

UNIC Centre for City Futures. A Transnational Change Agency

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Impactful sustainable development necessitates a shift in public policy goals from incremental activities to entire transformational change processes. This paper examines a new centre of a European University (UNIC Centre for City Futures), as a **Transnational Change Agency**. Currently, it appears that there is a large mismatch in the alignment of local city-challenges and the capabilities of regional and local administrations to provide comprehensive responses. There is a need for coordination between levels of governance, across administrative silos and beyond boundaries, especially the need to include citizens and local communities in urban development and decision-making processes. In addition, innovation is a local phenomenon, and it has been noted that there is room for enhanced formal instruments to channel a continuous flow of information and knowledge between the EU policy level and dynamics at the local level (McCann & Soete, 2020).

In response, a cluster of creative thinking has emerged asking what could be possible if universities were to recognise their full potential contribution to the development of ecologically and socially sustainable cities, fostering processes of positive and collective learning (see, for example, Chatterton et al. (2018), Facer & Enright (2016), May & Perry (2017)). In this paper, we will scrutinize the operation of a *Centre for City Futures*, new to *UNIC European University of Cities in Post-industrial Transition*, an alliance of ten universities and their cities. Here we are mobilizing a large-scale transnational Change Agency whose quintuple helix approach aims to develop our collective regional capacities beyond and across their boundaries.

The UNIC Centre for City Futures leverages four missions of higher education institutions: education, research and innovation and service to society. It capitalises on these to develop diverse innovative and structural models for implementing and achieving systemic, structural and sustainable cooperation with ten Cities. In terms of a transformative agency (Engeström, 2007; Virkkunen & Newnham, 2013), central here is an intervention method around societally **engaged city-challenge-based research and learning**.

Indeed, UNIC and the Centre for City Futures have brought an explicit focus on *Engaged Research*, which is an overarching term that describes a wide range of comprehensive research approaches and methodologies that share a common interest in collaborative engagement 'with' and 'within' society. Collectively our ten universities and ten cities have co-developed a declaration on engaged research where we have outlined together its fundamental principles. We believe it is a form of research committed to academic freedom and the public good. It aims to improve, understand, or investigate issues of public interest where societal partners are active collaborative participants in the research process. It nurtures democratic competencies through participation—from defining research needs to the co-creation of knowledge and equitable and reciprocal knowledge translation to and with society. Committed to sustainability, and inherently transdisciplinary, it explicitly builds awareness of the interconnectedness of our social-ecological systems. Imbued with different knowledge

traditions (expertise, practice, experience and wisdom), it is manifestly impactful research that has an emancipatory and transformative social justice orientation—consistently pursuing intersectional understanding towards greater social solidarity, diversity, inclusion and equity. (European Declaration of Engaged Research)

The UNIC Engaged Research orients itself around the core concept of missions (Council on Urban Initiatives, 2021) to deliver impact on the strategic priorities facing post-industrial cities in transition. **Mission-oriented** engaged research and innovation is problem-based, not discipline-based and is structured around a clear direction, targeted, measurable and timebound transformative objectives. Thus, defining concrete target and objectives are essential in mission-oriented engaged research. Therefore, it must be possible to assess whether the mission has been achieved or not, which requires appropriate indicators and monitoring frameworks to measure progress and impact. A Theory of Change is a method that can usefully assist in framing a mission area and subsequent aligned research projects. Co-developing a Theory of Change that stakeholders can agree with, can be a first step in the development of a mission among groups of stakeholders united by a common goal. An agreed Theory of Change can then facilitate working backwards from common goals in pathways that are autonomous yet coherent. It is common for stakeholders of a city-challenge to have conflicting understandings of the issues and views to its possible solution. This is why it is important to create spaces for open deliberation that can allow stakeholders to come closer to shared understandings of the root causes of territorial and inter-territorial problems, working backwards from the impacts they wish to achieve.

All transdisciplinary research is solution-oriented, yet some projects focus on local solutions and sets of actors within relatively prescribed themes, whereas others describe whole-of-society solutions for complex global problems, such as the SDGs.

When non-academic stakeholders hold knowledge critical to resolving the issue in question, transdisciplinary research integrated diverse expertise and resources on the table for co-producing knowledge. In return, societal stakeholders expect a positive local impact, by providing their data, practitioner expertise, spent working hours and diverse platforms for research activities. In other words, to partner research, innovation and development projects, the city partners as well as other societal partners expect tailored contributions and solutions for local transformation-making in their city context. This follows that a single engaged research project needs to match all the project partners' objectives and share the benefits and risks in a fair negotiated way contributing to the local urban development efforts. The City Futures Roadmaps maintained by the UNIC Centre for City Futures ensure research projects are grounded in the actual local urban development work needs in UNIC Cities and host the pathways for local impact making, in research that is engaged.

The Change Agency is developed as an integrative boundary zone linking research, education and the city, society and community. It follows that this ecosystemic perspective expands these actors' capabilities beyond their boundaries and transforms knowledge into innovation and value via collaboration (Adner, 2006; Adner & Kapoor, 2010; van der Borgh et al., 2012). Thus, in an urban context, the integrated and interlinked competencies, resources, spaces and facilities between the stakeholders define the innovation potential of the ecosystem as a whole (Schaffers & Turkama, 2012). Thereafter, creating institutional catalysts for change and co-creating for the public good helps us improve our impact and competitive advantage. The UNIC Centre for City Futures systematically harvests societal challenges and opportunities with and in our cities, to frame engaged learning and research. The Centre increases transdisciplinary collaboration and engagement around city-needs-based challenges and opportunities.

Essentially this serves as a living laboratory that will nurture a user-centred open innovation ecosystem that strives to facilitate research, development and innovation processes related to different partnerships in physical, real-life and virtual contexts (Ståhlbröst, 2008; Heikkanen & Österberg, 2012). The underpinning theory is that place-based innovation ecosystems' capacity to experiment, develop and implement new ideas is increased through radically expanded mobility and diversity of participants across boundaries. Therefore, the UNIC Centre for City Futures runs the UNIC CityLabs as a change laboratory, drives productive interactions, and facilitates co-creation for transformative innovation.

From a Change Agency process perspective, we rely on March's (1991, 2006) concept of exploration and exploitation. Exploration refers to the pursuit of what might come to be known through creativity, experimentation, and learning and it is characterized by activities intended to recognize new ideas or opportunities that could become the foundation of future sources of advantage. In contrast, exploitation is defined as the "application of established competence to problems" (March, 2006).



Figure 1. UNIC Centre for City Futures' infrastructure has provided a joint model for City-Engaged Research and City-challenge-based learning to serve society, since October 2023. The Centre is powered by 10 interconnected living laboratories with local transformation-making focuses. Together they form a large-scale transnational living laboratory for European impact.

When addressing the experience perspective, we rely on the *territories of experience* approach discussed by Torbert (1991, 2004) and Meyer (2003), as they offer a novel way for systematically approaching Engaged Research as a proactive and integrative organizational practice. Combining these two perspectives, we argue that an integrative and proactive City-Engaged Research living laboratory comprises four parallel processes sustained by the UNIC Centre for City Futures: visioning, strategizing, performing and assessing. It is essential to the living laboratory process to run continuously and have parallel operations offering a structured approach to guide the work of individual research and innovation initiatives.

1. Envision and anticipate the future of the city. This includes support for co-creation, joint problem framing and idea development.
2. Strategize to mobilize and enrich resources for transformation. This includes capacity support in identifying, fostering or creating a pipeline of researchers, skills, leadership etc. It includes planning for integration in transdisciplinary project implementation. This involves team building and proposal preparation and planning for impact and stakeholder roles.
3. Perform Engaged Research in transnational/local living laboratories to implement an intervention in the cities.
4. Assess the impacts of an intervention, in the context of established urban knowledge management and transitions monitoring.
5. Support the scaling deep and scaling wide implementation of viable solutions.

Thus, integral to the Centre for City Futures is the quintuple helix knowledge and innovation approach which is a method to integrate the complementary capacities of our Cities, societies, private sector partners and citizens, and mobilise them around city-engaged learning and engaged Research.

Building on ecosystemic thinking (Moore 1993; Lansiti & Levien, 2004, Adner & Kapoor 2010), the UNIC4ER Meets the City framework explores the facilitation of open innovation through ecosystem orchestration in the context of Engaged Research. That is, we place the utilization of 'deliberate, purposeful actions for initiating and managing innovation processes' (Dhanaraj & Parkhe, 2006) in the UNIC Centre for City Futures.

It is well established that creating and transforming innovation ecosystems is possible through promoting a shared vision, reinforced through explicit network management and orchestration (Hurmelinna-Laukkanen & Nätti, 2018). Orchestration encompasses many activities: Orchestrators need to take care of knowledge mobility, network stability, and innovation appropriability (Dhanaraj & Parkhe, 2006). In addition, actor mobilization, agenda-setting, and coordination are relevant (Hurmelinna-Laukkanen & Nätti, 2018). It has been noted that orchestrators are essentially needed to generate strong, growth-inducing ecosystems (Hurmelinna-Laukkanen & Nätti, 2018; Leten et al., 2013).

For this, the UNIC Centre for City Futures provides services to enable UNIC researchers and academics to engage with cities and city stakeholders for transformative innovation and societal impact. The Centre is effectively being developed into an attractive "one-stop-shop" infrastructure and service provider that facilitates collaboration and co-creation between various actors, turning the entire city into a living laboratory. CityLabs provides pathways and tools for city-impact-oriented research, education, and innovation. By linking ten university-city contexts in a large-scale transnational living laboratory, the CCF provides access to innovative data sources and opportunities for mission-oriented engaged research and innovation. It supports expertise around speculative futures to understand complex societal phenomena in our ten UNIC cities and to envision attractive futures through a dedicated 'Re-Imagatorium'. Integral to the Centre for City Futures is the quintuple helix knowledge and innovation approach which is a method to integrate the complementary capacities of our Cities, societies, private sector partners and citizens, and mobilise them around mission-oriented engaged research and innovation in a dedicated UNIC 'Science Shop'.

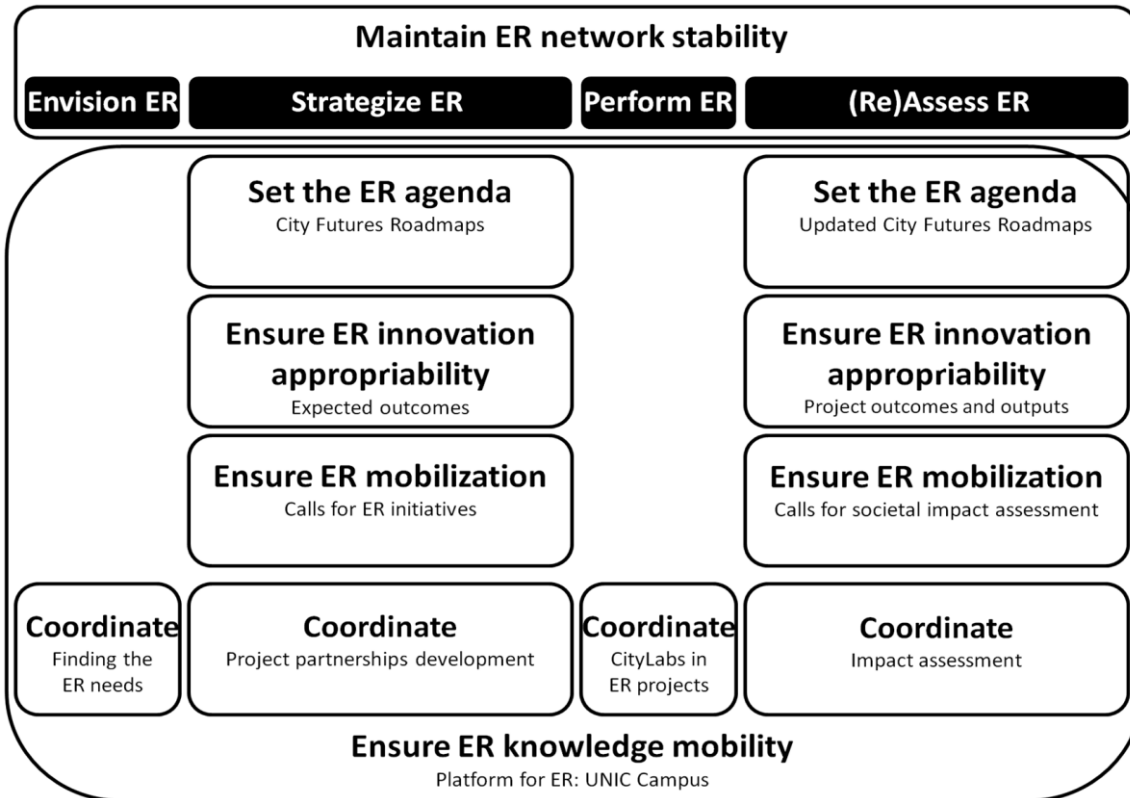


Figure 2. Activities that are needed for Engaged Research ecosystem orchestration (UNIC4ER Design of the UNIC4ER Meets the City framework for supporting the cocreation of engaged research on post-industrial transitions).

As noted above, orchestration comprises different activities for formulating the network, and directing and managing the innovation practices and processes to enable innovation and value creation and capture (Batterink et al., 2010). Among the activities, ensuring mobilization (that is, attracting and engaging relevant actors) and maintaining network stability (making sure that excessive turbulence and member turnover do not occur) are inherently about building and maintaining appropriate structures in an innovation network (see Dhanaraj & Parkhe, 2006; Van der Borgh et al., 2012). Ensuring knowledge mobility (i.e., making sure that relevant knowledge is available for further assimilation, transformation and exploitation) and innovation appropriability (e.g., facilitating value capture potential and overseeing fair distribution of intellectual property), setting the agenda (opportunity identification and goal drafting), and coordinating (promoting and administrating interaction besides knowledge transfer) relates to the efficiency and smooth operation (Dhanaraj & Parkhe, 2006; Hurmelinna-Laukkanen & Nätti, 2018; Sabatier et al., 2010).

Furthermore, over the next number of years, the UNIC Centre for City Futures will work on an **integrated approach** towards resilience and reducing inequality in cities via increasing possibilities for superdiverse populations, lifelong learning and employability. Whereas resilience refers to society’s ability to rapidly respond to and recover from disruptions through improved empowerment, engagement, adaptation, innovation, and learning, we believe that working on resilience may be key to the vitality of our regions and societal well-being.

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