

Smart specialization for cities

A roadmap for city intelligence and excellence

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How to build an intelligent city

The broad view of holistic development should nevertheless be coupled with a deepening of strategy and positioning. This is pursued in part by **developing city intelligence and intellectual capital**, in the form of knowledge industries and cluster development. The tendency can be, however, to pursue economic sectors and activities which are popular but which may not complement the particular region's existing strengths or support its vision and future growth areas. How then can cities be intelligent in their navigation of the knowledge economy? One such guiding compass is the smart specialisation approach to city visioning and resource prioritisation.

Understand what you do best – and do it well

Smart specialisation

Smart specialisation is one of the pillar concepts of the 'Innovation Union' flagship initiative, adopted by the European Commission in October 2010 as part of its Europe 2020 strategy to enhance Europe's capacity to deliver smart, sustainable and inclusive growth.

It is described as an economic transformation agenda based on innovation aligned with regional assets, and involves identifying competitive advantages and mobilising regional stakeholders and resources around an excellence-driven vision for the future. It builds on emerging evidence which shows that focusing on areas of real potential has

“We need new perspectives of cities, their visions, knowledge, creativity and motivation in order to find new ways to develop strategic city management.”

The growing importance of cities

The OECD estimates that 70% of the world's population will live in urban areas by the year 2050. UNESCO projects that by 2015, there will be 26 megacities (cities with more than 10 million people), with more than 10% of the world's population living in these cities. Clearly, city perspectives, strategies and governance have become key focus points on national government agendas, with cities around the world increasingly seen as engines for growth.

What will define one city from another, however, is whether it can manage its potential growth effectively and sustainably, or it will be swept away by the unintended consequences of a rising wave

of urbanization. Growth can provide cities with new frontiers of possibilities if managed well, or alternatively, cause cities to degenerate into overcrowded areas suffering from social ills and the associated adverse effects of growth.

Accordingly, the quality of growth that cities can achieve is strongly linked to their power to address social, environmental and economic issues in a cohesive and proactive manner, whilst making the most of future opportunities. This is what PwC calls the “new capitalism” – managing and developing all capitals holistically for the development of a sustainable local economy (see Figure 1).

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a much better pay-off than spreading investments thinly over unrelated areas. It therefore looks to position the region via international differentiation and technology diversification and have a distinctive strategy with a unique value proposition, by building on and combining existing strengths in new ways, while enhancing internal and external connectivity across stakeholders.

Importantly, smart specialisation asserts that understanding the region's knowledge assets is achieved, not through a top-down approach driven by public leaders, but by involving key innovation stakeholders and businesses in what is called a process of 'entrepreneurial discovery'. Business and academia are envisioned to work together to identify both the most promising areas of specialisation as well as roadblocks for innovation specific to the region in question.

“Know thyself” in order to know where to go

While smart specialisation is a concept now being applied to European regions, it also has bearing for cities around the world desiring to be successful and positioned on the forefront of innovation. In these turbulent times, it is the city that understands where it is and uses that knowledge to draft a strategic roadmap for its future that will build sustainable strength and presence in the global arena. Smart specialisation can help cities achieve this by feeding into a well-defined, clear and

ambitious strategic vision and prioritization process of how and where resources should be allocated. To be successful, it requires an alignment of vision, strategy and policy between local, regional and central government for cohesiveness and synergy at all levels.

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Firstly, cities need to make **informed choices**. City governors need to resist the temptation to ride along the proverbial bandwagon by drafting policies and visions which other successful cities seem to be doing, without regard for the specific strengths and conditions of the locality. As the timeless wisdom of the Oracle of Delphi asserts, “knowing thyself” is the key starting point to any vision. Accordingly, city leaders should identify the city's assets, and select key priorities for specialisation, keeping in mind not just the “sexy” industries, but emerging ones as well.

Next, cities should focus on **finding and building a competitive position**. Knowing its strengths and where it wants to position itself nationally and internationally should lead to the building of necessary support infrastructure,

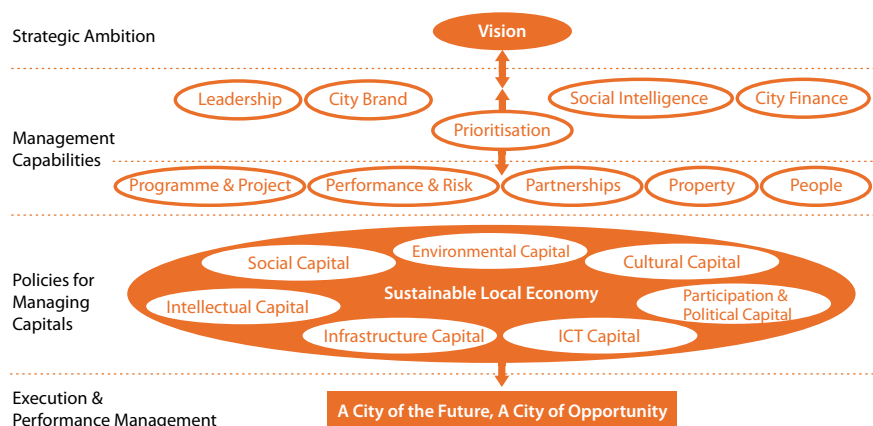
the mobilisation of resources, both financial and intellectual, and the creation of policy to provide a fertile ground for focused growth. Universities and R&D initiatives should be aligned with business needs for competitive growth in emerging and complementary industries; talent

and investments should be harnessed and channeled toward the targeted areas of potential and competitiveness.

Thirdly, cities should consider **related diversification and cross-sectoral collaborations** to build and leverage on existing industry bases. It is about capturing knowledge spillovers, which are harnessed best within related fields as opposed to a range of unrelated sectors. The focus is not on the boundaries, but instead on the possibilities that can happen in between, while leveraging on the existing dominant technologies and skills base. With this, cities are not held prisoner to existing traditional industries, but have the opportunity to discover new industries and fields of innovation, while not falling into the trap of spreading too thinly by over-diversifying. Having a critical mass in specific, related fields can provide a city with a niche, competitive edge to distinguish itself nationally and internationally.

Consequently, smart specialisation can serve to **enhance the identity of cities or regions**. Helsinki, Finland models this well – its focus on design and innovation in all aspects of society by leveraging on its small size and flexibility, adaptive innovation ecosystem, and sense of public space has resulted in it being designated as the World Design Capital for 2012, which recognizes cities which have most effectively and creatively used design as a tool for urban progress. Helsinki's gutsy approach to creative urban design has also earned it the title of Monocle's

Figure 1: A holistic approach to visioning and execution of city strategy





most liveable city for 2011, outperforming bigger cities such as Zürich and Copenhagen. Helsinki shows how smart specialisation, by enabling distinctive positioning based on city-specific factors and assets, can potentially bring not just economic benefits to cities, but also increased societal welfare and wellbeing to citizens through urban transformation and renewal.

Executing excellently – doing more with less

We have seen how adopting the smart specialisation approach can enable cities to develop a concrete knowledge and innovation agenda built on unique strengths and capabilities. Still, the most pressing challenge facing many cities today is how to turn these visions into reality, while simultaneously navigating a climate of upheaval and constant change.

In PwC’s 2011 report, “Making it happen”¹, we identify some factors that are vital for the execution of a city’s strategy and the realisation of its vision (see Figure 2).

Our survey of local government leaders identifies four key areas in which local governments are falling short of the necessary requirements to accomplish a city’s vision:

- **Financing:** This is seen as the biggest barrier to implementing strategies. There appears to be a lack of capability to make plans that are resilient to the financial challenges. There is also an associated lack of capacity

in-house to manage and develop new forms of finance to enable the continuing delivery of services and outcomes to citizens.

- **Simplifying, standardising and streamlining²:** While large size can assist branding, we have found that size may constrain agility and the ability to get things done quickly. Agility remains an important factor in being able to respond to new technologies and knowledge flows quickly and proactively.
- **Implementation planning:** Few local governments have been found to have a comprehensive implementation plan, with accountabilities and responsibilities in place alongside frequent monitoring, updating and risk mitigation. There seems to be a gap in the formation of concrete steps to convert word into action.
- **Supporting frameworks and tracking systems:** We have found the greatest challenges to service delivery to be outcome assessment along with performance monitoring and needs assessment. It is also of concern that the supporting tracking and information systems appear to be lacking.

Making it happen

So, what needs to be done? Cities and local government entities face a challenging **agenda for action** to make things happen including:

- Investing in their capabilities around financing, given that this is the single biggest perceived barrier to the

implementation of strategies and delivery of outcomes.

- Re-designing their organisations to enable more effective collaboration with their primary stakeholders, e.g. setting joint outcome targets, building new partnering competencies and professionalising performance monitoring and management.
- Assessing the impact of their size and scale and seeking out opportunities to standardise, simplify and streamline their operations.
- Developing clear, well documented implementation plans which make clear the roles, responsibilities and timetables for actions.
- Prioritising and managing programmes and projects more effectively by putting in place systems to measure outcomes (social as well as financial) and value for money.

In addition to the above points, we believe there are several **key success criteria** specific to the effective development of knowledge clusters and industries in cities and regions:

- **Access to money:** This is about ensuring a steady flow of financing at each stage of development, from the incubation stage to maturation and launch into the market. Often, financing is focused only in the very early stages or when companies are mature, but in the middle stage, where companies are too big for early-stage financing but it is too premature to access the market, proper financing is lacking.
- **Access to market:** A city innovation procurement program is an efficient tool to enable companies, particularly in emerging industries such as mobility or new health industries, to cooperate and respond to new societal or environmental market demand. It can position companies to bring their new solution to market and use it as demonstration tool for further domestic and export sales.
- **Adoption and dissemination of enabling technologies:** This process of enabling widespread adoption of related technologies becomes especially important for emerging industries

Figure 2: Capabilities to execute strategy



which may lack an existing established technological base.

- **Effective infrastructure:** Infrastructure should support the city's innovation agenda in a cohesive and sustainable way.
- **Accelerators:** Creating the right conditions for creativity and knowledge flows to flourish involves encouraging arenas for stakeholders to meet and connect the dots in new ways. This can be facilitated via physical and virtual meeting places for knowledge discussion and collaboration.
- **People:** Human capital remains key. The education agenda needs to complement the knowledge agenda and facilitate the development, attraction, retention and mobilisation of talent to counter the risk of "brain drain".

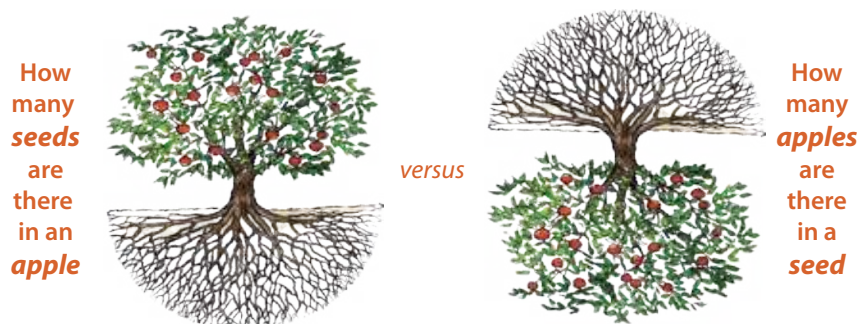
The success of an intelligent city depends on the leaders' capacity to mobilise, attract and engage entrepreneurs with innovative initiatives.

A final word on leadership and entrepreneurship

One standout internal capability driving strategy vision and implementation is that of leadership, but not in its traditional sense. While top level sponsorship is an absolute requirement, **leadership on its own is not enough**. Outcomes are no longer dependent on the one, but the many, both within and across organizations. Indeed, if cities are to "specialize smartly", leadership can no longer afford to be merely top-driven, but necessitates collaboration across all stakeholders – public, private, voluntary sector, academia, citizens – to maximize the chances of success.

In particular, city leaders will urgently need new entrepreneurs and entrepreneurship support programs. The success of an intelligent city depends on the leaders' capacity to mobilise, attract and engage entrepreneurs with innovative initiatives. In turn, our assumptions regarding **entrepreneurship** need to be re-evaluated. Entrepreneurship is derived from the French word *entre* (between)

Figure 3: Challenging our perspectives on potential and growth



Source: L. Edvinsson

- *prendre* (to take). Viewed as such, it points to grasping what is "in-between", seeing overlooked and invisible solutions, and having the courage to act on that vision. Beyond private entrepreneurship, the

one that is holistic, inclusive and allows for various perspectives, while is also continually challenged in the way cities of the future and of opportunity are understood and envisioned (Figure 3).

"PwC will develop new arenas for dialogue and knowledge sharing with city leaders, resulting in sustainable development and added value for people and businesses."

Further Reading

written
PwC 2011, "Making it happen: A roadmap for cities and local public services to achieve outcomes"
PwC 2011, "Cities of Opportunity"
PwC 2005, "Cities of the future – global competition, local leadership"
[www.](http://psrc.pwc.com/)
<http://psrc.pwc.com/>
<http://ec.europa.eu/>

Notes

- 1.PwC, 2011, "Making it happen: A roadmap for cities and local public services to achieve outcomes".
- 2.PwC's Public Sector Research Centre, 2010, "Standardising processes, improving performance".

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increasing number of societal, economical and environmental issues today has necessitated the rise of public, political and societal entrepreneurs. Public and political entrepreneurs are present in governments, hospitals, universities and state-owned companies, and are the initiators and sponsors of new transformational projects which then generate wealth creation at the hands of private entrepreneurs. Societal entrepreneurs affect change from the ground up, and are vital to developing and engaging society as a whole.

This illustrates the need for a new paradigm of leadership – leadership that is **proactive and creative** in addressing challenges, **energises** entrepreneurs, citizens and organizations towards achieving a common vision, **connects** with people at all tiers of society, imbues them with a **sense of meaning** and place in society, and **serves** the community it resides in.

Cities and local governments thus need to dare to harness the power of **collaborative and innovative leadership**,