

## CHAPTER 11

# Leadership That Drives Social Change With Performance Measures

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## Takeaways for Leading Change

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This chapter highlights that performance measures can be an integral part of problem-solving and that problem-solving drives social change. Problem-solving as a leadership practice is crucial because it signals to the organisation what is important to the leader. Identified problems represent issues that need to be fixed. The chosen solutions determine which actions are undertaken. In a similar fashion, performance measures used for problem-solving reveal something about the leaders and their values. By using certain performance measures for problem-solving, a leader signals what is valuable and what is not. Performance measures are yardsticks that define what type of performance is appreciated and what is not. This indicates that values cannot be detached from performance measures and problem-solving. Performance measures can be used at every step of the problem-solving process. The choice of measures to be used at each step is crucial. This choice can either support or hinder the social change leaders are attempting to engender. The implication is that those who aim to exercise leadership in any form must consider what implementing and ignoring certain performance measures signals to members of the organisation and other stakeholders. It is also important to understand how leaders try to drive social change by shaping perceptions through the use of certain measures in their rhetoric and writings addressing problems.

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It has been claimed “that problems drive change more effectively than opportunities do” (Greve, 2008, p. 200). This notion is especially true in complex environments, where those in leadership roles frequently deal with wicked problems. Because wicked problems often cannot be solved, considerable effort goes into ongoing problem-solving processes and the pursuit of temporal solutions. Complex environments highlight the importance of problem-solving. A large and accessible information base becomes very valuable when people are constantly trying to keep up with wicked problems. These cannot be tackled with simple information. Performance measures therefore take centre stage when versatile information bases are required for problem-solving purposes.

Performance measures record how social change is occurring (cf. Schalock, 2001). Widely used indicators, such as greenhouse gas emissions, obesity, life expectancy, household income, income inequality, inflation, unemployment rate, and economic growth are all examples of performance measures that record how social change occur (cf. Hatry, 2006). Because measures record social change, they are used to frame the problems and solutions we see in society. For example, unemployment statistics are performance measures which report the number of unemployed people. Leaders can use this measure when they suggest that a given number of unemployed people is a problem.

As a solution to the unemployment problem, a government may try to change the situation through interventions that help people obtain jobs. The intervention is the government’s solution to the problematic unemployment situation. The effects of the intervention can be measured to some extent via performance measures. The purpose of measuring these effects is to reveal whether or not the chosen intervention was effective. Because performance measures can reveal the effectiveness of solutions, these measures can determine the solutions people choose.

It is well known that problem-solving and the use of performance measures are leadership practises that drive social change (Yukl, 2013). However, it is less clear exactly how leadership, social change, performance measures, and problem-solving relate to each other as concepts (cf. Hunt, 1991). Precisely how leaders attempt to create social change by using performance measures in their problem-solving processes is also unclear (cf. Yukl, 2013). The purpose

of this chapter is to demonstrate leadership practises that utilise performance measures and problem-solving together. I ask the following three research questions:

1. What do leadership, social change, performance measurement, and problem-solving mean as concepts and how do these concepts relate to each other?
2. According to measurement handbook instructions written by leaders, what tasks in problem-solving are recommended to be done using performance measures?
3. How can leaders utilise performance measures for problem-solving in public speeches?

The first research question is answered in the next section by reviewing the existing literature. Section 3 provides a theoretical perspective on using performance measures in problem-solving. In section 4, the recommended tasks associated with performance measures in problem-solving are identified from leaders' instructions as given in measurement handbooks. Section 5 analyses the public speeches by Barack Obama and George W. Bush to demonstrate how performance measures are used in problem-solving embedded in public speeches. Section 6 presents the discussion and highlights the implications of this research. The chapter views leadership and change from an organisational perspective. This perspective was used because many social changes emerge and spread to wider society from organisations. The research setting allows clarification of the conceptual relationships between key concepts and identification of leadership practises utilising performance measures for problem-solving.

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## Defining Leadership, Social Change, Performance Measurement, and Problem-Solving

There are many different definitions of leadership (Alvesson, 2017). In this chapter, leadership is defined as a relational leadership (Ropo, Salovaara, Sauer, & De Paoli, 2015) which anyone can exercise. Here, relational

leadership is also understood as an influence process through which social changes in behaviours emerge (cf. Uhl-Bien, 2006, p. 665). According to this definition, leadership involves striving to influence social change. Influence refers to a force that person X exerts on person Y to change the latter's behaviour (cf. French & Raven, 1959). This force can be direct or indirect (Yukl, 2013). Direct leadership requires immediate contact between those who lead and those who are being led. In indirect leadership, people are influenced even though there is no direct contact between those who lead and those who are being led (Jensen & Overman, 2003). This study concentrates on both indirect and direct leadership practises that utilise performance measures for problem-solving.

Leaders can influence the behaviours of people working in organisations indirectly by making decisions about, for example, competitive strategy, organisational structure, or management programmes (Yukl, 2013). Instructions in measurement handbooks, which are examined in this chapter, are part of management programs that attempt to change organisational behaviour. These instructions are a form of indirect leadership because the writers of these instructions are not directly in contact with those who read the instructions. Instead, the writers operate through written instructions and the instructions are the medium through which people are influenced. The people who are being led are involved directly with the handbook instructions but not with the leaders.

A leader's direct influence can be divided into three categories: task-oriented, relations-oriented, and change-oriented behaviours. Task-oriented behaviours are aimed at improving efficiency and process reliability of specific tasks in the organisation. Relations-oriented behaviours focus on human relations and human resources within the organisation. Change-oriented behaviours concentrate on advancing "innovation and adaptation to the external environment" (Yukl, 2013, p. 281). This chapter focuses on the latter, by examining how leaders utilise performance measures for problem-solving in public speeches.

Social change, as defined by Vago (1980), is a process of alterations in social phenomena. In this chapter, social change is understood as any alteration in organisational performance. In general, performance is a socially constructed concept with no objective description. Every person simply defines

performance in their own way (Neely, 2007). In this chapter, performance refers simultaneously to human action and the result of this action (cf. Neely, 2002). Performance is merely human behaviour in the organisational context and the outcomes of this behaviour. This can be seen in both the organisation and the surrounding environment (Schalock, 2001). Performance measures track organisational performance. The research literature lists several types of performance that can take place in an organisation (Hatry, 2006). For the purpose of this chapter, it is not necessary to identify all types of performance that occur in an organisation. Instead, the focus here is on four types of organisational performance: leadership, written handbook instructions, performance measurement, and problem-solving. Because handbook instructions are the result of writing instructions, these instructions can be seen as performance (see the definition of performance used in this chapter).

A problem can be defined as a matter regarded as unwelcome or harmful. It is something needing to be dealt with and solved (Oxford English Dictionary, 2018). In the context of organisational performance, problems are associated with trouble in performance. Problems are solved through a problem-solving process (Davidson & Sternberg, 2003), and performance measures can facilitate the problem-solving process at each step (cf. Hatry, 2006). However, problems can also be solved without performance measures. Traditionally, the problem-solving process is described as a cycle consisting of the seven steps presented in Figure 1.

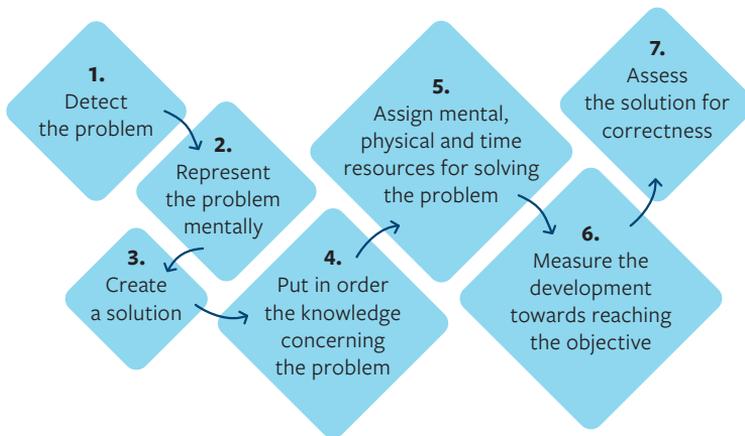


FIGURE 1. The problem-solving process (adopted from Davidson and Sternberg, 2003)

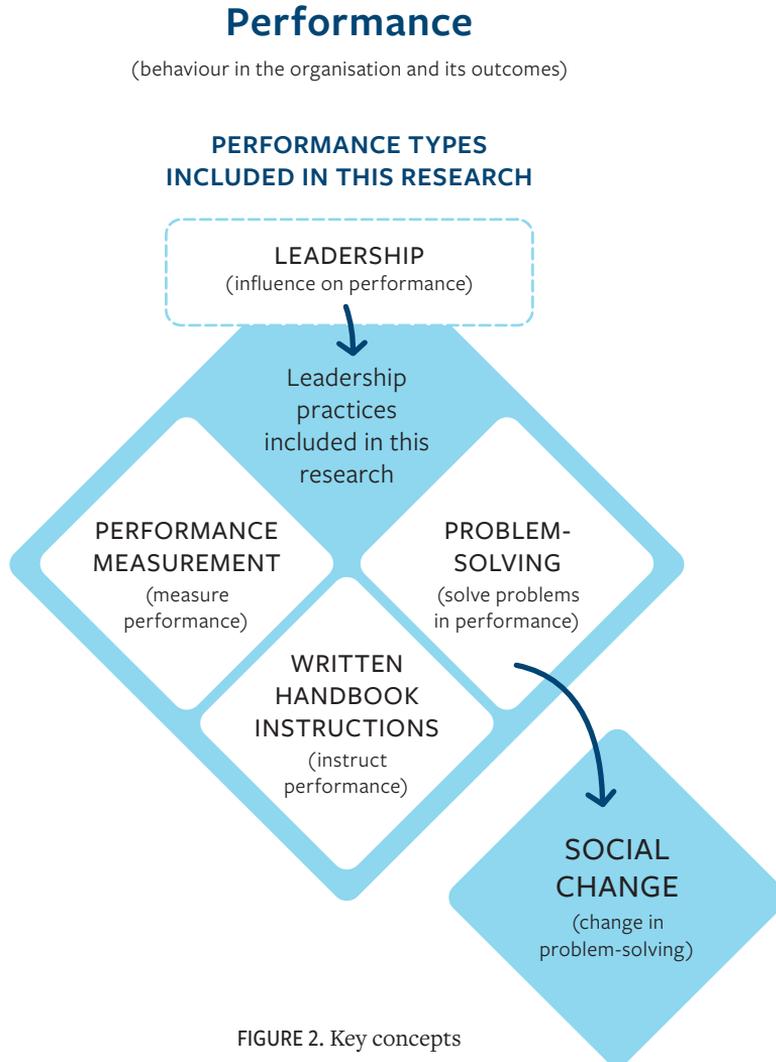


Figure 2 summarises the key concepts in this research and their inter-relationships. As the figure shows, social change is understood to necessitate a change in problem-solving, whereas problem-solving encompasses organisational behaviour that may or may not be changing. When the problem-solving changes, a social change occurs. If the problem-solving does not change, then social change in

problem-solving does not occur. The concept of performance comprises abovementioned performance types: leadership, written handbook instructions, performance measurement, and problem-solving. Leadership is understood as the process of influencing performance. Performance measurement indicates the act of measuring performance. Problem-solving is understood as the act of solving problems relating to performance. Written handbook instructions provide guidance to performance. Written handbook instructions, performance measurement, and problem-solving are not only performance. In this chapter, they are also understood as leadership practices.

## Using Performance Measures in Problem-Solving – A Theoretical Perspective on the Topic

This section presents a short review on the research literature describing uses of performance measures in problem-solving processes. The aim of this review is to highlight testable hypotheses for the empirical examination. The literature is used to demonstrate that performance measures can be used in each step of the problem-solving process.

According to Wagner (2014), problems can be recognised by judging performance against the expected standard of performance. In this process, performance measures are used to verify on a regular basis what is happening and what should be happening if performance standards are met. A substantial difference between what is going on and what should be going on reveals the existence of a problem. By presenting an unmet performance standard, measures provide a mental model of problematic performance. Presenting the problem mentally means describing “exactly what is happening, where it is happening, when is it happening, and to what extent it is happening” (Wagner, 2014, p. 160–161). Performance measures report what is happening, where and when it is happening, and to what extent it is happening (Hatry, 2006). Presenting the problem mentally also puts in order the knowledge concerning the problem. Performance measures also communicate the success of government programs and

services (Schalock, 2001). By doing so, they demonstrate the effectiveness of government solutions. Moreover, performance measures are often used to allocate resources to solutions in budgeting processes (Hatry, 2006). In summary, seven hypotheses can be deduced from the previous literature.

- Hypothesis 1: Performance measures are used to detect problems.
- Hypothesis 2: Performance measures are used to represent problems mentally.
- Hypothesis 3: Performance measures are used to create solutions for problems.
- Hypothesis 4: Performance measures are used to put in order the knowledge concerning the problem.
- Hypothesis 5: Performance measures are used to assign resources for solving the problem.
- Hypothesis 6: Performance measures are used to measure the development towards the objective
- Hypothesis 7: Performance measures are used to assess the solution for correctness

## Indirect Leadership via Handbook Instructions

This chapter uses leaders' instructions in measurement handbooks as research material. These instructions were analysed to investigate what problem-solving tasks are recommended to be done using performance measures. The measurement handbooks examined are listed in Table 1. The handbooks were chosen from public sector organisations operating in the United States and from two multinational companies. In the public sector context, performance measurement handbooks issued by national, state, and municipal governments were examined. The United States operates under a federal system of government, where the national government shares duties with state and municipal governments, such as counties. Measurement handbooks from the federal, state and municipal levels were used with an aim towards capturing empirical data from all three levels of government.

Measurement handbooks aim to influence how people behave at each step of the problem-solving process. Thus, the writers of these handbooks are exercising indirect leadership. This indirect leadership is aimed at convincing others that performance measures say something important about an organisation's performance. The handbooks suggest that people should pay attention to these measures in problem-solving. In general, the measurement handbooks provide guidelines on how to use information about performance (State of Washington, 2016). The purpose of these guidelines is to increase the ability of the organisation to use such measures. These handbooks have also been designed to assist with the implementation and use of performance measures, and they drive social change in organisations' problem-solving processes (cf. Ernst & Young [EY], 1995; Fairfax County, 2009). Measurement handbooks are also typically used to reinforce the willingness of the organisation to use performance measures (e.g. OPM, 2017).

Deductive content analysis was the research method utilised for assessing the handbooks. The text in the 10 handbooks listed in Table 1 was coded into seven categories. The seven coding categories emerged from the seven hypotheses presented in the literature review (see also Appendix 1). If text in the measurement handbooks corresponded to the coding category, then this text was coded accordingly. The coding categories aimed to address whether or not, according to the handbooks, performance measures are used in different problem-solving steps. The analysis revealed that all 10 measurement handbooks describe how performance measures should be used at all seven stages of the problem-solving process. Although the handbook instructions do not present problem-solving processes in the same manner as this chapter, the instructions indicate that measures can be used in each step of the problem-solving process. Next, a short overview is provided of the measurement handbook instructions concerning the problem-solving steps. During this overview, the hypotheses derived from the literature are tested using the coding framework presented in Appendix 1.

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Measurement handbooks aim to influence how people behave at each step of the problem-solving process.

MEASUREMENT HANDBOOK AUTHOR	YEAR OF PUBLICATION	TITLE OF THE HANDBOOK
Multnomah County	2007	Performance Measurement Manual FY 2009
Fairfax County	2009	A Manual for Performance Measurement – Fairfax County Measures Up
Kent County	2014	Performance Measurement Handbook for Managers.
State of Arizona	1998	Managing for Results
State of California	2007	Organizational Performance Management and Measurement – Strategic Planning and Performance Measurement Staff Training Handbook
State of Washington	2016	Performance Measure Guide
Office of Personnel Management (OPM)	2017	A Handbook for Measuring Employee Performance
Bonneville Power Administration (BPA)	1992	Quality Improvement Tools
EY	1995	The Ernst & Young Guide to Performance Measurement for Financial Institutions: Methods for Managing Business Results
PricewaterhouseCoopers (PWC)	2007	Guide to Key Performance Indicators

TABLE 1. The handbooks considered in the analysis

## What Tasks in Problem-Solving Are Recommended to be Done Using Performance Measures?

In the first step of problem-solving, a problem is detected by using performance measures. All the handbooks examined suggested that performance measures are used to *detect problems*. As stated in one handbook, performance measures simply point out problems in the current performance or state of affairs (Multnomah County, 2007, p. 5). The second step of the process is *representing the problem mentally by using performance measures*. All scrutinised handbooks demonstrate that performance measures are used to *represent the problem* in order to create mental models describing the problem (cf. Fairfax County, 2009, p. 13). Performance measures report what is happening, where and when it is happening, and to what extent it is happening (State of Washington, 2016, p. 1). For this reason, the measures describe how a problem in performance comes into existence. This description is a mental representation.

In the third step, performance measures provide solutions. According to leader instructions, performance measures reveal solutions, best practices, improvements, development opportunities, progress, and enhancements. By comparing an organisation with problems to another organisation without the same problems, one can find solutions to the problems (State of California, 2007). For example, benchmarking provides many solutions for an organisation seeking to improve its performance (Fairfax County, 2009). Benchmarking is a practice in which organisational performance is enhanced by comparing the organisation's activities against those of a similar organisation in order to discover the best practices that can be adopted in the organisation (State of Arizona, 1998).

In the fourth step of the problem-solving process, performance measures are used to *put in order the knowledge concerning the problem*. According to all the handbooks, performance measures structure the knowledge concerning the problem. By measuring the resources used, goods and services provided, and results over time (Multnomah County, 2007, p. 5), performance measures allow for arranging and

storing knowledge in a chronological manner. This chronological storage system enables comparisons over time, and this makes it possible to examine progress towards achieving organisational goals within a certain timeframe (Kent County, 2014).

In the fifth step, performance measures are used to *allocate resources* in budgeting to organisational activities, such as problem-solving. According to the examined handbooks, performance measures provide crucial information on how many resources different activities require, which makes them useful for budgeting (State of California, 2007). Next, performance measures are used to *measure progress towards the objective*. All the handbooks instructed the reader to use performance measures to track progress towards the organisation's objectives. Indeed, performance measurement gathers information regarding the kinds of activities that the organisation is undertaking and it addresses the effects of the organisation's activities (Fairfax County, 2009). By doing so, performance measurement reveals whether or not organisational goals are achieved (State of Arizona, 1998). In the final step of problem-solving, performance measures are used to assess the solution for correctness. Because performance measures report goal achievement, they also expose whether or not the organisation's solutions to previous problems were the correct ones. If objectives are achieved, the solutions are correct. If not, then new solutions are needed.

## Direct Leadership – Using the Right Performance Measures for Problem-Solving

The previous section examined indirect leadership in the form of measurement handbook instructions. This indirect leadership drives social change by advocating the use of performance measures in problem-solving processes. Performance measures and problem-solving were explained as conceptual tools utilised for indirect leadership by leaders. The handbook instructions offered a platform where these conceptual tools were used. In this section, the focus turns from indirect leadership to direct leadership

that utilises performance measures and problem-solving in speeches. Examining both indirect and direct leadership highlights how performance measures and problem-solving can be used in leadership practises.

Because performance measures can point out undesirable social changes (Schalock, 2001), they are often used in problem-solving where societal problems are described and social change is created. An illustrative example of this type of use is the following quotation taken from past United States President Barack Obama's (2016) speech to the United Nations General Assembly:

American businesses have created now 15 million new jobs. After the recession, the top one percent of Americans were capturing more than 90 percent of income growth. But today, that's down to about half. Last year, poverty in this country fell at the fastest rate in nearly 50 years. And with further investment in infrastructure and early childhood education and basic research, I'm confident that such progress will continue.

The next consideration is whether or not Obama uses performance measures to:

1. Detect problems
2. Represent problems mentally
3. Create solutions for problems
4. Put in order the knowledge concerning the problem
5. Assign resources for solving the problem
6. Measure the development towards the objective
7. Assess the solution for correctness

The fact that “after the recession, the top one percent of Americans were capturing more than 90 percent of income growth” seems to be a problem according to President Obama. Obama conducts the first step

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of problem-solving by using the information provided by performance measures to detect this problem. At the same time, Obama creates a mental model for the listener and executes the second step of problem-solving. This mental model describes how the top one percent of Americans are capturing more than 90 percent of income growth. This mental model is stored in Obama's speech, which puts in order the knowledge concerning the problem. Putting in order the knowledge concerning the problem is the fourth step of Obama's problem-solving.

In step three of the problem-solving process, Obama presents a solution to the problem by pointing out that "poverty in this country fell at the fastest rate in nearly 50 years" and that "with further investment in infrastructure and early childhood education and basic research ... such progress will continue". By proposing further investments, Obama is actually suggesting how resources should be allocated to solve the problem. Suggesting a resource allocation is step five in Obama's problem-solving process. Obama also points out that there were previous investments in infrastructure, early childhood education, and basic research by referring to "further investments". As such, Obama shows that his previous solutions have worked, because poverty in this country fell the previous year at the fastest rate in nearly 50 years. By demonstrating how poverty fell, Obama conducts the sixth step in the problem-solving process, tracking the progress towards his objectives. Finally, Obama uses measures of poverty to announce a budgeting proposal for the future; at the same time, he assesses his previous solutions against these poverty measures. The solution assessment is the seventh step in Obama's problem-solving process.

Obama uses performance measures in a highly effective way to identify a problem and a solution to this problem. By doing this, he is actually going through a problem-solving process in his speech. While solving the problem, Obama is also attempting to influence the audience. It appears that he is trying to persuade the audience to view income inequality as a problem. He also wants the audience to understand that this problem can be solved with further investments in infrastructure, education, and research. Again, Obama uses performance measures by pointing out how poverty has fallen in the country, thereby demonstrating that

investments have worked so far. Here, Obama seems to argue that the decrease in poverty is a positive social change and that this positive change should be sustained.

Overall, the above quotation is a textbook example of direct leadership behaviour that uses performance measures for problem-solving and to motivate other people to promote the change desired by the leader. Obama's own behaviour can encourage other people to use the same performance measures when they advocate for the same change as Obama. Next, I consider how past United States President George W. Bush conducted his problem-solving process when giving a speech on the financial crisis and economic recovery plan:

The government's top economic experts warn that without immediate action by Congress, America could slip into a financial panic, and a distressing scenario would unfold: More banks could fail, including some in your community. The stock market would drop even more, which would reduce the value of your retirement account. The value of your home could plummet. Foreclosures would rise dramatically. And if you own a business or a farm, you would find it harder and more expensive to get credit. More businesses would close their doors, and millions of Americans could lose their jobs... And ultimately, our country could experience a long and painful recession... In close consultation with Treasury Secretary Hank Paulson, Federal Reserve Chairman Ben Bernanke, and SEC Chairman Chris Cox, I announced a plan on Friday. First, the plan is big enough to solve a serious problem [i.e. the financial panic leading to financial crisis and recession]. Under our proposal, the federal government would put up to \$700 billion taxpayer dollars on the line to purchase troubled assets that are clogging the financial system. In the short term, this will free up banks to resume the flow of credit to American families and businesses. And this will help our economy grow... The federal government also continues to enforce laws and regulations protecting your money. The Treasury Department recently offered government insurance for money market mutual funds. And through the FDIC [Federal Deposit Insurance Corporation], every savings account, checking account, and certificate of deposit is insured by the federal government for up to \$100,000. The FDIC has been in existence for 75 years, and no one has ever lost a penny on an insured deposit – and this will not change.

Next, Bush's use of performance measures in each of the seven steps of the problem-solving is studied. In the quotation above, Bush uses economic experts and their performance measures as a source of information when he describes the financial crisis as a problem. By doing so, Bush completes step one in the problem-solving process. Bush also offers everyday examples to create a mental model of the problem, and while doing so, he indirectly refers to performance measures used by economists, such as stock market indexes, credit ratings, inflation, and unemployment statistics. This is step two in Bush's problem-solving process. Economists use economic forecasts as performance measures when they give warnings to society. Therefore, Bush utilizes these forecasts and makes them understandable to a layperson. The everyday examples of problems embody how the knowledge is put in order in the speech. Putting knowledge in order is step four in Bush's problem-solving process.

As a solution, Bush provides a plan developed "in close consultation with" several people. The plan is the third step of the problem-solving process. Again, Bush does not use any precise performance measures in his rhetoric. Instead, he indicates that he has relied on the expertise of Paulson, Bernanke, and Cox, all of whom have economic forecasts at their disposal. However, it is unclear what precise performance measures Bush has used in crafting his plan. By mentioning the help of experts, Bush adds credibility to his problem-solving process. Bush also proposes resources for problem-solving by suggesting that \$700 billion dollars should be used to purchase troubled assets. Here, some measures tracking the troubled assets are used. The budget proposal is step five in Bush's problem-solving process.

Assigning measures to track the development is step six of the problem-solving process. To track future achievements, Bush states that the success of his plan will be seen in economic growth. Economic growth points to measures like gross domestic product (GDP) and gross national product (GNP), which will be used to assess the correctness of the solution, or in Bush's case, the success of his plan. Although Bush does not assess the correctness of his plan, he does assess one of the solutions included in his plan by evaluating how the insured deposits have worked in the past 75 years. By assessing this solution via performance measures, Bush conducts the final step of the problem-solving process.

## Discussion

This chapter has investigated direct leadership practices in which performance measures were used in problem-solving tasks. It also examined indirect leadership via measurement handbook instructions by asking what tasks in problem-solving are recommended to be done using performance measures. The aim of the study was to map out the problem-solving tasks in which performance measures could be used to serve leadership objectives. As the main finding, current leadership practices demonstrate that performance measures can be used to detect and represent problems, to put in order the knowledge relating to problems, to provide solutions and allocate resources, and to assess solutions and progress towards achieving goals. This finding contributes to previous performance measurement literature (cf. Neely, 2002) by identifying how performance measures can be used in problem-solving aimed at serving leadership purposes. By mapping out the opportunities to use performance measures in problem-solving, this research provides tools for leaders dealing with wicked problems.

The second major contribution is the conceptual model presented in Figure 1. This model provides conceptual clarity to the leadership literature (cf. Yukl, 2013). By showing how these concepts relate to each other and what separates them, this conceptual model clarifies the language used in current leadership and management literature. Such clarity will hopefully translate to a better understanding of the phenomena.

The chapter also demonstrated that the seven-step problem-solving process can be drastically different depending the agenda of the leader. Indeed, the two speeches by the two former United States presidents displayed significant differences with regard to problem-solving processes. The most substantial difference was that they perceived different problems and solutions and they used different methods to locate these problems and solutions. For Obama, the problem was income inequality whereas Bush's problem was the financial crisis. Obama represented the problem mentally by saying that "the top one percent of Americans were capturing more than 90 percent of income growth" while Bush described failing banks, expensive loans, and so on. Obama's solution was further

investments in infrastructure and Bush's solution was to buy the troubled assets clogging the financial system.

Regarding their methods, Bush based his speech on performance measures that forecast the future, whereas Obama relied on performance measures that looked at the past. Moreover, the presidents used different measures for detecting and representing problems, creating solutions, putting knowledge in order, allocating resources to problem-solving, tracking development, and assessing solutions. Obama and Bush used different measures because these measures were required to support

their public problem-solving performance. For example, if Obama had used GDP to demonstrate the income inequality problem, he would have looked irrational and incompetent to those who understand what GDP measures and does not measure. As a measure, GDP does not explain how wealth is divided among citizens. In fact, GDP measures the market value of all final goods and services produced in a certain period time within the examined country. If Obama had chosen

the wrong performance measures, he would have undermined his own performance at each step of the problem-solving process. For this reason, using measures such as GDP would not have benefitted Obama's cause. Instead, by using income inequality and poverty measures, Obama was able to carry out the problem-solving process in a way that supported his causes and values. In a similar fashion, Bush chose measures that supported his agenda and values. This indicates that performance measures can support a leader's cause or act against it. Convincing leaders select convincing performance measures to back up their cases.

As a limitation, the reader should note that the document sample used in this research was not statistically representative. The availability of handbooks restricted sample collection, and purposive sampling had to be adopted. Thus, the results of this study cannot be generalised to the whole government of the United States or governments in general. Moreover, they do not reflect how multinational companies usually see the tasks of performance measures in problem-solving processes.

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Another limitation relates to the chosen speeches. The quotations from the speeches were used only to demonstrate how speeches can utilise performance measures for problem-solving. Empirical data was not used to determine how conventional it is to conduct problem-solving based on performance measures in speeches. For this reason, the reader should not generalise the findings of this research to all political speeches. Whether or not the chosen quotations represent a typical way of undertaking problem-solving in speeches remains uncertain. Future research could answer these questions through the collection of different kinds of empirical data. They might delve more deeply into how public and private sector actors use performance measures in their problem-solving processes. It would also be interesting to see whether or not problem-solving processes utilising performance measures actually lead to the social changes for which leaders are aiming.

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## Appendix 1.

<b>THE RESEARCH HYPOTHESES AS CODING CATEGORIES</b>	<b>THE STATEMENTS SEARCHED FROM THE HANDBOOKS OR PROBLEM-SOLVING TECHNIQUES SEARCHED FROM SPEECHES</b>
1. Performance measures are used to detect problems	Performance measures are used to identify unsuccessful performance or problems, difficulties, complications, and issues in the performance.
2. Performance measures are used to represent problems mentally	A failure in performance can be seen in performance measures.
3. Performance measures are used to create solutions for problems	Performance measures offer solutions, best practices, improvements, development opportunities, progress, and enhancements.
4. Performance measures are used to put in order the knowledge concerning the problem	Performance measures record performance over time.
5. Performance measures are used to assign resources for solving the problem	Performance measures are used for budgeting purposes.
6. Performance measures are used to measure the development towards the objective	Performance measures track the progress towards goal achievement.
7. Performance measures are used to assess the solution for correctness	Performance measures tell whether or not the performance is achieving the organisational goals.

TABLE 2. The coding framework for the qualitative content analysis.