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TOWARDS A THEORY OF PURPOSE-DRIVEN URBAN ENTREPRENEURSHIP

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Abstract

Inspired by Shrivastava & Kennelly (2013), we aim to extend theory on place-based entrepreneurship by highlighting the uniqueness of cities and the interplay between purpose-driven entrepreneurs and the urban places where they operate. This paper sets out to conceptualize a middle-range theoretical framework and establish the boundary conditions for purpose-driven urban entrepreneurship based on a combination of inductive reasoning and deductive theorizing. We draw from sustainability and territorial development lietaratures and the complexity science view of entrepreneurship to establish units, laws of interaction, boundaries and system states of purpose-driven urban entrepreneurship across three geo-spatial layers, and elaborate a complexity model comprising sources of opportunities, context and venturing process. We conclude with potential avenues for further theoretical and empirical development of the purpose-driven urban entrepreneurship construct.

1. Introduction

Research on purpose-driven entrepreneurship has gained traction in recent years (Hollensbe et al., 2014), as evidenced by the surge in scholarly attention to social, environmental and sustainable entrepreneurship (Hall et al. 2010). The relevance of these emergent sub-fields is driven by new business approaches that seem capable of solving pressing issues (Cohen & Winn 2007) through a resolution of the dualistic divide between business ventures and altruistic endeavors (Parrish 2010) in favor of a new entrepreneurial approach based on the creation of value for the economy, society and the environment (Shepherd & Patzelt 2011).

The context in which purpose-driven entrepreneurs act has received insufficient attention in extant entrepreneurship research, even though it is clear that place-based enterprise (PBE) offers "a potentially important means of fostering ecological and social sustainability in local communities." (Shrivastava & Kennelly, 2013:83). While management, entrepreneurship and sustainability scholars have largely overlooked the role of place, our observations suggest that a

new breed of entrepreneur is emerging, one who is embedded in place and seeks to generate sustainable impacts through their venturing in urban environments. This is evidenced in new alliances between entrepreneurs, private and public sector actors, which aim to resolve unique, interconnected city challenges and improving the quality of life of civil society, are expanding even more the frontiers of entrepreneurial action and opening up the field to new, cross-disciplinary streams of research (Cohen & Kietzmann, 2014). This field remains unexplored and current perspectives seem ill-equipped to account for the distinctive ways in which entrepreneurs committed to fostering urban well-being think and behave as embedded agents (Cohen & Kietzmann, 2014).

While similar forms of entrepreneurship likely emerge across a range of place types, our work focuses on purpose-driven urban entrepreneurship. As such, we theorize and seek to advance the domain of purpose-driven urban entrepreneurship because of the unique complexities and challenges emerging in the urban context, which are becoming more apparent and critical with each passing year and wave of urban migration. Cities are increasingly being viewed as systems of systems that entail the interconnected systems associated with communication, transportation, business, city services, energy, food, water and social systems of citizens and tourists (Dodgson & Gann, 2011).

The idea that entrepreneurial behavior can be applied to urban life has been explored in other fields, particularly in regional and government studies (e.g. Henton, et. al., 1997). Yet purpose-driven urban entrepreneurship has so far been neglected in management and entrepreneurship research, suggesting the need for boundary definition and theoretical development. Purpose-driven urban entrepreneurship opens up a unique field of inquiry because

it challenges commonly held assumptions of entrepreneurship and expands its reach in both research and practice.

Our central objective is to conceptualize a theoretical framework and establish the boundary conditions for purpose-driven urban entrepreneurship, which explains how particular individuals solve place-specific anomalies and foster urban well-being by means of developing a new project or venture. We do so by using deductive theory building methodology combined with inductive data gathering from several cases, which allowed us to identify the central components of a theoretical model of purpose-driven urban entrepreneurship including sources of opportunity, embeddedness and venture development. Given the nature of the phenomenon, our approach draws on theoretical considerations from entrepreneurship literature, business sustainability, complexity theory, and territorial development. Complexity theory has become a dominant lens for studying innovation and dynamics within urban contexts and is supporting the development of a new science of cities (Batty, 2012). Both the science of complexity and territorial development offer a significant opportunity to assist entrepreneurship and sustainability scholars to uncover multiple layers of interactions associated with co-evolutionary, place-based entrepreneurial processes (McKelvey, 2004; Etamad, 2004; Shrivastava & Kennelly, 2013). Early work on place-based entrepreneurship is promising. However, much more theoretical foundation needs to be developed for this research to generate significant new insights (Shrivastava & Kennelly, 2013).

We elaborate upon middle range theorizing (Merton, 1949), leveraging both qualitative insights from more than a dozen interviews and observations of the purpose-driven urban entrepreneurship domain and Dubin´s (1978) theoretical phase of the continuous theory-research cycle. This includes the development of the units of the theory, the laws of interaction including

the theoretical model of purpose-driven urban entrepreneurship, the theory boundaries, the identification of three territorial-based system states (neighborhood, city and urban global) derived from a complexity perspective and finally a list of propositions which were also informed through a series of observed case studies. Employing the first five of Dubin´s eight-stage theory-building research method results in an informed, conceptual framework of the theory (Ardichvili, et al., 2003). Figure 1 provides an overview of our theorizing process and structure of the paper.

---Insert Figure 1 about here---

This conceptualization and the propositions emerging from this research are important for three reasons. First, traditional concepts of entrepreneurship and economic development do not appear to capture the essential features of venturing in complex urban spheres. Entrepreneurship literature does recognize the presence of an opportunity context, i.e. a marketplace that operates as the playing field of aspiring entrepreneurs, however, until recently it has overlooked the civil aspect of a place - in particular the uniqueness of urban spaces and thus the geo-spatiality of venture opportunities - that are shaped by human interactions (McKeever, et. al., 2015). Most importantly, such interactions are embedded in a tangible environment which needs to be recognized as a complex space that supports and shapes collaborative efforts, from individuals and communities, toward improving their own urban circumstances. Ultimately, no phenomena can be adequately described unless we abandon fabricated differences between the social and the material world, and direct our attention to the empirical reality that people, ideas, objects, civic life, nature and the built environment are all joined together in a complex network of interactions. In theorizing about purpose-driven urban entrepreneurship we extend our

knowledge of place-based entrepreneurship (Shrivastava & Kennelly, 2013) and cement strong roots for further research.

Second, research on social and sustainable entrepreneurship has certainly expanded our understanding of entrepreneurship, and entrepreneurs, by demonstrating that some entrepreneurs are driven by purpose, a desire to make social and environmental impact as opposed to the more commonly held view that entrepreneurs are profit-seekers first and foremost. Nevertheless, the collective effort toward improving the complex physical-human space by means of developing new means, ends or means-ends relationships is still an under-examined issue. This space propels and sets the boundary for entrepreneurial action and acts as the ultimate beneficiary of such action.

Finally, our view of the purpose-driven urban entrepreneurship phenomenon as embedded in a complex system allows for thick theorizing. Rather than seeing the opportunity context as decomposable pieces which are usually assumed to be necessary and sufficient for entrepreneurial action, we take a broader and more holistic view on urban entrepreneurial action. In so doing, we embrace the possibility of both multi- and equifinality in a single model, thus allowing for multi-causal, non-linear explanations of purpose-driven urban venture emergence, a combination enabled by the application of complexity theory to the urban entrepreneurship domain (McKelvey, 2004).

2. Inductive Contributions towards a Theory of Purpose-Driven Urban Entrepreneurship

Following Hoffman and Ocasio, (2001) we sought to develop a middle range theory of purpose-driven urban entrepreneurship. This requires a combination of both inductive

observation of phenomenon as well as deductive approaches to theory building. Thus our first step was to identify examples of purpose-driven entrepreneurs operating in urban settings in hopes of gaining insights for future deductive theory-building work leveraging Dubin´s theory-building methodology. The first phase of this research, therefore, took the form of an inductive, qualitative research approach to inform our deductive theory building efforts. As such, we identified and purposively selected group of individuals who have been seeking to increase their role beyond city service recipients to providers of services that help to bridge observable gaps affecting quality of life in their communities. This was a purposive, convenience sample selected to ensure geographic differentiation as well as a range of actors including founders, accelerators and municipal organizations dedicated to supporting purpose-driven urban entrepreneurship. They allowed us to grow our initial understanding of specific factors that account for the purpose-driven urban entrepreneurship phenomenon. Our sample consisted of 20 cases ranging from new ventures to civic accelerators in multiple cities (Table 1).

--- Insert Table 1 about here ---

In this early phase of the research, we conducted more than a dozen interviews with urban-minded entrepreneurs and public officials at the council level working towards fostering city enterprising through civic incubators or accelerators. In addition, we collected evidence by means of secondary sources, such as public reports, indexes, business plans (when available), websites, which account for the development of city-oriented ventures. We also gathered information from emerging online crowdsourcing services geared towards urban entrepreneurs seeking to improve local quality of life, such as Neighbor.ly and Citizinvestor. The latter allowed us to triangulate data and avoid retrospective, over-optimism and social desirability biases. Our analysis was based on memo writing, theoretical sorting and situational mapping

techniques. These inductive analytical strategies are commonly used in grounded theorizing since they enable pattern finding at an abstract level (Charmaz, 2006).

Our context of interest is cities. Cities have been generating an increasing amount of attention from scholars, policy-makers, foundations, citizen groups, and entrepreneurs. The increased focus on cities is largely due to the rapid urbanization occurring around the globe and the increasing difficulties municipal governments have in ensuring a high quality of life as the hard and soft infrastructures are under threat. Many systems within cities are struggling under the weight of urban migration, as 1.3 million people are currently moving to cities each week, representing a major challenge for public officials. Cities struggle to keep up with affordable housing requirements, ensure a clean and reliable energy system, facilitate adequate public transit infrastructure and enabling quality, healthy local urban food systems (Guillen, 2012). These growing challenges and new demands from citizens for cities to be smarter in the use of technology and infrastructure for the provision of services have come at a time when many cities are faced with deficits caused in part by the "Great Recession."

Our examination of the purpose-driven urban entrepreneurship space led us to observe emergent movements in cities such as Atlanta, Barcelona, Boston and San Francisco where city-level initiatives are reshaping the interactions between city officials and citizen innovators. Points of Light, Code for America, Civic Innovation SF and New Urban Mechanics are exemplar cases. In addition, we observed movements of local residents and local organizations using the city as a source of opportunities and enabler of entrepreneurial action. They are using specific civic crowdfunding platforms to raise funding for neighborhood projects. A recently successfully funded campaign on Citizinvestor, for example, was the Somerville Mobile

Farmers´ Market, which aims to provide affordable, organic foods to two local public housing neighborhoods in Somerville, Massachusetts.

Through this process we identified the emergence of corporate purpose-driven urban entrepreneurship in the form of a collaboration, called Citizen Solar, between an energy company, (Wien Energy), the City of Vienna and citizens to co-finance the creation of solar farms near the city. We also uncovered a range of emerging platforms designed to connect citizens and urban entrepreneurs with innovation opportunities in their communities around the globe. For example, Citymart, co-founded by Sascha Haselmayer and based in Barcelona, which connects urban technology startups with cities around the globe. In 2014 and 2015, Citymart helped drive a civic crowdsourcing project whereby the city of Barcelona in a project called BCN Open Challenge, posted 6 challenges on the Citymart platform. Instead of predetermining the specifications of the solutions, Barcelona was able to embrace open innovation by soliciting innovative proposals from local and global startups.

The latter set the basis for our middle-range theorizing. In order to make sense of the range of approaches to solving urban problems discovered in this process, we then embarked on a deductive theory-building exercise leveraging the first five of Dubin´s eight stages of theory-building. Below we highlight our efforts to frame the process of purpose-driven urban entrepreneurship and then refer back to the inductive research to analyze the cases in light of the emergent theoretical model.

3. Dubin´s Eight-Stage Theory Building Methodology

3.1 Introduction to Dubin´s Theory Building Methodology

In unfolding our middle range theory of purpose-driven urban entrepreneurship, we have chosen to utilize a deductive theory-then-research strategy due to the relative absence of extant research or data on the purpose-driven urban entrepreneurship from which to induce a theory of purpose-driven urban entrepreneurship (Holton & Lowe, 2007). Dubin´s eight-stage model for theory building encompassing conceptual development and empirical verification (Dubin, 1978) is widely recognized as a leading approach to deductive theory building in applied fields (Ardichvili, et al, 2003). Throughout our deductive theory building efforts, we also applied inductive approaches to gaining insights about the emerging phenomenon of purpose-drvien urban entrepreneurship. This mix of inductive and deductive approaches is commonly referred to as middle range theory building (Merton, 1949; Hoffman and Ocasio, 2001). "(Middle range theory) is intermediate to general theories of social systems which are too remote from particular classes of social behavior, organization, and change to account for what is observed and to those detailed orderly descriptions of particulars that are not generalized at all. Middle-range theory involves abstractions, but they are close enough to observed data to be incorporated in propositions that permit empirical testing." (Merton, 1949:39) It is our belief that the middle-range theory building approach embraced herein allows for the construction of a more robust theoretical framework by embracing the rigorous approach to deductive theory building advanced by Dubin, while simultaneously benefitting the contextual richness that can only be developed from insights gleaned through qualitative case analysis.

Dubin (1978) identified four components which are required in the conceptual development of the theory building process: units, laws of interaction, boundaries and system states. Units are the core concepts which interact to create the phenomenon of study; the laws of interaction specify how the units interact or relate to each other; boundaries delineate the limits

of the phenomenon; and system states reflect the different conditions for which the phenomenon could be observed in light of real world complexity.

The research phase of Dubin´s model entails the development of propositions, empricial indicators, hypotheses development and testing. While propositions technically fall within Dubin´s research phase, we have chosen to follow Ardichivili, et. al,´s (2003) lead by also including propositions as a start towards understanding the testability of a theory of purpose-driven urban entrepreneurship.

This section focuses on the development of a middle range theory of purpose-driven urban entrepreneurship leveraging the first five components of Dubin´s theory-building research method: units, laws of interaction, boundaries, system states and propositions.

3.2 Units of a middle range theory of purpose-driven urban entrepreneurship

We aim to contribute to theory development of a construct, purpose-driven urban entrepreneurship, which has virtually no presence in sustainability and entrepreneurship literatures to date. In order to uncover potential units (i.e. core concepts of the theoretical model) for the development of a theory of purpose-driven urban entrepreneurship we focus on extant literature on other purpose-driven forms of entrepreneurship, social and sustainable entrepreneurship, over the past two decades and on literatures from territorial development and urban studies. We also draw on emerging cases of purpose-driven urban entrepreneurs to inform the theory building.

In recent years, numerous scholars have begun to address a range of subfields in entrepreneurship whereby entrepreneurs are understood to be motivated to make a social and/or

environmental difference in society. Social and sustainable entrepreneurship have emerged as a vehicle for making positive social change in society, in that both seek to enhance social wealth and/or protect the natural enviornment by creating new ventures or managing existing organizations in an innovative manner." (Zahra, et al. 2009; Shepherd & Patzelt, 2011). For the purposes of this paper, we have chosen to frame social and sustainable entrepreneurship in urban contexts as purpose-driven urban entrepreneurship.

Drawing on extant literature, "a combination of careful observation, shrewd guesses, and scientific intuition" (Kaplan, 1964: 9), and an interative process of induction through cases, we identify three sets of units for the development of a middle range theory of purpose-driven urban entrepreneurship. The first set is associated with sources of opportunity and contains three units: merit good failures, public good failures and private good failures. The second set is associated with embeddedness, both territorial and social, and the third set is associated with venture development, which contains three sets of institutions participating in the process: public, private and civil society.

Sources of Opportunities: Public, Merit, and Private Good Failures

There are three broad types of goods offered in society: public, merit and private (Fiorito & Kollintzas, 2004).

Public goods are offered free of charge to citizens and usually paid for via the collection of taxes. Public goods include services such as national defense, emergency services and the criminal justice system. Goods must meet two criteria to be classified as public goods: non-rivalrous and non-exclusive (Laux-Meiselbach, 1988). For goods to be non-rivalrous, access or

enjoyment must not be affected by additional users. Public goods must also be non-excludable, meaning that non-payers must have equal access to the public good.

Merit goods, regardless of an individual's willingness or desire to pay, are seen by governments as important to provide due to the associated positive externalities (Musgrave, 1959). In contrast to public goods, it is possible to exclude users even if the fees for use are below market prices. Classic examples of merit goods often include health care, affordable housing, education and public transit. Merit goods generally meet two criteria: they are undervalued by the users, and they provide a positive externality in their community or society as a whole. The full value of a merit good at the time of consumption may not be fully determined by users in the system due to imperfect information.

Private goods are essentially the opposite of public goods, as they are excludable and rivalrous. A user may be rejected for inability or lack of desire to pay (excludable). Furthermore, the consumption of the private good by one user may minimize or inhibit the availability of that good for another. A third characteristic of private goods is rejectability (Haignere 1999). Rejectability implies that individual consumers have the right to forego the use or purchase of an item.

The way urban entrepreneurs pursue opportunities departs from the traditional gap-filling market-based logic towards appreciating the complexity of, and the distance between, public (neighborhoods, cities or globe) and private (citizens) spheres. Instead of searching for venture opportunities residing solely in market imperfections, they observe the system as a whole, comprising public, merit and private good failure (Fiorito & Kollintzas, 2004), and provide entrepreneurial solutions to bridge the gap between the governmental and industrial structures and citizens' search for urban well-being.

Place-based embeddedness: Social and Territorial

As the entrepreneurship phenomenon gains in complexity given the multi-dimensional interactions amongst different layers including the firm, the market and the environment (Etemad 2004), entrepreneurship scholars have begun to embrace complexity theory as a lens for understanding the phenomenon (McKelvey, 2004). One salient aspect of this complexity being addressed in entrepreneurship research pertains to the way in which entrepreneurs are embedded in social systems (Jack & Anderson, 2002) and, more recently, in place (Mckeever, et al., 2015). The need for social and sustainable entrepreneurship scholars to embrace a more complex view of place-based embeddedness which considers both embeddedness in sociological systems and in territory, is starting to gain traction (Guthey et al., 2014).

Shrivastava and Kennelly further suggest that PBEs may be more likely to develop 'fields of care' associated with place, which encourages them to act in ways that improve their local community through business activities. In the past few decades, urban scholars have attempted to identifying the underlying features of urban environments which increase the sense of place amongst local residents. Jane Jacobs (1961) was an early pioneer with her work on how U.S. cities had lost their sense of place when planners turned their attention from prioritizing people to prioritizing automobiles. Jacobs highlighted tactics for making better cities through interventions such as pedestrian-oriented development, preservation of historic architecture, housing subsidies to ensure affordability and strategies for ensuring economic viability. Since Jacobs, many others have explored the art and science of urban ´placemaking´ such as Landry (2006) and Florida (2002). This work has drawn urban policy, urban planners, corporate and citizen interest.

While some scholars have explored how placemaking can attract innovative, entrepreneurial types to different cities (e.g. Florida, 2002), there is a dearth of theory building about the connection between placemaking and purpose-driven urban entrepreneurship. Cities are likely to have differential impact on fostering purpose-driven urban entrepreneurship depending on city´s ability to create a sense of place amongst its citizens. While placemaking in cities can serve to attract traditional entrepreneurs seeking a dynamic, tolerant and creative place to start and grow their ventures, some citizens may feel embedded in their city and have a sense of responsibility to improve the quality of life for themselves and their fellow neighbors. We have perceived that through embeddeness in social and territorial systems, purpose-driven urban entrepreneurs establish fields of care for their neighbors and fellow citizens and that this field of care influences the urban entrepreneur's venturing process.

Social embeddedness. Economic actors can not be easily separated from the social structures in which they operate (Granovetter, 2000). Based on a sociological conception of markets, however, markets can be viewed as self-reproducing social structures (White, 1981), involving exchange and competition and mediated by social interactions. Thus, entrepreneurs shaping market interactions and exchange relationships do not only alter economic structures, but also influence the way in which social actors and social dialogues – embedded in social structures and governed by sociological institutions - are interwoven (Dimov, 2011). In this process, entrepreneurs are "shaped by and in turn shape structures of social interaction" (Granovetter, 2000: 256). In the context of purpose-driven organizations, scholars have suggested that a more inclusive perspective on stakeholders compels interdependence between the organization and society (Hörisch, et al., 2014).

Territorial Embeddedness. In recent years, scholars have started to focus on the social embeddedness of entrepreneurs, particularly in markets. Yet, the role of territorial embeddedness of entrepreneurs has, to date, been largely ignored in mainstream management and entrepreneurship research. In tackling this issue, and through the application of ethnographic methodology, McKeever et. al, (2015) found that entrepreneurs in two different communities of Ireland engaged in key exchange relationships with the local community to not only advance their ventures, but to also support local community development. A logical extension of this research is to consider sensitivities to place, which encompasses natural ecosystems (Shrivastava & Kennelly, 2013), the built environment and sense of place possessed by individuals and organizations physically located in the same territory (Guthey, et al., 2014).

Place-based enterpises (PBEs) "are firmly rooted in and interdependent with place and practice an ethos of sustainability" (Shrivastava & Kennelly, 2013:91).

> Place is a multifaceted subject of analysis where people, nature, politics, culture, history, and, indeed, organizations lead to the creation and continued transformation of place, rather than place being a preformed phenomenon, fixed social fact, or canvas on which history plays out. As such, it is a dynamic concept with the potential to generate important insights into organizational studies of sustainability. (Guthey, et al., 2014:257)

By omitting place in entrepreneurship theory, we have underestimated the link between the venture, the entrepreneurial team, surrounding natural resources and the venture's productive activity (Shrivastava & Kennelly, 2013). This calls for novel theory, one that allows us to move from the traditional anthropocentric approach to entrepreneurship to one that integrates the complex interaction between people, place and its civic environment, resulting in a complex system (Byrne 1998).

Inter-institutional collaborative venture development: Public institutions, private institutions and civil society

"Entrepreneurship, like the rest of social life, is a collaborative social endeavor. The interactions of entrepreneurs and their stakeholders sustain and transform the nature of entrepreneurship." (Downing, 2005:196). Entrepreneurs can not succeed in their pursuits without involving other actors external to the firm. Opportunity development, as the sequence of actions that move rough ideas towards their final realization in market structures, is increasingly seen as a learning process, whereby aspiring entrepreneurs engage with and organize other social actors, transcending the individual agent and becoming social in nature (Dimov, 2007). Entrepreneurs, in this sense, have a host of internal and external stakeholders including employees, customers, suppliers and competitors and the entrepreneur´s ability to align the contributions of all stakeholders is a critical part of the entrepreneurial process (Venkataraman, 2002). Institutional entrepreneurship provides a theoretical framework for understanding the arrangements between embedded agents and cultural and regulatory factors.

Institutional entrepreneurship is a unification of institutional and entrepreneurship theories and has been defined as "activities of actors who have an interest in particular institutional arrangements and who leverage resources to create new institutions or to transform existing ones" (Maguire, et al., 2004:657). Institutions take the form of taken-for-granted rules, norms, and beliefs, which affect the perceived legitimacy of activities or behaviors (Hoffman, 1999). Institutional entrepreneurship is concerned with the juxtaposition of institutions that tend to place constraints on entrepreneurs, with entrepreneurs as embedded agents seeking to change institutions (Garud, et. al., 2007). In the context of purpose-driven urban entrepreneurship, we

have identified three key institutional actors that shape, and are shaped by, urban entrepreneurs: public institutions, private institutions and civil society.

Public institutions. Governments create and regulate the playing ground for innovation and entrepreneurship (Minniti, 2008) by exercising varying degrees of economic and political control to stimulate technological innovation in their jurisdictions (Mahmood & Rufin, 2005). While traditional views of government have suggested that government actors tend to constrain innovation and entrepreneurship (e.g. Rothwell, 1992), recently scholars have begun to explore how different levels of public institutions can embrace public entrepreneurship (Klein et. al., 2010) and stimulate more innovation through demand-side policies such as procurement for innovation, voluntary standards and regulation (Cohen & Amoros, 2014).

Private Institutions. Previously we discussed a range of goods failures, which form the opportunity space for urban entrepreneurs. One such failure is that created by the absence or deficiencies in private goods. Just as public institutions can either constrain or facilitate innovation, so can other private entities operating at a local, regional or global level. Dimaggio and Powell (1983) identified institutional isomorphism as a set of factors which encourage sameness amongst companies operating in similar industries, resulting in less innovation in organization forms, processes and outcomes. Established companies, acting independently or in collusion with other firms, are also prone to engage in monopolistic or oligopolistic behaviors in an effort to restrict new entrants (Caves & Porter, 1977).

Civil Society. One key role that social entrepreneurs play is the creation of non-government organizations (NGOs) to fill institutional voids left by public institutions (Mair & Marti, 2009). Aside from NGOs, civil society is also generally comprised of individuals and groups of citizens. While traditional for profit, business to consumer models are concerned with customers, we posit

that urban entrepreneurs are more focused on improving lives of citizens. However, instead of solving deficiencies in welfare provision by replacing the role of institutions, urban entrepreneurs collaborate with public, private and/or civil society in potentially unique ways to collectively improve the surrounding civil society's circumstances.

3.2 Laws of Interaction

In recent years, entrepreneurship scholars have demonstrated that entrepreneurship is a learning process whereby opportunities are developed through the shaping and reshaping of ideas, actions and interactions (Dimov, 2011) presenting a path forward for understanding the true nature of opportunities (Venkataraman et al. 2012). We draw on this ongoing discussion to depict the laws of interaction within the opportunity development process associated with a urban entrepreneur's venture intentions, which we refer to as collaborative place-based venturing. In making sense of the units of the theory outlined in the prior section, we provide in Figure 2 a graphical model which illustrates how the urban entrepreneur acts as an agent to improve quality of life in urban areas via the laws of interaction amongst the units (Dubin, 1978) in the development of purpose-driven urban ventures. It should be noted that the model does not intend to depict causal relationships. Rather it is a process model whereby connecting arrows are used to suggest sequence and feedback loops in a process model of purpose-driven urban entrepreneurship.

---Insert Figure 2 about here---

Figure 2 portrays the elements and interactions which are driven by and also affect purpose-driven urban entrepreneurs in shaping the opportunity space in the process of building bridges between geo-spatial and social complexity. For example, purpose-driven urban entrepreneurs

seek to observe an entire system like the orchestration of a multi-platform public transportation system serving three million users daily, and the simplicity of a citizen's every-day life, such as individuals struggling to arrive on time to a medical exam because the bus that they decided to take suffered a punctured tire. We argue that in closing the gap between complexity and simplicity, aspiring purpose-driven urban entrepreneurs can find or create an array of venture opportunities.

Let's briefly return to the transportation failure experienced by the citizen arriving late to her doctor's office. Residing in cities is a host of transportation solutions. Some, like buses, metro systems and light rail, are provided, usually as a merit good, to citizens and visitors by local and regional government authorities or sub-contracted private operators. Furthermore, the private sector also offers a range of alternatives for citizen transit from bicycles to private passenger vehicles. Some are public goods, such as sidewalks and bike paths. Yet, as cities experience continued population growth, the transportation alternatives offered to citizens from private and public sources increase their complexity and sometimes fail to meet the simple needs. This is where urban entrepreneurs enter the picture, bridging system complexity and everyday simplicity by means of becoming an intermediary between the offer and demand of welfare. Collaborative initiatives like bikesharing, carsharing and ridesharing services entering cities around the globe, are designed to address the current failures of private and public transportation solutions (Cohen & Kietzmann, 2014). Cohen and Kietzmann (2014) leveraged an agency theory perspective to consider the role of private shared mobility operators in helping cities achieve their sustainable transportation objectives. In reviewing the evolution of 12 distinctive business models for sustainability, Cohen and Kietzmann (2014) determined that shared mobility operators who embraced collaborative business models were also more viable as these approaches minimize

potentials for conflict with the local government and increase venture legitimacy. Thus, shared mobility providers are able to bridge the gap between the complexity in cities with the simplicity of challenges which emerge on a daily basis at the individual level. For example, the person stuck on a bus with a flat tire could open their smart phone and hail an Uber taxi leveraging geo-location. Or perhaps identify the nearest Zipcar charshare or B-Cycle bikeshare to their current location in order to reach their medical appointment on time. These alternative transportation services provide an increasingly important bridge between the complexity of urban mobility and the daily needs of citizens and visitors.

As a consequence we posit that, in the context of purpose-driven urban entrepreneurship, the sources of opportunities can come from several possible combinations of public, private and merit goods failures. As such, solutions emerge as a response to perceived gaps between public and private entities in the form of collaborative initiatives through city-oriented innovations that close the urban well-being gap produced by the inadequate provision of goods and services from government and private structures. Such solutions are thus intended to resolve the inefficiency of the governmental structure in bringing urban well-being closer to citizens on the one hand, and the lack of knowledge of local citizens regarding how to obtain greater benefits from the prevailing system of welfare provision, on the other hand.

While traditional (commercial) entrepreneurs respond to perceived opportunities based primarily on market needs, urban entrepreneurs focus on solving issues experienced in daily living covering wider aspects of human and civic life in urban areas. These issues emerge at the intersection of the person, the physical (territory) and civic spaces (social) in which he or she is embedded. The opportunity space where urban entrepreneurs operate is thus socially- and territorially embedded. It takes form under collaboration and is not shaped by the frustration

experienced by people in their role as consumer, but rather as citizens in search for urban welfare provision. Given the iterative nature of the venturing process, the opportunity under pursuit is in continuous dialogue with the social and territorial conditions surrounding the entrepreneur and its venture.

Entrepreneurs are known to embrace collaborative initiatives to foster new institutions which might enhance venture legitimacy (Lawrence, et. al., 2002). By acting upon the urban well-being gap, urban entrepreneurs move beyond passive recipients of government services, and towards co-creation of solutions designed to solve the urban well-being gap. We posit that urban entrepreneurs are unique in their approach to collaboration with public and private institutions and civil society in their venturing process.

3.3 Boundaries of a middle range theory of purpose-driven urban entrepreneurship

We posit that purpose-driven urban entrepreneurs embrace similar values similar to those of social and sustainable entrepreneurs. In fact, rather than seek to differentiate urban entrepreneurs from social and sustainable entrepreneurs, we suggest here that purpose-driven urban entrepreneurs represent a subset of social and sustainable entrepreneurs possessing unique characteristics. Firstly, purpose-driven urban entrepreneurs are firmly embedded in place, and that place, is the complex urban environment which is regarded as a systems of systems (Dodgson & Gann, 2011). We consider purpose-driven urban entrepreneurship to be unique from corporate social responsibility. Perhaps urban entrepreneurs are most similar to community based entrepreneurs (CBE) (Peredo & Chrisman, 2006). Yet, community-based entrepreneurs are different from our view of purpose-driven urban entrepreneurs in that CBEs are most commonly found in rural environments and generally take the form of cooperative business

models (Peredo & Chrisman, 2006). Purpose-driven urban entrepreneurs, on the contrary, more frequently focus on co-creating innovations with local governments and citizens in ways that improve the urban well-being of civic society but through the formation of independent projects and ventures.

3.4 System states

The construction of system states is the fourth stage of Dubin´s theory building process and entails defining the conditions whereby all the specified units combine under certain conditions to behave in the same manner. System states must be inclusive of all units in the model, persistent across time and distinctive for that specific system state (Dubin, 1978; Ardichvili, et. al, 2003).

Here, we focus on the actual practices, whereby certain everyday actions build bridges between human beings in pursuit of urban well-being and a context which we define as the social and geo-spatial milieu where purpose-driven urban entrepreneurship action takes place. Urban entrepreneurs operate in three complex civic and geographic layers. While all urban entrepreneurs are embedded in a place, the opportunity context changes depending on which layer they decide to operate in: neighborhood, city or the globe.

As such, viewing entrepreneurship from a complexity theory perspective allows for a deeper understanding of its multiple layers, and thus, generates insights regarding the fluctuating character of the opportunity context which transcends market logic. In exploring the complexity of the entrepreneurship phenomenon, authors have usually drawn from economics research to incorporate a number of interacting layers comprising factors such as the entrepreneur, the firm,

the market and the international environment (Etamad, 2004). Given the social and territorial embeddedness of UE, we take a broader approach to entrepreneurship complexity and propose a three-layer model to depict the geospatial environment in which the urban entrepreneur is embedded, comprising: the neighborhood, the city and the globe. Our choice of nomenclature for depicting ever-growing geo-spatial layers was largely driven by the work of Byrne (1998), who specifically addresses the geo-spatial component of complexity theory. In his seminal work, he refers to the interactive nested hierarchy of spaces from globalization, regions and neighborhoods. While each of the geo-spatial layers are interconnected to each other, it is also important to briefly delineate the uniqueness of each layer within the complex global and local systems.

The purpose-driven urban entrepreneurship system is complex, because interactions between the social and the physical within the different levels of aggregation may result in different outcomes. As such, purpose-driven urban venture emergence is evolutionary and may not follow one single recognizable pattern towards one single possible outcome. Units will combine differently in a non-linear fashion and can yield many possible outcomes depending on how the opportunity context is being shaped by the geospatial context where the entrepreneur decides to operate. Interestingly, the entrepreneur may decide at any point in time to move upwards or downwards inside the multi-layered model, changing the entire interaction logic of his or her system of reference.

In order to support empirical testing of the theory, we draw on prior research extending Dubin's theory-building phase to include propositions (e.g. Ardichivili, et. al, 2003), which usually mark the beginning of the research operation phase. Propositions are considered the

"truth statements about the theory" (Dubin, 1978:160), in that they facilitate the operationalization of the theory by supporting its empirical testing in real world settings.

Neighborhoods (micro-level) represent the "smallest significant socio-spatial scale" (Byrne, 1998: 93). Virtually every citizen, including entrepreneurs, who lives within cities, is embedded in their own neighborhood and is part of a local complex system. While a neighborhood may have representation in the form of voluntary community associations, they are generally void of formal political representation at the neighborhood scale. Yet neighborhoods also are more likely to have social cohesion than cities as a whole (Perry, 1929).

We propose that neighborhood-level venturing refers to project-based, purpose-driven urban entrepreneurship, conducted by entrepreneurs embedded in their neighborhood. That is, we posit that the neighborhood system state of purpose-driven urban entrepreneurship takes the form of a project in its collaboration-based business model. We also posit that neighborhood purpose-driven urban venturing will be mostly associated with civil society collaborations. As the neighborhood layer is at the lowest scale possible, it is unlikely that a purpose-driven urban entrepreneur would be capable in most cases of building a sustainable venture. Instead we posit that urban entrepreneurship at the neighborhood scale likely consists of defined projects that have a beginning and end. Once neighborhood-oriented business solutions are established as new ventures, some may scale up towards solving city-level issues (i.e. transition to the city-level system state), a few of them may extend their reach by replicating the model in several different neighborhoods or may simply dissolve after the completion of the one-off project.

In the empirical world, civic crowdfunding platforms such as Neighbor.ly, Spacehive and Citizinvestor are dominated by neighborhood, micro-scale civic project proposals. Spacehive, based in the UK, was used as the financing vehicle for the Bristol Park and Slide project

proposed by local artist, Luke Jerram. This project was developed on Park Street, utilizing a 90-meter waterslide for this one-day event, May 4th, 2014. The goal of the purpose-driven urban entrepreneur was to enable locals to "navigate the streets of their city in a new way" and was proposed as part of an ongoing program in Bristol to "Make Sundays Special." This project not only focused on a benefit for local citizens but also engaged them in co-financing the project via crowdfunding. The artist even received offers from local musicians willing to perform for free during the one-day event.

> *Proposition 1: Urban entrepreneurs embedded at the neighborhood level will initiate project-based initiatives and rely on significant civil society collaboration, compared to meso- and macro-level venturing.*

Cities (meso-level) are essentially interconnected sets of neighborhoods, some with more commercial or industry activity, some with more residential activity and some with a mixture of uses (Byrne, 1998). Within a city, complexity frameworks consider the interconnectivity of infrastructure and activity ranging from transportation systems to commercial activity and other social interactivity (Batty, 2008). "Cities are no longer regarded as being disordered systems. Beneath the apparent chaos and diversity of physical form, there is strong order and a pattern that emerges from the myriad of decisions and processes required for a city to develop and expand physically. Cities are the example par excellence of complex systems: emergent, far from equilibrium, requiring enormous energies to maintain themselves, displaying patterns of inequality spawned through agglomeration and intense competition for space, and saturated flow systems that use capacity in what appear to be barely sustainable but paradoxically resilient networks" (Batty, 2008:769).

In the case of the city layer, we propose that the majority of purpose-driven urban entrepreneurship occurring at the city scale will likely take the form of a city-based, purpose-driven urban venture. This is because the scale and complexity to implement innovation at the city level is sufficient to warrant the formation of an ongoing venture. Purpose driven urban entrepreneurs are likely to be embedded in multiple social systems given the complexity of life in cities and the competing challenges emerging from public, private and merit goods failures at the city level. Purpose-driven urban entrepreneurs likely involve collaborations with civil society and most certainly involve collaborations with public institutions, including local city government or regional and national government agencies and ministries.

At the meso city-level, the Citizen Solar project from Wien Energy and the city of Vienna provides a good example of purpose-driven urban entrepreneurship involving a corporate actor. In another form of civic crowdfunding, Citizen Solar enables local residents to micro-invest in local renewable energy. Citizens can invest as little as 475 euros to own a half of one solar panel or invest 950 euros to own one or more panels. The Citizens Solar project, a collaboration between the City of Vienna and a semi-private energy company, Wien Energy, seeks to assist the city in achieving its goal of 50% renewable energy by 2030 while engaging local residents as co-owners of the project. We consider this a good example of a city-based urban venture (system state) developed by an existing corporation.

> *Proposition 2: Urban entrepreneurs embedded at the city level will initate new ventures while maintaining a primary focus on scaling within the city, compared to micro- and macro-level venturing, although some may choose to expand to other cities in the future. Urban entrepreneurs rely on a combination of public, private and civil society collaborations to achieve their desired outcomes.*

Globe (macro-level). Historical perspectives on cities treated the city as a dependent political structure subsumed within national government control (Brugmann 2009). Yet in recent years, scholars have demonstrated that national boundaries have become less relevant as city

leaders and citizens have increasingly engaged in interactions with other cities for trade, migration and the diffusion of innovation (Brugmann 2009; Batty 2008). This increased interaction amongst cities is evidenced by the growing number of cities participating in city-based networks for knowledge-sharing such as the U.S. Council of Mayors, the European Covenant of Mayors, ICLEI, and the Spanish Network of Smart Cities (RECI). For this research, when we refer to the globe as a layer in our complexity model of purpose-driven urban entrepreneurship (figure 2), we are primarily referring to the loosely-connected global network of cities as opposed to the globe as a whole and its composition of nation-states (Brugmann, 2009).

Finally, urban global-level venturing is most likely to be associated with what we refer to as platform-based, purpose-driven urban entrepreneurship. For our purposes, we consider platform-based, purpose-driven urban ventures to be those that primarily leveraging information and communications technologies allow for connections between two-sided markets, such as the connection between citizens or local government authorities and urban entrepreneurs. Kim and Kogut, (1996: 286) suggest that firms that develop platform technologies have a "formative influence on a newly evolving trajectory" which experience increasing returns through network externalities. Purpose-driven urban entrepreneurs building a vehicle to address geo-spatially complex public, merit or private good failures almost certainly need to form a platform-based urban venture which is able to replicate or scale the same or similar solutions in cities within a region or across the globe. Such urban entrepreneurs would be considered *glocally* embedded (Chen & Tan, 2009) in both the city where they live and global perspectives.

At the macro-level, Citymart.com currently connects cities and their 200 million citizens with more than a thousand solution providers – businesses, social enterprises and universities.

Citymart.com is a classic intermediary whereby they link providers of technologies and services to the growing number of cities around the globe seeking such solutions. Citymart.com's goal is to connect "cities and solution providers to improve the lives of citizens around the world." Citymart can only succeed if there is a growing need from cities to source new solutions to their challenges from a global provider base. In essence, Citymart's growth is driven by the existence of information asymmetry in the market for such products and services. Furthermore, as a macro-global-scale initiative, Citymart has sought out, and obtained venture finance from private investors. Citymart's model is consistent with the third system state, that of a platform civic venture, having a base of operations in two leading European cities, Barcelona and Copenhagen, while serving cities and technology providers around the globe.

> *Proposition 3: Urban entrepreneurs embedded at the urban global level will be more likely to create platform ventures maintaining a focus on scaling across cities, compared to micro- and meso-level venturing. These entrepreneurs are least likely to directly collaborate with civil society and instead rely on public and private sector collaborations.*

> *Proposition 4: Urban entrepreneurs embedded in social systems and neighborhood, city and global territories are primarily driven to advance urban well-being by improving public and private institutions, leveraging models of collaboration.*

4. Discussion

Ultimately, purpose-driven urban entrepreneurship is an activity focused on engaging and improving the quality of life for local citizens through entrepreneurial behavior. Urban entrepreneurs share much in common with social and sustainable entrepreneurs, particularly in their broader notion of success and impact. Yet urban entrepreneurs are unique in that they are embedded in place, are responding to public, private and/or merit goods failures, and particularly focus on collaborative business models. With this theory building, we attempted to address calls

for future place-based research, particularly those from Shrivastava and Kennelly (2013) with respect to how a sense of place may impact ´fields of care´ for place-based enterprises and how organizations "directly negotiate and potentially dominate place-based identities and decision-making." (Guthey et al., 2014:262). Yet, our theory building effort generates numerous questions for future research.

Testing the model. We believe this research may open up a range of new theoretical and empirical lines of research for scholars interested in purpose-driven urban entrepreneurship as an emergent field of scholarly inquiry. There is a need to unpack the role of purpose-driven urban entrepreneurs in addressing public and/or private goods failures. How do urban entrepreneurs engage with citizens and public officials to co-develop solutions to problems that historically were the domain of public officials? Can insights into purpose-driven urban entrepreneurship be gleaned from broader regional development models, such as the triple helix research stream (e.g. Etzkowitz & Leydesdorff, 2000), which explores innovation and entrepreneurship emerging from collaborations amongst government, university and private sector actors, or even more so with the more recent development of the quadruple helix models which also include civil society (Carayannis & Rakhmatullin, 2014)? Also, as Shrivastava and Kennelly (2013) noted, there is a need to develop methods for empirically testing the level of embeddedness of entrepreneurs and their ventures. Assuming there are in fact degrees of embeddedness, how does the variability in embeddedness affect the venturing process? What factors in urban environments contribute to place-embeddedness of entrepreneurs and what differentiates purpose-driven urban entrepreneurs from other forms of purpose-driven entrepreneurship?

Theory extension for PBEs. Further theoretical development of this new phenomenon needs to be conducted. Bringing in theoretical frameworks from cognition, effectuation and

institutional entrepreneurship would certainly add further thickness to theorizing about purpose-driven urban entrepreneurship. Our proposed theory on purpose-driven urban entrepreneurship seeks to provide an anchor for emerging research on place-based, socially-, and territorially-embedded entrepreneurial activity. Yet purpose-driven urban entrepreneurship is not the only context where place-based entrepreneurship can be found. For example, collaborative research models in rural areas in the form of community-based entrepreneurship (CBE), appears to also treat territorial-embeddedness as a necessary condition (Peredo & Chrisman, 2006).

Sharing economy and urban entrepreneurship. On the latter point regarding collaborative business models, outside of crowdfunding (which is generally not place-based), the emergence of the collaborative, or sharing economy has yet to be explored in entrepreneurship research. We believe there are significant overlaps in both constructs of purpose-driven urban entrepreneurship and the sharing economy. Scholars have only just begun to explore this intersection, but evidence suggests that a majority of the sharing economy activity emerges in urban areas because of their population density and the increasing ubiquity of information and communication technologies (ICTs) in cities (Cohen & Kietzmann, 2014). While it is beyond the scope of this theory building research, further theoretical development and empirical research needs to be conducted to understand the sources of opportunity in the sharing economy, business models employed, mechanisms for establishing trust in such sharing networks, and the different system states for the sharing economy such as peer to peer and business to consumer.

Implications for policymakers. Because a theoretical model of purpose-driven urban entrepreneurship must be embedded in territory and deal parsimoniously with social complexity in addressing local quality of life challenges, it should be relevant for policy makers and practitioners interested in the promise of entrepreneurship as the engine of urban prosperity and

sustainability. Increasingly, local governments are seeking to collaborate with and foster urban entrepreneurs as a means to supportive innovative solutions to local challenges. What public policies are being used to stimulate private sector innovation to urban challenges? How are open innovation approaches such as open data and hackathons sponsored by cities spawning purpose-driven urban entrepreneurship and contributing to local and regional innovation ecosystems comprised of entrepreneurs, government authorities, investors, corporations, entrepreneurial mentors and citizens?

Bridges between system states. We previously suggested that in some cases urban entrepreneurs may choose to move from one system state to another, i.e. they may start as a micro, neighborhood scale venture, obtain some level of success and be inspired or encouraged to scale the project into a city (meso) or even to a global (macro) scale venture. What cognitive processes occur in and what factors motivate urban entrepreneurs to make that switch to a different system state?

Corporate, purpose-driven urban entrepreneurship. The engagement and improvement of the lives of local citizens through entrepreneurial behavior can emerge within existing organizations or as a new venture. One of the examples we provided earlier focused on an established energy company, Wien Energy, co-creating a solar venture with the city and its residents. This is an example of corporate, purpose-driven urban entrepreneurship. Entrepreneurship scholars have developed a rich line of research on corporate entrepreneurship. What can be learned from extant literature in the field with respect to corporate, purpose-driven urban entrepreneurship? Also, could corporate, purpose-driven urban entrepreneurship be a replacement for, or a complement to long-established corporate social responsibility (CSR) programs? Rather than CSR programs being treated as a cost center to facilitate social license to

operate, corporate, purpose-driven urban entrepreneurship may achieve similar benefits in the community but be cost neutral or even profitable enterprises in their own right.

5. Conclusion

In conclusion, purpose-driven urban entrepreneurs, unlike traditional market-based venturing, act, react and interact in geo-spatially complex social environments by articulating territorially-embedded collaborative initiatives together with both public and private sectors designed to improve the urban well-being of local citizens. With the massive urbanization occurring around the globe, and the increased burdens placed on public officials and public infrastructure, there is increasing need for entrepreneurial solutions in order for cities to maintain, and ideally, improve urban well-being for all citizens. We believe that the complexity-based approach to purpose-driven urban entrepreneurship will help to unearth a new line of inquiry for entrepreneurship research which can challenge and extend existing theory and also have an impact on the practice of entrepreneurship embedded in geo-spatially complex systems.

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Figure 1. Structure of the paper - Middle-range Theorizing

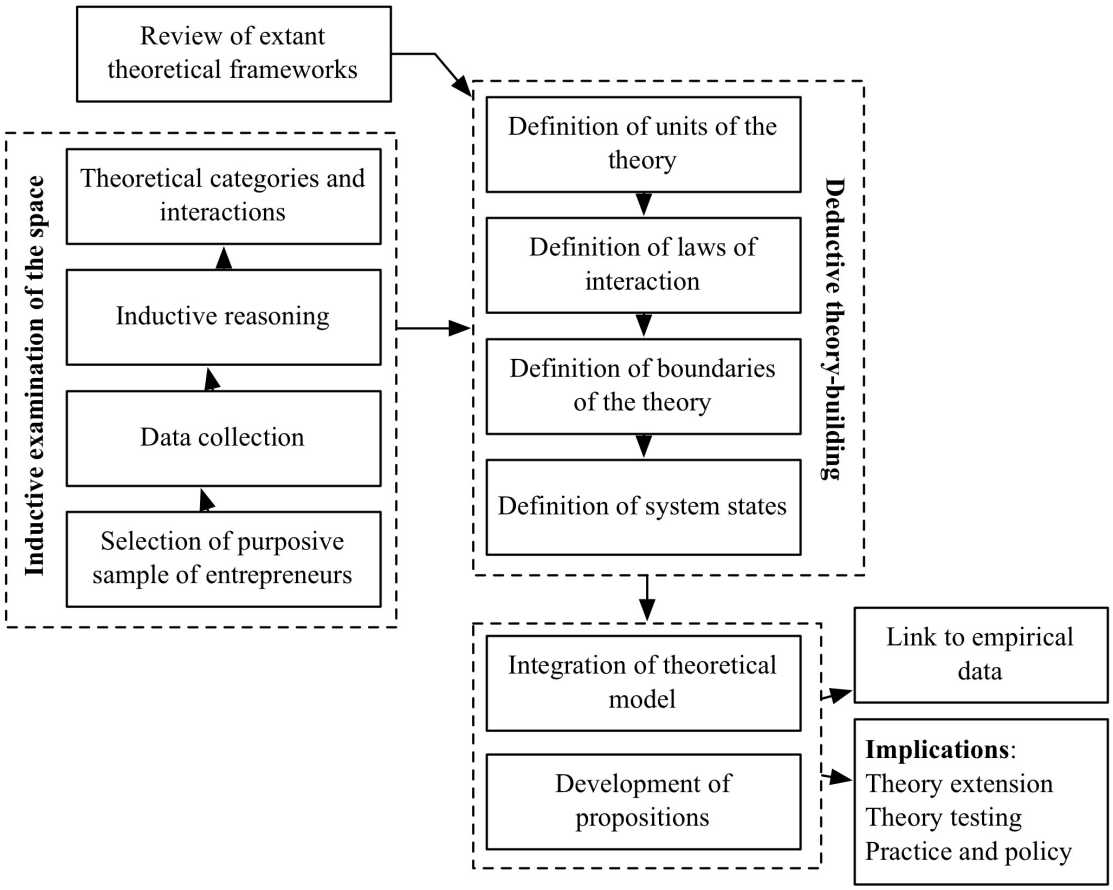

Figure 2. Theoretical model

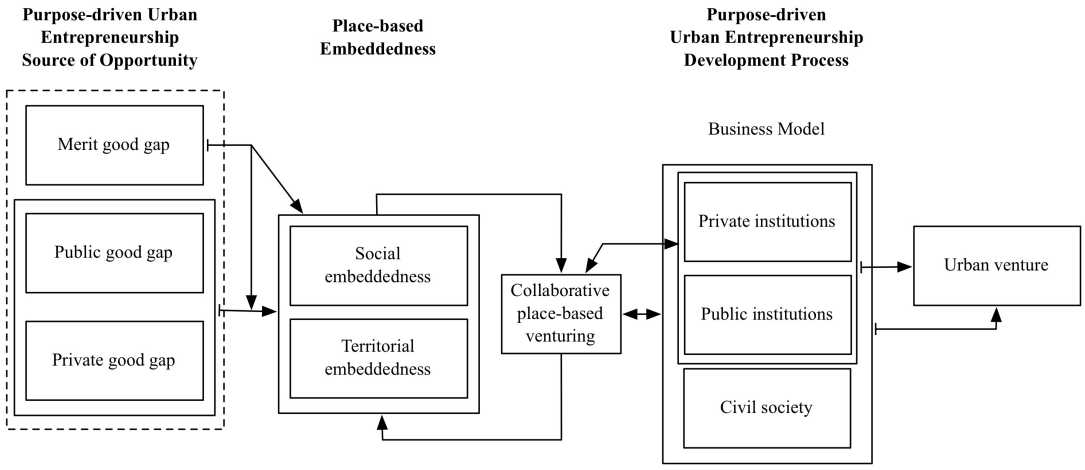

Table 1. Observed cases – city accelerators and new purpose-driven urban ventures

Case	Location	Description
Airbnb	San Francisco, USA	Airbnb is an online platform that allows its members to rent out lodging. It runs on a marketplace platform model where it connects hosts and travelers and enables transactions without owning any rooms itself. It disrupts traditional industries by creating new sources of supply and relying on users' recommendations for developing quality.
Changemakers	Manchester, UK	Changemakers is a community-led organization whose members take action on social, economic, political and environmental city-related issues. It was built by local people for local people – and for the common good of Manchester, Bradford and Stockton.
Chiripa.org*	Buenos Aires, Argentina	Chiripa seeks to build collaboration bridges between cities in Latin America by improving transparency and governance systems. It supports local governments and organizations by means of fostering governance processes, environmental practices, civic participation and grassroots innovation.
Citizen Solar*	Vienna, Austria	Citizen Solar is a smart city initiative that seeks to boost Vienna's clear commitment to developing solar energy. By investing in community-funded solar power plants, Viennese citizens have the opportunity to participate in the development of renewable energies. Citizens' Solar Power Plants mark the beginning of the dawn of a solar energy future for Vienna.
CityCamp*	Buenos Aires, Argentina / Santiago, Chile	Citycamp is a city-oriented innovation platform, which has built an open and multi-disciplinary dialogue on the future of cities. It connects ideas and projects that aim to create collaborative Latin American cities.
Citymart*	Barcelona, Spain / Copenhagen, Denmark (+50 cities)	Citymart helps cities deliver impact by strengthening their innovation capacity and sharing inspiring solutions and methods to transform their communities. It enables cities to identify, evaluate, and adopt game-changing solutions, which contribute to the creation of more sustainable, resilient, entrepreneurial and responsive communities.
Citizinvestor	Bristol, UK	Citizinvestor is a crowdfunding and civic engagement platform for local government projects. It empowers citizens to invest in their community and create real change.
Code for America*	San Francisco, USA	Code for America offers an open source technology that helps organize a network of people dedicated to making government services simple, effective, and easy to use. It encourages and empowers residents to take an active role in their community, facilitates collaboration between government staff and foster forward-thinking approaches to solving city problems, and supports civic-minded entrepreneurs and startups.
Elemental*	Santiago, Chile	Elemental is an architecture do-tank that focuses on innovation and design in projects of public interest and social impact. It works towards the development of complex initiatives that require coordination of public and private actors alongside participatory processes for decision-making.
Modo	Vancouver, Canada	Modo is a not-for-profit carsharing co-operative incorporated in 1997 to foster carsharing and raise awareness about the benefits of sharing cars over individual ownership. By turning car owners into carsharers, Modo offers an environmental and economic mode of transportation.
Neighbor.ly*	Kansas City, USA	Neighbor.ly is the first civic crowdfunding platform in the US. Neighbor.ly believes everyone should be able to invest in municipal securities, so the company focuses on helping people donate to the civic projects they care about.
New Urban Mechanics*	Boston and Philadelphia, USA	New Urban Mechanics is an approach to civic innovation focused on delivering transformative City services to residents. The Mayor's Offices of New Urban Mechanics in Boston and Philadelphia serve as each City's innovation incubator, building partnerships between internal agencies and outside entrepreneurs to pilot projects that address resident needs. It focuses on a broad range of areas from increasing civic participation, to improving City streets, to boosting educational outcomes.
Playing Out	Bristol, UK	Playing Out is a Community Interest Company working to encourage and support people who want children to play out in the places where they live. It exists to support and inspire parents and residents across the UK to help children play out.
Points of Light*	Atlanta, USA	Points of Light is the world's largest organization dedicated to volunteer service. It mobilizes people to take action on the causes they care about through innovative programs, events and campaigns. It is creating a culture of volunteerism, one that celebrates the power of service.
Technology Quotient*	Singapore, Singapore	Previously named Urban Intel, Technology Quotient leverages and develops new technology platforms to support smarter education solutions in Asian cities.
Uber	San Francisco, USA (+200 cities)	Uber is a technology company focused on connecting riders to drivers through mobile applications. It makes cities more accessible, opening up more possibilities for riders and more business for drivers.
UrbanKit*	San Francisco, USA	UrbanKit is a crowdfunding platform founded in 2012 to support civic crowdfunding projects. UrbanKit was incubated in Santiago, Chile using funds and support from Startup-Up Chile. UrbanKit is no longer active.
Vertical Harvest	Jackson Hole, USA	Vertical Harvest is a Wyoming based agri-business that seeks to enhance the local economy by operating year round to sell fresh, locally grown produce to the community through multiple venues at a competitive, consistent price.
Yelp	San Francisco, USA	Yelp is an online platform founded in 2004 that focuses on helping people find great local businesses. It uses automated software to recommend the most helpful and reliable reviews for the Yelp community among the millions we get. The software looks at dozens of different signals, including various measures of quality, reliability, and activity on Yelp.
Ytech Innovation Centre*	Amsterdam, Netherlands	Ytech Innovation Centre works on sustainable mobility. Together with the City of Amsterdam and a group of companies it is introducing an individual public transport system that is installing 750 white public bikes at around 45 depositories across the city.

*Indicates one or more interviews conducted by the authors with founders or organizational representatives