Cities and the Environment:
The role of formal and informal controls in steering cities towards sustainability

Dr. Nathalie CRUTZEN

PhD in Economics and Management
Assistant Professor
Accenture Chair in Sustainable Strategy
HEC-Management School of the University of Liège (Belgium)

7th EMAN Global Conference – Gold Coast (Australia)
14-15 July 2013

Introduction

- Prior research argues that **management control is essential in promoting corporate sustainability** (e.g. Norris and O'Dwyer, 2004; Durden, 2008). However, **scepticism** has been raised **about the existence** and their role in promoting sustainability (Deegan, 2002; Norris and O'Dwyer, 2004; Durden, 2008)

- While the EMA literature has mainly focused on businesses (sometimes on regions/countries), few emphasis on **cities** while **urban areas** play crucial **role** in the pursuit of Sustainable Development.

  - Urbanization is one key global challenge

  - Urban areas are eco-systems of different (private and public) actors that account for the majority of the environmental and social challenges our planet is facing (CO_2 emissions, water, energy, social issues, etc.)

  - Even if this "level of analysis" is very relevant, it has been under-investigated

Introduction

- Even if other aspects are crucial (waste management, energy, water, building, culture, education, etc.), one (key) element in creating urban sustainability is the adoption of appropriate **mobility policies or strategies**

- To be successful, these mobility strategies must be supported by a series of formal and informal control mechanisms that will contribute to the translation of these strategic aspirations into actions (Epstein and Wisner, 2005; Berry and Nelson, 2008).
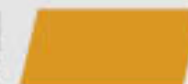
Research objective

- With reference to current worldwide challenges (especially sustainability and urbanization), this research paper focuses on how cities are steered towards an ideal objective of sustainability with a focus on "mobility" issues.

- Specifically, based on Malmi and Brown model (2008), this study investigates **the existence of formal and informal controls to support the implementation of a mobility strategy <u>at city-level</u>**.

- Our empirical study explores how city managers rely on formal and informal controls to promote mobility in **eight <u>Belgian</u> cities**.
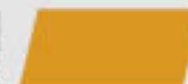
Key concepts

- **Sustainability**

Result of management attempts to address sustainability challenges (Brundtland, 1980). However, it remains unclear whether and when an organization could be considered to have reached the state of being sustainable (Schaltegger et al. 2006)

- **Management Control**

Evolving formal and informal mechanisms, processes, systems, and networks used by organizations for conveying the key objectives and goals elicited by management, for assisting the strategic process and on-going management through analysis, planning, measurement, control, rewarding, and broadly managing performance, and for supporting and facilitating organizational learning and change (Ferreira and Otley, 2009)

Conceptual framework

Cultural Controls					
Clans		Values			Symbols
Planning		**Cybernetic Controls**			**Reward and Compensation**
Long Range Planning	Action Planning	Budgets	Performance Measurement Systems including Financial Measurement Systems, Non-Financial Measurement Systems and Hybrid Systems		
Administrative Controls					
Governance Structure		Organization Structure			Policies and Procedures

Malmi and Brown (2008)

Methodology – Explorative Qualitative Analysis

- **Sample**

Eight Belgian cities (Flemish and Walloon cities + Brussels)

Brussels, Brugge, Charleroi, Hasselt, Liege, Namur, Mons, Ghent

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- **Data Collection**

➢ Semi-structured interviews with the person in charge of mobility in these eight cities between the beginning of November 2012 and the end of May 2013. Each interview lasted between 1 hour 30 minutes and 2 hours. All these interviews were recorded.

➢ Secondary data (website information, internal documents, specific reports)

- **Data Analysis**

Qualitative Content Analysis (Glaser and Strauss, 1967; Eisenhardt, 1989; Miles and Huberman, 1994).

Preliminary findings (1) – Aggreate observations

- All these eight Belgian cities have developed a strategic thinking about mobility (since the 1990's for the first ones). Sustainability challenges (eg. promotion of the use of public transportation or bikes) are integrated, at diverse degrees, in these mobility strategies/policies.

- In each city, control mechanisms exist to promote mobility

➢ **Some mechanisms exist in all cities** (eg. formal long-term plans, budgets, incentives)

➢ But, in a lot of cities, **these mechanisms are very basic** (eg. vague long-term plans which are not translated into clear action plans; very limited budgets for setting up mobility campaigns, incentives for city workers how use public transportation)

➢ **Differences** have been observed between cities.
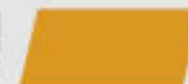
Preliminary findings (2) – Individual controls

➤ **<u>Planning</u>**

- In most cities, the long-term plans (<u>required</u> by the Flemish and Walloon governments since the beginning of the 2000's) are **vaguely** translated into action plans but these action plans are not very precise and need to be up-dated.

- In addition, these actions were not necessarily taken and followed by the cities.

- Globally, **Flemish cities are more advanced than Walloon ones** in terms of mobility planning and related follow-up (evaluation, revision, etc.). However, this will be their priority in the next years…

- Best practices: Brugge and Ghent

Preliminary findings (3) – Individual controls

➢ **Cybernetic controls**

- Varying specific **budgets** + combination of different budgets

- **None of the eight cities have developed a real performance measurement system** (set of judicious KPI's) (technical difficulties: lots of actors, difficulty to develop KPIs + to control them).

- Until today, the achievement of the objectives of the plans has been vaguely controlled during informal meetings of several (multi-stakeholders) committees and via a follow-up of a limited number of basic "mobility" indicators (accidents, traffic), which were not necessarily related to the plans

- Best practice: Ghent

Preliminary findings (4) – Individual controls

➢ **<u>Reward and compensation</u>**

Incentive systems have been observed at a varying extent

Examples:

- Compensations for city workers (eg. compensations for using public transportation or bicycle (Euros/km)) but they vary a lot

- General incentives in favour of sustainable mobility (eg. use of public transportation, bikes, car-pooling or car-sharing) for citizens, visitors, firms or schools are also developed in almost all cities. Opportunities for citizens/visitors to rent or buy bikes are very common in Belgium.

Preliminary findings (4) – Individual controls

➤ **<u>Administrative controls</u>**

- **Mobility departments** have been developed in each of the eight cities. In seven cities, these departments are one of the city administration services. In Liege, 2 city workers manage mobility issues from an "independent" strategic cell

- These mobility structures vary a lot in terms of size, age as well as role and activities managed

- From a political point of view, in each city, except in Charleroi where, since 2013, the (visionary) mayor is has been directly in charge of mobility issues, a deputy burgomaster (deputy clerk) is closely involved in all mobility projects. Politicians generally make important final decisions regarding mobility issues.

Preliminary findings (5) – Individual controls

➢ **Cultural controls**

- **Huge diversity** in the cities studied. **Flemish cities** have traditionally promoted a **culture favouring the use of bikes**. Cultural controls (symbols, identity) towards alternative mobility are thus more common in Brugge, Ghent and Hasselt.

- Nevertheless, campaigns and actions to promote a culture of (more sustainable) mobility (eg. organization of "mobility weeks", education in schools and distribution of folders) have been identified in all cities at a varying extent. The scale of these actions depends on the size of the department.

Conclusion

- *Early-stage research project → need to go beyond description and to develop further the theoretical and practical contribution*

- **Original analysis** of the management control packages developed by cities and, in particular, **original transposition of the model of Malmi and Brown (2008) to strategy implementation at the city-level →** New insights on sustainability, strategy and management control at city-level.

- Even if **some mechanisms exist in all cities**, in a lot of cities, these mechanisms are **very basic** (eg. vague long-term plans which are not translated into clear action plans; very limited budgets for setting up mobility campaigns, incentives for city workers who use public transportation).

- None of the researched cities has developed **a rigorous performance measurement system** to control the achievement of its strategic objectives.

- Interesting differences have also been highlighted between the sampled cities.

Conclusion

- **Limitations**

➢ Focus on Belgium and its specific (European) context

➢ One interview with the person in charge of mobility in these eight cities

➢ Intentionally, the current research is dedicated to one aspect of sustainability management in cities: "how to promote mobility". There is of course a clear link between these issues but this limits our analysis to this specific part of the sustainability management of a city.

- **Directions for future research**

➢ Need for further research on the link between sustainability, strategy and management control at the city-level (other methodologies, other context, other aspects, etc.)

Thank you for your attention!

Questions?
Comments?
Remarks?

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