Leadership in planning & control
A study into the fundamentals, functioning, implementation and effect of the A3 approach

Many public and non-profit organizations are going through processes of change. In this context, the existing management control approaches are increasingly being perceived as bureaucratic, not very interactive and by no means inspiring. In most cases there is no intrinsic motivation in ‘shaping the future and jointly monitoring its realization’. According to these problems, the author introduces an alternative method for planning & control, the A3 approach. The A3 approach contains three pillars: the formulation of the A3 annual plan (on a A3 paper format) by a group of people, management dialogues about the progress of the A3 annual plan and the synchronization of the management information with the A3 annual plan (for example via A3 digital).

The A3 approach has been developed as an alternative to the current, often more bureaucratic approaches of management control. This PhD thesis gives an account of a research study into the quantitative effects and qualitative aspects of a new method of management control: ‘the A3 approach’. This approach is investigated in terms of its contribution to the characteristics of organizations successful in realizing change.

What is the A3 approach? Under which conditions can the A3 approach be implemented effectively? What is gained by its application? The conclusion is that a ‘one paper strategy’ such as the A3 approach, is not so much focused on the writing capabilities of the people in the organization, but more on the power of thinking and on dialogue. The often much criticized management control process can actually be changed into an attractive and interactive manner of working in which a mutual dialogue about the future and the monitoring of this future are central. The A3 approach claims that by using less paper, one can realize more direction, consistency, coherence and feedback. The essence of the A3 approach is the combination of simplicity, interaction, thoroughness obtained by using an evidence based quality model (the EFQM Excellence model). The A3 approach fits in with the type of leadership particularly required at the present moment to help organizations go successfully through the change processes desired. The best way to predict the future is to create it in collaboration with others.

A3 approach as a new management control approach. As a basis for the design, description and testing of management control or performance management systems, Ferreira and Otley (2009) defined a framework containing twelve characteristics in terms of questions. The key-questions for the characteristics they address are: (1) What is the vision and mission of the organization and how is this brought to the attention of managers and employees? (2) What are the key factors that are believed to be central to the organization’s overall future success and how are they brought to the attention of managers and employees? (3) What is the organization structure and what impact does it have on the design and use of performance management systems? (4) What strategies and plans has the organization adopted and what are the processes and activities that it has decided will be required for it to ensure its success? (5) What are the organization’s key performance measures deriving from its objectives, key success factors, and strategies and plans; how are these specified and communicated and what role do they play in performance evaluation? (6) What level of performance does the organization need to achieve for each of its key performance measures (identified in the above question), how does it go about setting appropriate performance targets for them, and how challenging are those performance targets? (7) What processes, if any, does the organization follow for evaluating individual, group, and organizational performance? (8) What rewards -financial and/or non-financial- will managers and other employees gain by achieving performance targets or other assessed aspects of performance? (9) What specific information flows -feedback and feedforward-, systems and networks has the organization in place to support the operation of its performance management systems? (10) What type of use is made of information and of the various control mechanisms in place? (11) How have the performance management
systems altered in the light of the change dynamics of the organization and its environment? and (12) How strong and coherent are the links between the components of performance management systems and the ways in which they are used (as denoted by the above eleven questions)?

Using this framework the approaches to management control can be assessed from a holistic perspective. In chapter 2, the author of this study presents an analysis of an assessment of the A3 approach based on these twelve characteristics. This analysis shows that the A3 approach accommodates all twelve characteristics. This is why the first research question: ‘To what extent does the A3 approach meet the characteristics which apply to a management control system?’ can be answered positively. Next to the characteristics of Ferreira and Otley (2009), the author uses in his description the four levers of control of Simons (1995) and the view on trust as presented by Robbins (2006) as main fundaments of the A3 approach. The four levers of control of Simons are: belief systems (for example, core values), boundary systems (for example risks to be avoided), diagnostic control systems (for example, critical performance variables and interactive control systems (for example, strategic uncertainties). According to Simons, these levers mutually determine the performance of an organization. Robbins (2006) distinguishes six game rules for increasing trust: Integrity, Competency, Consistency (reliability, predictability), Loyalty and Openness. In a comparative analysis conducted by nine independent controllers, the A3 approach appeared to obtain good scores on the four levers of control as defined by Simons (1995) and on the game rules for the strengthening of trust (Robbins, 2006) compared to other commonly used management control approaches.

A3 approach as a tool for supporting leadership in realizing purposeful and goal-oriented change

The second conclusion in chapter 2 concerns the degree to which the A3 approach supports the leadership required for achieving purposeful and goal-oriented change. To answer the question: ‘In which way does the A3 approach support the characteristics of transformational leadership?’, an analysis was made of the leadership theories mostly associated with the management of change. This analysis shows that the concept of transformational leadership (Bass, 1985) is linked to change most frequently. Also in two recent publications in the overview we made, a positive relationship is found between the degree of transformational leadership and goal-oriented change. Subsequently, the characteristics of transformational leadership were related to the A3 approach by describing in which way the A3 approach supports transformational leadership behaviour. This analysis shows large similarities between the two. The conclusion of the analysis is therefore that the A3 approach largely supports the characteristics of transformational leadership.

The value of the use of the EFQM Excellence model in the A3 approach. Chapter 3 deals with the value of the EFQM Excellence model. The third research question is about the use of the EFQM Excellence model in the A3 approach. When developing the A3 approach it was decided to use the nine criteria (four results areas and five enabler areas) of the EFQM Excellence model as a framework for the A3 annual plan. This model has thereby come to serve as an important basis for the A3 approach. Its use has led to the following research question: ‘What evidence is there of the use of the EFQM Excellence model?’. To answer this question a systematic review was conducted of articles in the databases of Business Source Premier. Based on selection criteria, 25 academic publications over the period 2005-2011 were selected and studied. In the analysis four evidence levels can be distinguished: levels A t/m D. The quantity of articles per level are listed as follows: A1 Systematic reviews (0), A2 Randomized trial (0), B Controlled trial (B1 Multiple measurement points (1); B2 Single measurement point (0)), C Non-controlled study (C1 Multiple cases, multiple measurement points (1); C2 Multiple cases, single measurement point (13); C3 Single case, multiple measurement points (2); C4 Single case, one measurement point (2)); Descriptive research (D1 Multiple projects (3) en D2 Single project (3)). The conclusion of the literature review (as ‘best evidence synthesis’) is that there is indeed evidence for the EFQM Excellence model and thereby also for the Dutch equivalent INK management model. It is therefore expected that the model will also have its value in the A3 approach. The essence of the contribution of the use of the EFQM Excellence model can be summarized as follows: the application of the model has a positive effect on the results of an organization; the model offers room for an individual interpretation and
is to a lesser extent prescriptive; the model offers the opportunity to integrate the organization’s improvement and development into the management cycle; it has proven to be an effective tool for comparison and benchmarking among and within organizations, and finally, the focus on the relations among the nine criteria contributes to a consistent and coherent organizational development.

The connections among leadership, management control and the concepts for organizations realizing change in a purposeful and goal-oriented manner. Chapter 4 deals with the relationships between leadership, management control and the concepts for organizations realizing change in a purposeful and goal-oriented manner. To gain an insight into the connections between management control dimensions and the concepts for organizations focused on purposeful and goal-oriented change and the influence of leadership on these relations, a quantitative study was conducted among 618 managers of 44 locations (of which 43 met the response requirement) of the Dienst Justitiële Inrichtingen (Correctional Institutions Agency) in the prison sector in 2007. In this research, management control was defined on the basis of three dimensions: performance management, management communication and management information. Leadership was operationalized in three types, two active: transformational and transactional, and one passive: passive leadership. Additionally, a validated questionnaire operationalized the management concepts for organizations engaged in purposeful and goal-oriented change (Ten Have, 2002; 2003) in terms of direction, consistency, coherence and feedback.

The first research question is: ‘What are the relationships between the dimensions of management control and the characteristics of successful changing organizations?’ To answer this question three hypotheses were formulated: (1) Performance management influences the characteristics of successful changing organizations, (2) Management communication influences the characteristics of successful changing organizations, and (3) Management information influences the characteristics of successful changing organizations. This study has confirmed all hypotheses; there are significant positive coherent relationships. Relative to the other dimensions, management communication has the strongest connections while those of management information are less solid.

The second research question investigated is: ‘What is the (moderating) influence of leadership on the relationship between management control and the characteristics of successful changing organizations?’ To examine this question one hypothesis was formulated and tested: ‘All three relationships as indicated in the earlier three hypotheses are strengthened by the involvement of active leadership in the form of transformational and transactional leadership’. This hypothesis has been partly confirmed. Active leadership (the construct of transformational and transactional leadership) appears to have a moderating (positive) effect on the relationship between management control and the effects in terms of the management concepts of Ten Have (2002). A further analysis has shown that active leadership also has a moderating influence on the connection between the individual dimensions of management control (and their construct) and the management concept ‘coherence’. The two separate styles, transactional and transformational leadership, were also investigated. From the analysis of the interaction effects it was concluded that the moderating effect is first and foremost the result of transformational leadership; its moderating influence is stronger than that of active leadership (the construct of transformational and transactional leadership). With respect to transactional leadership itself no significant moderating effects were found on the relation between the management control dimensions and the management concepts. In addition, a significant moderating effect of transformational leadership was observed on the connection between two dimensions of management control, namely performance management and management information, and the construct of the four management concepts (total effect). The above-mentioned research results were published in the international journal TQM and Business Excellence (Doeleman et al., 2012) in June 2012.

The effect of the implementation of the A3 approach on the concepts for organizations engaged in purposeful and goal-oriented change. To map out the effect of the implementation of the A3
approach, the study conducted in 2007 was repeated in 2009. In chapter 5 the following two research questions are central: (1) What is the effect of the implementation of an intervention, the A3 approach, on the management concepts of Ten Have (2002)?; and (2) What influence does leadership have on the degree to which this effect is reached? Also for this quantitative research hypotheses were formulated. These hypotheses concern the three pillars of the A3 approach: the A3 annual plan, the A3 management dialogue and A3 digital. They have been phrased as ‘The larger the degree of implementation of the pillar, the stronger the management concepts for organizations engaged in purposeful and goal-oriented change (construct) are perceived’. The first hypothesis related to the A3 annual plan was rejected. A possible explanation is that in 2006 most of the locations had already drawn up their A3 annual plans, whereby during the following years no additional change was experienced. The second hypothesis, about the contribution of the A3 management dialogues, does show a significant positive relationship with the changes in terms of the management concepts. And also the third hypothesis, concerning the connection between A3 digital and the management concepts, was confirmed by a weak significant positive relationship. The fourth hypothesis refers to the moderating effect of transformational leadership, formulated as: ‘The higher the degree of transformational leadership within the organization, the larger the effect of the A3 approach on the construct of the management concepts for organizations engaged in purposeful and goal-oriented change’. In chapter 4, the moderating effect of transformational leadership is determined. In addition, a mediation analysis shows a strong significant mediating and causal connection between transactional and transformational leadership. Transactional leadership has a causal relationship with management information, and transformational leadership with management information and management communication. Based on these partial results, the author draws the conclusion that the higher the extent of transformational leadership at a location, the larger the change in terms of the management concepts for organizations engaged in purposeful and goal-oriented change, resulting from the implementation of the A3 approach. The fifth hypothesis has formed the core of the research into the contribution of the A3 approach to the perception of the management concepts for organizations engaged in purposeful and goal-oriented change. The hypothesis which the author formulated is: ‘The higher the degree of implementation of the intervention, the A3 approach, the stronger the management concepts for purposeful and goal-oriented change (and their constructs) are perceived’. This hypothesis was confirmed by a significant positive connection. Based on this result the author draws the conclusion that the implementation of the A3 approach contributes to a positive development with respect to the perceived management concepts for organizations engaged in purposeful and goal-oriented change. In this way, the implementation contributes to the development of organizations which are more consciously focused on purposeful and goal-oriented change. This finding is one of the predominant conclusions of the study presented in this dissertation.

The conditions for a successful implementation of the A3 approach. Next to the quantitative research also a qualitative study was conducted. This qualitative study concentrates on the conditions for a successful implementation of the A3 approach. It was executed by means of group interviews with 34 management teams (see attachment 5). After analyzing the interview reports by using the grounded theory methodology, ten conditions for successful implementation were identified. Chapter 6 reports on this analysis. After the grounded theory analysis a cross-case analysis was executed by four researchers. The results of this analysis were tested on the correlation between the conditions and the degree of implementation. This test identified seven statistical significant correlations.

The first condition is facilitation at the start. A successful implementation asks for a good facilitation at the start. Facilitation prevents that A3 approach is being applied incorrectly, too loosely or too rigidly. The second condition is the need for concrete targets and actions. The third condition is the presence of an intrinsically motivated management. This means that the implementation is based on the perspective of ‘wanting to’ rather than on ‘having to’. In some cases this motivation may gradually develop, as it may take some time during the implementation process before the managers come to appreciate the ‘added value’ of the implementation of the A3 approach. Another condition for a successful implementation is the conduct to empower. Here,
concepts such as a bottom-up approach, trust, and taking responsibility play an important role. The fifth condition is prioritizing the implementation of the A3 approach. Another condition is the need for a change management tool. Many organizations are confronted with a multitude of changes taking place either simultaneously or in increasing succession. Often, the management control approach used does not offer the flexibility required to oversee all consequences of the changes for the annual plan in a structured manner. The seventh condition is the need for synchronization. Synchronization refers to consistency between the plans and generated management information. These seven conditions defined provide the answer to the following research question: ‘What are the conditions for a successful implementation of the A3 approach as intervention?’

The role of the conditions in the context of ‘early adaptor’ organizations within two sectors of the DJI. Parallel to the implementation of the A3 approach, two case studies were conducted in two ‘early adaptor’ organizations in the period 2007-2009: PI Oosterhoek and JJI De Hunnerberg. The objective of these case studies was to map out experiences in practice and successful methods of implementation. Chapter 7 focusses on the research question: ‘To what extent do the conditions also play a role for the ‘early adaptor’ organizations in two sectors of DJI?’ To answer this question, a more in-depth categorization was made of the experiences in practice. Additionally, in these two cases the practice was compared to the conditions for successful implementation as listed in the qualitative research study discussed in chapter 6. The predominant conditions as established in the PI Oosterhoek case study are the presence of intrinsically motivated management, conduct to empower, need for concrete targets and actions and interactive controls. During the time when the case study was conducted the reliability and accessibility of A3 digital still required attention. The conclusion of the JJI De Hunnerberg case study tells us that working with an internal help desk offers large advantages in the implementation of the A3 approach. Here prioritizing the implementation of the A3 approach and intrinsically motivated management appear to be decisive for their success. The lack of a more structured deployment of A3 digital, however, hampers an effective implementation. Also in this case all ten conditions categorized have been illustrated with examples from practice. The cross-case analysis shows that positive attention on the part of the manager and the input and involvement of staff members in formulating an A3 annual plan are of great importance. Some preliminary knowledge of the terminology framework, which is required in working with the EFQM Excellence model or INK-managementmodel (‘the common language’), is desirable. The horizontal exchange of the A3 annual plans among the organizational units is experienced as informative and useful. The largest difference between the case studies is that JJI De Hunnerberg chose a method in which the help desk had a central role, while PI Oosterhoek opted for a training approach of the top- and middle managers.

What is the influence of the A3 approach intervention on commitment and loyalty? Apart from the above-mentioned conclusions, Chapter 8 also formulates the answer to this additional research question, which rose during the research. To this end, a supplementary study was conducted at the Nederlandse Koninklijke Marechaussee (Royal Netherlands Marechaussee). The results show that after the implementation of the A3 approach, the respondents experienced an improvement in all areas measured (direction, consistency, coherence, feedback, commitment and loyalty). From this indicative study into the effects of the A3 approach it can be concluded that according to the experiences of managers, the implementation of the A3 approach truly contributes to the management concepts for organizations engaged in purposeful and goal-oriented change (Ten Have, 2002). The results indicate that commitment and loyalty are strongly related to the four management concepts for organizations engaged in realizing purposeful and goal-oriented change.

With this research, the author has aimed to build bridges between the fields of leadership, management accounting, change management and Total Quality Management. Using these bridges, he wants to address several research questions for future research. The first bridge is that between science and practice. The current research has reported on measurements of the effects observed within 44 locations of the prison sector, and has presented an indicative study conducted within the Koninklijke Marechaussee (Royal Netherlands Marechaussee). Further research is desirable into
the effects reached in other organizations or sectors, such as care, education, municipalities, provinces, etc., where the A3 approach has been adopted recently in the Netherlands. The second bridge is that between the ‘what’ and the ‘how’. Ten Have (2002) defined four management concepts with respect to ‘what’ it is that characterizes organizations engaged in purposeful and goal-oriented change. This study has provided a possible approach for determining ‘how’ these management concepts (including commitment and loyalty) can be influenced. Establishing the connection between the ‘what’ and the ‘how’ yields two new research questions: (1) What are other possible interventions which contribute to the management concepts of Ten Have? and (2) Are ‘commitment’ and ‘loyalty’ perhaps the fifth and sixth characteristic of organizations engaged in purposeful and goal-oriented change? The third bridge entails overcoming the boundaries between the fields of leadership, management accounting, change management and Total Quality Management. Many scientific fields are aimed at deepening the knowledge and understanding within their own domains. In addition, every field has its own methodological views. Follow-up research may therefore be focused on the methodological attunement of the disciplines. Finally, the author points to the bridge between the short-term and the long-term effect. Many business or management control methods seem to have a life cycle. Realizing sustainable improvement and maintaining focus in applying these methods are frequently mentioned bottle-necks. An essential question in this context is: ‘How can exemplary behaviour and disciplined application of management control methods be maintained in order to realize long-term effect?’.

This PhD thesis, which is the account of a challenging journey, is expected to contribute to the trust of managing directors and managers in the A3 approach. Inspired by the research results, they will hopefully obtain more insight into the meaning of the A3 approach and the conditions for its successful implementation. The extensive adoption of the A3 approach will facilitate larger-scaled research into experiences and effects. Tools for this purpose have been offered. Hence, I would welcome any new research on the A3 approach and on the interface of leadership, management accounting, change management and Total Quality Management.

To facilitate further research I published with Manon Diepenmaat a book titled One paper strategy, Deventer (NL): Wolters Kluwer (2014) with a more extended description of the A3 approach and the research results till now (Doeleman and Diepenmaat, 2014).