The HRM Cockpit. An instrument for developing and evaluating sustainable HRM in an organization.
Abstract

These days, a new approach is emerging in the field of Human Resource Management (HRM). Where strategic HRM has been the main approach for the last decades, nowadays more and more scholars are connecting sustainability to HRM (Ehnert, 2009, 2014, Kramar, 2014). There are many different conceptualizations for sustainable HRM, but most scholars agree on defining it as an extension of strategic HRM (Ehnert, 2009; Kramar, 2014). Thereby they agree that sustainable HRM has a broader focus on the organization’s performances than only accounting for the financial success of the organization. In fact sustainable HRM incorporates the triple bottom line, namely people, planet and profit (Elkington, 1997) and tries to balance these three different aspects. Even though literature (Ehnert, 2009, De Prins et al., 2014) provides different models about sustainable HRM, we face a lack of practical tools to explore and exploit sustainable HRM in an organization.

To develop a practical tool for monitoring sustainable HRM in an organization, an extended literature review was conducted, complemented with qualitative data (i.e. explorative interviews with practitioners, trade unions and a test panel) to define the field of sustainable HRM. The development of the tool started with a literature review in several different domains such as strategic HRM, sustainable HRM, HR scorecards and strategy mapping. The tool is based upon the idea of scorecards and measuring progress in realizing an HRM strategy.

Deriving from the literature review, two concepts were used as basic principles during the development of the tool. First, the idea of the HR value chain where an input, throughput and output model is presented as a strategic approach to sustainable HRM (den Hartog, Boselie & Paauwe 2004; Vanderstraeten, 2014). Secondly, to increase the applicability of the model, strategic mapping, starting with Kaplan & Norton (2004) and further developed in the field of HRM by Becker (2001) and Huselid (2005), is used as a guideline for implementing sustainable HRM.

After the literature review, a first draft of the tool was developed. We used the Delphi methodology to gain consensus among practitioners about the components and definitions that were used in the first draft of the tool (Linstone & Turoff, 1975). HR managers of twelve organizations participated in this part of the development. This resulted in a tool with 12 different components. The resulting tool can be used to guide social profit and public organizations in the development of a sustainable HRM or to support the evaluation of their current sustainable HRM. For each of the different components (12) in the tool, validated
questionnaires and measures are available so that organizations can collect data and measure their progress towards a sustainable HRM. Six experts in HRM were consulted to allocate the measures to the components. To further test the practical usefulness and correctness of the tool seven organizations were willing to test it more in detail and even started implementing it. Because of the importance of sustainability in organizations and the support that a sustainable HRM can provide in transitioning towards such an organization it is important to encourage more organizations towards sustainable HR. The developed tool provides organizations can guide them towards sustainable HRM. In addition more organizations can make the shift towards a sustainable organization based on a scientifically validated and evidence based HRM practice. Future research should reexamine the implementations that were made, their effectiveness and extend the implementation of the tool to different organizations.

Keywords: Sustainability, human resource management, sustainable HRM, strategic HRM
Introduction

In the past decades, many scholars agreed on the fact that HRM moved from an operational towards a strategic function in the organization. (Storey, 1992; Ulrich, 1997; Becker & Huselid, 1998; Jackson & Schuler, 1997; Armstrong, 2011; Boxall & Purcell, 2008; Kramar, 2014). Boselie (2010) describes how managers in the early 20th century became interested in optimizing work processes based on scientific measurements, resulting in the scientific management approach. Since then, the issue of measurement is never far away. Thinking strategically about HRM as a leading HRM approach also pays more attention to the measurement issue, with the central aim to measure the strategic ambition of the organization. The work of Becker, Huselid, and Ulrich (2001) introduced the concept of HR scorecards as the ultimate strategic monitoring and evaluation instrument to keep the organization on track for the realization of its strategic HR ambitions. Its goal is to align HR with organizational strategy (Boswell, 2006). In this view, HRM is an important catalyst to create organizational performance. HRM influences employees' behavior and attitudes to reach organizational goals (Becker & Huselid, 1998, 2006; Becker et al., 2001; Huselid, Jackson, & Schuler, 1997).

In the last decade, a new approach emerged, not only focusing on long term HRM but also on broadening its scope of interest. Together with global concerns about sustainability (e.g., global warming, scarceness of resources, awareness about pollution (WWF, 2012), scholars increased their interest in the introduction of sustainability into HRM (De Lange, 2005; De Prins, Van Beirendonck, Segers, & De Vos; Kramar, 2014). Demographic evolutions in Western societies lead to lower birth rates, combined with large numbers of retiring babyboomers. This implies difficulties for organizations to attract or retain qualitative staff. Ehnert (2009) and Kramar (2014) therefore consider human capital more and more as a scarce resource, making the comparison with for instance water or energy. To take this possible shortage into account, organizations should treat their workforce respectfully, which is more and more becoming an ethical standard in HRM. (Ehnert, 2009) Therefore, moving towards a sustainability approach in human resources management, in order to face this challenge, may be a promising strategy.

The idea of a more sustainable HRM has also grasped scholars' interest: De Lange (2005) was a pioneer by investigating the building blocks of sustainable organizations. More recently, De Prins et al. (2014) suggested the need for (more) sustainable HRM, and Kramar (2014) hypothesized that sustainable HRM may become the next leading HRM approach, beyond strategic HRM. However, literature about sustainable HRM is scarce. Apart from the fact that there is no consensus about a clear definition of sustainable HRM, Ehnert (2014)
also mentions the lack of ‘best practices’ and guidelines for organizations searching to orient themselves towards more sustainability. She considers research about organization structures, work systems and HR systems as a key challenge for scholars interested in HRM in function of the supposed impact of work systems on people’s work life. Nowadays, although scholars underline the need to implement sustainability into HRM practices, it is difficult for practitioners to fundamentally review their HRM and make the transition towards a more sustainable HRM. Our paper aims to fill this gap of knowledge and practice. We present a model and a tool to guide practitioners to make their HRM more sustainable and allows to follow-up their actions on sustainability.

Before presenting our model to implement sustainable HRM practices, we will turn our attention to the history and recent evolutions in strategic HRM. Our model and tool are meant to support sustainable HRM practices, but are grounded in successful strategic HRM approaches. Therefore, we will first review the key concepts of strategic HRM and address the shortcomings that lead to the call for a more sustainable approach.

Second, we will define sustainability and conceptualize sustainable HRM, followed by a discussion on the relationship between strategic and sustainable HRM.

In the third part of this paper, we will focus on our model and tool and describe the methodology and way to use it.

Finally, we will present limitations and implications, and a research agenda. This research paper is only a first step in a more profound conceptualization and practical tool that needs further fine-tuning and external validation.

**Approaches to HRM**

**Strategic HRM**

Situation. Strategic HRM (SHRM) originated in the 1970s and 1980s, in an era where professionalization became more and more necessary due to low economic activity. Boxall, Purcell, and Wright (2007) describe strategic HRM as “those HR strategies designed to improve organizational performance”. Wright and McMahan (1992, p. 298) refer to it as “a series of planned HR activities and deployments designed to achieve an organization’s goals”. These definitions focus on the strategic aspect of HR activities: Strategic HRM as a focus on HRM in order to improve organizational outputs (Armstrong, 2011; Schuler & Jackson, 1987; Wright, Gardner, & Moynihan, 2003). SHRM provides guidelines for organizations to orient their human resources practices on an overarching organizational strategy. This vertical alignment (Boswell, 2006) is necessary for SHRM to create value for organizations. Strategic HRM contributes to organizational performance by developing
several mediating factors, such as higher productivity, positive social outcomes, or lower turnover. Positive evolutions on these social and human factors lead to positive outcomes in other domains, and, ultimately, to successful financial and non-financial results (e.g., Collins & Clark, 2003; Evans & Davis, 2005; Huselid, 1995). Thus, when SHRM is successful, organizational performance will increase due to the planned and strategic contribution of HRM. Lengnick-Hall, Lengnick-Hall, Andrade, and Drake (2009) provide a more extensive definition of SHRM, incorporating a second crucial characteristic. They state that SHRM “covers the overall HR strategies adopted by business units and companies and tries to measure their impacts on performance”. By talking about measurements, Lengnick-Hall et al. (2009) address an utterly important feature of SHRM: SHRM is not only limited to planning and implementing alone. To evaluate practices implemented through SHRM, organizations need to follow up and measure specific outcomes. This allows them to know the contribution of SHRM to organizational goals. It also makes continuous evaluation or adjustment possible by repeating measurements at specific time intervals. This measurement culture makes SHRM more accountable in function of desired HR outputs and final impact, based on more sophisticated measures such as ROI and creating added value approaches (Phillips & Phillips, 2012).

**Strategic HRM Instruments.** In the past, scholars have developed instruments to support this measurement approach and make it easier and more accessible for practitioners. Although there are numerous different systems, some are very well known and used. Kaplan and Norton’s (1996a,b; 2004) Balanced Scorecard is probably one of the most well-known and used examples. It offers a structure to HR managers about which data to collect in order to investigate whether their strategy is successful. Other examples include the HR Scorecard (Becker, Huselid, & Ulrich, 2001) and the Workforce Scorecard (Huselid, Becker, & Beatty, 2005). All those instruments have in common that they provide practical guidelines about how to translate desired outcomes or a strategy into specific organizational actions and outcomes. Another important question is why SHRM is effective. We also need to address the logic behind SHRM to fully understand why implementing specific practices will lead to organizational outcomes. Therefore, two models are useful: The HR Value Chain (Guest, 1997), and strategic mapping (Kaplan & Norton, 2004).

**HR Value Chain.** The idea behind strategic HRM is that managing employees’ behavior and attitudes will result in positive outcomes for organizations (Ulrich & Brockbank, 2005; Wright et al., 2003). Models about SHRM show us why it is an effective technique to improve organizational results. Generally, such models follow an input – throughput – output flow. One of these models is the HR Value chain of Guest (1997). The framework describes how an HR strategy (input) can be translated into specific employee behaviors (throughput),
and consequently organizational results (output). Simply said, the HR Value Chain aims to explain why and how HRM processes will create value for an organization. It is not only a strategic instrument, but more precisely, a mapping of causal relationships to build a value chain from HR systems and practices towards organizational outcomes. The value chain unravels the intermediate processes and outputs that link HR input with organizational outcomes. The original model contains six causal steps, but it has been extended by den Hartog, Boselie, and Paauwe (2004) and Vanderstraeten (2014). Here we will only shortly summarize the HR value chain to explain the logic and relevance for SHRM and our paper. For a detailed overview, we refer to the works of Guest (1997) and den Hartog et al. (2004) who provide detailed descriptions about the model.

First, an organization needs to develop an HR strategy. This is a statement that contains the organization's intentions about HR management and short or long term goals, aligned with the overarching organizational strategy. Second, HR systems and practices must be developed to support HR managers at implementing the HR strategy. Those systems go hand in hand with the HR capacity, reflected in a vision, strategic insight and knowledge about HR to use systems and practices effectively. The implementation itself is the next step in the HR value chain, resulting in employees' direct contact with HR practices. At this stage, they face the impact of HR practices and systems, for instance by having planning interviews with their supervisor. Line managers or supervisors are in the position to implement HR practices ‘on the floor’. They have the important task to communicate efficiently, and in this role they are the link between employees and the HR department to signal problems or concerns. This role makes line managers crucial actors in the HR value chain, since they have the influence and knowledge to shape their employees’ actions and behaviors. Actions of employees are coordinated by their supervisor and are plan of a broader HR strategy. When all of these processes are aligned to each other and based on a result-oriented approach, the employee output will follow automatically. Employee outputs, such as productivity, job satisfaction or high commitment, are results of HR implementations at the level of the employees. These outcomes are mediating factors that will lead to organizational outcomes (e.g., Collins & Clark, 2003; Evans & Davis, 2005; Huselid, 1995). The HR value chain contributes to SHRM and to our aim of developing a new tool because it shows the causal steps between the intended HR policies and practices through a clear HR strategy and the ultimate goals (organizational performance).

**Strategic Mapping.** While the HR value chain shows how HR processes are related to each other and to organizational outcomes, the value chain remains quite general. The focus is not organization-specific and in order to be used in practice, one needs to ‘operationalize’ the steps and name the concrete behaviors or actions to clarify the causal
The aim of strategic mapping is to work in a structured way, it visualizes how organizational goals are tied to specific behaviors and actions of employees, and initiated by HR policies and practices. Visualizing relations between actions and goals clarifies why specific actions will lead to outcomes. The relationships between concrete goals and concrete behaviors is shown in a strategic map. As such, a strategic map is a blueprint of how an organizational strategy will be concretely implemented and how it leads to organizational results. It clarifies how and why employees' behaviors, perceptions, or motivation will contribute to the realization of organizational goals (Butler, Letza, & Neale, 1997; Kaplan & Norton, 1996a,b; Lawrie & Cobbold, 2004).

Also contrary to the HR value chain, strategic mapping does not focus on HR processes alone. Its aim is to help managers implement a specific strategy and evaluate its effectiveness in terms of financial and non-financial outcomes (Banker, Chang, & Pizzini, 2004). The technique can be applied in a broader context as well, and we will rely on this methodology to create a causal chain in our model as well. Thus, by combining the approach of strategic mapping and the HR value chain, we aim to develop a tool that offers guidelines for HR to influence employees in order to reach organizational goals.

**Measurement in SHRM.** Strategic mapping is a specific way of thinking and analyzing drivers of success in an organization. By thinking thoroughly about relations between management practices, it is possible to identify the key factors that lead to organizational success. Following this analysis, actions and measurements can be planned and implemented, in order to create the desired behavior on the employee level, and evaluate whether this indeed leads to success. The strategic mapping makes clear which specific drivers are at stake, and consequently, which concrete drivers to consider for following up through concrete measurements (Banker et al., 2004; Kaplan & Norton, 1996).

**Criticism on SHRM.** As mentioned before, measurements are utterly important in SHRM. The results of using an HR value chain and a strategic map can only be evaluated when organizations collect the relevant data. In strategic HRM, the focus of evaluation is often economic: organizations are interested in a monetary return of investment of their HRM implementations (Huselid, 1995, Pfeffer, 1998, Richard & Johnson, 2001). Specific results in this domain are for instance the monetary profit, market share, or absenteeism, which can also be seen as a costly phenomenon for organizations. And although the importance of financial health for organizations cannot be denied, the focus on financial profit is also one of the most important criticisms on SHRM. According to several authors, organizational outcomes are more than monetary outcomes. Anno 2015, it makes sense to look at other...
aspects of organizational performance as well, since they may (indirectly) be related to positive long-term outcomes as well (Avery, 2005; Dunphy, Griffiths, & Benn, 2007).

Another criticism on SHRM has to do with the focus on stakeholders. SHRM aims to make organizations more efficient and profitable by shaping employees’ behavior and attitudes. To evaluate strategic HRM practices, managers look at the relationship between HRM and financial organizational outcomes. As Friedman (cited in Kramar, 2014) states, SHRM emphasizes organizational responsibility towards the owners of the organization, rather than to other stakeholders (Kramar, 2014). The interests of other stakeholders such as unions or the own employees are somehow neglected. This may not be immediately problematic, but a larger interest for their issues may result in positive outcomes for the organization as a whole (e.g., lower turnover, less union actions and thus higher productivity) and opens the door for corporate social responsibilities and other societal interests.

This lack of interest for human well-being in organizations is the key to understand the call to make a transition from strategic HRM towards a more sustainable approach (Kramar, 2014). In the following section, we will therefore address the topic of sustainability and sustainable HRM.

Sustainability

Situation. When talking about sustainability, people usually consider it as a long-term, durable, or systematic approach to society (Leal Filho, 2000). The roots of the concept are difficult to trace, but the Brundtland report (WCED, 1987) represents a milestone in the development of sustainability in the world. The commission defined sustainable development as “development that meets the needs of the current generation without threatening those of the future generations”. Research by Ehnert (2009) indicates that organizations show a growing interest for sustainability, and define sustainability as a means to reduce their environmental impact. As Ehnert (2014) states however, sustainability is more than environmental management: In recent years, social sustainability (social, ethical behavior) and human sustainability emerged as two related, but equally important concepts, next to ecological sustainability (Docherty, Kira, & Shani, 2009, Pfeffer, 2010, Wilkinson et al., 2001, Zaugg, Blum, & Thom, 2001). The model of Elkington (1997) presents the three forms of sustainability in a comprehensible way. Elkington (1997) was amongst the first authors to put sustainability on the research agenda, by making the link between ‘general’ sustainability and sustainability as a specific strategy for organizations. According to Elkington (1997), organizations need to consider three bottom lines to take the full cost of doing business into account. Moreover, they will only be sustainable when they give attention to each of the three factors. The three bottom lines are represented in his “Triple P model” (see Figure 1) that
focuses on Profit, People, and Planet. Profit represents the traditional view on organizational results: corporate profit, financial gains or more generally positive performances. Focusing on People implies that organizations try to be socially responsible, take care of employees’ well-being and treat them respectfully (1997). When organizations value the People pillar, they also acknowledge their impact on society, e.g., by relying on human capital to make profit. By offering jobs, organizations create incomes for their employees, but also for society by paying taxes. The last pillar, Planet, refers to the ecological impact of organizations. While ecological concerns were neglected for a long time, it became increasingly important to take care of the environment when major ecological crises started to emerge in the last part of the 20th century. As a result, the Planet pillar is the most developed and sustainability used to be considered mostly in terms of ecological issues. Recent evolutions raise the question where we stand today, considering the three bottom lines of sustainability. In this light, a study by Pfeffer (2010) revealed that ecological (planet), but also economical sustainability (profit) are far more developed in organizations than social or human (people) sustainability. This underlines the need for organizations to pay attention to the third pillar as well.

**Sustainability in HRM.** People in organizations are the core business of HR departments (Huselid, 1995, SHRM, 2011). If there is a need to become more sustainable in managing employees, people management actions should start from the HRM department. As we described already in the introduction, HRM has undergone many transitions to arrive

![Figure 1. Triple P model of sustainability (Elkington, 1997).](image)
at a crucial crossroad today (Becker & Huselid, 2006; Boselie, 2010). Many organizations nowadays use strategic human resource management to a certain extent. Research by the authors of this paper (forthcoming) indicates that most organizations in Belgium apply strategic HRM to a certain extent. More specifically, we asked HR managers of a sample of 190 organizations whether their organization has a formal HR mission and vision, which role HRM plays in their organization, and to which extent they use specific KPI’s to support their HRM. First, 118 of the 190 organizations (62.1%) indicated to have a formal mission. The result for a formal vision was somewhat higher: In 130 (68.4%) of the organizations, a formal vision for HR is written down. Next, on a 4 point scale questioning the role of the HRM department in the organization, organizations’ mean was 3.09 (SD = 1.01) with the scale going from 1 (the HRM department is not involved in decisions about the organizational strategy) to 4 (the HRM department makes decisions (together with other actor) about the organizational strategy). Finally, we asked whether organizations used several KPI’s or organizational data to support their HRM. We offered 20 possibilities (e.g., absenteeism, turnover, motivation, number of strikes, evaluation of training,...) and the mean was 15.19 (SD = 3.42) All these measures are indications of strategic HRM (Pearce & David, 1987) since they show that organizations think carefully about the direction of their HRM and use measures to evaluate their implications. Our results show that SHRM is nothing new for most organizations: Most organizations use KPIs and assign an important role to their HRM department. The fact that SHRM seems to be used by many organizations and has shown its merits doesn’t mean however that SHRM is the ideal end state of HRM. Recently, Kramar (2014) provided an interesting definition of strategic HRM: “It links people management policies and practices to the achievement of organizational outcomes and performance, most particularly financial and market outcomes.” This recent conceptualization of SHRM is one of the first that explicitly mentions people management policies, although such policies were of course implicitly referred to in older definitions. In this light it is interesting to refer to Storey (1992) who describes the difference between the hard and the soft sides of HRM. Strategic HRM focuses mostly on the hard aspects such as return on investment and calculating the added value of employees in organizations. This does not mean that soft aspects such as human relations, job security, commitment, and work life balance are not taken into account, but often they are not the first interest. The definition of Kramar (2014) could be interpreted as a sign of an ongoing transition towards a more sustainable approach in SHRM, with more attention for the soft aspects. However, in the same definition, the targeted outcomes are still economical/financial, while sustainability means that other kinds of explicit outcomes should be taken into account. Therefore, we argue, together with Kramar (2014) that this is not an evolution within strategic HRM, but instead, an evolution towards a new, more sustainable and more people oriented approach in HRM.
We already addressed the fact that human capital is seen as a scarce resource. Therefore, organizations need to handle this resource sustainably. In the traditional economic view on HRM, human resources are merely seen as a production factor such as building materials, machines, etc. and HRM considers people as objects, which can be laid off when they are no longer needed (Brewster & Larsen, 2000). Organizations relied on HRM mostly to “hire and fire” people only, whereas there was merely attention for development or well-being of employees (Wilkinson & Townsend, 2011). This is in contrast with Helfat et al. (2007) who stated that human resource is a particular resource with its own needs, with individual goals and potential mobility. The statement of Helfat et al. (2007) represents a sustainability approach in HRM. Sustainability acknowledges that organizational practices, and especially HRM practices, have a wide range of outcomes: Apart from the impact on financial results, it recognizes potential impacts on individuals or groups within an organization, and on groups of people and the relationships between them (Kramer, 2014). Moreover, this approach also highlights potential negative or side effects on human, social and environmental outcomes.

According to De Prins et al. (2014), sustainable HRM is more than ‘general’ HRM because it emphasizes an optimal usage of and respect for the human workforce within an organization, together with a striving towards balancing the interests of employers, employees, and societal interests. This is also what distinguishes it from strategic HRM: the outcomes of interest are broader and go beyond financial gains. Environmental and social outcomes are valued as well: sustainable HRM encompasses outcomes on the level of people, performance, and planet. The idea of sustainable HRM thus means that people are not only ‘means’ and their value goes beyond the financial value they produce for organizations (Greenwood, 2002; Ehnert, 2009a, 2011). A study of Cohen, Taylor, and Muller-Carmen (2012) revealed that organizations incorporate sustainability principles in their corporate strategy to reach specific outcomes: Attracting and retaining talent, maintaining employee health and safety, investing in skills of their workforce, supporting employees’ work-life balance, managing aging employees... These outcomes are not typically ecological, but belong to the social or environmental pillar of the triple bottom line. The fact that, in this recent study, organizations seem to put forward other than financial outcomes of their corporate strategy indicates a growing interest in the management of their workforce, with the central idea that HRM can play an important role to make organizations more sustainable. Ehnert (2014) defines sustainable HRM as “the pattern or emerging human resource strategies and practices intended to enable organizational goal achievement while simultaneously reproducing the HR base [inside and outside the organization] over a long-lasting calendar time and controlling for self-induced side and feedback effects of HR
systems on the HR base and thus on the company itself”. Ehnert highlights some other aspects of sustainability: Sustainable HRM has to do with reaching organizational goals, but from a long-term and feedback-oriented approach. This also shows that strategic and sustainable HRM are not necessarily opposite approaches: In fact, several aspects of strategic HRM such as the focus on goals are also present in sustainable HRM, albeit with a broader focus and a long-term perspective. The definition of De Lange (2005) and De Lange and Koppens (2007) distinguishes sustainable from ‘ordinary’ HRM by mentioning the emphasis on optimal utilization of and respect for the human workforce in an organization. Here the people aspect is more pronounced.

To summarize, most of the definitions of sustainable HRM mention to some extent the fact that organizations use their resources, including human workforce, with respect and in a socially responsible manner. However, the literature lacks concrete ‘best practices’ or guidelines to implement or to evaluate sustainable HRM. This lack of instruments to monitor sustainable HRM can be the reason why sustainable HRM practices in organizations are nowadays not common yet. We described the triple P model of Elkington (1997) already (see above). Elkington refers to this triple P-model as a particular manifestation of the balanced scorecard. He considers it as an extension that includes a broader scope but follows the same logic: measurements are a crucial characteristic of the balanced scorecard and are essential to use the instrument in a correct way. Elkington states that, by providing a framework that requires organizations to measure specific organizational outcomes, they will automatically pay attention to them. In this light, he refers to the fact that scorecards function as triggers for organizations to become more strategic in HRM. Applying the same logic to the three pillars of sustainability means that we could make it easier for organizations to focus on sustainable HRM tactics. By providing a structured tool to collect measurements on sustainable outcomes, organizations will automatically pay more attention to these specific outcomes, and be oriented towards more sustainability in their practices. This reflects our ambition to present the HRM Cockpit as a tool to implement, support, and evaluate sustainable HRM.

**HRM Cockpit**

In the past section, we described how the HR value chain and strategic mapping are used to link organizational strategy to organizational performance and outcomes. At the same time, we showed that the focus of SHRM may be too narrow for organizations to keep being competitive in a contemporary society and market where sustainability is becoming increasingly important. When evaluating organizational performance, managers should consider environmental, societal, and human capital aspects as well as the financial
We relied on both approaches (HR value chain and strategic mapping) to design the methodology of our model, because they proved successful in SHRM to implement specific strategies related to desired outcomes. Also, we extended this methodology to focus more on People and Planet as well as Performance as a way to incorporate sustainability in the tool. This results in a model following the logic of input – throughput – output - outcome. We chose “HRM Cockpit” as a name for our model/tool. This name symbolizes its purpose to head organizations into a sustainable human resource management direction. As a cockpit, it provides HR managers with the necessary tools and procedures to (1) orient the organization in the direction of sustainability, and to (2) monitor whether the organization is still heading towards the desired final destination and ambition. In the next paragraphs, we will describe how the model was developed, present the final model and explain how practitioners can use it. We will conclude by pointing the strengths and limitations of the model and offer suggestions for future research about the HRM Cockpit.

Development of the HRM Cockpit

Methodology

The HRM Cockpit aims to be an instrument to use in practice, but based on existing and validated theories. Therefore, we need to focus on academic and practitioners’ experience and professionalism to develop the HRM Cockpit. To guarantee the usefulness of the model for practice, without losing the scientific background, we followed a stepwise approach that allowed systematic interaction between both points of view. All steps are described in the sections below. An important remark concerns the participants involved. In different steps of the model development, different parties were involved, making it impossible to provide a typical ‘participants’ section in this paper. Instead, for each step, we will describe which parties/participants were involved or consulted.

Literature analysis. The research started with a thorough investigation of the literature on SHRM, sustainability and sustainable HRM. The search for relevant literature had two goals: (1) We used the web of knowledge database to find recent theories in the literature on the relevant topics and we consulted standard books of pioneer authors in the field of SHRM and sustainable HRM. (2) Furthermore we made an analysis of existing tools and methods to implement strategic HRM. The most relevant models were retained for further exploration and integration into the HRM Cockpit. In this first, preparatory step, no other parties than the authors of this paper were involved.

First draft. We relied on existing models and the logic of the HR value chain and strategic mapping to create the structure of the HRM Cockpit. This resulted in a four-phase causal input-throughput-output-outcome model. Each of the phases consisted of several
The HRM Cockpit

concepts, all of them are described in detail under the ‘Results’ section of this paper. The HR value chain and strategic mapping approach resulted in a successful implementation of strategic HRM and by expanding them with the principles of sustainability (People and Planet), we expected that organizations would be triggered to become more sustainable in their HRM when they use the HRM Cockpit. As in the previous step, this step involved only the authors of the paper as well.

Consultation of practitioners. To ensure the HRM cockpit to be useful for practitioners, we organized consultation rounds between ourselves and 12 HR practitioners from 12 different organizations, varying in size from very small (5 employees) to large (over 2000 employees). Beforehand, we also installed a steering group of representatives of different sectors to monitor the development of the HR cockpit and to receive continuous feedback on the cockpit. When the first draft was ready and discussed by the steering group, we sent the draft version to the 12 practitioners with the request to review the model, the causal relationships and the terminology used in the different phases. They also provided feedback on the lay-out and gave general remarks. We collected the feedback and integrated all information to create a new version of the model and manual with the well-known Delphi methodology (Linstone & Turoff, 1975). This methodology was developed as a method to obtain consensus of opinion between a group of experts, using a structured format of questionnaires and feedback. The technique is widely used in settings where consensus between different groups of experts is needed. Linstone and Turoff (1975) refer to the communication process between the different actors as the success factor of the technique. We used it to reach consensus between the academics’ and practitioners’ view in a structured and planned way. The process of sending out the (new) version of the HRM Cockpit and gathering feedback from practitioners was repeated three times to ensure that every partner agreed on the characteristics of the model. Thus, we relied on the Delphi technique to fine tune our model, since we wanted to use an iterative path to reach the final model and reach agreement about the according measurements (see further). In this step, the steering group and 12 HR practitioners were involved. The steering committee is formed by the three authors of this paper (2 males, 1 female, all researchers on the topic of human resource management) and and 6 representatives of different sectors: 3 men and 3 women, all with several years of experience in HR management. The 12 HR practitioners were 6 men and 6 women. Their experience in HR varied from 3 years to over 20 years. They were contacted through the network of an organization offering HR consultancy, and through the mailing list of a Belgian magazine about HR with the question whether they wanted to participate in a try-out of our HRM Cockpit.
Consultation of unions and advisory committee. Since unions are strongly related to HR decisions and play a role in setting up some important HR policies, we decided to consult and involve this stakeholder in the development of the HRM Cockpit as well. Therefore, the three major unions in Belgium (belonging to the catholic/centered, socialist/left-wing, and liberal/right-wing political spectrum) were consulted to provide us with their feedback. The union representatives were positive about the model and only advised to made minor changes, such as wordings, some clarifications, and lay-out. We adjusted the model accordingly and moved on to the next phase of testing the model. The parties involved in this step were 5 representatives of the three biggest unions.

Testing in practice. The HRM Cockpit was extensively tried out to check where practical problems could occur, whether instructions were clear, etc. Therefore we contacted seven organizations who, after receiving the necessary information and instructions, agreed to apply the model in their organization. These organizations were randomly chosen, taken into account they represented a variety of sectors and businesses. Although the HRM Cockpit aims to be a self-use instrument, in this phase we guided each organization through the use and gathered feedback by observing group discussions. This would allow us to fine tune the instructions, or add or remove specific questions in the manual. Again, these discussions were based on the Delphi methodology in order to reach consensus between practice and academia. Another advantage of this phase is that we used the process and results of these seven organizations to develop cases to incorporate in the manual of the HRM Cockpit. These cases show practical examples of how different organizations use the HRM Cockpit.

Validation of the components of the HRM Cockpit. After integrating the feedback of the seven try-outs, the model was almost ready. We turned back to academia in this phase, for a final validation of the components. As is described below, every phase of the model consists of three different components and in order to facilitate the use of the model, every component contains specific measurements, observations, inspirational questions and suggestions (see further).. The measurements were allocated to specific components (e.g., measurements of job crafting belongs to “Performance and talent management”, measurements of transformational and coaching leadership belong to “Leadership”; empowerment, ethical behavior of employees belong to “Sustainable behavior of employees”). In order to ‘validate’ the allocation of (1) 52 measurements to components and (2) 12 components to phases (input-throughput-output-outcome), we consulted six experts in HRM research and discussed the model with each of them individually. We explained the purpose of the model and then asked them to allocate each of the measurements to the most fitting component and do the same for the components to the level of the phases. Although
we expected this to be a tough step, the experts were remarkably unanimous about the places of the proposed measurements and components. Of the 52 measurements to allocate, there was no agreement about only 4 components. We solved the issues of no agreement by group discussions. The 6 experts placed the 12 components unanimously under their theoretically assumed phase, indicating a high reliability.

**Workshop with HR practitioners.** After integrating the feedback of the seven testing sessions, a workshop with practitioners was executed for a first try out and a to collect final feedback. The feedback collected in this workshop was mainly practical, we incorporated it in the final version of the model and manual.

**Results**

**HRM Cockpit**

The HRM Cockpit and its components are described in the sections below. The Cockpit is presented visually in *Figure 2*.

**Impact.** Huselid et al. (2001) define customer, financial, and operational success as the end goals of their model. In the HRM Cockpit, financial outcomes can be translated to the P of Performance. We refer to these results as ‘Impact’ because the results of using the HRM Cockpit are expected to have an impact on People, Planet, and Performance. Keeping in mind the importance of satisfied customers, we suggest that customer satisfaction can be a part of performance outcomes. Therefore, we suggest people as the second outcome. With ‘people’, we refer to all involved stakeholders of an organization (employees, managers, union representatives,…). This means we address the criticism that SHRM focuses too much on one stakeholder, the managers/owners (Kramar, 2014). Outcomes on the level of people can be job satisfaction, low turnover intentions, low absenteeism, high well-being, high commitment,…

A third important aspect of HR Success is an organization design that supports a good climate and a sustainable mindset of employees, which goes hand in hand with their behavior.

These three aspects of the HRM Cockpit compose the HR Success. This terminology indicates that organizations need three components to reach HR Success, which will, in turn, lead to impact on planet, performance, and people: (1) having a suitable organization design, (2) sustainable behavior and (3) the presence of key competences of the workforce.

**HR Processes.** The processes responsible for the HR Success are the third important pillar of the HRM Cockpit. They are the core processes of HR and are responsible
for the HR successes. As in the model of Huselid et al. (2005), effective leadership is one HR process that is utterly important to translate HR strategy into specific procedures. Line managers have a lot of influence on their employees’ behavior, motivation, employability,… and can be the link between ‘the floor’ and the (HR) management. Another important factor is performance and talent management. By assuring that employees get the right support to learn the skills they need, or by making the right decisions in selection procedures, employees will be able to perform on a high level. Performance and talent management are important throughout employees’ whole career, and are always more or less present on lists of high performance work systems (e.g., Arthur, 1994; Delery & Doty, 1996; Huselid, 1995; Pfeffer, 1995.
Figure 2: Visual representation of the HRM Cockpit.
Performance and talent management are important during employees’ whole track at one organization:

- Entrance and exit: Recruitment and selection should be based on organizational strategy and the organization should be attractive to the desired profile of applicants. Also, selection should be based on specific core competences. HR managers are responsible to ensure that all these practices are performed properly.
- On the job: (HR) managers must manage their employees’ effort and performance. They should outline result-oriented goals, supervise and evaluate their employees’ performance to monitor whether employees perform well or should be supported or reoriented.
- Talent development: A successful organization will actively try to develop and rely on their employees’ possibilities: through organizing specific training, HR can support the development of its employees. Furthermore, assessment of the employees’ potential is a part of talent development.

The third HR Process is organizational development and communication. Implementing a sustainable HR strategy is impossible without considering organizational culture and structure. HR responsibilities can actively contribute to the development of an appropriate culture and structure by providing knowledge about which organizational design is necessary in order to create a positive work environment. HR will select or develop one or more specific designs that are adapted to the HR policy, the HR strategy and the organizational strategy. Communication structures and flows should be efficient in order to allow every employee to know which decisions are made and how every single employee can help to reach organizational goals.

**HR Input.** The last pillar of the HRM Cockpit addresses the input: This has to do with the HR strategy and the capacity and methods or systems to support organizations towards a more sustainable HRM. Thus, implementation of sustainable HRM practices builds on the presence of the three input factors. The HR capacity of an organization is the first necessary condition to allow HR managers to implement sustainable HRM. It represents all necessary knowledge, competences and attitudes of the HR department in order to analyze and solve problems or answer HR related questions. It is more than merely the number of people working in the HR department. Creating impact with specific HR implementations will only be successful when the HR department and employees have a large and professional knowledge base about the organization and HR processes.

Next, organizations’ HR capacity contains an HR strategy, together with a clear vision and view on the organization’s future. In line with the corporate strategy, an HR strategy
The HRM Cockpit depicts the general characteristics of the role of HR in an organization, and clarifies how HR will help to realize organizational goals. It contains concrete goals that show how HR impacts the organization and that allow evaluation of HR practices as well.

Finally, successful implementation of HR strategy is only possible when organizations possess the necessary tools and systems to support HR processes. The HR systems and practices are thus the last component of the HR input: they represent for instance a good administration, tools to plan interviews with supervisors, to register individuals’ needs and competences, to register courses and interests of employees etc. In short, every HR related tool that an HR manager or supervisor needs to implement the HR strategy must be present in the organization.

Use of the HRM Cockpit

Two directions. The HRM Cockpit contains arrows in two directions, both representing a way of using the tool. When organizations want to orient themselves towards more sustainability in their HRM, they start working with the HRM Cockpit for the first time. Therefore, it is necessary that they follow the approach that is also used in strategic mapping: Starting by defining clear goals on the corporate level, and step by step ‘coming down’ in the organization to define which preceding steps or actions are needed. Thus, they will start thinking of which (sustainable) outcomes to reach on performance, people, and planet, and which organizational processes or actions are needed. This means that the first step is to look at the right hand side of the model, to define the impact goals. Impact can simultaneously address the three P’s, for instance, reducing paper use (Planet), increasing employee commitment (People), and achieving at least the same level of financial gains (Performance). It is only possible to think of preceding actions, of what is needed in the organization, when the goals are clearly defined. We also add the organizational strategy as a final input to formulate the 3 P’s ambition in line with the idea that HR strategy is vertical aligned to organizational strategy (Boswell, 2006)

The next step is to think of which HR successes will relate to the respective outcomes, thus going from right to left in the model. After one has identified which HR successes will lead to the outcomes, the HR processes must be considered: Are there any points to improve or to put in place to consider performance and talent management, leadership, or communication and organizational development?

Finally, HR managers should think of the input of the HRM Cockpit: whether the required capacity, methods, systems, and instruments are present in the organization or not. HR managers also need to define a good HR strategy: they must think of which role HR will play in the organization and how it can help to reach the organizational outcomes.
To support this (theoretical) way of thinking, we include specific questions and suggestions in the manual of the HRM Cockpit. Every component has several questions to give practitioners inspiration and show them how to think. For instance, the question “Is there a specific policy towards leadership styles in the organization?” belongs to the component of Leadership (HR Processes) and helps practitioners to think of their current leadership and whether this needs to be changed or not. The question “Is the HR policy known by and acceptable for all employees in the organization?” belongs to the component of HR strategy (HR capacity) and points the attention of the HR manager to the importance of an accepted HR strategy.

When all of the previous steps are carried out carefully, organizations are ready to implement their HR strategy to increase their sustainability. While the development of the strategy and actions is done by going through the model in the opposite direction, i.e., from right to left, the implementation should be carried out from left to right: before any impact, HR success or process can be observed, organizations must assure that the necessary HR capacity is available. When the HR capacity is sufficient to support successful implementation of HR processes, HR managers can start with the next step: working on the core processes of the HRM Cockpit, finally leading to HR success and 3P outcomes.

Measurements. For every aspect of the HRM Cockpit, we included, next to the suggestions and inspiration questions, measurements to make it possible to answer the questions in a reliable way. There are 52 possible measurements, and every component has also a number of observations/registrations (for instance, absenteeism, financial situation, budget for a ‘green policy’, age and gender statistics of the workforce,….. Measurements or registration of data are an important aspect of a strategic approach towards HRM (Lengnick-Hall et al., 2009; Kaplan & Norton, 2004). By incorporating these in our model of sustainable HRM, we increase the focus of organizations on specific causal relations and the key success factors. Also, they can use them as baseline measurements, and see evolutions over time. By relying on existing and well-known measurements, the results will show high validity and reliability. Therefore, the data can be collected and compared on multiple times.

In short, the HRM Cockpit is a tool to orient organizations towards a sustainable human resource management. The tool is built on an input-throughput-output-outcome flow and guides practitioners through these four phases. To start working with the HRM Cockpit, we advise to go through the model from outcome to input and think of which actions in the organization can be taken to reach organizational outcomes on the 3 P’s (Planet, People, Performance). Once this decision is taken and practitioners have assured that their organization has the necessary knowledge and tools available, implementation can start.
This time the model should be followed from left to right. Suggestions for measurements and inspirational questions are available in the manual to facilitate implementation of a sustainable human resource management.

**Contributions and limitations**

Concerns about sustainability are prominent in today's society (WCED, 1987; WWF, 2012). Human capital for organizations is more and more considered as a scarce resource, meaning organizations feel more and more pressure to handle their employees in a sustainable way (Ehnert, 2009; Kramar, 2014). Although scholars have recently called for more research about sustainable HRM practices, evidence in this domain remains scarce. The key idea in many definitions of sustainable HRM is that it is a form of HRM that especially considers the needs of people in organizations. People are seen as the core of an organization, and sustainable outcomes can only be reached when people are taken care of on the long term. Sustainability is also a matter of outcomes. Instead of focusing on economic outcomes, sustainable organizations also value human and social outcomes. The foundation of this idea lies in Elkington’s (1997) model of sustainability that states that performance, planet, and people should all receive the necessary attention. Organizations also face a lack of practical tools to advise them to come to a sustainable HRM. We developed a “HRM Cockpit” to address this gap of practical knowledge. We started from two successful approaches used to implement and evaluate strategic HRM: the HR Value chain of Guest (1997) and the strategic mapping approach of Kaplan and Norton (2004). We extended them to incorporate the three pillars of sustainability into our model. After intensive collaboration with different stakeholders, we present practitioners a lean model with four steps to follow in order to make their HRM more sustainable. The model not only allows HR managers to implement sustainable HRM, it also allows to continuously monitor the development of sustainable HR and leads to regular evaluation of a sustainable HR strategy in an organization.

The HRM Cockpit has several merits when comparing it to existing literature or models. First of all, it is a model that puts a larger emphasis on sustainability than previous approaches. Like that, we address the recent calls for more sustainability in HRM practices (Kramar, 2014). Second, the HRM Cockpit is a practical tool with a scientific background: It contains questions and measurements to facilitate the use in daily practice for those who lack scientific knowledge. Questions can be used to detect topics where the organization has opportunities to become more sustainable, while the measures allow organizations to evaluate the effectivity of the changes. Another strength lies in its general nature: Every component contains a number of measurements and questions, which allow organizations to
choose their own strategy to focus on. For any organization, it is impossible to focus on every possible aspect of HRM. Therefore, deliberately picking the most important or the most efficient aspects and focusing on their relationship is how this model should be used. Every particular organization has specific needs, operates in a specific context, etc. Our model allows that every organizations focuses on the aspects that are most relevant given their nature, environment, history, culture, etc. As such, the model can possibly be used in a variety of organizations.

The academic base of our model is the fourth strength we would like to highlight. While practical tools or procedures sometimes emerge in practice only, we started from validated instruments and theories to guarantee that the HRM Cockpit is built on an academic background. Also, the measurement instruments in the model are all validated and their reliability has been proved. These are important steps towards a validation of our model. However, it should be tested whether the extensions to incorporate principles of sustainability are indeed useful. Will organizations score better on sustainability outcomes when they start using the HRM Cockpit? This is a question to be answered by future, longitudinal inquiries.

Multiple organizations have already tested and used the model and HR managers show great enthusiasm about it. However, we admit that this may not be sufficient to state that this model is the only working model and there may be other successful approaches to implement sustainable HRM. Another possibility is that the model can be ameliorated by extending it with some more concepts. Therefore, we call for other scholars to use the HRM Cockpit in their research.
References


