"There is a growing weight of expectation on organizations to operate as good citizens. This is because of the influence they exercise on the lives of so many individuals (The King Report, 2002).

Abstract
In this paper we research the integration of non-financial information for decision making of managers in government. Therefore is explored how the integration of non-financial information leads to more inclusive decisions. Inclusive meaning the societal performance is included in the decision-making process by managers. Civil society is focusing more and more on common societal goals and its requests for comprehensive and sustainable societal solutions. A tendency of shifting interests both in civil society and governments is noticeable. Expectations seem to shift to cooperation, to openness, to commitment, and to connectivity. A shift in focus from short-term output to a long-term outcome is apparently taking place. Therewith value indicators have shifted from being merely financial and budget-oriented to being outcome, societal value performance indicators, expressed in aspects of environment, health, living context, education and meaningfulness. Linking outcomes to organizational activities as a basis for effective governance is a complex topic. It is often referred to as ‘an ongoing challenge’ to be able to demonstrate an understandable and explanatory connection between public sector activities and societal outcomes. Only linking outcomes and activities are not sufficient to understand well the governance creation of public value. Stakeholders hold government more and more accountable for the public impact in respect of their own operations as well as administrative/governing responsibilities in relation to a public policy area or jurisdiction. A new reality seems to be emerging, whereas governments are facing a reality of being responsible instead of taking control. In order to be a responsible government and so creating public value, governmental objectives and goals should be in line with its stakeholder’s needs.
The definition of the outcome performance indicators and so making non-financial performance measurable should gain a more inclusive insight, known as integrated information. Integrated information is defined as the information about how an organization’s strategy, governance, performance and prospects, in the context of its external environment, lead to the creation of value in the short, medium and long term. Hypothesized is that the improvements of societal performance will be the result of measurement and review of the integrated performance information. As a condition the governments internal and external reporting environment should therefore be conducive to understanding and articulating government’s strategies: it should support driving performance internally and measure and demonstrate if, and how the execution of activities affects the public impact. In this paper we will show, based on case studies and supported with references from academic theories, how integrated performance information enables better long-term management decisions what eventually will lead to improving societal performance of governmental organizations.

1. Introduction
In many governmental organizations, much effort has been taken to improve the quality of public administration. All attempts from different perspectives, though with the same underlying goal. In order to improve governance, much effort is aimed at developing organizational structures and leadership role models to support improvement in policy-making and decision-making. The increasing importance of governance has been a trend for several years.

Linking outcomes to organizational activities as a basis for effective governance is a complex topic. It is often referred to as ‘an ongoing challenge’1 to be able to demonstrate an understandable and explanatory relation between public sector activities and societal outcomes. Just linking outcomes and activities are not sufficient enough to well understand the creation of public value. Civil society is focusing more and more on common societal goals and demands for comprehensive and sustainable societal solutions2. A tendency of shifting interests both in civil society and governments is noticeable. Expectations seem to shift to cooperation, to openness, to commitment, and to connectivity. A shift in focus from

1 Bossert, 2012; Moore, 2013
2 GRI Public sector supplement 2005.
short-term output to a long-term outcome is apparently taking place. Information and being informed seems to play a critical role. Performance indicators have shifted from being merely financial and budget-oriented to being outcome, societal value performance indicators, i.e. performance indicators that express aspects of environment, health, living context, education and meaningfulness. This is often referred to as integrated information. Based on this, one would expect that integrated information is a condition for public management decision-making in order to create public value and so higher stakeholder engagement.

2. Theoretical concepts and notions
A host of new expectations have arisen for public agencies, spurred on by major events such as the 1992 United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro, Brazil, and the 2002 United Nations World Summit on Sustainable Development (WSSD) in Johannesburg, South Africa. In many publications this trend of increased stakeholder expectations and demands in regard of government performance, is related to the roles of governance and leadership. With a growing demand for improved and more efficient government services, stakeholders hold government more and more accountable for the public impact in respect of their own operations as well as administrative/governing responsibilities in relation to a public policy area or jurisdiction. A new reality seems to be emerging, whereas governments are facing a reality of being responsible instead of taking control. Public agencies are defined primarily by the fact that they are mission-driven organizations designed to promote the public interest through the development and application of existing laws, by implementing the policies of the presiding government, and the provision of services. The optimization of stakeholder value has resulted in a stakeholder value-approach to establishing effective governance and leadership roles, with more emphasis on supervision, better information for accountability purposes, and a stronger focus on transparency and integrity. In order to be a responsible government, and

---

3 Ibid.
4 For instance: Adams, 2014; Bossert, 2008; IFAC, 2013 Governance in the public sector, GRI Public Sector supplement 2005
5 GRI Public sector supplement 2005
6 Bossert, 2008
so creating public value by providing in societies’ needs, governmental decision-making should be based on integrated information and in line with its stakeholder’s expectations.

2.1 Conceptual model
In order to link sub national government organizational performance to public value, performance should be regarded from a more holistic point of view on the ability to create public value over time. This asks for a link between financial and non-financial performance and societal outcomes. Linking the performance to outcomes enables organizations to broaden their view on creating value and how their organizational model realizes this. Integrating this information facilitates a more holistic thinking about their organizations relationship with and impact on value.

Integrated information is defined as the information about how an organization’s strategy, governance, performance and prospects, in the context of its external environment, lead to the creation of value in the short, medium and long term. This integrated information, improves management’s decision making when the governments’ internal and external reporting environment is conducive to understanding and articulating government’s strategies: it should support driving performance internally and measure and demonstrate if, and how the execution of activities lead to the creation of public value in the short, medium and long term. Therefore its crucial to transform stakeholders’ expectations into a set of non-financial targets and performance indicators, cascade them throughout the organization, embed them into the organizational processes and continuously monitor the impact.

---

7 IIRC, International Integrated Reporting Council,
The internal reporting environment should support management in determining if the objectives and targets are delivered through the appropriate processes and if operational management is carried out in the right way. Non-financial performance indicators, and so making outcomes measurable, should gain a more inclusive insight of the allocation of the capitals to organizational tasks. Internal integrated an accurate management information supports management in measuring the objectives, their comparison to targets and the review of the effectiveness and efficiency of processes as well as compliance to specific requirements. This insight will allow management to take decisions and allocate capital to activities based on accurate considerations of the legitimacy, efficiency and effectiveness of their policies pursued. Stakeholder engagement should allow management to determine if the creation of public value, and therefore objectives and targets, are in line with stakeholders’ expectations. The external reporting environment should allow management to demonstrate to stakeholders, and help stakeholders understand, if the execution of the strategy affects the impact and therewith if improvements of public value are the results of measurement and review of the operational management.

2.2 Theoretical notions

A lot of research has been done on the achievement of societal impact through integrated reporting. For instance Eccles & Krzus, 2010 conclude that integrated reporting adds

---

8 For example: Robert. G. Eccles 2011, 2013; Eccles, Krzus, & Wiley 2010
tremendous value to the company and all of its stakeholders, including shareholders. They state that in seeking to establish greater clarity about the relationship between financial and nonfinancial outcomes, the company will find it needs better information, which will, in turn, lead to better decisions. Adams, 2013\textsuperscript{10} demonstrates how integrated thinking can benefit many other organizations whose success and influence depends on relationships and partnership. It acknowledges the influence on the company’s business model and the ability to create value. Adams (2014) \textsuperscript{11}, furthermore shows that government departments in Australia have responded to the growing need for sustainability performance measures. Her study demonstrates the high level of interest in the public sector for the use of performance measures not only for internal, but also for external reporting to a wide variety of stakeholders including media, community and external funding agencies\textsuperscript{12}. The increased attention on performance evaluation by public sector managers, consultants and academics, are reflecting the increased pressure on public sector organizations to improve performance to remain viable in today’s competitive and global operating environment and to demonstrate this to external as well as internal stakeholders. It also mentions the growing concern with sustainability, the impact of organizational activities on the environment and society as well as the more traditional aspect of economic viability. According to Adams (2014), the implementation of information systems for performance management provides opportunity to incorporate measures aligned with sustainability outcomes and provides reportable indicators. It points out the importance of multiple performance indicators in measuring the effectiveness of an operation. Eccles and Serafeim (2014)\textsuperscript{13} refer to the two important reporting functions: information (“reporting that meets the needs of both statutory financial reporting and sustainability reporting”) and transformation (“primarily internal”) (“improved understanding of the links between sustainability and business strategy, consistent messaging, and improved decision making”) of reporting. They underpin that the transformation function of reporting can be effectively performed through engagement of stakeholders because herewith the organization obtains a better understanding of the

\textsuperscript{12} Adams refers here to: Ittner and Larcker, 1998; Bevir et al., 2003; Cavalluzzo and Ittner, 2004; Herawaty and Hoque, 2007
stakeholder’s expectations, and there with the outcomes expected from the organizations ‘business model’ (strategy, activities and outcomes). In their article Eccles & Saltzman (2011)\textsuperscript{14}, explore the strengths and challenges of integrated reporting. It concludes that although integrated reporting is still in its infancy, benefits can be identified. Yet at this stage initial benefits include better internal resource allocation decisions, greater engagement with stakeholders and other stakeholders, and lower risk\textsuperscript{15}.

3. Two case studies
As to better understand the relations between integrated information, decision-making, stakeholder engagement and creating public value, two case studies as part of our research have been executed. The case studies are described and analyzed as follows.

3.1 Avalex: a business model for public value creation
The first case study is performed at Avalex. Avalex is a Dutch joint organization (a formal administer body) of six municipalities in the center of The Netherlands. Avalex is charged with the societal task of effective and efficient prevention, recycling, collection and discharging of waste and raw materials, commissioned by the municipalities and companies located in the municipalities. Performing this jointly task benefits municipalities and society in both financial and non-financial ways. Performance management used to be output and budget driven. And therefore more oriented on performance in terms of efficiency instead of performance as creating public value. In order to secure its long-term existence it had to focus more closely on the outcome, and stakeholder engagement, i.e. citizens and municipalities. Therefore Avalex started to define its relationship with and its impact (creation and destruction of value) in terms of capital according the IIRC value creation model\textsuperscript{16}. As a result it redefined its role as to meet a broader set of public challenges. It defined her role in the transition from waste to resources, and adding public value by carrying out its operation according to high societal standards. As a result more ecological, social and economic outcomes are created, what led to a higher level of stakeholder engagement. In the case of Avalex one could conclude that integrating its information

\textsuperscript{16} IIRC, International Integrated Reporting Council
resulted in more transparency for management, owners and external stakeholders (as presented in its Annual Report 2014\(^\text{17}\)) and therefore strengthened its legitimacy towards her stakeholders. Visually this is presented in the following figure.

Figure 2. The conceptual relations in the Avalex case

The figure shows that Avalex, based on integrated information, created a business model with a broader set of outcomes. In doing so it increases its public value, which, through integrated external reporting, is perceived by the stakeholders as a higher value. In a response the stakeholders started to give long-term commitments. Our case study shows that integrated information and decision making led to creating more public value and higher stakeholder engagement. This largely underpins our conceptual model.

3.2. NOM: a model for decision-making

The NOM (Noordelijke Ontwikkeling Maatschappij) is the Dutch Northern Regional Development Company financed by its governmental shareholders (Ministry of Economic Affairs and the three Northern Provinces). In order to contribute to an economic future of the Northern Netherlands, NOM’s mission is to be a catalyst for economic development in Northern Netherlands. NOM started to use an integrated management information model to steer on social, economic and environmental goals in order to create optimal and sustainable public value by performing her task. Approaching performance from a holistic point of view, the necessity to create public value over time resulted in certain dilemmas and insights for management’s decision making. NOM subscribes the circular economy as an

\(^{17}\) Avalex, Annual Report 2014,
important development and transposes it in its strategy. This confronted NOM with different capital budgets demanding for priority as to create public value. Integrated information formed the basis for the consideration to let economic continuity (preservation of current employment by providing financial capital to a company threatened with insolvency) prevail above innovative sustainable development (providing capital to a promising start up for innovative sustainable techniques). The case study shows that NOM based its decision making on integrated management information as shown in the following figure.

Figure 3. Findings in the NOM case study

In their 2014 annual report\textsuperscript{18}, NOM informs her shareholders and stakeholders how decisions on the allocation of capital are made. The decisions are based on NOM’s strategic approach to achieve sustainable economic development. Being transparent about this to their stakeholders, it creates understanding and support for their business strategy. Stakeholders in return provided useful insights about matters that are important to them, including economic, social, environmental issues, and how they perceive value. All resulting in an efficient and productive capital allocation, and acted as a force for financial stability and sustainability.

The case studies show that public sector organizations are searching for ways to rethink their public value creation and to be accountable for it. From the two case studies some conclusions emerge. First, the study teaches us that using integrated information in sub-national governmental organizations leads to redefining the business model and optimizing the service portfolio. Secondly, it showed that the use of integrated information leads to a

\textsuperscript{18} NOM Jaarverslag 2014
better allocation of funds and capital budgeting system. We felt these are important conclusions and therefore the need to review other practices regarding these results.

4. Practice reviews

4.1 Comparative case reviews

On the level of sub-national government we selected three large municipalities that are taking the lead in applying integrated reporting guidelines (of the continents Europa and Australia and Africa, that are taking the lead in applying integrated reporting guidelines). The practices are reviewed based on their own public reporting. The main focus was to explore how in these cases integrated information influences management decision-making and outcomes. The cases reviewed are the city of Warsaw, Melbourne, and Johannesburg.

1. Warsaw

In 2013 the City of Warsaw was the first in the world to publish her (first) annual integrated sustainability report using the Global Reporting Initiative (GRI) G4 guidelines. As the 9th largest city in Europe and Capital of Poland, Warsaw therewith systematic disclosed the city's environmental, societal, economic, and financial performance, as well as governance details. In their report Warsaw describe their vision as: “to achieve sustainability in both city operations and the activities of residents, businesses, and visitors.” Consistent with the Development Strategy for the City of Warsaw until 2020, they express to do this by considering the full range of impacts and benefits of what they do. The report shows consistency of key topics and concerns that have been raised through stakeholder engagement, their vision, goals, action, progress, and opportunities related to sustainability with Warsaw’s strategic plan. The report therewith reflects on the significant efforts and progress in terms of environmental impacts, economic health and societal well-being as well as specific, tangible, and ongoing steps to assure strategic goals are met.

2. Melbourne

As the capital, Melbourne sees itself as an example in performance and in their reporting. They are committed to being open and clear communicators. The Municipal

---

19 GRI, G4 Reporting principles and standard disclosures, 2013
20 City of Warsaw, Integrated Sustainability report, 2013
Strategic Statement is part of the Victorian Government’s Melbourne Planning Scheme, and sets out the Council’s vision, objectives and strategies. The Annual report 2013-2014 draws on the GRI G4 framework for sustainability reporting, with a view to being able to report fully to core requirements of the framework in future years. The report gives insight in the performance against their eight goals that support their vision on being a bold, inspirational and sustainable city, as described in their council plan 2013-2017. The integrated report links the council’s long term plans with measurements, actions and progress indicators in order to track and report back the progress the city is making towards their long term vision. In the report\textsuperscript{21}, the CEO states that the integrated reporting according GRI G4 standards helps Melbourne to prove their customers that they are any better of as a result of Melbourne’s work.

3. Johannesburg

The City of Johannesburg made a first attempt to integrated reporting in its 2012/13 annual report. In this and the 2013/14 annual report they consciously attempt to align its reporting more closely with its integrated operational and strategic approach. The reports show the connection between the stakeholders’ interests and the strategic focus of the organization. In the 2013/14 Annual report Johannesburg states that “to coordinate operations, and to transcend operational boundaries, the City adopted a cluster configuration to City departments, linked to four pillars of Good Governance; Human and Social Development; Sustainable Services and Economic Growth. The adopted cluster approach ensures developmental continuity within the City as it strives to achieve its long-term objectives. Through the cluster approach, the City has successfully coordinated its programs around the key outcomes outlined in the ‘Joburg 2040’ Strategy and is continuing to integrate service delivery.”\textsuperscript{22} The report shows a clear relation between the business model and the outcomes and impact on society, which is measured by both financial and non-financial performance indicators.

In all three practices reviewed, it is claimed that integrated information and stakeholder engagement allows public organizations to make better decisions and attune strategy to

\textsuperscript{21} City of Melbourne, Annual Report 2013/2014, p.5
\textsuperscript{22} City of Johannesburg, Group Integrated Annual Report 2013/14, p.22
society’s needs and herewith create more public value or a better-balanced budgeting system.

4.2 Standards and protocols

Practice also shows the rise of codes and standards in order to define and to regulate integrated information in public sector. We have looked at King III, GRI, and IIRC.

1. King III

The King Report on Governance for South Africa and the King Code of Governance Principles, together referred to as King III, was issued in September 2009\(^2\). It was created to maintain South Africa’s leadership in standards and practices for corporate governance. In 2002 the Johannesburg Stock Exchange (JSE) adopted the King II report recommendations on corporate governance, on the need for integrated sustainability reporting. This led to isolated sustainability reports, which did not integrate non-financial aspects into the financial aspects. The King Code of Corporate Practices and Conduct 2002 (King II) saw only limited adoption in government and the public services. This was largely due to the pre-emptive legal requirement of compliance with the Public Finance Management Act, 1999 (Act No. 1 of 1999) (PFMA) and the Municipal Finance Management Act, 2003 (Act No. 56 of 2003) (MFMA), as minimum requirements in the public sector. The King III report sets out international best practices for the governance of private and public organizations, including a recommendation that these organizations undertake integrated reporting connecting material financial and sustainability information. The philosophy of the Report revolves around leadership, sustainability and corporate citizenship. The provisions of King III specifically intend to be ‘applied or explained’ within all economic sectors, including the public sector. All institutions should disclose which principles and/or practices they have decided not to apply or explain. This level of disclosure will allow stakeholders to comment on and challenge the leadership to improve the level of governance within an institution. The report recommends that organizations produce an integrated report and create sustainability reports according to the GRI’s Sustainability Reporting Guidelines.

\(^2\) King Code of Governance for South Africa 2009
2. **GRI**

The Global Reporting Initiative (GRI) is a leading organization in the sustainability field. GRI are the most widely used standards, adopted by over 4,000 organizations (including over 75% of the largest companies) in at least 60 countries. GRI promotes the use of sustainability reporting as a way for organizations to become more sustainable and contribute to sustainable development. They consider it as an intrinsic element of integrated reporting. GRI defines a sustainable report as: “a report published by an organization about the economic, environmental and social impacts caused by its everyday activities. It also presents the organization’s values and governance model, and demonstrates the link between its strategy and its commitment to a sustainable global economy”. According GRI, organizations need to set up an internal reporting cycle – a program of data collection, communication and responses- in order to produce a regular sustainability report. Herewith performance on sustainability can be monitored on an ongoing basis. When data is provided regularly to senior decision makers, it shapes the organization’s strategy and policies, and improve performance. Therewith GRI describes its function as follow: “Systematic sustainability reporting helps organizations to measure the impacts they cause or experience, set goals, and manage change. A sustainability report is the key platform for communicating sustainability performance and impacts – whether positive or negative”.

3. **IIRC**

The International Integrated Reporting Council (IIRC) is a global coalition of regulators, investors, companies, standard setters, the accounting profession and NGOs. The coalition is promoting communication about value creation as the next step in the evolution of corporate reporting. The IIRC published the first formal guidance to integrated reporting in December 2013, The International <IR> Framework. According to this framework, an integrated report aims to provide insight about the resources and relationships used and affected by an organization, collectively referred to as “the capital” in this framework. A fundamental concept of the framework is that “value created by an organization over time manifests itself in increases, decreases or transformations of the capitals caused by the organization’s business activities and

---

24 The International Integrated Reporting Council
25 Ibid
outputs. All organizations depend on various forms of capital for their success. In this framework, the capitals comprise financial, manufactured, intellectual, human, social and relationship, and natural. The IIRC notes that Integrated reporting promotes a more cohesive and efficient approach to corporate reporting and aims to improve the quality of information available to providers of financial capital to enable a more efficient and productive allocation of capital\(^{26}\). In addition the IIRC notes that an integrated report benefits all stakeholders interested in an organization’s ability to create value over time, including employees, customers, business partners, local communities, legislators, regulators and policy makers.\(^{27}\)

The leading protocols and standards on governance and integrated reporting aim that integrated reporting, by linking outcomes to the organizations business strategy, provide internal and external stakeholders with insight in how organizations focus on its sustainability in the future.

5. Conclusions and discussion

Generally the case studies and comparative practice reviews show that the integration of non-financial information in management information provides management with a more holistic insight in the process of creating public value. In our study we hypothesized that integrated information would lead to management decision-making that is more focused on the process of creating public value and stakeholder engagement. Therefore it is expected that the allocation of capital is better substantiated by information that includes the effectiveness of the organizations strategy and policies besides its efficiency and legitimacy. Also engaging stakeholders’ expectations and being accountable for the value created by the organizations will therefore result in increased public value.

In the Avalex’ case, integrated information, including stakeholders expectations, gives a more inclusive insight in effectiveness of its strategies, which led to an optimization of the business model and service portfolio. This in its turn leads to higher stakeholder satisfaction and long-term commitment. For the NOM case, integrated information and stakeholder engagement optimized the decision making for efficient and productive capital allocation.

\(^{26}\) Ibid. p.4
\(^{27}\) Ibid., p.4
Being transparent in the strategic considerations of this allocation resulted in higher stakeholders’ understanding and therewith in financial stability and sustainability of the organization.

The practice review of Warsaw supports the findings of the Avalex case by showing increased public value as a result of the coherence of stakeholders expectations, strategy, the business model and results. The case review of Melbourne supports both findings of the Avalex and NOM case by showing how integrated information, linking the council’s long term plans with measurements, actions and progress indicators, tracks and report back the progress the city is making towards their long term vision on creating public value. The case review of Johannesburg also supports both findings of Avalex and NOM by using integrated information to underpin the connection between the stakeholders’ interests, the strategic focus of the organization, the business model and the outcomes and impact on society.

The use of codes and standards for governance and integrated reporting support these findings. KING III aims that disclosure of integrated information (according GRI’s guidelines on sustainability reporting) on how the company has both positively and negatively impacted on the economic life of the community in which it operates, will allow stakeholders to comment on and challenge the leadership to improve the level of governance and therewith service delivery within an institution. GRI aims that systematic sustainability (non-financial) reporting helps organizations to measure the impacts they cause or experience, set goals, manage change and improve their impact. IIRC aims that Integrated reporting promotes a more cohesive and efficient approach to corporate reporting by providing insight about the resources and relationships used and affected by an organization. Including non-financial information aims to improve the quality of information available to providers of financial capital to enable a more efficient and productive allocation of capital in order to create value.

Based on our study and reviews we therefore conclude that the use of integrated information has a significant effect on the creation of public value and stakeholder engagement. More precisely, it will lead to optimizing the service portfolio and/or better financial allocation of sub-national governments. The questions, to what extend our findings are generally valid still remains. We therefore recommend further study in this area.
LITERATURE AND REFERENCES

- Avalex, Jaarverslag 2014: www.avalex.nl
- Bossert, J., Towards an Outcome-based Government: Changing roles of Governance and leadership, 2008
- City of Johannesburg, Group Integrated Annual Report 2013/14, p.22
- City of Melbourne, Annual Report 2013/2014, p.5
- City of Warsaw, Integrated Sustainability Report, 2013
- GRI G4, Reporting principles and standard disclosures: www.globalreporting.org
- GRI Public sector supplement, 2005.
- IFAC, Governance in the public sector, 2013
- King Code of Governance for South Africa 2009
- Moore, M.H., Recognizing Public Value, 2013
- Noordelijke Ontwikkelingsmaatschappij (NOM), Jaarverslag 2014: www.nom.nl

ABOUT THE AUTORS:

drs. L.J. Dijkstra is a researcher and senior advisor in the field of social development and sustainable entrepreneurship. Her focus lies on Corporate Sustainability, Responsibility & Reporting. With a background in business ethics, governance and risk management, her interest lies in creating both business and societal value. She is an associate partner of Sustainalize (www.sustainalize.nl), Utrecht, The Netherlands. (dijkstra@si-csr.nl).
Prof. dr. J. Bossert is professor of Public Governance at the Nyenrode Business Universiteit in Breukelen, The Netherlands and an extraordinary professor at the School of Public Leadership (US SPL), University of Stellenbosch in Stellenbosch, South Africa. (j.bossert@planet.nl).