dutton et al** 2007; Dutton et al 2001; Dutton & Ashford 1993
Ambidexterity	Managing Exploration / Exploitation	- Integration vs differentiation - Internal vs External	- Organizational alignments with external changes - Resource allocation - Decision speed	**Raisch et al** 2009; **Raisch & Birkinshaw** 2008; Turner et al 2013; Velu & Stiles 2013; Doz & Kosonen 2010; **Andriopoulos & Lewis 2009**; Taylor & Helfat 2009; Groysberg & Lee 2009; **Rothaermel & Alexandre 2009**; Markides & Charitou 2004; Gibson &
	Organizational learning	- Exploitative learning - Explorative learning		Junni et al 2015; Chesbrough & Brunswicker 2014; Wei et al 2014; Dell'era & Verganti 2011; Crossan & Berdrow 2003; **Crossan et al** 1999; Homquist 2004; Kuwada 1998; Levinthal & March 1993; Mintzberg & Westley 1992; **March** 1991; March & Olsen 1975
Open Strategy Practice	In the center	- Perfectioning of prevailing strategy (Deductive)	Refinement of existing resource and industry factors	Appleyard and Chesbrough 2017**,** Baptista et al. (2017), Birkinshaw 2017, Gegenhuber and Dobusch 2017, **Hautz, Seidl & Whittington 2017**, Hutter et al 2017, Luedicke et al. 2017, Mack and Szulanski 2017, Malhotra et al 2017, **Tavakoli et al 2017,** Yakis-Douglas et al. 2017, Pittz and Adler 2016, Schoemaker et al 2013; Regner
	At the periphery	- Strategy creation (Inductive)	New combinations of old and new resource and industry factors	& Zander 2011; Chen et al 2010; Argawal and Helfat 2009; Kaplan & Tripsas 2008; Miller et al. 2008; **Paroutis & Pettigrew 2007**; Burgelman & Grove 2007; Prahalad 2004; **Regner** 2003, Floyd & Lane 2000; **Burgelman** 1998; Floyd & Woolridge 1992; Eisenhardt 1989
	Inclusion (AR Cycle II)	Actors involvement	Creating and sustaining a community of interacting stakeholders	Chesbrough and Appleyard, 2007; Doz and Kosonen 2008; Schmidtt 2010; Whittington et al. 2011; Stieger 2012; Werle and Seidl 2012; Dobusch et al. 2015; Appleyard and Chesbrough, 2017; Baptista et al., 2017; **Hautz et al 2017**; Hutter et al., 2017; Luedicke et al., 2017; Mack and Szulanski; 2017; Malhotra et al., 2017; **Tavakoli et al 2017,** Yakis-Douglas et al., 2017
	Transparency (AR Cycle II)	Communication process	Visibility of information about an organization's strategy, during the formulation process and with regard to the strategy finally produced	

Inquiry Methods
Process Analysis: From Empirical Data to Theory

INCIDENTS → EVENTS ← CONCEPTS & DIMENSIONS

INCIDENTS
- Description → Observations/ key learnings → Categorization (open coding)

EVENTS

CONCEPTS & DIMENSIONS

Research Streams
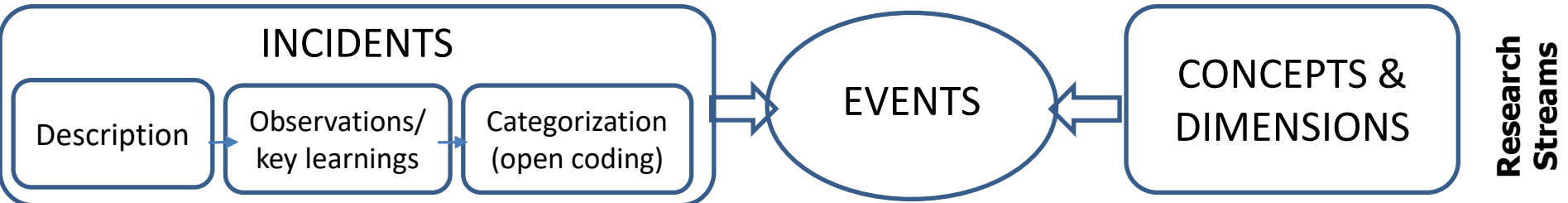
Chronological Database

785 incidents over 91 weeks (May 2016 - March 2018)

NB:
(*) IAR 1st cycle only
(**) IAR 2nd Cycle only

Incident categories or Set of activities

Understanding of company's context and strategic issues (*)

Assessing company's competitiveness and performance

Exploring new markets and opportunities

Priorization and follow-ups of strategic issues

Co-constructing new strategic management process

Opening up to external ecosystems (**)

Diversification strategy implementation (**)

Concepts & Dimensions:
- Issue Diagnosis
- Issue Selling
- Explorative learning
- Exploitative learning
- Internal vs External
- Integration vs Differentiation
- SP in the center
- SP at the Periphery
- Inclusiveness (**)
- Transparency (**)

SIM

Ambidexterity

(Open) Strategy Practice

Research Questions
(Strategic Agility Dimensions)

1/ How to sense and anticipate disruptive changes?
(Strategic Sensitivity)

2/ How to articulate exploration and exploitation to initiate strategic change decisions?
(Resource Fluidity)

3/ Which actors and interactions to get collective commitment and bring timely strategic responses?
(Leadership Unity)

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Results from Data Analysis

Incident Categories (Events or Set of Practices) and Agility dimensions

IAR 1st cycle

IAR 2nd cycle
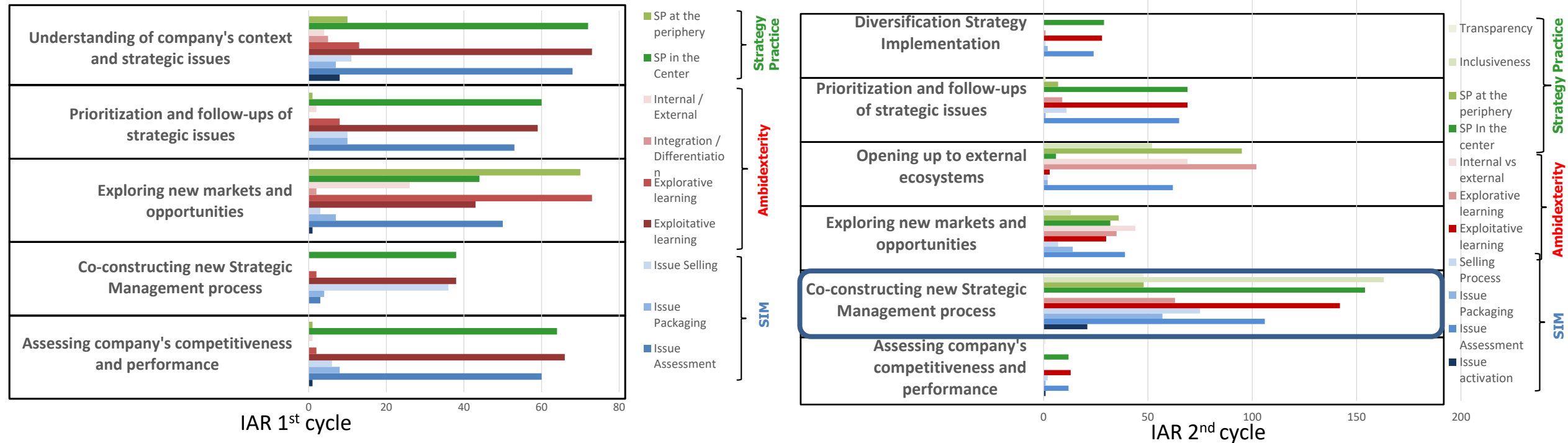
Different incident categories (events or set of practices) correspond to different sets of dimensions:

- Exploring new markets and opportunities and co-constructing a new strategizing process (in particular in the 2nd IAR cycle) mobilized the most dimensions: *SP at the periphery, explorative learning along with SP in the center, exploitative learning and issue assessment*

- Understanding Omega's context and strategic issues, assessing Omega's competitiveness and performance, or prioritizing and follow-ups of strategic issues were mostly about *SP in the center, exploitative learning* and *issue assessment*

- Diversification Strategy Implementation involved mainly *SP in the center, exploitative learning, issue diagnosis and issue selling.*

- Opening up to external ecosystems implied *SP in the periphery, explorative learning and issue assessments.*

Dimension Analysis Descriptor

Theoretical Frameworks	Concepts	Dimensions observed	Descriptors
Strategic Issue Management & Organizational Attention	Issue Diagnosis	Issue activation /Organizational attention	1 = An issue is identified or triggered through emerging or consequential trends in the environment 0 = Otherwise
		Issue assessment / Interpretation	1= whether issue urgency and / or feasibility is assessed through perceived understandings and identifications of available /accessible means to solve the issue 0 = Otherwise
	Issue Selling	Issue Packaging	1= Content framing (e.g. threats & opportunities), presentation, appeals, and bundling with other issues 0= Otherwise
		Selling Process	1= Upward or Top-Down selling 0= Otherwise
Ambidexterity	Organizational learning	Exploitative learning	1= Presence identified of routinized learning to optimize existing operating models, without changing the nature of its activities 0= Otherwise
		Explorative learning	1= Non-routinized process identified of exploring new opportunities. involving changes in company routines or experimentation with new alternatives 0= Otherwise
	Managing Exploration / Exploitation tensions	Integration vs differentiation	1= when the issue is related to the question of differentiation (separated exploitative and explorative activities) or integration ("mechanisms that allow organizations to address exploitative and explorative activities" within the same unit)
		Internal vs External	1= when the issue is related to externalizing a part of the activity such as corporate venturing or strategic partnerships
Strategy Practice (1st IAR cycle)	In the center	SP in the center (perfectioning of prevailing strategy / deductive)	1= Exploitation / refinement of prevailing resources and industry factors: formal reports, documents. Intelligence or industry experience and routines
	At the periphery	SP at the periphery (strategy creation /inductive)	1= Exploration of combination of old and new resources and industry factors: informal contacts and encounters or technology and market experiments
Open Strategizing (2nd IAR cycle)	Inclusiveness	Inclusiveness (involvement of actors)	1= Inclusiveness implemented in the participation in the "strategic conversation"; trough a community of interacting stakeholders, involving actors at the periphery, beyond the boundaries of the firm.
	Transparency	Transparency (communication process)	1= Visibility of information about Omega's strategy, during the formulation process and possibly during the strategy formation. Transparency can be both internal and external

Proposed Practical Guideline to Assess Strategic Agility

| Agility dimension	Examples of key questions (non-exhaustive list)
Strategic Sensitivity	1/ How does the organization sense and anticipate changes?
Issue activation / SP	➤ How are issues identified and activated? Which actors are involved?
Issue assessment	➤ How are issues evaluated?
Organizational learning / Internal vs External	• Does the organization have a clear understanding of technology evolutions, use cases, new players and new business models? Who has the knowledge (inside or outside the organization)?
Organizational learning / SP	• Have the technology impacts been evaluated on the current portfolio of activities? By whom?
Issue Framing	• Are threats / opportunities identified?
Issue Assessment	• What estimated urgency or timeline? (ex: < 2 years, 2-5 years, > 5 year, the timing will depend on types of business and perceived speed of changes)
Issue Assessment	• What could be the responses or strategic options (digitizing existing processes, new sources of revenues, growth options, divestments...)? Has the feasibility been assessed (required resources, capabilities...)?
Issue selling	➤ What are the issue selling practices within the organization?
Selling process	• What are the main decision making instances? Who are the main influencers?
Selling process	• Are the selling processes different following different issue typologies?
Selling process	• Is issue selling mainly upward or downward?
Resource Fluidity	2/ How are exploitation and exploration articulated in strategic decisions?
Integration / Differentiation	➤ Are exploitation and exploitation activities separated or grouped within the same entity?
Managing ambidexterity tensions	➤ How are investment arbitrages or resource allocations made (exploitation vs exploitation)? How have they evolved over time (following strategic priorities)?
Internal vs external	➤ Does the organization resort to external resources? How often? For exploitation? For exploration? In which specific cases?
Explorative learning / SP at periphery	➤ How is innovation managed? Does the organization collaborate with external parties (research institutions, technology companies, startups, end users, financing bodies, ...)
Exploitative learning / SP center / periphery	➤ Are there routines to optimize existing operating models? What are they? How are they applied in practice? In the center? At the periphery?
Explorative learning	➤ Are there routines to explore new opportunities involving changes in company routines or experimentation with new alternatives? What are they? How are they applied in practice?
SP / Organizational learning	➤ How are new / innovative services (or products) deployed? What portion of the service portfolio corresponds to "new' or "innovative" services / products?
SP / Organizational learning	➤ What are the main barriers / obstacles to organizational changes?
Leadership unity	3/ How to foster collective buy-in and actions?
SP center / periphery	➤ How are strategic decisions made (centrally, locally)?
Inclusiveness	➤ Which actors are involved in the strategy making process?
SP / Org. learning / internal vs external	➤ What are the interactions among actors? At intra-organizational and inter-organizational levels? How are those interactions coordinated?
Inclusiveness / Transparency	➤ How are strategy making process communicated? During different phases of strategizing? Inside the organization? Outside the organization?

Action Research Characteristics

Addressing both Research and Problem solving imperatives to bridge Theory and Practice

➢ Action researcher **takes action**

➢ Action research always involves **two goals**: to **solve a problem** (or improve a situation) and to **contribute to knowledge**

➢ Action research is **interactive and collaborative**

➢ Action research aims at developing **holistic understanding**

➢ Action research is fundamentally about **change**

➢ Action research can include **all types of data gathering methods**

(Source: Gummesson 2000)

(McKay & Marshall 2001)
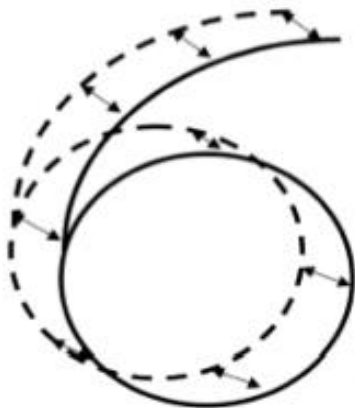
Problem Solving Cycle
- P – Real-world problem situation
- M_{PS} – Methodology for solving the problem
- Findings about P and M_{PS}

Research Cycle
- A – Area of interest
- M_R – Methodology for conducting the research
- F – Theoretical framework to guide intervention
- Findings about A, M_R, and F

Step	The problem solving cycle	The research interest cycle
1	Problem identification	Research themes/interests/questions
2	Reconnaissance/fact finding about problem context stakeholders, etc.	Reconnaissance/fact finding in relevant literature
3	Plan the problem solving activity	Plan and design the research project to answer RQ, hypotheses, etc.
4	Define the action steps	
5	Implement the action steps	
6	Reflect upon the problem solving efficacy of the actions	Reflect upon the efficacy of the intervention in terms of research interests
7a	Amend the plan if further change is required and return to Step 4	Amend the plan and design further explanation and research as required and return to Step 4
7b	Exit, if outcomes are satisfactory	Exit, if questions are satisfactorily resolved

Source: Adapted from McKay and Marshall (2001, pp. 50-1)

Insider Action Researcher and Strategist

Main **challenges** faced by **Insider Action Researcher** (Coghlan 2007)

- the closeness–distance tension in **preunderstanding**, i.e., the researcher's knowledge, insights and experiences may lead to partial or path dependent perspectives

- **role duality**: total involvement and active commitment as a change agent in organizational role vs more detached, reflective, more theoretic position in the research role.

- the **politics**: gaining access, using data, diagnosing and disseminating findings are eminently political acts. Research efforts and initiated change can be undermined by political forces, if not properly managed.

Strategist

- "self-conscious mission/philosophy, sense of time/place, invites conversation among multiple voices and reframing of boundaries – double-loop feedback, occasionally acted upon" (Torbert and Taylor, 2008)

- take a holistic view in the strategizing process, often collaborative, integrating multiple perspectives, and facing multiple tensions (Dameron and Torset 2014)

Good Fit to solve real case problem and generate actionable knowledge

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