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## Bridging Strategy and Practice in Higher Education Innovation

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**Abstract:** This paper examines how strategic research, development, and innovation (RDI) focus areas are operationalised in ways that meaningfully guide daily research and teaching activities in a higher education context. Drawing on strategy-as-practice and sensemaking perspectives, the study adopts a qualitative, process-oriented case study approach to analyse a collaborative refinement process conducted through three successive workshops within a single university unit. The findings identify three interrelated stages—initiation, consolidation, and integration—through which broad strategic intentions were interpreted, refined, and configured into two complementary research groups. The analysis shows that strategic RDI priorities were embedded not through linear implementation, but through iterative sensemaking and coordinated action in which governance arrangements, interpretive frames, and operational practices co-evolved. The study contributes process-level insights into RDI governance and highlights the central role of collective strategising practices in higher education organisations.

**Keywords:** Strategy-as-practice; sensemaking; RDI strategy; higher education; research groups; process-oriented analysis; strategy implementation

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### 1 Introduction

Higher education institutions often struggle to embed their strategic Research, Development, and Innovation (RDI) focus areas into the daily realities of research, teaching, and societal impact (e.g. Fumasoli and Hladchenko, 2023). Even when institution's strategic priorities are well articulated, operationalization can be hindered by disciplinary silos, fragmented processes, and a lack of sustained governance mechanisms (Hellström *et al.*, 2017). Without effective operationalization, RDI focus areas risk remaining aspirational statements rather than actionable drivers of daily practices. The

challenge is to design and manage organizational structures and collaborative practices that translate strategic RDI themes into coordinated, interdisciplinary activities capable of delivering relevant and measurable innovation outcomes. This problem lies at the intersection of strategy implementation, collaborative governance, and innovation management in higher education (e.g. Jiang and Carpenter, 2013), and requires approaches that bridge strategic intent with everyday academic practice (e.g. Jarzabkowski and Whittington, 2008).

Research in higher education strategy has tended to emphasise strategic planning processes, structural reforms, and formally stated objectives, while paying comparatively less attention to the micro-level dynamics, actor engagement, and informal practices through which strategies are implemented in complex academic organisations (Morphew *et al.*, 2018; Fumasoli and Hladchenko, 2023). As a result, strategy implementation in universities is often treated as a rational, linear process, despite evidence that implementation is shaped by distributed authority, professional autonomy, and negotiated practices characteristic of higher education governance (Clark, 1998).

Strategy-as-practice theory highlights the everyday activities, practices, and actors through which strategy is enacted in organisations (Jarzabkowski, 2004), while sensemaking theory explains how organisations interpret contexts and build shared understanding that guides action (Weick, 1995). Yet more research is needed to examine how these sensemaking processes translate strategic intentions into everyday academic practices, particularly in terms of universities' efforts to operationalise strategic RDI priorities (Maitlis and Christianson, 2014; Balogun *et al.*, 2014). Consequently, the study addresses the following research question: How can higher education institutions embed their strategic RDI focus areas so that they guide daily research and teaching activities, foster interdisciplinary collaboration, and deliver effective innovation outcomes.

This research integrates insights from strategy-as-practice and sensemaking theories to develop a process-oriented framework that explains how strategic RDI focus areas are refined and embedded in everyday organisational practices. The framework is intended to be applicable to other universities and knowledge-based organizations seeking to operationalize their RDI priorities in ways that meaningfully guide daily research, development, and teaching activities.

## **2 Strategy-as-Practice and Sensemaking in Higher Education**

Strategy-as-practice (SAP) theory conceptualises strategy as something organisations *do*, foregrounding the recurring activities, practices, and adaptations through which strategic work is produced and reproduced in everyday organisational life (Jarzabkowski, 2004). From this perspective, strategy is not treated as a static plan or an abstract organisational property, but as an ongoing stream of socially situated actions involving multiple actors across organisational levels. Building on this view, Jarzabkowski and Whittington (2008) emphasise that strategy-as-practice research redirects attention from formal strategies to the concrete work through which strategy is enacted, including the activities, routines, and interactions that shape strategic action, as well as the actors involved in this work. This perspective has been central in advancing a micro-level understanding of how strategic intentions are interpreted, negotiated, and translated into action through everyday organisational practices rather than through linear implementation processes.

Strategy-as-practice scholarship has further emphasised the dynamic and relational nature of strategising, highlighting how strategy emerges through continuous interaction, sensemaking, and the use of strategic tools in practice (Jarzabkowski and Spee, 2009; Whittington, 2011). Rather than assuming coherent and linear strategy implementation, SAP research demonstrates how strategic activity is shaped by organisational routines, professional norms, power relations, and contextual constraints, often resulting in emergent and evolving strategic outcomes (Jarzabkowski *et al.*, 2007). This focus on situated action is particularly relevant in pluralistic and knowledge-intensive organisations such as universities, where strategy work is distributed across heterogeneous actor groups and embedded in professionally autonomous practices.

Several contributions have also extended the SAP perspective by linking it more explicitly to themes of governance, coordination, and institutional complexity. Studies show that strategic practices serve not only to align organisational action but also to mediate competing logics and priorities, thereby enabling organisations to cope with complexity and ambiguity in their strategic environments (Vaara and Whittington, 2012; Jarzabkowski *et al.*, 2013). From this viewpoint, strategy-as-practice offers a particularly suitable lens for examining how strategic RDI priorities are enacted and sustained through everyday academic work, as it captures both the formal and informal practices through which strategic focus areas gain practical relevance.

Complementing this practice-oriented view, sensemaking theory directs analytical attention to how organisations interpret their internal and external contexts and construct shared understandings that shape and guide action (Weick, 1995). Rather than assuming that organisational environments are objectively given and unproblematically understood, sensemaking theory conceptualises action as grounded in ongoing processes of meaning construction, through which actors seek to render ambiguous situations plausible and actionable. Sensemaking is therefore not primarily about accuracy, but about the development of interpretations that enable coordinated action under conditions of uncertainty and complexity (Weick *et al.*, 2005).

A central insight of sensemaking theory is that organisational members enact the environments they attempt to understand. Through everyday interactions, conversations, and practices, actors selectively notice cues, retrospectively interpret events, and stabilise shared frames of reference that guide subsequent action (Weick, 1995). These processes are inherently social and collective, as meanings are negotiated and reinforced through interaction rather than formed in isolation. As a result, sensemaking highlights how organisational action is shaped not only by formal strategies and structures but also by informal interpretations, narratives, and shared assumptions that emerge over time.

In higher education institutions, sensemaking processes are particularly salient due to the ambiguity of goals, the multiplicity of stakeholders, and the strong professional autonomy of academic staff. Universities operate as loosely coupled and pluralistic organisations in which strategic priorities—such as RDI focus areas—are rarely enacted through direct control or hierarchical implementation. Instead, strategic intentions must be interpreted and made meaningful by diverse actor groups, including researchers, educators, academic leaders, and support staff. Sensemaking theory helps explain how these actors come to understand what strategic RDI priorities mean for their own work and how such interpretations influence day-to-day research, teaching, and collaboration practices.

From this perspective, the operationalisation of strategic RDI priorities can be understood as an ongoing sensemaking process rather than a discrete implementation

phase. Strategic focus areas become influential only when they are translated into locally meaningful understandings through sensemaking processes that align with existing disciplinary logics, research practices, and professional identities (Maitlis and Christianson, 2014). Formal strategy documents may provide symbolic direction, but it is through sensemaking that strategic priorities are connected to everyday academic activities, shape decisions about resource use and collaboration, and ultimately influence innovation outcomes.

Sensemaking scholarship has further emphasised the dynamic relationship between sensemaking and organising, showing how meaning construction both shapes and is shaped by organisational practices and governance arrangements (Weick *et al.*, 2005; Sandberg and Tsoukas, 2015). In the context of university RDI governance, this highlights the importance of creating arenas, processes, and interactions that support collective sensemaking across disciplinary and organisational boundaries. Such processes are critical for embedding strategic RDI focus areas in ways that foster interdisciplinary collaboration and sustained engagement, rather than remaining abstract priorities detached from academic practice.

### **3 Research design**

The study was conducted as a qualitative case study focusing on a single unit within a higher education institution. All units at the university were tasked with developing or aligning research groups in line with the institution's strategic RDI focus areas of Data-Driven Management, Sustainable Future, and Game Development and Serious Games. In some units, research groups had already been established and were subsequently adapted to reflect the strategic priorities, whereas in others the groups were newly formed as part of the alignment process. This study focuses on analysing the process through which research groups were developed and aligned within one unit. It is important to emphasise that the task in the studied unit was challenging as the unit consists of roughly twenty members with expertise in diverse academic disciplines.

The case study approach enabled an in-depth understanding of how the strategic RDI focus areas can be practically embedded into the unit's operations. The study adopted a process-oriented qualitative research approach (Langley, 1999), which was used to follow and analyse the unfolding stages through which the research groups were developed and aligned with the university's strategic RDI priorities. This approach made it possible to examine the evolution of the process over time and to identify key turning points, central decision-making mechanisms, and emerging structural arrangements that supported the embedding of the RDI focus areas into the unit's everyday research and teaching activities.

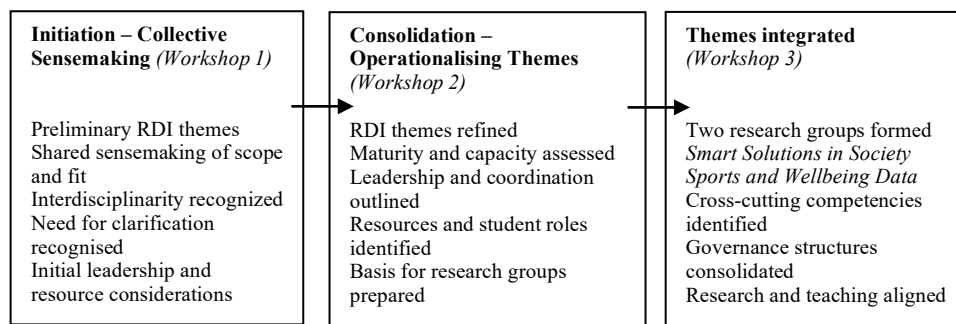
Data sources consist of documented outputs from three consecutive workshops, each involving ten to fifteen unit members, conducted in hybrid mode in 2025. Each workshop lasted between two and three hours. These sessions were designed to surface diverse perspectives, interpret both institutional and unit-level strengths, and align them with external opportunities.

A process-oriented analytical approach (e.g. Langley, 1999) was used to analyse the empirical material, focusing on the temporal sequencing of actions, interpretations, and decisions through which strategic RDI priorities were translated into concrete research group configurations within the unit. This approach enabled the identification of evolving

themes, interpretive frames, and decision-making patterns as the process unfolded over time. In addition, process mapping (e.g. Langley *et al.*, 2013) was used as an analytical device to visualise the progression from initial broad ideas to more clearly articulated and strategically aligned research groups within the unit.

#### 4 Embedding Strategic RDI Focus Areas Through a Collaborative Process

The analysis identifies three interrelated stages through which the unit collaboratively refined and embedded the institution’s strategic RDI focus areas into concrete research group configurations. Across these stages, the findings highlight (1) the evolution of shared interpretations, (2) the emergence of enabling governance structures and coordination mechanisms, and (3) the processes through which pre-existing RDI themes were progressively sharpened into distinct yet interconnected research groups. Consistent with a process-oriented analytical approach (Langley, 1999), the findings are presented as a sequential narrative that traces how strategic RDI priorities were operationalised and embedded in ways that meaningfully guide daily research and teaching activities within the unit. The staged process is illustrated in Figure 1.



**Figure 1** Process of Operationalising Strategic RDI Priorities.

##### *Stage 1: Initiating Embedded Sensemaking Around RDI Focus Areas (Workshop 1)*

The first workshop marked the initiation of the embedding process, functioning as an arena for collective sensemaking around the institution’s strategic RDI focus areas. The unit began by examining four preliminary thematic “seeds” proposed by the workshop facilitators as a starting point for the development and alignment of the research groups. Rather than treating these themes as fixed strategic directives, participants engaged in interpretive work to assess their relevance, scope, and interrelations in light of the unit’s existing strengths, ongoing projects, and strategic aspirations.

Through facilitated dialogue, participants negotiated how the proposed themes aligned with regional needs, international opportunities, and existing networks and infrastructures. A key outcome of this stage was the recognition that broad themes—such as wellbeing—required further scope clarification to ensure they could provide a clear and coherent frame for articulating the unit’s research, development, and teaching activities. The discussion also surfaced early governance considerations, including the need for dedicated leadership roles, resource allocation, and mechanisms for student involvement, indicating that successful embedding would depend on both strategic alignment and operational capacity.

From a process perspective, this stage established the initial interpretive frames that shaped subsequent actions. By the end of the workshop, four refined RDI themes—Sports Data Analytics, Energy Transition, Responsible Business, and Reform of the Wellbeing Sector—were provisionally agreed upon, creating a shared strategic reference point while leaving space for further refinement. Importantly, this stage foregrounded interdisciplinarity by explicitly recognising thematic overlaps and potential synergies, laying the groundwork for cross-disciplinary collaboration rather than siloed research group configuration.

### *Stage 2: Translating Themes into Operational Capacities (Workshop 2)*

Building on the shared understanding developed in Stage 1, the second workshop focused on deepening and operationalising the RDI themes as the basis for research groups. Participants worked in theme-specific groups to develop detailed descriptions of each theme, addressing their scope, strategic significance, existing expertise, networks, and evidence of competence. This stage shifted the process from interpretive sensemaking toward capacity-oriented strategising, where themes were translated into more concrete research group mandates.

The analysis reveals that the themes varied significantly in terms of maturity and readiness for embedding. For example, *Sports Data Analytics* emerged as a well-established area supported by robust infrastructure and international collaborations, providing a ready-made foundation for the formulation of a research group. By contrast, *Energy Transition* was characterised as an emergent focus area with strong strategic potential but requiring targeted recruitment and capacity building. *Responsible Business* was likewise recognised as strategically important; however, it depended on the further strengthening of international linkages to support research group development. Finally, *Reform of the Wellbeing Sector* remained subject to ongoing negotiation regarding its appropriate scope and disciplinary focus, highlighting the need for continued refinement before a stable research group configuration could be established.

This stage was critical in transforming abstract strategic priorities into actionable plans. Participants identified leadership needs, resource requirements, pathways for student engagement, and opportunities for interdisciplinary collaboration. From a process-oriented perspective, Workshop 2 marked a consolidation phase in which the initially broad thematic interpretations were systematically translated into more clearly defined operational roles, coordination mechanisms, and organisational arrangements, establishing the structural and conceptual foundations for the subsequent configuration of thematic research groups through which the university's strategic RDI priorities would be embedded into practice.

### *Stage 3: Integrating Themes into a Coherent Research Group Framework (Workshop 3)*

The third workshop marked a transition from theme-specific planning to broader integration and coordination across the unit. Building on the outputs of the earlier stages, participants explored how the four RDI themes could be positioned within coherent research group frameworks that would strengthen strategic focus, support existing interdisciplinarity within the unit, and enhance external visibility. Through collective deliberation, two complementary research groups were established: *Smart Solutions in Society* and *Sports and Wellbeing Data*.

The *Smart Solutions in Society* research group emerged as an overarching framework integrating the technological and societal dimensions of the unit's expertise, drawing in

particular on the themes of Energy Transition, Responsible Business, and Reform of the Wellbeing Sector. This group was positioned as a platform for addressing sustainability challenges, societal impact, and systemic innovation through interdisciplinary collaboration. In parallel, *Sports and Wellbeing Data* was consolidated as a distinct research group based on the maturity and strong existing capacity of the Sports Data Analytics theme. Owing to its robust infrastructure, established international networks, and coherent data-driven focus, this area was recognised as warranting a dedicated research group configuration.

A central outcome of this stage was the identification of cross-cutting competencies—including sustainability, impact assessment, artificial intelligence, innovation management, and co-creation—that connect the two research groups while preserving their distinct profiles. These competencies were discussed as shared resources to be embedded across research and teaching activities, reinforcing coordination and knowledge exchange between the groups. The workshop also consolidated key embedding mechanisms identified in earlier stages, such as coordinated leadership structures, alignment of resources, integration of student projects and thesis work, and the strengthening of internal and external collaboration networks.

From an analytical perspective, Stage 3 represents the integration and institutionalisation phase of the embedding process. The thematic priorities articulated in Stage 1 and the operational foundations developed in Stage 2 were synthesised into two coherent yet interconnected research group configurations that could meaningfully guide day-to-day academic work. Rather than producing rigid organisational units, the process resulted in adaptive research group frameworks designed to support ongoing sensemaking, interdisciplinary collaboration, and strategic renewal over time.

Taken together, the findings illustrate how strategic RDI focus areas were embedded not through linear implementation but through an iterative, practice-based process of collective sensemaking and coordinated action. Strategy-as-practice is evident in the everyday activities—workshops, discussions, and negotiations—through which strategy was enacted, while sensemaking processes explain how shared understandings of RDI priorities emerged and evolved over time. The process-oriented analysis highlights how governance arrangements, interpretive frames, and operational practices co-evolved across stages, culminating in two interconnected research group configurations that align strategic intent with daily research and teaching activities.

## 5 Discussion

This study examined how strategic RDI focus areas can be operationalised in ways that meaningfully guide daily research and teaching activities in a higher education context. The findings show that the embedding of strategic RDI priorities did not occur through linear implementation, but through an iterative, practice-based process in which shared understandings and organisational arrangements co-evolved. This extends existing research on higher education strategy, which has often focused on formal plans and structures rather than on the micro-processes through which strategy becomes consequential in everyday academic work (Morphew *et al.*, 2018; Fumasoli and Hladchenko, 2023).

From a strategy-as-practice perspective, the findings underscore that strategy is enacted through situated activities rather than implemented as a pre-defined blueprint (Jarzabkowski, 2004; Jarzabkowski and Whittington, 2008). Workshops, facilitated

discussions, and negotiations functioned as key strategising practices through which strategic RDI priorities were interpreted, refined, and reconfigured. The emergence of two research groups illustrates how organisational structures can crystallise out of practice-based strategising: a specialised group (*Sports and Wellbeing Data*) formed around a mature and stabilised thematic area, while an integrative group (*Smart Solutions in Society*) served as an umbrella configuration capable of accommodating multiple themes and competencies. This finding aligns with previous research suggesting that strategy-as-practice processes often give rise to heterogeneous organisational arrangements shaped by local capacities, histories, and practices (Jarzabkowski *et al.*, 2007; Whittington, 2011).

The findings also contribute to sensemaking theory by illustrating how shared interpretations of strategic priorities emerged and stabilised over time. Consistent with Weick's (1995) account of sensemaking as a social and retrospective process, early RDI themes acted as ambiguous interpretive cues that required collective clarification before they could guide action. Through repeated interaction, participants negotiated the scope and relevance of the themes, resulting in shared frames that enabled coordination. Notably, differences in thematic maturity shaped the pace and nature of sensemaking: well-established areas converged more rapidly, whereas emerging themes required prolonged negotiation and further capacity building. This supports the sensemaking research emphasising that meaning construction is strongly conditioned by existing practices and material arrangements (Maitlis and Christianson, 2014; Sandberg and Tsoukas, 2015).

Importantly, the study highlights how governance arrangements and sensemaking processes co-evolved across stages. Leadership roles, resource considerations, and coordination mechanisms did not precede interpretation but developed alongside it, reflecting what prior studies have described as the entanglement of governance and strategising in pluralistic organisations such as universities (Denis *et al.*, 2007; Vaara and Whittington, 2012). Workshop 2 marked a consolidation phase in which interpretive work was translated into provisional organisational arrangements, while Workshop 3 institutionalised these arrangements by configuring two coherent research groups. This finding nuances dominant views of RDI governance by showing how governance structures are progressively assembled through practice, rather than fully defined and fixed *ex ante* (Ansell and Gash, 2008).

The study offers several practical implications for higher education leaders and policymakers. First, it suggests that structured arenas for collective sensemaking—such as facilitated workshops—are crucial for aligning strategic RDI priorities with academic practice. Second, the coexistence of integrative and specialised research group configurations indicates that flexibility in organisational design may be more effective than uniform models, particularly when thematic maturity varies. Third, the explicit articulation of cross-cutting competencies can help to prevent siloed development and support sustained interdisciplinarity, a recurring challenge in higher education organisations (Clark, 1998; Vaara and Whittington, 2012).

Several limitations should be acknowledged. The study is based on a single-unit case study, which limits empirical generalisation. In addition, the analysis focuses on the formation and early institutionalisation of research groups rather than on longer-term outcomes related to research performance, teaching innovation, or societal impact. Future research could extend this work through comparative multi-case studies or longitudinal

designs examining how research group configurations evolve as strategic priorities and external conditions change (e.g. Langley *et al.*, 2013).

Overall, the study contributes to the literature on higher education strategy and RDI governance by providing a process-oriented account of how strategic priorities are operationalised through everyday practices. By integrating strategy-as-practice and sensemaking perspectives, it advances understanding of how strategy, governance, and organisational arrangements co-evolve, resulting in research group configurations that meaningfully connect strategic intent with daily academic work.

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