Title: The influence of sustainable and smart strategies on performance measurement systems in a Swedish city

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Abstract
Urbanisation is a global challenge where urban areas are growing while other areas shrink their population. The challenges that arise with a globalised world affect city development practices (Vallance et al., 2012; Giffinger et al., 2007) and have implications for management and of cities around the world (Lombardi et al, 2011; Kreuger and Gibbs, 2010). Urbanisation has lately enriched the focus on sustainability, innovation and performance (e.g. Metzger and Rader-Olsson, 2013). These changes and new challenges for public organizations have also entailed collaborative urban governance, where public organizations carry out practices together with private and non-profit organization.

Swedish cities have a strong tradition of self-government, something that could imply differences between them in relation to management and performance. In large cities there is a new strive for innovation, which is a means of both becoming more flexible to new solutions where change can be implemented faster but also something described as a necessity based on the challenges the cities now face (Bartlett and Dibben, 2002).

The aim of the paper is to increase our understanding regarding urban development and be able to support civil servants and politicians in local governments in their work with sustainable urban development. In particular, we aim to investigate how sustainable and smart strategies are implemented in a Swedish city and how they are influencing performance measurement systems.

In this paper we use the notion of governmentality of Foucault (1991) to explain the how sustainable and smart strategies are implemented as it is based on three developments (Ferlie and Ongaro, 2015): calculative technology sponsored by the government center; government fragments into a collection of indirect and hybrid organizations; and to new identity shifts and values characteristic Foucauldian analyses.

This paper consists of qualitative data from the city of Gothenburg where interviews have been carried out with key actors involved in the implementation phase of a sustainable and smart strategy. Our intention is also to, in the next steps, include data from other large Swedish cities such as Stockholm, Malmö and Helsingborg.

Keywords
Sustainability, smart cities, strategy, governmentality, performance measurements, Sweden
1. Introduction

Challenges concerning how to create sustainable cities through improved urban planning, strategies and urban development projects are challenges that all local governments, regardless of country, are facing today. Especially as we, as will be explained below, approach the question by adopting a Triple Bottom Line perspective and thus consider not only environmental aspects in our analysis, but also economic and social aspects. The topics of sustainable and smart cities tap right into issues of high relevance for the society today. The focus for this paper is to critically analyse and evaluate how sustainable and smart strategies are implemented and their influence on performance measurement systems.

Previous research shows that challenges when developing and investing in new techniques (for example for water and waste water management) is to know what type of technique will be used and sought after in the future (Thomasson, 2016). Also important is it to consider financial aspects when making investments in new techniques (Fjertorp, 2010). For example issues related to life cycle costs (how to finance maintenance for example) and payback times. A solution can be good for the environment but expensive to maintain and thus from an economic perspective not considered to be a good investment.

What also need to be taken in consideration are the human aspects. People are going to live in these new areas and the environmentally friendly techniques needs to function in everyday life situations. That is one challenge. Another and much more complex issue is how the development of new urban areas with special features affect, not only the life of the people living there, but the life of the rest of the people living in the city. There is a danger that these areas will be difficult to access if you don’t live there and that what you create is a “city in the city”. Urban development projects needs to take the rest of the city into consideration in order to not increase segregation. Especially in times where the number of immigrants are increasing and with that the pressure on municipal services in general, especially in relation to school and housing.

To be a smart and sustainable city can thus not only be about environmental aspects. To be smart and sustainable means that the city has the ability to manage not only one type of challenge, but several. Thus in order to increase our understanding and to more critically evaluate Smart City projects we will apply a Triple Bottom line perspective for this study. With Triple Bottom Line we refer to the need to discuss sustainability, but not only focusing on environmental aspects, but also on social and economic aspects. By taking a holistic view and analyse and critically evaluate Smart City projects the aim is to increase our understanding regarding urban development and be able to support civil servants and politicians in local governments (nationally and internationally) in their work with sustainable urban development. In particular, we aim to investigate how sustainable and smart strategies are implemented in a Swedish city and how they are influencing performance measurement systems.

Swedish cities to a greater extent adapt sustainable and smart city strategies, often as means to become more sustainable and innovative. We will use in this paper experiences from the Swedish city of Gothenburg to explore these ideas. Gothenburg in 2012 adapted a new vision and strategies, under the label of “Gothenburg – open to the world”, and the three strategies heal the city, strengthen the regional core and meet the water. In Gothenburg so far the smart city projects and the implementation of the strategies are mostly about strengthen the regional core and improve the environment for the entrepreneurs and business in the city.

The remainder of this paper is structured as follows. Section two presents the theoretical framework that is used to analyse the case of Gothenburg. Section three explains the research
method adopted to conduct the empirical research in the Swedish context, and city context. The last section includes discussion and conclusions.

2. Theoretical framework

The discussion presented in the previous section has highlighted that cities face complex challenges due to societal challenges. It is acknowledged that cities have to face the challenges generated by urbanisation which implies that urban areas are growing while other areas shrink their population (Reckien and Martinez-Fernandez, 2011). Urbanisation is rapidly accelerating across the globe (Brenner and Keil, 2014) and in 2050, 75 per cent of the world population is believed to live in cities or urban areas (Vallance et al., 2012).

The challenges that arise affect city management and development practises (Giffinger et al., 2007; Lombardi et al., 2011; Kreuger and Gibbs, 2007) and require a focus on sustainability, innovation and performance of public organizations (Metzger and Rader-Olsson, 2013). Indeed, urbanisation has led to focus on how to grow smart, i.e. smart city discourse (Vanolo, 2014). The term smart city clearly refers to the relation between the city government and its citizens (i.e. good governance or smart governance) (Lombardi, 2011).

A smart city seems able to provide infrastructures and services that improve the citizens’ life in a sustainable way (Cretu, 2012, Vanolo, 2014). Giffinger et al. (2007) show a multifaceted view of the smart city concept by dividing it into six different parts: smart economy, smart people, smart governance, smart mobility, smart environment and smart living. Consistently, previous literature has identified three different types of smart cities (Meijer and Bolivar, 2015): smart cities as cities using smart technologies (technological focus), smart cities as cities with smart people (human resource focus), and smart cities as cities with smart collaboration (governance focus).

Within the contemporary smart city discourse, the city is conceived as a system of information and flows that can be controlled, modified, and optimized to reach efficiency goals in many areas (transportation, energy, healthcare, etc.). Cretu (2012) refers to the “sustainable and liveable city” as a complex organization whose growth is to be measured in terms of social, economic, and environmental performance.

It follows that our theoretical framework can include Foucault’s notion of governmentality, defined as “The ensemble of institutions, procedures, analyses and reflections, the calculations and tactics that allow the exercise of this very specific, albeit complex, form of power, which has as its target the population, as its principal form of knowledge political economy, and as its essential technical means apparatuses of security” (Foucault, 1991, pp. 102-103).

The Foucauldian notion of governmentality is useful to explore the sustainability and performance of smart cities because governmentality refers to a government exercising its power, and using various technical means, to achieve the end of a healthy society. In other words, governmentality is characterized by the congruence it tries to achieve between a responsible/moral individual and an economic-rational actor (Lemke, 2001). The balance between moral responsibility and economic rationality is connected to the importance of rationalizing the problems regarding the condition of life of the population (Foucault, 2008).

Governmentality is useful in context as it does not only entail that a government problem has to be addressed (representation), but it also includes forms intervention, i.e. solution strategies (Lemke, 2001). In this sense, cities can prepare programs (identifying specific objectives and coherent devices to reach them) and implement them. Such implementation implies a complex
process “formulating the categories and techniques to make it realizable; assembling and sometimes devising technologies to give effect to its objectives in the lives of individuals, enterprises and organizations; and evaluating, debating and contesting the consequences of such programmes and conditions of their failure and success” (Miller and Rose, 1990).

The exercise of the government power is complex. Governing requires more than ruling; it involves skills and practical knowledge, relatively systematized and organized ways of doing things. This discourse involves specialists, i.e. governmental experts (Rose and Miller, 1992) and a plurality of actors concretely building the city through their decisions, projects, and actions (Söderström et al., 2014). The involvement of specialist needs to be coupled with the use of various “technologies of government” in order to achieve the desirable objectives (Miller and Rose, 1990).

The involvement of actors and specific technologies is desirable especially because the development (i.e. growth) of a city may create tensions with sustainability. Hardoy et al. (1992) highlight the contradictions between sustainability and development, as worldwide most of the cities which can be judged positively by development criteria (i.e. social, economic and political goals) have among the highest negative impact on the environment (i.e. use of non-renewable resources, stratospheric ozone-depleting gases, etc.).

This discussion suggests that taking sustainable development of cities seriously implies understanding the challenges and complexities of emerging governance of public service provision. Public sector reforms have mainly been designed and implemented with the purpose of improving effectiveness and efficiency, but with sustainability as a core element of public sector development, performance necessarily needs to indicate also social and environmental as well as financial results (Elkington, 1998). This shows the importance for public-serving organizations to constantly seek a trade-off between financial and non-financial performance measures (Peda et al., 2013). In addition, some authors argue that it is not enough to focus on the sustainability of individual public service organizations. Rather, the focus must integrate both an outward-facing concern with public service effectiveness and an inward-facing balance of individual organizational sustainability against overall public service sustainability (Osborne et al., 2014). This is the challenge for smart cities seeking to achieve their goals.

Collaborative urban governance, where public organizations carry out practices together with private and non-profit organizations, has increased in forms of partnerships, networks and other kinds of urban collaborations (Walker and Hills, 2012; Andrews and Entwhistle, 2015). These arrangements are established as “a solution to the most pressing social problems facing contemporary societies” (Andrews and Entwhistle, 2015: 679). They are moreover believed to produce better outcomes (Agranoff, 2008), but few studies have examined if the potential benefits are actually realized (Andrews and Entwhistle, 2010). It is argued that collaborative governance in general has a positive impact for public organizations performance (Agranoff, 2008; Choi and Choi, 2012; O’Toole et al., 2005). However, the consequences for sustainable development are not well specified (Walker and Hills, 2012).

There are some inbuilt complexities, for instance Nutt (2006) notes that there are substantial differences in how public and private organizations make decisions. What also can be noted is that different stakeholders in an urban setting might have different views of what the collaborating network should perform and then obviously also how to measure the outcomes of such collaboration (Selsky and Parker, 2005; Walker at al., 2010). We can therefore assume that the performance of these urban collaborations is a crucial factor of how to create sustainable development, but that there are inbuilt complexities of how to measure performance
where different actors have different stakes. Yet, the ability to distinguish the performance of these urban collaborative networks is crucial to actually create a more sustainable future.

In this respect, Foucault’s notion of governmentality is relevant because it does not focus narrowly on core political institutions, but enables to consider the wider network steered and controlled by a city (see Ferlie and Ongaro, 2015). Smart and sustainable strategies rely on a network of organizations, which should perform in line with coordinated goals. This means that besides vertical performance (of single organizations), horizontal performance (of networks of organizations) also needs to be measured, analysed, and evaluated (Almqvist et al., 2013; Klijn, 2012) since it is the network performance that enables the sustainable and smart city to fulfil its goals. Performance information within networks is meant to support the debate and dialogue among inter-dependent partners (Almqvist et al., 2013).

3. Research context and method
Nordic countries are depicted as representing the “Promised Land” of local government and are treated as belonging to a single model of local government. In Nordic countries the active participations of societal actors to public policymaking is seen as a healthy contribution to the process (Ferlie and Ongaro, 2015).

Swedish local governments have a strong autonomy and self-government, something that could imply differences between them when it comes to management and performance. A further characteristic of Sweden is that government efforts were highly concentrated to systematic amalgamation of units of local government to form larger units. The last decades saw increased interest in new types of hybrid and indirect governance organizations, which mix public and private agencies or traits of public and private governance arrangements, and are often based on mixed streams of finance, partly from the public purse, partly from market and private operations (Thomasson, 2009; Grossi and Thomasson, 2015). Moreover the use of new information technology, both as a means of informing local residents and as a means of stimulating citizen involvement, has had more diffusion in larger local governments. In cities there is a new strive for innovation, which is a means of both becoming more flexible to new solutions where change can be implemented faster but also something described as a necessity based on the challenges the cities now face (Bartlett and Dibben 2002). The concept of sustainable and smart cities can be seen as a tool of coming up with new ideas to old as well as new problems.

In Sweden, like in other Nordic countries, the way in which NPM “menus” were adapted to the local palates located it outside the core NPM jurisdictions, even if in terms of managerial and performance tools Swedish local governments seem to have adopted a number of NPM “dishes” (Pollitt and Bouckaert, 2011).

Also and as mentioned earlier, when we in this paper talk about sustainability we refer not only to environmental sustainability but also to social and economic sustainability. During the last year municipalities in Sweden as well as in other parts of Europe have been put under pressure by the large number of immigrants that seeking refugee here. To include human and social aspects with focus on how to through sustainable and smart city strategies support integration and avoid segregation of cities and municipalities is more relevant than ever and we believe that these aspects need to be included.

The empirical data in this paper is based on interviews with directors from city departments and municipal corporations, middle managers from the same departments and municipal corporations and project leaders of subprojects, which are involved in realising the vision and
strategies. The empirical data in this paper consists of 15 interviews. In addition have observations been carried out at meetings between the city directors and meetings between the middle managers. Field notes have been collected at these occasions.

The city of Gothenburg is located at the western part of Sweden and is Sweden’s second city population wise, with about 550 000 inhabitants. The city is known as an industrial city, with large companies as Volvo, SKF and Stena. Lately there has also been a discussion about that the city need a change of identity, from the industrial city to a modern city. One large issue often referred to is how the city is segregated and need to become more integrated to be able to handle social issues. The qualitative method will enhance the comprehension of how and why sustainable and smart strategies may affect performance measurement systems. The focus is the organization of implementation of a vision and strategies for becoming more sustainable and smart.

4. River city Gothenburg – Open for the world
River City Gothenburg is the central part of the city of Gothenburg – on both sides of the River that divides the city into two parts, the inner city and the island of Hisingen. The big issue ascribed to the city is that it is segregated, where people do not travel across the city. This is an issue that has been highlighted in the context of the immigration at the time, where the city organization has a clear aim of increase integration. The segregation issue was however also a reason for starting the vision and strategy process in 2010, the aim described at this time was to ‘built the city together’. A task was given to a group of civil servants to draft a vision and strategies of how to become more sustainable in all three dimensions, social, ecological and economical. This group consisted of people representing one of the three dimensions and being experts in that area. The idea behind this was to create a heterogeneous group, that would agree on what the city of Gothenburg would be in the future and how the get there. This was easier said then done. After a two-year process, in October 2012 the politicians however adapted the vision “River City – Open for the world” and the three strategies “heal the city, strengthen the regional core and meet the water”. All strategies referring to sustainability: to become greener, more integrated and a better environment for businesses and entrepreneurs. The vision and strategy document, that is a document of about 45 pages, also includes a model of how the city should keep working with becoming more sustainable, this model includes: collaboration, learning, participation and leadership. The model is in hindsight referred to as the most important outcome of the drafting process. The model implies that the city organization needs to work in different ways to be able to change the on-going development. This entails to question taken for granted routines and hierarchies, something that in practice is difficult. The model also shows the importance of working over organizational boundaries in new ways and a key-word for the process has been “the whole city” implying that all should be involved, not one single department could alone realising the vision and the strategies, here also municipal corporations need to be involved to implement sustainable and smart strategies.

After the adaption of the document a discussion started of what organizational model that would most suitable when implementing the vision and strategies. Here different ideas were competing, which made this process take time, too long according to some of the interviewed, but eventually turned into a project organization. This project organization consists of a steering committee of directors from different departments and municipal corporations that meets once every second month and is supposed to be an instance that quality proofs the on going in the city in general. Then there is the management group consisting of people working as middle managers from the same departments and municipal corporations as the directors
that meet every second week for about three hours. The next organizational level consist of seven sub-project, consisting of city areas, that each have two project leaders responsible at a micro level of making the vision and strategies come true. Here different smart city projects also come in, as a means of turning the vision and strategies to practise, often with a focus of innovations.

The realisation of the vision and strategies, as stated above, implies an increased collaboration with actors outside the city organization, as corporation, landowners and interest groups. However, when making a collaborative organizational model, there are some other issues arising, of how to decide who got the right to make decisions, who have what mandate and how to measure what the organization does, and how to decide what actions that are coherent with the vision and what actions that are not. In Gothenburg there is a focus of actions taken, that something is done is more important that what is actually done. Here different values are discussed, the aspect of social sustainability is claimed to be integrated more now than before, but not everyone agrees on this claim. One of the interviewed that has worked for a long time at a city department says that:

We have always done this, thought of social aspects in planning, but have never talked as much about it as we do now. I am a bit afraid that it is just talk and not a lot of change.

On the other hand the language and values, that now to a larger extent consist of sustainability issues also makes room for a change of content, to work with other issues than before. That talk is turned into action, just because they do talk about it.

The people that are part of the organization have different views of it, but most of them argue that the city has gone through a large change, mostly since collaboration has improved. One of them working with in the city for many years says:

It has changed a lot from when I started (at the traffic office), we where an administrative office, now we are managing city development.

There is however by all levels of the organization a need of measuring the on-going work, not at least to be able to show the surrounding that a lot is going on in the city. This responding to a previous critique about the city organization acting to slow or not at all, mostly referred to building of houses. One of the city directors at the steering committee, explains the benefits of using a vision as a long term direction:

I think it is much easier to manage towards the vision than ‘we should build so and so many apartments each year’. In the short run it might be easier to deliver, but we do not know if what we deliver is worth it in the long run.

The quotation highlights that there is flexibility in the vision of becoming a more sustainable city that also includes a change of values, the reason for doing something. The most important part is not to deliver a certain number a specific year, but to do something better and something new, with the aim of becoming more sustainable and smart. The process towards the vision becomes as important as the actual vision. This implies new ways of collaboration, described as ‘collaboration as result’ and not ‘collaboration as process’, meaning that the collaboration in itself is not important, it is that it is leading to improved results. “You can call it what you want but we need to create action now”, a city director says. This is somewhat paradoxical considering the large effort of creating this project organization, and the frustration some of
the people involved felt in that process. One of the middle managers describe how they spent about two years talking about how to organise the realisation of the document:

I have been to so many meetings, with different names but with the same persons and that seemed to be about the same topics. We need to become an ‘action organization’ and not a ‘talk organization’.

Also one of the directors describe the issue of the ‘talk organization’:

There is a belief in us directors that we should talk at our home departments and anchor everything. That is not the case. We can talk us self to death and it would not be anchored anyway. It will take processes within the different departments.

Even so, or maybe because of this, there is a need for numbers, goals, indicators and measurements. A group has been collected to create a model that all subprojects could use as a guideline, something that also would make it easier to compare the projects with each other. This is based on the idea, that all projects together should put the vision into practice, but they do not have to do the same things. There is here however a risk that some values do not get included at all. And the idea of comparison is not something that the project leaders altogether like:

I think we have to compare one project over time and with itself, not with the other projects.

This might be right, but there is also a need to have some supervision, some higher level that make sure the projects together answers to the overall idea of becoming more sustainable and smart. The interviewed take this into account, and not at least from the project managers at the subprojects are there needs of being able to show what they have done and how, but they want to do it in their way. Therefore they have in the subprojects developed their own performance measurements and they have created their own vision and goals based on the overall vision and strategies. Here some of the directors see a risk of a gap between the vision and how it is translated in the other projects. The project leaders however all describe a feeling of a large responsibility but that they are not sure what mandate they have to make decisions that will affect different departments that are not their home departments.

Can I go to another director (than my own), and say ‘you cannot do that, that is not your responsibility or it is not coherent with the new vision’? Maybe I can, but it is not easy.

The project leaders also describe how they in their work of dealing with city areas in practice have to collaborate with corporations that own land our have other stakes in the city area. This implies that they also need to make the corporations agree to the new vision. This is a good way of spreading the vision of sustainable city outside the city’s organizational boundaries but there is also a risk in having to negotiate values of the vision with other actors. One risk, described by one of the interviewed, was that when deciding on performance measurements, it became a “lowest common denominator”, and not as ambitious as they had hoped initially. But, on the positive side, the vision and strategies could be used as a means to say no, when something is obviously going the wrong direction. When constructing performance measurements the difficult part described by several of the interviewed is that there are a lot of ‘un measureable’ aspects of sustainability and there is a tendency to measure what can be measured:
It easy turns into focuses on finances, techniques and environmental issues, everything from water quality to environmental toxin or whatever; social dimensions get stuck outside the discussion.

A city director, formerly working in the business sector says that the need of documenting everything is excessive in the public sector, that it is a “sign of a good week” if there is a lot of documentation done. On the other hand there is also described how the measurements and indicators of sustainability is much needed in the communication with the politicians, to be able to illustrated what the ambitions are and that if they, the politicians, agree that it is worth aiming for then they also need to make decisions about making investments. As civil servants they cannot higher their ambitions too much without having more resources. The performance measurements are therefore a means of negotiating. On the other hand, this is a critical process, if they have ambitious objectives, and then fail to meet them; the civil servants are the ones failing, with or without resources.

5. Discussion and conclusions
The aim of this paper is to investigate how sustainable and smart strategies are implemented in a Swedish city and how they are influencing performance measurement systems. The aim can thus be divided into two parts, one related to strategy implementation and another at how the strategy influences performance measurement system. Consequently, we will first focus on findings related to strategy and strategy implementation and then move on to discuss how the strategy implemented influenced the performance measurement system.

Already at the beginning of the strategy process the need to not only focus on one aspect, but several, was recognized and reflected in the creation of the group given the responsibility to develop the new strategy for the city. Consequently the group consisted of people with different backgrounds and experiences and one can say that the composition of the group as well as it assignment, at least on the paper, reflected a Triple Bottom Line approach. To call for a network of different competencies is also in line with the approach within what is called the New Public Management within research today. Municipal actors have realised that the municipal task is difficult to manage by themselves. Thus to involve different competencies in the network from both inside and outside the organization can be one success factor for public organization in the future (Almqvist and Wällstedt, 2015).

The study of how the new strategy was developed and implemented mirrors the notion of governmentality developed by Foucault (1991). Especially apparent is the complexity of governmentality which is reflected not only in the process of implementing the strategic model, but also the development of it. The latter turned for example out to be more time-consuming than expected.

The challenge of implementing the strategy also turned out to be time-consuming and an ordeal. In order for the strategy to cover all aspects (social/human, environmental and financial) as well as secure that the project spanned over organizational boundaries and included all actor involved in urban development, the strategy needed to be implemented and accepted by a wide group of people. The challenges facing the city of Gothenburg in the implementation process thus bear many similarities with what is described in the governance network literature regarding how to govern and manage a network of actors.

People interviewed express problems with securing an acceptance off strategic goals and to secure goal alignment and in relation to this to be able to show how projects like this creates win-win situations. The latter is important in order to motivate and to coordinate actors across
organizational boundaries. Similar challenges are described in the literature concerning governance network. Thus, there seems to be similarities between challenges related to Smart City projects and governance networks. This is perhaps not strange since governance network also contain the complexity of governmentality (Foucault, 2008) since they aim towards solving complex and wicked issues requiring competences from different organizations and thus also spans organizational boundaries (Rhodes, 1997: 2010; Lowndes and Skelcher, Osborne, 2010).

What happened in the case of Gothenburg was that due to the difficulties of developing as well as implementing the strategy, the project was criticized for being all talk and no action. When looking at the case one possible explanation for this is the difficulties within a network context to implement a strategy, as discussed above. Another likely explanation is the issues of linking strategy to performance measurement and organizational output. Supporting this is that even when the strategy was implemented and projects were up and running the critique remained. Also, there seems to be in the different projects a certain degree of frustration regarding the lack of articulated targets or anticipated outcomes signaling that there is a gap between strategic development and decision making at the governance level and what occur on the project management level as well as what seems to be a need to secure accountability in relation to the different projects and their outputs. It is likely that if performance measurement systems based on the strategic model had been developed, it is likely that this gap would not have existed or at least had been less apparent. Further supporting this is the bottom-up initiative in different project groups to develop performance measurement systems of their own.

The bottom up initiative might have merits in terms of involving project partners. The problem is that it might increase the gap (as mentioned in the case) and by that impairing the ability to, through the strategy, align different parts of the municipality under one overarching goal. When looking at literature concerning governance network one issue that keeps reoccurring is the difficulty of developing performance measurement systems that are accepted by and covers the different goals of the actors in the network (Sullivan and Skelcher, 2002; Huxham and Vangen, 2005). The same challenge seems to be present in the project launched in Gothenburg. What needs to be kept in mind though is that if one manages to develop a performance measurement system that includes all actors and are accepted by all actors involved, this might be the solution to the issues of creating goal alignment often experienced. The bottom up initiative in the case of Gothenburg is a strong empirical evidence for the necessity to find a way to bridge the gap between the strategic development occurring in projects that span over organizational boundaries, groups of expertise and strives to align different organizational goal and the government level and the implementation occurring at the operational level. Also, the bottom up initiative to develop a performance measurement system in the Gothenburg case provides us with an interesting illustration of how this gap can be filled by such a system and also the necessity of developing and implementing such a system.

Then what can we learn from the case of a Smart City project as the one in Gothenburg? First, we learn more about how a smart and sustainable strategy can be implemented. In the case studied the implementation occurred through the use of a project organization, with subprojects each responsible for implementing and realizing different parts of the overarching Triple Bottom Line strategy. By spreading the responsibility of implementation to different groups no one took responsibility for the realization of the overarching strategy as the implementation was delegated to individual civil servants, each with their own interpretation of the strategic goals.

This leads us to the contributions of the study in relation to the second half of the purpose and that is how the strategy was reflected on the performance measurement system and in the case
of Gothenburg this part was never realized. The lack of a shared performance measurement system was however apparent and highly visible in the critique of their being “all talk and no action”. A consequence that might lead to an increasing risk of the strategy being interpreted differently in each project and also executed in a way that differs from what was first intended by the group developing the strategy. This also risks impairing the realization of the overarching strategic goals and raises issues on how to secure accountability in this type of projects.

The process in Gothenburg thus in different ways reflect the complexity of the concept of governmentality (Foucault, 2008). First, it illustrate how new values enters into an organization through experienced needs and external challenges putting pressure on urban planning and city development. Second, it illustrates how new values are adopted by an organization through the implementation of a new vision and a new strategy reflected in the use of new concepts. Further the case illustrates how sustainability from a Triple Bottom Line perspective not only is reflected in a vision but also through the implementation of a strategy that gradually becomes rooted in organizational practices and individual actions.

Even though the values related to sustainability and a Triple Bottom Line perspective was implemented in the organization and reflected in action and practices, the case show the difficulty to take the step from strategy and goal formulation to operationalize those goals through the development of a performance measurement system or what Foucault (2008) refers to as calculative techniques. Especially difficult seems it to be to create a performance measurement system that not only includes financial goals, but also the social and human aspects of the strategy, especially how to in a fair way capture these goals seems to be problematic. This is really a challenge for municipalities and previous research indicates that what is difficult to measure unfortunately tends to be ignored (Almqvist, 2001). In the case of Gothenburg this created frustration as well as a gap between the strategic development occurring on the governance level and the implementation of the strategy that occurred on the managerial level.

This leads us to a third area of contribution of this study and that is how the implementation of the smart and sustainable strategy requires involvement of different departments, municipal corporations as well as external actors. This was in Gothenburg highlighted through the concept of “the whole city”. A city cannot become sustainable and smart only by actions taken by individuals working within the city organization itself. This highlights also the movement from collaboration as a result to collaboration as a process, meaning that collaboration leads to improved results. What it also does is showing the challenges with coordination of a larger network comprising actors with different goals and expertise. As mentioned before, this goes in line with New Public Governance that perhaps is the next reform movement after New Public Management; to create networks with different competencies within and outside the organization. Here we also find similarities between the challenges experienced in the Smart City project in Gothenburg and experiences reported in literature on governance network (Sullivan and Skelcher, 2002; Huxham and Vangen, 2005; Klijn, 2008; Skelcher, et. al., 2011; Durose et al., 2015).

6. Concluding remarks
The study of a Smart City project in Gothenburg has increased our understanding of the how a Smart City strategy focusing on sustainability from a Triple Bottom Line perspective can be implemented. It also increases our understanding of the link between strategy and performance measurement system in complex and large projects that require collaboration across
organizational boundaries. Consequently this study not only contributes to the literature on Smart City projects and sustainable urban development, but also helps us to understand the challenges with developing performance measurement system in networks designed to solve complex issues as governance networks. This is an interesting contribution since this for quite some time has been an area requiring more research (Sullivan and Skelcher, 2002; Huxham and Vangen, 2005). Also, this study through the application of Foucault’s (2008) concept of governmentality, increases our understanding for challenges related to developing performance measurement systems that not only include financial goals, but also social and human perspectives. There is thus a possibility here for cross-fertilization by discovering this link between research on Smart City projects and that of governance networks opening up a possibility to apply results from different fields in new context and thus increase our understanding not only on Smart City projects or network governance, but complex and boundary spanning projects in general.

This study does however not only contribute to research on performance measurement in governance network and Smart City projects, it also provides us with valuable insights for civil servants planning to implement a Smart City project.

When assessing the results from this study one however needs to bear in mind that this is one study conducted on one case and therefore further studies are required and called for. Especially regarding the challenges of developing performance measurement systems for complex projects spanning over organizational boundaries and striving to align the goals of different actors. An area that seems to remain under researched, but has great value since the development of a performance measurement system could support goal alignment and increase accountability of large and complex projects.
References


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