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**Faculty of Behavioural,  
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**The future of HRM:  
an analysis of the symposium  
'back to the future'**

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This master thesis is written as the final part of my master in Business Administration. With a bachelor in Psychology, doing a master in Business Administration has been quite challenging sometimes, but now that this master is coming to an end, I know that I can achieve more than I have ever thought. I am very happy and proud to present this final piece of work.

The topic of HRM had my interest from the very first moment that I started with Business Administration. Therefore, I was very excited when I got the opportunity to evaluate the HRM symposium 'back to the future' for my master thesis. Futures studies were completely new for me at the start of the writing process, but now I think it is a really interesting field of research. I've learned a lot during the writing of this thesis and I got even more enthusiastic about the HRM field.

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## Summary

Nowadays, the HRM field is changing a lot. For organizations and researchers, it is of great importance to keep track of these changes in order to respond adequately to them. Within this master thesis, insight is created in the expected future of the HRM field. The goal of this study was to critically look at the data of the symposium 'back to the future' and to describe what is expected of the future of HRM, so that organizations and researchers can respond to this.

During the symposium 'back to the future' the participants brainstormed using the World Café method, which enables large groups to think together in a constructive way. The themes 'doing HR without HR', 'HR analytics', 'from I-nnovation to WE-nnovation' and 'smart HRM' were discussed during the day. The outcomes of the symposium were coded and analyzed. In addition to the outcomes of the symposium, interviews with scientific and business experts were held to expand the research and to broaden the amount of knowledge per theme.

It was found that a few concepts seem to be important when considering the future of HRM. The most recurring concept is technology. Technology will cause most of the changes in the HRM of the future. In the first place, technology will lead to more standardization. It is of great importance in the future to consider how tasks and responsibilities should be divided. Who is responsible for what? And if there will be less human resources, should HR still be a separate function in organizations or is that no longer necessary and can the function be subdivided? Secondly, due to the standardization and automation caused by more advanced technology, there will be a growing amount of available data, that can be used for several purposes. In the future, the data that will be used for HR analytics and for datafication should become more accurate than it is nowadays. HRM practices could be used to support the accuracy of the available data. Another theme that is considered important in the future of HRM is employee-driven innovation. In order to stimulate this more, organizations should create a learning organization in which employees feel supported to come up with ideas, they should think about team composition and they should set the right context.

Based on the findings in this study, organizations can prepare themselves for the future. In order to do so, they have to be aware of the changes and improvements in technology that arise. When they are aware of what is changing, they can decide which consequences this will have within their organization and respond to this in an adequate way.

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# 1. Introduction

The HRM field is changing a lot nowadays. There are new and more actors in HRM processes, smart industries are appearing, technology is developing, and so on. All these developments and innovations influence the HRM field. For organizations and researchers, it is of great importance to keep track of these changes in order to respond adequately to them. Within this master thesis, insight will be created in the expected future of the HRM field, thereby critically evaluating the output of the HRM-symposium 'back to the future'.

On Tuesday the 10<sup>th</sup> of November 2015 the symposium 'back to the future' took place on the occasion of the 25<sup>th</sup> anniversary of HRM technology and innovation. The symposium was held at the University of Twente. During this day over hundred participants assembled to brainstorm about the future of HRM. They brainstormed using the World Café method. The overarching theme of the day was thus the future of HRM. Since this is a rather broad theme, four subthemes were chosen to structure the discussion. The four subthemes were all discussed in a separate room, in a so called World Café. The World Café method is a very applicable method for large group discussions and it is increasingly used.

The domains in which the World Café method is used for research are countless (Brown & Isaacs, 2008). The method has been used in lots of different cultures, among different age groups, with different underlying purposes and in many different types of organizations. According to Brown and Isaacs (2008), it doesn't matter who uses the World Café method, the process just works. The past couple of years, the method has been successfully used in differing research domains, such as education, politics, information technology, conflict resolution, and evolution biology (Brown & Isaacs, 2008). Researcher Aldred (2011) also confirms that, the World Café method has spread to diverse sectors in the last years, and that diverse types of participants can take advantage of the conversational method.

Since the World Café method is an attractive method that enables large groups, from different backgrounds and hierarchies, to think together, by creating a welcoming and relaxing environment in which people feel free to speak up (Pulles et al., 2015; Tan & Brown, 2005), it is a method that is also good applicable for HRM situations. This is because in HRM (research) situations there are always employees or researchers with different backgrounds and functions who have to work together in order to come with solutions or helpful outcomes. By using the World Café method, they have a usable guidance to share their knowledge and to get the most out of it. During the symposium 'back to the future' the next four themes were discussed: doing HR without HR, HR analytics, employee-driven innovation, and smart HRM. In the next paragraphs these themes will be described in more detail.

## 1.1 World Café 1: Doing HR without HR

In this World Café the discussion was mainly about the development of the human resource management (HRM) function and responsibilities. Over the past years, lots of things have changed regarding the HRM function. Talent managers and business allies are newly created HRM roles with the purpose to add value. There also came new delivery channels to provide HRM services. At the beginning, it was meant that these changes were only to outsource the administrative HRM activities. However, more and more HRM activities are being outsourced, resulting in various stakeholders, inside and outside the organization, who together are responsible for the HRM activities of the organization. Besides that, employees themselves are also getting involved in this, since they are increasingly responsible for the management of their own careers and personal development. Different studies

suggest that the traditional HRM activities are gradually moving away from HR advisors and HR managers: line managers and supervisors get more HR responsibilities, shared service centers anticipate to transition into transformational HRM service provision, and further digitization of HRM services is planned. The future development of HRM responsibilities was discussed in this World Café, according to the following four themes:

- HR Shared Service Centers
- Competences and responsibilities of HR professionals
- HRM & Technology
- Employees' involvement in HRM

### 1.2 World Café 2: HR analytics: hello! (and goodbye?)

The second World Café was about HR analytics. Over ten years ago it was already mentioned that the traditional service-oriented focus of HR should be extended to a more 'decision science', in which decisions about human capital are enhanced (Boudreau & Ramstad, 2005). This way the HR function should be able to find out what it means to be strategic, and to enhance decisions about the human capital. By now, this paradigm shift is slowly taking place. The construct of 'decision science' is nowadays referred to with terms like 'HR analytics', 'workforce analytics' or 'people analytics'. More and more positive experiences of companies confirm the success and usability of HR analytics, which among other thing led to the fact that advanced HR analytics is becoming mainstream (McKinsey, 2015). HR analytics is increasingly seen as an unmissable tool for HR (Boston Consulting Group, 2014). But on the other side it is also known that organizations are having a hard time to let HR analytics become a reality within their organization. Besides that, it is also suggested that lots of organizations don't have a clear vision of the ideas about the future of HR analytics within their own company. In this café there was attention for the survival of HR analytics within the HR function, how HR analytics can contribute to business goals, the role of technology to support HR analytics, outsourcing of HR analytics, teaching HR analytics at universities, and the focus HR analytics research. In order to get a clear discussion, there were four themes to discuss. Every table in the café had one of the following themes:

- Technology: future technologies to support HR analytics
- Employees' responses: generating employee acceptance for HR analytics
- Competencies: teaching HR analytics at universities
- Practices: future applications of HR analytics

### 1.3 World Café 3: From I-nnovation to WE-nnovation

The theme of this third World Café was innovation. Since the focus of the most successful organizations has moved from productivity and efficiency to innovation, this has become an important theme for discussion. It is known that all innovations in an organization come from people within the organization, at all levels. Not just the R&D department can innovate, every employee can. However, the HRM practices don't always support this; innovative HRM solutions deserve more attention. The IBM research (2011) showed that only 50 percent of the participating HR leaders did something with their main business challenge, namely driving creativity and innovation, whilst all participating HR leaders admitted that this is their main challenge. The research also showed that the HR leaders admit

that HRM plays an important role in promoting innovation, but nearly none of them use screening tools to select creative job candidates. This are all examples that show that organizations know that innovation and creativity are important factors within their company, however they don't fully use this knowledge. In this café the focus was on WE-nnovation, where every employee is a potential source of innovation. It was discussed if this is a desirable direction, how a safe climate for sharing ideas can be created, what the management can do to stimulate innovation, etc. The discussions were directed by the following questions:

- Innovation in HRM Practices
- Innovation in Networks
- Implementation of Innovations
- Employee-Driven Innovation

#### 1.4 World Café 4: Beyond digitization: what is smart HRM?

The last decades, digitization has extended its scope of impact. The term 'digital economy' was first mentioned by Tapscott (1995), and in the beginning it was about automating work processes and value creation in the production chain. Digitization is nowadays more and more coming to the core of the knowledge work, involving decision making and taking over cognitive challenging tasks. This has far-reaching effects for organizations. The HRM field enters smart businesses with convergence of human, digital, and high tech dimensions. Former traditional HRM tasks may also become further digitized, or even robotized. The boarders between consumption and production will become tangled: a consumer will convert more into a producer instead of into a co-producer. The consequence of this 'do-it-yourself'-economy is that the HRM field is forced to become smart, where one may expect the future workforce consisting of the 'consumer as a producer and a costless employee'. Within this café, smart HRM was discussed, according to the following four sub-themes:

- New competences for HRM Professionals
- Datafication of HRM
- New jobs in smart industries
- HRM practices in smart industries

Because during this symposium a lot of interesting things were discussed by the participants, it is desirable to get a clear overview of the most important things that were said about the future of HRM and what should be considered in the future. These conclusions and knowledge can be used by organizations to make them aware of what is going to change in the HRM field. This way they can respond to these changes in time and adjust their HRM policies if necessary. Researchers could also use this information to set an outline for their further research. Therefore, the goal of this master thesis is to critically look at the data of the symposium 'back to the future' and to describe what is expected of the future of HRM, so that organizations and researchers can respond to this.



## 2. Methods to study the future

The method that was used during the symposium 'back to the future, the World Café method, will be explained in detail in this chapter. At first a broad explanation of futures studies will be given in order to get an overview of the diverse futures studies. After that, starting with the beginning of the method, the characteristics and design of the World Café will be illustrated. The World Café method will also be compared with other popular research methods. Then some examples of successfully applied World Café studies will be demonstrated, the sustainability of the World Café method for HRM will be explained, and finally implications of the method will be written down.

### 2.1 Futures studies

Futures studies are nowadays more and more of importance within a broad range of corporations (Hirshfeld, 2001). The futures studies are used for several purposes, with the common goal to be of help and to say something about the future of a corporation. In a study of Schwarz (2008) it is emphasized that a growing number of corporations are using future studies and its methods, and Schwarz states that this suggests that there is a very strong interest in these kind of studies in the field of management. The growing interest in futures studies is also visible through the various publications that recommend corporations to pay attention to their future and to develop foresight (Schwarz, 2008).

Within the HRM field no articles were found that already studied the future of HRM. The issues from the past couple of years till may 2016 of the journals 'Futures', 'Foresight' and the 'European Journal of Futures Research' were viewed in this regard. The scientific journal 'Futures' did publish an article about the future of work, in which they looked beyond binary hierarchies, however they didn't consider the future of HRM as a function. This highlights the relevance of this study.

To get an overview of the different kinds of futures studies, ideas were borrowed from Schwarz (2008), who considered futures studies in a corporate context, with the goal to support strategic future oriented action. A distinction was made between the following methods (Schwarz, 2008):

- Quantitative forecasting  
The goal is to make quantitative predictions in order to make the best possible decision about future events, by extrapolating data and trends. The main types of quantitative forecasting are the 'exploratory method' and 'time series'. The exploratory method tries to correlate two or more variables, and time series uses past trends in order to predict the future trend. These methods are used when there is past data available and when it is likely that some patterns will continue in the future. Normally, these methods are applied to short-range decisions.
- Simulation and gaming  
These methods can both be seen as being decision-aiding technologies that involve mathematical modelling.
- Delphi technique  
The main goal of the Delphi technique is to reach consensus. In order to achieve this consensus a group of experts will tackle a problem that lies in the future. The experts don't have contact with each other, but they fill in questionnaires to give their opinion. During several rounds of filling in questionnaires and getting feedback, the goal is to reach consensus. This method is mainly used as a tool for making predictions about not too complex subjects.

- Scenario technique  
This technique has the goal to identify existing trends and uncertainties and to combine them in a picture of the future. This picture doesn't have to cover all eventualities, but it has to discover the boundaries of future outcomes. This technique does not use past data and does not expect past observations to be continued in the future, but it just tries to consider possible developments, which may be connected to past experiences.
- Issue management and strategic early warning  
The goal of issue management is at first to identify and monitor social, technological, political and economic forces and trends. Then implications and opinions should be interpreted and defined. After that, strategic action should be set to deal with the situation. The underlying goal of this is that early signals of possible environmental change can be identified and detected already underway.
- Creativity  
Creativity contains all the methods which foster creative thinking about the future. The World Café method is one of these creative methods. The creative aspect of the World Café method enables participants to come up with a lot of creative and new ideas and to speak out freely. The World Café method is very suitable for exploratory research (Chang & Chen, 2015). Therefore, the World Café method is extremely suitable for the goal of this master thesis to describe the expected future of the HRM field, since this is very explorative.

## 2.2 The World Café method

### 2.2.1 The history of the World Café method

The World Café method has emerged in January 1995, during a strategic dialogue on Intellectual Capital (Brown, 2001). The second day of the strategic dialogue had to take place in the garden of David Isaacs and Juanita Brown, but due to the heavy rainfall the dialogue was moved inside. In their living room, Isaacs and Brown put up several TV tables, decorated with tablecloths and stationary. Brown (2001) described the unexpected situation of that day the following way:

“And so it was. The rain falling, hard. People huddling around the TV tables, learning together, testing ideas and assumptions together, building new knowledge together, adding to each others’ diagrams and pictures and noting key words and ideas on the tablecloths” (Brown, 2001, p. 5-6).

After this second day of the strategic dialogue, the idea for the World Café method arose. Several years went by, in which the method was explored and expanded. Nowadays, the World Café method is a well-known, accepted manner to host group dialogues, since it activates the collective knowledge of a group (Brown, 2001; Brown & Isaacs, 2005). Among other things, this is a reason why the World Café method is becoming a popular method for brainstorming.

### 2.2.2 Characteristics and design of the World Café method

The World Café methodology is a quite simple but effective and flexible format used to host large group dialogues (The World Café, 2016). The World Café method is built on seven integrated design principles, that form the basis of the concept and the process (The World Café, 2016):

- Set the context  
It is important that enough attention is paid to the reason of bringing the people together and to what the organization wants to achieve. With keeping these things in mind, it enables the organization to consider and choose the right elements to realize the goals.
- Create hospitable space  
By creating a hospitable space, people at the Café will feel safe and welcome. When people feel comfortable and safe, they will come up with more creative ideas. The organization of the World Café should consider how they can contribute to creating a welcoming and pleasant atmosphere.
- Explore questions that matter  
Knowledge will come up when people are triggered with compelling questions. Therefore the organization of the World Café should find questions that fit the present group well. The questions should help attract the collective energy, insight, and actions of the people.
- Encourage everyone's contribution  
It is important for the Café hosts to give every participant the space and opportunity to participate. The hosts should actively encourage all participants to participate in the process, while on the other hand also respecting that some participants want to participate by solely listening.
- Connect diverse perspectives  
A distinguishing characteristic of the World Café method is that there is the opportunity to switch between tables, to meet other people, to actively contribute to the thinking process, and to link the discoveries to ever widening circles of thought, thereby creating more and more insights.
- Listen together for patterns and insights  
The quality of the listening to each other is one of the most important factors determining the success of a World Café. Not just listening to what is said and shared, but also to what is not said. The participants should be encouraged to pay attention to themes, patterns and insights, so that the larger whole can be seen.
- Share collective discoveries  
The conversations that are held at one table are, as part of the whole, connected to the conversations at the other tables. The last phase of the World Café, the 'harvest', is meant to connect these different parts and to make the pattern of wholeness visible to all the participants. The small groups can share their patterns, themes and experienced deeper questions with the larger group.

This form of 'café learning' enables large groups to think together in a creative way, as part of a single, connected conversation (Tan & Brown, 2005). The method is easy to use and often leads to surprising results (Tan & Brown, 2005). The method gathers information by stimulating café dialogues, through creating a warm and welcoming environment in which people feel good and thus feel free to speak up (Pulles, Schiele, Veldman & Hüttinger, 2015). To set up and host a World Café, the basic model of the World Café method can be used. This model consists of five elements, based on the abovementioned design principles (The World Café, 2016):

- Setting  
To create an appropriate setting, the setting of a café should be the starting point. There should be a couple of small tables with optimally four chairs per table, blocks with paper, and (colored) pencils. The environment should have a relaxed atmosphere to give the ultimate café experience.

- Welcome and introduction  
To give the participants a warm welcome, the host begins with an introduction to the World Café process, thereby explaining the etiquette of the café, answering questions and setting the participants at convenience.
- Small group rounds  
The World Café process starts with a round of twenty minutes, where the small groups around the tables can discuss a topic. After these twenty minutes, each person at the table moves to another different table. It is an option that one person per table stays as a 'table host' to welcome the new group and to inform them about what was discussed before. In total there should be a couple of these twenty minute rounds, with continuously rotating table members.
- Questions  
Prior to each round there will be a question that is set up for the specific purpose of the World Café. There can be some different questions that complement or built upon each other to give direction to the conversation or the same question can be used for a couple of rounds.
- Harvest  
After the discussions and/or conversations in the small groups, participants are asked to share their findings and insights with the larger group. These results are reflected visually. This can occur in varying ways.

Thus, in a World Café dialogue different conversations at small café tables are linked to each other since people move to other tables to discuss different questions or sub-topics with different people (Tan & Brown, 2005). All these conversations are connected to the same main topic. By discussing the different subjects this way, the knowledge sharing will grow (Tan & Brown, 2005). At all tables the key ideas are written down, so the key insights can be shared and saved.

### 2.2.3 Comparison with other research methods

Brennan and Ritch (2010) say that The World Café is in fact a specialized form of the conventional focus group approach. Focus groups can be used for theory building and for gaining more insight in behavior. The main idea of a focus group is to allow a group of people to share their ideas and opinions in regard to their experiences (Murgado-Amenteros, Torres-Ruiz & Vega-Zamora, 2012). This form of sharing thoughts allows for collaborative thinking. This is comparable to the idea of the World Café method, but the World Café method has multiple advantages over other approaches to guide group conversations, such as focus groups and (semi-)structured interviews (Pulles et al, 2015). The participants in the World Café method are active co-researchers that explore a particular topic, they are not interviewees. So the World Café method gives an opportunity for open discussion in which the participants can gain new insights from the experiences of the other participants. Besides that, the World Café often evaluates the outcomes of previous café rounds, which allows the participants to confirm, remodel, sharpen, or reject the previous findings. Through this process, the robustness of the outcomes is increased.

Another research method that is considered as a competitor is the Delphi technique. This technique is used to reach consensus among a group of participants (Hsu & Sandford, 2007). Within the Delphi technique, data is collected anonymously, through the use of multiple questionnaires. The use of multiple questionnaires has as a purpose that participants can adjust their opinions in the meantime, based on the information that is provided in previous rounds (Hsu & Sandford, 2007). The similarity with the World Café method is that both methods try to collect data of a specific group of

respondents that discuss a specific topic with each other in several rounds. However, the data gathered through the World Café method is much more useful for research, since it is much richer and less ambiguous. Within the World Café method, the data gathering consists of multiple data collection methods, such as the free interpretation notes on the paper blocks, and a voice or video recording, instead of only predetermined questionnaire answers. The World Café may take more time, but in the end gives more valuable data.

#### 2.2.4 Application of the World Café method

In the past years several studies have been conducted in which the World Café method has been successfully applied. Pulles et al. (2015) used the World Café method in their study in order to gather theoretical conceptualizations. They wanted to research how a firm can become a preferred customer, however, decent literature about the conceptual variables and their coherence wasn't available. To solve this problem they used the World Café method and successfully discussed these topics, eventually leading to hypotheses on the link between the constructs and preferred customer status. This way they could continue their study about becoming a preferred customer.

Schiele and Krummaker (2011) also successfully applied the World Café method in their study. In this study, the objective was to discuss risk management systems with various interested firms and universities. The initiators of the World Café first made a conceptual model containing the categories by which to access different factors of risk. Then there were several discussion rounds, with table rotations after the different rounds. Every table has a table host, to guide the discussion and to share previous ideas and knowledge at that table. Each table discussed a predetermined risk category, so that all risk categories were discussed and so that potential risk sources and indicators for monitoring these risk sources were identified by the end of the day.

#### 2.2.5 Limitations of the World Café method

There are plenty successful stories of applied World Café methods in diverse settings, like in large multinationals, small non-profit organizations and educational institutions. However, there is a lack of evaluative studies that have examined the effectiveness of the World Café method (Fouché & Light, 2010). Until today, very little scientific evidence can be found for the effectiveness of the World Café method.

Another drawback of the World Café method is that, apart from plenary, large group discussions where every participant can attend in the discussion, it can occur that one person never attends a table that discusses a particular topic. This way, his or her knowledge, is not taken into account in the conclusion.

### 3. Method

#### 3.1 Setting of the symposium

The symposium 'back to the future' was set up in such a manner that comparison of the different cafés in possible and allowed. In order to reach that comparability, all cafés had the same characteristics. Each of the four cafés consisted of four tables. In each café, the four tables addressed their topic from the four same perspectives: what, who, how and why? The main aim of each café was to formulate five research questions regarding the café theme. The discussions took place in four round, lasting respectively 40, 25, 20, and 15 minutes. In order to ensure a constant time duration of the rounds, each café had a time watcher. Further, each café had a café leader and three moderators. They were in charge of regulating the café. After each round, the participants switched tables, but they always stayed in the same café. The participants of the symposium were free to choose in which café they wanted to participate. However, once they choose one, they had to stay there for the rest of the day. After the four discussion rounds the question in all cafés was: 'what is the most important/interesting research question/topic for the future of HRM?' All participants were given stickers, with which they could vote on the statements they found most important. They could use an unlimited number of stickers, however, they could only put one sticker per bullet on the flip charts. In order to set up the symposium in the best possible way, Niels Pulles and Petra Hoffmann, two experts in this field, were involved in monitoring the design.

#### 3.2 Research design

To say something about the symposium, all the available data gathered at the symposium was analyzed. The available data consisted of flip charts and some voice recordings. At first the flip charts were analyzed. At all the café tables the participants wrote down their ideas at the flip charts. In order to digitize the data, all the written text at the flip charts was retyped. This resulted in 24 pages of typescript. This typescript was then coded by hand. With different color markers the returning themes/topics were coded. As can be seen in figure 1, sentences coded with blue, are all related to the users of the HR Shared Service Centers. Using this coding technique, the whole typescript was coded.

After coding the whole typescript, the analyzing continued. This was done per café and per table. To start, the statements were sorted by topic and then by importance. At the end of the discussion sessions during the symposium, at every café the participants had to choose the most important/interesting research questions or topics for the future of HRM. In order to choose they had to put a sticker next to a statement at one of the flip charts. At the end, the bullet with most stickers, was considered most important. So, to examine the importance of the bullets per topic, the sentence accompanied with most stickers was estimated the most important, according to the symposium participants. The amount of stickers per bullet is represented by the number between the brackets (see appendix A, B, C and D).

World Café 1  
HR Shared Service Centers

- dubbeling van processen
- oude proces blijft maar moet administratief gevolgd worden
- processen op andere manier inrichten door gebruik systemen
- ~~systemen ingericht op processen IT-gericht en niet HR- of eindgebruiker-gericht~~
- ~~SSC en standaardisatie en geen customisatie~~
- ~~administratieve rol van het SSC~~
- ~~adviesrol richting lokaal HR~~
- aandacht binnen SSC ook naar SSC, welk effect op rol BP
- ~~Intductie SSC heeft geleid tot verplaatsing naar lijn~~ (minder lokaal HR)
- ~~veel aandacht voor systeem beleid, weinig aandacht voor gebruikers~~
- weerstand tegen gebruik systemen
- kwaliteit dalen, door deelname niet HR-professionals aan processen
- relaties business partners <-> SSC
- verschuiving naar meer expertise
- ~~in SSC alleen nog service management (BPO) en expertise, geen transacties~~
- ~~in welke mate hebben de klanten wat te willen binnen een SSC~~
- een SSC als een supermarkt; iedereen kan er vinden wat hij wil
- ~~SSC is in de basis een ondersteunend apparaat~~
- ~~verschuiving van cost naar profit center~~
- geen HR kennis nodig
- ~~gaan SSC in de toekomst meer bieden dan administratie~~
- ~~verschillende soorten diensten~~
- kan HR SSC de rol van de BP (lokale HR professional) vervangen?
- ~~kan en zo ja hoe, een SSC een profit worden?~~
- de mate van controle en first time right
- hoe borgen we compliance en hoe houden we data kwaliteit op orde? Zeker met analytics rol
- ~~heb je in een HR SSC nog wel HR kennis nodig?~~
- waarom nog HR SSC als je geen kennis
- HR analytics toekomstige rol veel beten binnen SSC daar zit een rol ook richting BP en management
- ~~toch geeft een lijnmanager ook geen tijd voor HR werk -> spanningsveld~~
- rolverdeling lijn versus SSC; hoe verdeling van activiteit? Op practices niveau? Of andere indeling? SSC bijvoorbeeld analytics
- lange termijn HR-processen vanuit de top. En daardoor niet door SSC. SSC doet korte termijn noodzakelijke dingen.
- ~~wat moet er met winsten/waarde van het SSC gebeuren?~~

hoe kan je processen en IT passen bij veranderende wens

- gebruikers
- rol van SSC
- SSC profit?
- rol HR-prof.
- standardization
- kwaliteit
- line managers
- employees

Figure 1. Example of the coding technique

When the different topics were identified and sorted, provisional conclusions were drawn, hereby taking the importance of the bullets into account. These provisional conclusions were then discussed with the four café leaders of the different World Cafés for a so called member check. The member checks were performed to improve the quality and reliability of the conclusions. During the member checks the findings were discussed to check the conclusions. After that, the conclusions were revised.

During the symposium the participants had to choose one café in which they stayed the whole day. Because of that, it can be the case that experts of specific HRM themes were not attending the café of their expertise. In order to overcome this and to create a wide range of knowledge regarding all the themes, scientific and business experts were interviewed. The four café leaders served also as the scientific experts, regarding their own café and field of expertise. The goal of these interviews was

to find out their corresponding professional and scientific opinions. The business professionals were also asked about their opinion about the future of the corresponding sub-areas of HRM. This way there are three perspectives per topic: the participants' perspective, the scientific perspective, and the business perspective. The café leaders, and thus the scientific experts, that were interviewed were (from café 1 to 4): Dr. Jeroen Meijerink, Dr. Sjoerd van den Heuvel, Dr. Anna Bos-Nehles, and Prof. Dr. Tanya Bondarouk. They are all working at the University of Twente, for the Behavioural, Management and Social Sciences department, specialised in HRM. The business experts that were interviewed were (café 1, 2 and 4): Peter Reilly (principal associate at the Institute for Employment Studies), Cor Polling and colleagues (HR transforming consultant at Capgemini), and Patrick Willer (workforce innovation consultant at SAP). Unfortunately, the interview about the third café couldn't take place.

### 3.3 Participants

In total 126 people participated in the symposium. Most of the participants came from the Netherlands, but there were also guests from Belgium, Spain, the UK, Denmark, and Indonesia. This were all people that work within the HRM field or are otherwise connected and/or interested in the HRM field. Some of them were (PhD) students, others were lecturers, researchers, directors, managers, professors, consultants, advisors, trainees, and so on. They were all from different universities and organizations. So a very diverse and varying group of people attended and participated in the symposium.



## 4. Results

In this chapter the results of the discussion sessions at the symposium and the results of the interviews will be shown per World Café.

### 4.1 World Café 1

#### 4.1.1 Participants' point of view

##### **HR Shared Service Centers**

The most important question about the role of SSC's that arose during the rounds is what the main goals of a SSC should be. What will be the tasks of the SSC, which functions will it perform, what kind of services are suited for the SSC? The question is if the SSC will do more than just the administration, or will it also take over other tasks. Besides that, people are curious how the cooperation between the SSC and the employees will be. How are tasks and responsibilities divided? In short, people want to know what the role of the SSC will be exactly. And when the SSC will play a bigger and bigger role within companies, what will be the role of the HR professional therein? Is HR knowledge still required within a SSC? Here arises a conflict; some people believe that HR knowledge is no longer needed within a SSC, but other people believe that the HR professionals are still needed, since they have the overview and can make connections. From this follows the question if the SSC can replace the local HR professionals and the HR business partners or are they still needed? And what is the impact on the HR Business Partners? It is good to figure out how the SSC can cooperate with the local HR and how they can divide responsibilities and tasks.

The role of the line manager is also important. The line managers will take care of the management of the different processes. When they perform better, there will be less questions at the SSC. However, this indicates that the line managers should always work flawless, in order to facilitate the operations well. But on the other hand, line managers don't have time for HR tasks, so how will the communication with the HR SSC's be? And how can they successfully control the HR managers, so that there won't be questions at the SSC. This puts them in a dilemma: they have to do more in less time. The optimal division of tasks between the line managers, HR professionals and the HR SSC should be considered carefully.

Besides the role of the management and the HR professionals, the employees are also important components of this floorer. The concept of employees will change, according to all the changing processes and responsibilities. Some employees will have to work at the SSC, but will they experience job satisfaction in this function? Especially when the SSC will be a standardized process, what will be their task and do they have career opportunities?

Most of the people believe that the SSC is about standardization and not about customization. In addition to figuring out how the SSC can cooperate with the local HR, it is wisely to figure out when a company wants a SSC to standardize, and when to customize. This choice can cohere with the choice for the division of tasks and responsibilities. In this, consideration should be given to indicators for standardization of customization.

While designing the SSC, besides customization or standardization, there is another important aspect that should be considered. The SSC systems are mostly focused on the IT processes, but they lose sight of the end-users. In order to get a functional SSC the processes of a company are changed to fit the IT systems. In the end, the users have to work with the system, so it should be good to get them involved in the system design process. In this respect it is good to have an idea of what the end-users need in relation to the SSC.

In the end, people are curious to the possibility of a SSC to become a profit center and how this should or could be accomplished. Nowadays, people see a SSC as a cost center, but if the SSC will play a bigger role in organizations, then how could it become a profit center?

And perhaps one of the most important questions that arose during this café is how to measure the success of the SSC. Because after all, the success of the SSC can tell if it was right to customize or to standardize, and if the division of tasks was done well, and if the end-users were able enough to work with the systems. Some people said that if there are any complaints, than the SSC is unsuccessful. This looks like the SSC should be a standardized process, in which mistakes are less occurring than in customized processes. But in here it is also good to consider if the quality gets worse if the processes are no longer performed by experts, but by 'normal' employees. So again it is the question if the HR knowledge is necessary for the SSC.

### **Competences & responsibilities of HR professionals**

The main question that arose at this table was how work will be organized in the future. Will HR still be a separate function? During the symposium lots of the participants had the opinion that HR has to develop its own functionality. Whether HR will be separate function or not, a very important question that remains is what knowledge, skills and attitudes are needed for (future) HR professionals to achieve business and HR strategy, or to achieve the organizational' goals. During the symposium the participants agreed that HR professionals will need (legal) knowledge, like knowledge of the business goals and strategy, knowledge of the business, and professional HRM expertise, and that the HR professionals will need particular skills/attitudes in coordinating, change management, communication and ethics.

Another question regarding the competences and responsibilities of the HR professionals that arose during the symposium is whether the HR department gives enough room to the line management to take their responsibilities. A recurrent theme was the shift from professionals to line management, and if this should take place or not. In the future it should be considered if this shift should take place, and if it does, how the line management and HR professionals will divide their responsibilities and how they will cooperate. Thereby it should be considered if there are differences between different organizational sizes, sectors and countries.

### **HRM & technology**

In the discussion about HRM & technology the participants mainly explored the advantages and disadvantages of technology within the HRM field. The biggest benefits seem to be that recruitment will get easier, communication will be facilitated, the organization will have less costs, and data can be used to learn about relationships and to eventually improve the organization. As the dark side of technology was mentioned the privacy; how can the privacy of all stakeholders be secured? People are also afraid for unintended consequences of technology. Besides that it was mentioned that the HR department is seldom involved in the development and design of the IT systems, which leads to incomprehension and problems in implementing it. There should be paid more attention to the end-users in the design phase. Thereby it is also of great importance that there is consistency in the company values and the systems that are implemented.

### **Employees' involvement in HRM**

When discussing the involvement of employees, one thing that came up was what the managers should do and what the role of the management should be. The most important answer to that

question was that managers become facilitators or coaches through goal setting; they should discuss with their employees how to keep their jobs. The development of employees was an important theme during this discussion. What became very clear during the symposium was that employees do want to develop themselves. As some of the most important interests of employees were mentioned: gaining skills, development, employability, goal setting, giving and receiving feedback. Almost all of these interests relate to the personal development of employees. The question that arose in here is who is responsible of this development. Some say that the line manager or HR professional should make this happen, others say that the employees themselves are responsible. A question that is somehow related to this, that also came up during the discussion was how to customize versus how to standardize HRM for employees. When you standardize HRM, is it then still possible to develop as an employee?

At this café table the discussion also came to the organization and its features. What is an organization? What are implications if there are blurry organizational boundaries? How should an organization cope with conflicting laws, how should an organization deregulate? What is the impact of the regulations on the contracts of employees? This are all questions that came up at this table that have an influence on the involvement of employees within HRM.

#### 4.1.2 Scientific point of view

The scientific expert believes that SSC's will still exist in the future, just because organizations have put a lot of time, money and effort in them. In terms of what they do, it can go two ways: the SSC's will be doing HR administration tasks at the lowest possible costs or the SSC's will become centers which collect and analyse data for the purpose of HR analytics. What also might happen is that the SSC's become too big and powerful and that they will decide how HR should be implemented. In that case the SSC will not just be an executing part.

The scientific expert also believes that the development of technologies will continue. However, technology will be used in a different way in the future. Technology will more be used to predict, which will become a task of the HR professional. This asks for other competences and responsibilities of the HR professionals.

Regarding the involvement of employees in HRM, the scientific expert wonders if there is an optimum in the amount of tasks and responsibilities for which the employees are responsible themselves and the tasks that should be done by the employer. Besides that, he states that the role of employees changes, due to the changing expectations that we have of customers/clients; we expect them to do more themselves. We should think about how to adapt HRM to that. That made the scientific expert wonder if there's an optimum in the amount of HRM that organizations should offer. We normally hypothesize that there is a linear relationship between HRM and achievements, which assumes that there is no limit for achieving; the scientific expert believes that there is an optimum in this. This is something to consider for the future.

#### 4.1.3 Business point of view

The business expert believes that SSC's will continue to be important in the future to drive efficiency and to reduce costs for large, complex and locational distributed organizations. They will enable technology and process solutions to be introduced that will facilitate standardization, thereby further driving down costs. He also believes that there will be a tendency to reduce the number of SSC's as much as possible and to locate them in low cost locations, thereby assuming skills availability, also to achieve financial savings.

According to the required competences for the professional role of HR professional, the business expert thinks that HR professionals will need the following dispositions, especially for business partners: confidence to challenge, a customer focus, solving problems, motivation to improve, flexibility to adapt, determination to make an impact, creativity, data and business awareness, awareness of technology, and being a chameleon.

The role of technology will mainly be to drive down the costs and improve the quality of HR. Besides that, technology will be used to facilitate distributed working, to make processes more effective, to drive standardization and to enable better data analytics.

The business expert states that the line manager remains the critical interlocutor with employees. This limits HR to deliver services like training, payroll, etc. This doesn't implicate that HR is not interested in employees, but the function of HR is at the organizational level.

## 4.2 World Café 2

### 4.2.1 Participants' point of view

#### **Technology: future technologies to support HR analytics**

Two future technology applications that may support HR analytics that were mentioned in this café were sensing and robotics. Regarding to sensing, the main question that arose is how can sensing support HR analytics? One possible application of sensing that was mentioned, is that sensors can automatically detect and sent data from employees. This data can then be analyzed. What should be considered is which sensing data will influence the performance of employees. Regarding the robotics, participants of the symposium wondered what the influence of robotizing will be on well-educated employees. And will the robot be leading, or is the human the leading one? It was also mentioned that HR analytics will develop from analyzing humans to analyzing robots; there will be teamwork between them. That will especially be the case if robots replace employees who cannot do their jobs efficiently enough. If that happens, it should be considered what and how humans can contribute to self-learning robots. So, the role of the human is something to take account of. Will the human still check the system, and how? During the symposium, the overall opinion was that the human will still need to ask the relevant question, so the human is still the most important part. The employee also has to decide which data should be shared and which data not. So, the human is still needed.

The rest of the discussion at this table was especially characterized by questions. The main challenge that was mentioned during the discussion at this table was linking HR to non-HR. According to the participants, this will be the main obstacle. Further, they wondered how the context does influence HR analytics, if data will be collected across organizational boundaries, how technology can bring in intelligence to make suggestions, to connect us and to give feedback.

#### **Employees' responses: generating employee acceptance for HR analytics**

The most important question that arose at this café table was what are the important factors that drive employees away from HR analytics, and what drivers are needed for employees to adopt HR analytics. In order to obtain employee acceptance, important things to take into account are the benefits for employees. So should the conclusions and results of HR analytics lead to visible follow up, and hypotheses and definitions of the benefits for employees should be there. This could be done, for example, to show from analytics in other areas how people can benefit. During the discussion at this table, the most important aspect to get the acceptance was that the benefit for the employees should be guaranteed. During the symposium it was said that the direct managers are the most important

players to create acceptance for a culture of leadership and trust, so they should play a role in communicating the benefits. Furthermore, it was mentioned that mandatory participation will increase resistance. Employees would be more willing to participate and eventually to accept HR analytics if this is voluntary.

During the discussion at this table, some other important things came up. The participants of the symposium think that it is very important that the results of HR analytics can be applied by the individual employees themselves. Employees should be motivated to apply it, and it should be clear how they can do that. Regarding the HR analytics itself, long term thinking should be stimulated, according to the participants. The business objectives should be translated to people drivers in order to define the data that an organization wants to analyze. The organization should thereby take into account that most data is available already and that HR analytics should be done dosed. Concerning the information of employees, the organization should make clear who has access to the data, what the data is used for and how long the data will be available; there should be clear rules.

### **Competencies: teaching HR analytics at universities**

The main question that arose at this table was how to benchmark HR analytics, compared to other disciplines? During the discussion the participants didn't come to a clear answer. The remaining of the discussing was mainly about how to teach HR analytics. According to the participants, if you want to teach HR analytics at universities, the following competences are needed: knowing that HR analytics is a team effort, knowing the client environment, understanding the process (communicating and listening), having a distant view. The participants at this table were wondering if HR knowledge is needed in order to teach HR analytics. In teaching it, we can learn from other disciplines. During the teaching process, both theory and practice should be dealt with, but it is preferred by the symposium participants to start with practice, since it is a complete new area.

A recurring theme at this table was 'disruptive thinking'. The main questions that arose were 'how can HR analytics contribute to disruptive thinking?' and 'which competences are needed for disruptive thinking?' Most participants thought that HR is able to think disruptive. The question thus remains how HR analytics can contribute to this.

### **Practices: future applications of HR analytics**

In what sector does HR analytics add the most value? That was the most important question at this discussion table. And can universities aid business by designing practical models? The participants also wondered what are factors that determine if HR analytics is needed, enterprise analytics is needed, or nothing should be done.

The participants of the symposium considered a couple future applications of HR analytics. The most important application, according to them, is that HR analytics should find evidence for the HR strategy. Related to that, HR analytics should aid policy decisions. Therefore, HR analytics should be robust and solid, but also fast and flexible.

### **4.2.2 Scientific point of view**

The scientific expert believes that we will collect data from a growing number of (external) sources. This can help us, but it will also lead to tension: what are we allowed to use for analytics? Technology will be an enabler of analytics and it can accelerate it, but it will depend strongly on the legislation and the ethical discussion.

Regarding the employee acceptance of HR analytics, it is crucial that from the beginning HR analytics will be put into service of the employees. A focus on the benefits for employees is essential. Employers should try to avoid that, when HR analytics will be really visible for employees, they will turn against it. Nowadays, HR analytics is progressing slowly and only some policies are changed due to the analytics outcomes, this is all far-away from the employee. Eventually organisations want to predict and intervene on an individual level, at that point it is important to take the employees into account, so they won't turn against it.

Teaching HR analytics at universities is something that should happen more broadly than it occurs now. It should not only be taught at HR educations, but also at other disciplines. Besides that, universities and companies should consider together which competences are needed and what is needed in practice in the coming years, so the education can adapt to that.

The scientific expert thinks that the separate HR function will be disappeared in a couple of years, and that an enterprise analytical function will arise. Simply because all the analytics functions will help to reach the same organisational goals, they will have to work together. If they work separately, they don't get each other's data, they don't see how they can complement each other, etc. So eventually there will be just one enterprise analytics function.

#### 4.2.3 Business point of view

The business experts think that the existing technology will be expanded and more advanced. They also state that future technology should be able to approach relevant data and directly present this, independent of the systems that are being used for personal, financial and organizational information.

The business experts all state that in order to obtain employee acceptance for HR analytics, the organization should be very transparent about which data it will gather, what it will be used for, what benefits this will have for the employees and for the organization. Thus in short, the employee should get insight in the HR analytics goals of the organization.

Teaching HR analytics at universities is a must. Especially the link with the practice and the challenges within there, is an important part that should be taught to students. Besides that, the technical analytical skills should be carefully taught.

In the future, HR analytics will mainly be used to support decision making, so this will be more effective. HR analytics will also enable that organizations can act more quickly, targeted and efficient at the market. This way, HR analytics will provide more profit, because organizations can act actively instead of reactively.

### 4.3 World Café 3

#### 4.3.1 Participants' point of view

##### **Innovation in HRM practices**

During the discussion rounds it became clear that a climate suited for innovation should be created in an organization in order to stimulate innovation. The participants think that the CEO is responsible for creating such a climate. He should be a role model for the employees, and thereby creating a climate in which making mistakes is accepted. Trial and error is important in this climate. The CEO should stimulate his employees to think about innovation. It was mentioned that in order to stimulate innovation, there should be a (digital) platform to communicate, so that a continuous dialogue with employees is possible. Within such a communication platform, employees could also share knowledge and learn from others, which can help them to think out of the box or from a different perspective.

Another idea was to organize central sessions to develop new ideas together. Employees that come up with ideas should also be rewarded for that.

The participants of the symposium wondered how teams should be created in order to be innovative and in order to implement innovation. Who builds those teams? How do you select people for those teams? Does HR play a role in building the teams for innovation? More general, the role of HR (practices) was discussed a lot at this table. Participants wondered how HR can really add value in the transition of organizations. How can HR work beyond their boundaries to empower innovation? How do HR managers have to experiment with the HR practices in order to create innovation? Can HR really make a difference in this, and are there particular (generic) HR practices that create change or innovation? The participants emphasized that the legislation should also be taken into account. The legislation and the culture in the Netherlands make it difficult; there are strict rules for employers and employees. It will be a challenge to create a good balance between legislation and an innovative culture. The participants do think that there should be HR practices that stimulate creative thinking, but what those HR practices exactly should be stayed unclear.

### **Employee-drive innovation**

The first thing that was discussed at this table was what we understand with the definition employee-driven innovation (EDI). The participants believe that EDI is the mobilization of employees to become innovative, by using their innovative thought. With EDI there will be responsibility for everyone, and you will get ideas from more people than just from selected employees. But on the other hand they wonder whether all employees should be involved in innovation.

Further the advantages and disadvantages of EDI were discussed. Employee-driven innovations have a lot of advantages, according to the participants: it offers satisfaction, engagement, more involvement, it creates motivation, it stimulates better performance; so it should be attractive for employees. However, it also has some drawbacks: feedback on ideas is necessary, what costs time and money, it delivers unusable ideas and thus disappointed and frustrated employees, people can have different understandings of innovation and it entails the risk to stay in the idea phase, which also can lead to frustration. Because employee-driven innovation involves (also) so many positive things, it was considered how EDI could best be facilitated. How do you have to facilitate people to be(come) innovative? Are there specific conditions needed for effective implementation of EDI, and what are these conditions? Most of the participants believe that the mindset of the manager/management should change. There should be less hierarchy and more freedom to innovate; the employees should be given autonomy to develop further. The management could also decide to create a learning organization, in which they, for example, provide bonuses or promotions to reward EDI and provide feedback during and after the process.

### **Innovation in networks**

The participants at this table stated that a network can consist of the following people: competitors, the own team, the government, universities, and clients to co-create. A network can be maintained by knowing the rules, knowing the purpose of collaboration, having a shared passion and interest, and by having openness for new ideas. This is how innovation in networks can take place. The most important question that arose according to the network was how to support the network to go beyond the organization and how to facilitate this? And how do you prevent networks from being bureaucratic, given the fact that now the networks are institutionalized? And do you have to build the network or does it develop gradually?

Networks have the advantage that they help to create knowledge, and that they create teams, facilitate connections, and facilitate network activity. In other words: they create value. But there were also drawbacks mentioned: there can be conflicting interests, unpredictable outcomes, and it contains risks.

### **Implementation of innovations**

During the rounds at this table, the participants discussed how implementation of innovations should take place. They wondered if EDI enhances implementation of innovations. The participants agreed that implementation of innovations is an ongoing process that involves people, and that it's not something static. In order to implement well, the benefits should be visible quickly, and a clear goal and purpose is needed.

During the discussion rounds, the participants considered the climate for innovation, the role of the context, and the team composition. They asked themselves how context plays a role in successful implementation of innovations and if innovation skills thus are context-specific. Are there elements that are more generic and elements that are more context-specific? They wondered if a climate for innovation exists. And if it does, what characteristics do people need to create such a climate? And how does a climate for innovation look? Some participants thought that a culture of continuous improvement leads to innovation. Others thought that a climate for innovation can best be described as a safe environment for making mistakes and bringing up ideas. Employees must be able to learn from mistakes. It was also said that it should be an open culture for everything, without judging.

The discussion also came to the compositions of stakeholders/teams. A lot of the participants wondered how the compositions of stakeholders influences the implementation of innovations. And they also wondered how you should compose teams in order to foster innovation. Does team composition have an effect on the implementation anyway? And if it does, how can you identify people with innovation skills? These are all questions that might be relevant for the implementation of innovations in the future.

#### **4.3.2 Scientific point of view**

The scientific expert believes that EDI and innovative work behaviour are of great importance for science and business and that they will get more attention in the future. Nowadays, in literature there is only attention for what's going to lead to innovation, the antecedence side, but there is less attention for the advantages of EDI, the outcome side. The outcome side should get more attention.

She also believes that the practices aren't that important; the working climate, and the role of the employer or of the managers are. That are the theme's that will get more attention in the future. An organization may have the best HR practices for innovation, but as long as there is no climate in which employees dare to make mistakes, that won't happen. So, certain conditions have to be met, before HR practices become important.

Innovation in networks will be a very important topic in the future. Especially because small and medium-sized enterprises don't have the capacity themselves to achieve much, so they are designated to their network. Combining forces, pooling ideas from people with different specialities, combining contexts; the network in its broadest sense. The employer will play an important role in innovation in networks, since he can play different innovator roles to further develop innovative ideas.

Regarding the implementation of innovations, the scientific expert believes that a good structure for the innovation process is of the greatest importance. Until today, lots of innovative ideas



get lost, simply because people don't make enough effort for the innovation and there is lack of structure. There are plenty of good ideas, however, there are certain circumstances that make it difficult to really implement them. Selection between good and better ideas should take place; which ideas will really add value? And how to handle with these innovative ideas? Who plays a role in this process? Guidelines are needed to structure this process.

## 4.4 World Café 4

### 4.4.1 Participants' point of view

#### **HRM practices in smart industries**

During the discussions at this table there was a dichotomy. Some of the participants stated that HRM will not survive in smart industries and others think that it will. From the perspective that it will survive, it was questioned what the role of HRM should be in smart industries. Most of the participants think it's important that HRM should have a business focus. HRM should be responsible for branding, risk management, supporting transfer skills, finding networks, compose teams, and to empower employees. A networked business seems to be the future, according to the participants. This requires new competences for HRM professionals: curiosity, change management, empathy, agility, and match-making. The participants who stated that HRM will not survive in smart industries, do think that the HRM function will be divided or delegated to teams. They believe that HRM departments can integrate with other departments, such as ICT, F&A, marketing, and purchasing. They do also think that HRM competencies can become a part of every managerial job, not just of HRM professionals. It was also said that HRM will become RM in smart industries, due to digitization and robotization. There will be created new jobs for robots and machines. This will eventually offer more free time to employees, which gives them the change to develop themselves.

At this table, the discussion also came to the boundaries of smart services. What are these new boundaries? It was mentioned that the physical boundaries will disappear and that the types of companies and business models will change. The participants believe that smart industries are multidisciplinary and that the gap between HRM and business will become smaller.

#### **New competences for HRM professionals**

It was mentioned that HRM has different roles. The role of HRM will also be depending on the organization. The participants of the symposium think that HR is moving to the organization-side instead of the employee-side. For the HRM function, this means that the tasks are widened. The HRM professionals will need more technical skills, but also more analytical skills, since there is more automation within HRM. However, it was also stated that it is difficult for the HR function to keep track of the technology, and the participants wondered if that is necessary. Does HR need to be able to balance with the new technologies? On the other hand, with technology, HR tasks can be taken over, so we maybe need less HR in the future. The key will be to find the best fit between HR and the system in what is needed.

The question remains what new competences HRM professionals need. The participants think that communication, research skills, soft skills, project management, portfolio management, cooperation, business skills, analytical skills and using best practices are important competences for HRM professionals in the future. The most important competence, according to the participants, that was mentioned is to always stay curious and keep sense of humor. However, the needed competences do really depend upon the situation and the business processes. It was suggested that competence

passports could be created to match them to the smart business practices. This way you can match the right persons to the right business processes. Teams should also be composed in such a way that all competences are there. And in the end, ethics and culture should always be taken into account. This is an ongoing process, so it will continuously need the right attention.

### **Datafication of HRM**

The biggest struggle with data is to get it accurate. Nowadays data is still very basic, since the systems are not ready yet for more advanced data collection. In the future sources of data should be combined to get more accurate data, for example combine finance and operations data. There are so many opportunities, but nowadays there are too limited applications. During the discussion rounds the participants came to the question who is responsible for data collection. Some say that the CEO is, others say that the line manager is. But regardless of who is responsible of data collection, the data should be collected reliable.

Suppose that data collection occurs well, how can it be used to help the organization? With datafication, one important aim of the data is that it could be used to predict to which function individuals would function best. The data could also be used to link it to the strategy and to improve decision making. The ultimate aim of data should be to increase productivity and performance.

The question then arose how data will be analyzed. Who is responsible for that? HRM of today misses the analytical skills. Besides that, data is hard and HRM is soft, here lies a gap. How should we deal with this gap? Is it better to let other departments make data based decisions? Should we train the 'soft' HRM people in 'hard' data analytics?

### **New jobs in smart industries**

Within the smart industries new jobs will arise and other jobs will disappear. According to the participants, the following jobs will disappear: manufacturing jobs, administrative jobs, data collection jobs, staff in supporting functions. Instead, other jobs will arise. For example, HR analytics will become a separate job, there will have to be a data analyst to interpret the automatically collected data, there should be people who transform the data into visually attractive and understandable images, and HR practitioners will mostly move to more managerial, added value tasks.

But, during the discussions, some of the participants also mentioned that there will be new characteristics of work rather than new jobs. They think that the term 'job' should be redefined; it must be about capabilities rather than people, the so-called full profiling. In the ideal situation, this will lead to more jobs dedicated to add value, and less jobs dedicated to repetitive.

Within the new smart industries, the challenge will be to not get lost and to belong. For the big corporations it is the question if they will sustain in their advantage, given that the highly-skilled and educated young people don't want to work for them. And, at least, it is also the question what will happen with the middle- and low-skilled jobs. Are they at risk? innovations in the future.

#### **4.4.2 Scientific point of view**

The scientific expert states that if a company doesn't have strategic HR, a smart industry will not help the company. The smart industry is like an accelerator: it can either accelerate processes or it will put it down. And besides that, she believes that we should get rid of the HR departments, switch the label and restructure it completely. Nowadays, payroll, training and development are mostly outsourced, but most people associate declarations, salaries, competence management, etc. with the HR department. Why can't we just make different columns? A column for training and development, a

column for recruitment and selection, a column for recruitment and selection, and not put them under HR. HR is supposed to be regarding personal and strategy management.

Regarding the new competences for HRM professionals, the scientific expert believes that HRM professionals need basis competences like how to recruit, train, promote, fire, etc. Besides that, they also need innovational oriented skills, such as problem solving, innovative behavior, and creativity. And HRM professionals will also need functional skills, like knowledge of ICT.

HRM practices should be designed in a way that the data that is needed for datafication is accurate, since accuracy in datafication is really important. The HRM practices could support this. After datafication, appification will be the new tool. In the future, performance management won't be needed anymore if appification works well; apps can help to regularly keep track on the performance of employees. Apps could be used to build a dossier of good practices and performances. However, there is some danger in this data- and appification. There are still HR professionals needed who overview everything. It is easy to be led by the data, to dive into the data to check all details, but it should be kept in mind that the organization should benefit from it. Therefore, someone should keep an eye on the whole process.

Referring to the new jobs in smart industries, the scientific expert thinks that smart industries are just a fourth industrial revolution and we could better discuss competences instead of new jobs. What are good developments? How to deal with development? How can we train people to adapt to these developments quicker? Those who are able to adapt quicker to the developments will be on the top of new jobs. innovations in the future.

#### 4.4.2 Business point of view

The business expert states that in smart industries the amount of HR needed will decrease. It will develop from shared services to self-services, and eventually to even fewer services. The smarter the industry will be, the earlier this will happen.

The only competence that is important for HRM professionals in smart industries is empathy. People should be able to connect with each other and therefore they should recognize emotional intelligence, be creative and thus have empathy.

Regarding the datafication in HRM, the business expert also believes that the amount of data will increase enormously. As an organization, it is case to take advantage of the available data and to make use of it. The organizations that anticipate to this the best, will eventually survive, the others will slowly disappear.

In the smart industries will be much more automation. This will lead to the disappearance of 80% of the current jobs and the appearance of 20% new jobs. These new jobs will be completely new; we can't imagine them yet. The new jobs will have to take care of all the profit of an organization.

## 5. Discussion

### 5.1 Summary of the main results

#### **World Café 1**

Regarding the theme 'doing HR without HR', SSC's play a big role. The main question herein is what the role of the SSC should be. Most probably the SSC's will still be important in the future to reduce costs, due to standardization. It is also possible that SSC's will become centres that gather data for the purpose of HR analytics. The question remains how the success of SSC's can be measured. Besides that, it should be considered how division of tasks between SSC's, line managers and HR professionals should take place. This is also of importance for the HR function. It is the question whether HR will still be a separate function or HR professionals will be working across several departments. In both scenarios, it remains important to consider how tasks and responsibilities should be divided. Even if the HR function will not be a separate function, the HR professionals will still need the following competences: a customer focus, flexibility, legal and business knowledge, HRM expertise, and coordination, communication, change management and ethics skills.

Technology will also remain to play an important role in HR. It is expected that the development of technology will continue. In the future technology may be used to predict, to drive down costs and to improve the quality of HR and the organization. Privacy is an important aspect of technological development that should be kept in mind.

An interesting discussion for the future is to which extent employees should be involved in HRM. The management will probably play a big role in this. They can serve as facilitators or coaches through goal setting. The question remains if they are responsible for the development of their employees. Employees do want to develop, but it's not clear who should be responsible for that. In a broader sense, it is interesting to wonder if there is an optimum in the amount of tasks and responsibilities for which the employees are responsible themselves and the tasks that should be done by the employer. Building on the previous, it would also be interesting to investigate if there is an optimum in the amount of HRM that organizations should offer.

#### **World Café 2**

In the future, HR analytics seems to become bigger and more important than it is nowadays. This is partly due to the development of technologies. It is expected that more and more external sources, like robots and sensors, will deliver data that can be used for HR analytics. With more available data for HR analytics, the applications of it will also expand. HR analytics could be used to find evidence for the HR strategy or to aid policy decisions. However, when HR analytics will be applied more in organizations, it should be considered well how employees' acceptance can be generated. The best way to do this seems to set very clear rules. From the beginning, it should be clear which data will be used, what the data will be used for, who has access to the data, how long data will be available, and what the benefit for the employees will be.

Teaching HR analytics at universities is something that needs more attention in the coming years. The teaching should be done more broadly than it happens right now. Both theory and practice should be dealt with during education. It should be considered if only HR departments at universities should be taught HR analytics. It might be meaningful to also teach HR analytics in other disciplines.

#### **World Café 3**

Innovation will play a big role in the future. EDI will come up more, since it has a lot of advantages. In

order to stimulate (employee driven) innovation, the mind-set of the management/CEO should change; they should create a learning organization. It is considered that HR practices won't be that important for fostering innovation and the implementation of innovations; a working climate and the role of the management and employees are. A climate in which employees feel safe to make mistakes should be created. Employees who come up with good ideas should be rewarded for that by the CEO/management. Besides that, there should be thought of the team composition. When these basic conditions are met, HR practices can become important.

Innovation in networks will also be very important in the future. Especially since smaller organizations won't be able to achieve much by themselves, they will need their networks more than ever. In order to innovate in networks, organizations need to know the rules and the purpose of collaboration, they should have a shared passion and interest, and they should be open to new ideas.

#### **World Café 4**

An important question for the future is if HRM practices will survive in smart industries. It is believed that if they survive, HRM should have a business focus. And if HRM practices and the HRM department will not survive, that the HRM function will be divided or delegated to other departments. The HRM professionals will most probably still exist in the future, but they will need other competences. Besides the basic competences, they will also need innovation oriented skills and functional/technical skills, to keep up with the (technological) innovations.

Within smart industries it is expected that the jobs as they exist now, will change. The exact nature of these changes remains to be seen. Some believe that certain jobs will disappear, others think that just the competences that are needed for particular jobs will change.

Regarding the datafication of HRM, the biggest challenge in the future will be to get data more accurate. The HRM practices could support the accuracy of the data. The practices could be designed in such a way that the needed data for datafication will become more accurate. Datafication could then be used to predict, to improve decision making, and to increase productivity and performance.

#### 5.2 How new is the future?

The objective of this thesis was to get a clear overview of what is expected regarding the future of HRM, according to several (HRM) experts. By organizing a symposium using the World Café method, this was done in a very structured, yet pleasant, way. Because the setup of the symposium was in such a way that all four World Café's had the same characteristics, it was possible to compare them to each other and to draw conclusions from that. The World Café method appeared to be a great manner to gather lots of information regarding all the topics and themes. Additional interviews with scientific and business experts were conducted to expand the data. By performing member checks for all four World Café's, the reliability of the results was increased and could be considered good. Thus, the results that are described in this thesis give a clear overview of what is expected for the future of HRM.

The results show that the innovations in technology will cause most of the expected changes in the field of HRM. Due to the expanded capabilities of technology there will be more standardization and more datafication. This will lead to less deployment of employees, which again leads to the question what the role of HRM (practices) and HR professionals should be in the future. There should be thought of the division of tasks and responsibilities within companies and then what the role of HRM herein should be. Besides that, organizations should be aware of their position in and influence on (employee-driven) innovation processes, both within their own organization and within their network.

In this research it is found that especially the developments in technology are expected to cause most of the changes in the future of HRM. This is not a new phenomenon. Information technology increasingly sets the tempo and direction of innovations (Simon, Janneck & Gumm, 2006). This happens at all levels: at global level, at national level, at local level and at a personal level (Simon, Janneck & Gumm, 2006), and thus it can be expected that this also occurs at an organizational level. In the past this phenomenon is indeed visible within the HRM field. Several researchers found that in the past decades one of the major drivers of change within the HR field was the increased usage of technology to collect, store and utilize data for the decision making process (Gueutal & Stone, 2005; Strohmeier, 2007; Strohmeier & Kabst, 2009). Technology has been the cause that HR processes like recruiting, selection and training have transformed and technology has also been the cause that the nature of jobs and the relationships between employees and organizations have modified (Kiesler, Siegel & McGuire, 1984). Especially since the introduction of the internet, organizations have been able to innovate and develop their processes. They could start using the internet for several purposes, like advertising jobs, online applications, delivering training to employees, communication, intranet systems, etc. (Dineen & Allen, 2013; Salas, DeRouin & Littrell, 2005).

It can be seen that several times in the past, technology has been the cause of changes in the field of HRM. In fact, developments in technology seem to be the starting point of changes in HR processes over and over again. So, how new is the future? Isn't it just a repetition of the past?

Lots of research has been conducted to investigate the added value of the use of technology in order to facilitate HR processes. Several studies indicate that technology enhances the efficiency of the HR processes and that it decreases the costs that are associated with HR transactions (Dulebohn & Johnson, 2013; Strohmeier, 2007; Dulebohn & Marler, 2005). However, there are also researchers who state that there are multiple limitations associated with the use of technologies to manage HR processes (Stone-Romero, Stone & Salas, 2003). According to them, information technologies are static and they use one-way communication systems, which makes them impersonal and not-flexible. As a result, the technologies create some sort of distance between supervisors and employees. They also say that using technology for training employees is less engaging and that it may not give employees the opportunity to practice or to receive suited feedback (Stone-Romero et al., 2003).

In the future of HRM it should be considered how far technology should reach. It should be investigated if there is an optimum in the amount of technology that should be used to replace human resources. To a certain extend technology and automation can contribute to the efficiency and the reduction of costs, but one should also make sure that it still adds value. There should be thought about who is going to control the automated processes and how this should be done. The question for the future remains how far technology should reach.

In figure 2 it can be seen how the changes in technology can influence the field of HRM. The developments in technology can, partly by the SSC's, lead to more standardization of HRM. Besides that, it can lead to the datafication of HRM, the 'smartness' of HRM, and more HR analytics. The latter two especially via robots and sensing. Those four consequences of the changes in technology can all have influence on the division of tasks and responsibilities within organizations, the jobs, and the HRM function. It depends on the organization which consequences will be more present, and thus what the eventual consequences are. This can have many variations.

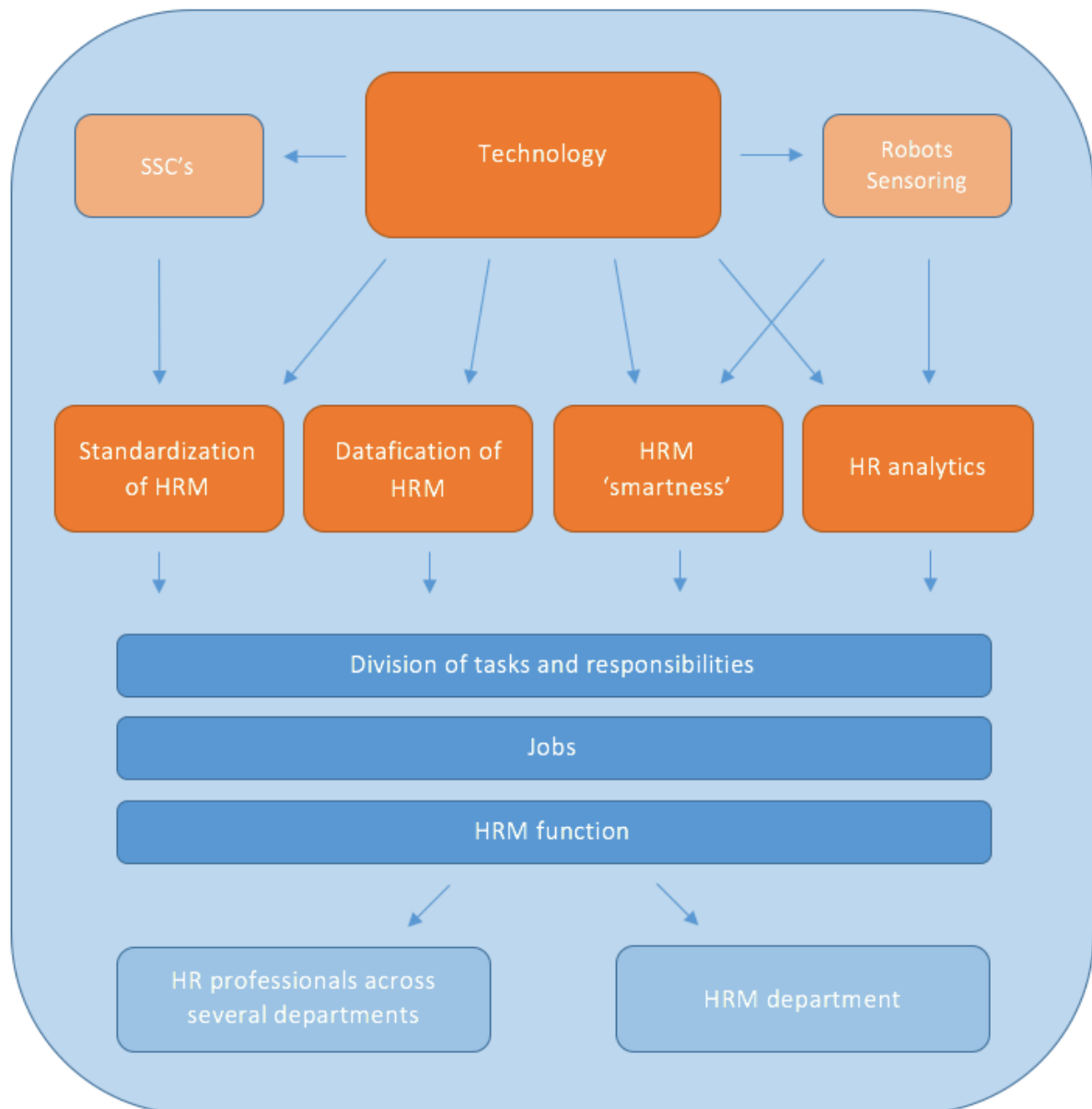


Figure 2. Overview of the changes in HRM caused by the developments in technology.

### 5.3 Practical implications

Based on the findings in this study, organizations can prepare themselves for the future. In order to do so, they have to be aware of the changes and improvements in technology that arise. When they are aware of what is changing, they can decide which consequences this will have within their organization. They can look at the combination of factors that are present within their organization, for example standardization and datafication of HRM. Based on this, they can decide what the consequences for their HRM function, division of tasks, and the composition of jobs should be. This way, organizations can prepare their organization for the future.

#### 5.4 Limitations and future research

This study focused on the expectations for the HRM field, based on the insights of several HRM experts. The focus points within this study were very specific: HR without HR, HR analytics, employee driven innovation, and smart HRM. This can be considered a strong characteristic of the study, since the topics were very clear and specific and there was no doubt about the content of the discussions. But on the other hand it can also be seen as a limitation: other topics were not considered at all. Besides the four discussed topics, there are much more topics within the HRM field that are interesting to investigate for the future. That way, a much more extensive image of the future of HRM can be created. Future researchers who also want to investigate the future of HRM should take this consideration into account.

It would also be interesting for future researchers to do an annually study to the expectations of HRM experts regarding the changes within the HRM field. This way they can adjust their expectations according to the newest developments. The current study only painted a picture of the expectations at one point in time, it is a 'static point of view'. A very accurate image of the future will originate when experts will be questioned at several points in time, so they can adjust their expectations. Organisations would then be able to take the newest developments and expectations into account in their policies and plans.

For the future it also remains the question how far technology should reach in HRM. Researchers could further investigate this. It would be desirable to investigate if there is an optimum in the amount of technology that should be used in order to replace the human capital. Technology can add a lot of positive things to the field of HRM, like more productivity, efficiency, and a reduction of costs. But on the other hand, it also involves drawbacks: jobs get lost, people should control the automated processes, work processes get less personal and social, and so on. It would be interesting to investigate if there is some kind of optimum in this. How much technology can be used to replace or strengthen human resources, so that value still will be added? In other words: in the ideal situation: how far should technology reach in the HRM field? Researchers could contribute to this question.

Finally, it was mentioned before that the World Café method has not been evaluative studied in order to examine the effectiveness. The outcomes that resulted from the current World Café about the future of HRM appear logic and valid, however, it should be very interesting to iterate a study to the future of HRM, but with a research method or tool that is scientifically proven to be effective. The results of both studies can then be compared to see if there are significant differences.



## 6. Conclusion

The goal of this master thesis was to describe what is expected of the future of HRM, so that organizations and researchers can respond to this. Concluding, it can be seen that a few themes seem to be important when considering the future of HRM. The most recurring theme is technology. Technology will cause most of the changes in the HRM of the future. In the first place, technology will lead to more standardization. As a consequence of that, HR tasks will be executed more and more without human resources: HR without HR. Shared Service Centres will, for example, be able to take over tasks. It is of great importance in the future to consider how tasks and responsibilities should be divided. Who is responsible for what? And if there will be less human resources, should HR still be a separate function in organizations or is that no longer necessary and can the function be subdivided? Secondly, due to the standardization and automation caused by more advanced technology, there will be a growing amount of available data. Besides the already known sources, robots and sensors will also be delivering data that can be used for HR analytics. In the future, the data that will be used for HR analytics and for datafication should become more accurate than it is nowadays. HRM practices could be used to support the accuracy of the available data. And when the data is accurate, there will be plenty of applications for it.

Another theme that is considered important in the future of HRM is employee-driven innovation. In order to stimulate this more, organizations should create a learning organization in which employees feel supported to come up with ideas, they should think about team composition and they should set the right context. Besides the employee-driven innovation, innovation in networks will also come up more. Organizations, especially the smaller ones, should go along with the innovations in order to survive.

HRM practices, and the role of them in the future were also a recurring theme. HRM practices could be used in the future to support data accuracy. But on the other hand, people are wondering if HRM practices will survive. This is especially the case for smart industries. In all situations, HRM professionals will still be there, however their tasks and responsibilities, and thus their needed competences will slightly change. This refers again to the division of tasks and responsibilities.

It can be concluded that the changes in the future of HRM are all related to each other to a certain extent and technology seems to trigger most of the expected changes.

## 7. References

- Aldred, R. (2011). From Community Participation to Organizational Therapy? World Café and Appreciative Inquiry as Research Methods. *Community Development Journal*, 46(1), pp. 57-71.
- Boudreau, J.W., & Ramstad, P.M. (2005). Talentship and the Evolution of Human Resource Management: From 'Professional Practices' to 'Strategic Talent Decision Science'. *Human Resource Planning*, 28, pp. 17-26.
- Brennan, C., & Ritch, E. (2010). Capturing the Voice of Older Consumers in Relation to Financial Products and Services. *International Journal of Consumer Studies*, 34(2), pp. 212-218.
- Brown, J. (2001). *The World Café: Living Knowledge Through Conversations That Matter*.
- Brown, J., & Isaacs, D. (2005). *The World Café: Shaping Our Futures Through Conversations That Matter*. Retrieved from <https://books.google.nl/>
- Brown, J. & Isaacs, D. (2008). *The World Café: Shaping Our Futures Through Conversations That Matter*. San Francisco: Berrett-Koehler Publications.
- Chang, W. L., & Chen, S. T. (2015). The impact of World Café on entrepreneurial strategic planning capability. *Journal of Business Research*, 68 (6), pp. 1283-1290.
- Dinees, B.R., & Allen, D.G. (2013). Internet Recruiting 2.0: Shifting Paradigms. In K.Y.T. Yu & D.M. Cable (Eds.), *The Oxford Handbook of Recruitment*. New York: Oxford University Publishers.
- Dulebohn, J.H., & Johnson, R.D. (2013). Human Resource Metrics and Decision Support: A Classification Framework. *Human Resource Management Review*, 23, pp. 71-83.
- Dulebohn, J.H., & Marler, J.H. (2005). E-Compensation: The Potential to Transform Practice. In H.G. Gueutal & D.L. Stone (Eds.) *The Brave New World of e-HR: Human Resources Management in the Digital Age*. San Francisco: Jossey Bass.
- Fouché, C., & Light, G. (2010). An Invitation to Dialogue: 'the World Café' in Social Work Research. *Qualitative Social Work*, 10(1), pp. 28-48.
- Gueutal, H.G., & Stone, D.L. (2005). *The Brave New World of eHR: Human Resources Management in the Digital Age*. San Francisco, CA: Jossey-Bass.
- Hirshfeld, S.F. (2001). The Role of Future Studies in Leading Global Companies. *Futures Research Quarterly*, 17(3), pp. 67-77.
- Kiesler, S., Siegel, J., & McGuire, T.W. (1984). Social Psychological Aspects of Computer-Mediated Communication. *American Psychologist*, 39, pp. 1124-1134.

- Murgado-Armenteros, E.M., Torres-Ruiz, J.F., & Vega-Zamora, M. (2012). Differences between Online and Face to Face Focus Groups, Viewed through Two Approaches. *Journal of Theoretical and Applied Electronic Commerce Research*, 7(2), pp. 73-86.
- Pulles, N.J., Schiele, H., Veldman, J., & Hüttinger, L. (2015). The Impact of Customer Attractiveness and Supplier Satisfaction on Becoming a Preferred Customer. *Industrial Marketing Management* (2015).
- Salas, E., DeRouin, R., & Littrell, L. (2005). Research-Based Guidelines for Designing Distance Learning: What we Know so Far. In H.G. Gueutal & D.L. Stone (Eds.), *The Brave New World of e-HR: Human Resource Management in the Digital Age*. San Francisco: Jossey Bass.
- Schiele, H., & Krummaker, S. (2011). Consortium Benchmarking: Collaborative Academic–Practitioner Case Study Research. *Journal of Business Research*, 64(10), pp. 1137-1145.
- Schwarz, J.O. (2008). Assessing the Future of Futures Studies in Management. *Futures*, 40, pp. 237-246.
- Simon, E.J., Janneck, M., & Gumm, D. (2006). Understanding Socio-Technical Change: Towards a Multidisciplinary Approach. *International Federation for Information Processing*, 223, pp. 469-479.
- Stone-Romero, E.F., Stone, D.L., & Salas, E. (2013). The Influence of Culture on Role Conceptions and Role Behavior in Organizations. *Applied Psychology*, 52(3), pp. 328-362.
- Strohmeier, S. (2007). Research in e-HRM: Review and Implications. *Human Resource Management Review*, 17, pp. 19-37.
- Strohmeier, S. & Kabst, R. Organizational Adoption of of e-HRM in Europe: An Empirical Exploration of Major Adoption Factors. *Journal of Managerial Psychology*, 24(6), pp. 482-501.
- Tan, S., & Brown, J. (2005). The World Café in Singapore: Creating a Learning Culture Through Dialogue. *The Journal of Applied Behavioral Science*, 41(1), pp. 83-90.
- Tapscott, D. (1995). *The Digital Economy: Promise and Peril in the Age of Networked Intelligence*. New York: McGraw-Hill.
- The World Café (2016). Accessed at 22 March 2016 via <http://www.theworldcafe.com/>

## Appendices

In these appendices the phrases and questions that were written down on the sheets during the several rounds in the World Cafés are sorted per theme from the coding scheme. This is done per café and per table. The phrases at the bullet points are literally copied from the sheets.

### Appendix A: World Café 1

#### HR SSC

##### (end-)users and the system

- systemen ingericht op processen IT-gericht en niet HR- of eindgebruiker gericht
- veel aandacht voor 36ppara beleid, weinig aandacht voor gebruikers
- in welke mate hebben de klanten wat te willen binnen een SSC?
- processes are changed to fit IT systems
- much attention for IT and processes, less for users
- what are the needs of end-users in relation to the SSC?

##### role of SSC

- what should be the main goal of the SSC **(4)**
- in the future will the SSC do more than administration? **(2)**
- administratieve rol van het SSC
- adviesrol richting lokaal HR
- in SSC alleen nog service management (BPO) en expertise, geen transacties
- SSC is in de basis een ondersteunend 36pparat
- HR analytics toekomstige rol veel beter binnen SSC, daar zit ook een rol richting BP en management
- SSC doet korte termijn noodzakelijke dingen
- future role of HR SSC is analytics of big data
- how should division of tasks and responsibilities take place?
- SSC is about administration and advise to local HR
- integration of functions
- SSC focuses on urgent and necessary HR activities, less urgent and necessary is not for HR
- what kind of services are suited for SSC?
- future SSC will be about service management BPO and expertise
- the SSC is about support
- what are the advantages of cross-functional SSC?

##### SSC profit

- can a SSC become a profit center? How? **(3)**
- verschuiving van cost naar profit center
- kan, en zo ja hoe, een SSC een profit worden?
- wat moet er met de winst/waarde van het SSC gebeuren?
- what should happen with profit/value of SSC?
- SSC shift from cost toward profit center

### role HR professional

- to what extent HR knowledge is required within SSC? **(6)**
- no need for HR knowledge for SSC employees **(2)**
- how to keep the HR function integrated; they need to help each other and the company in the end **(2)**
- kwaliteit dalen, door deelname niet-professionals aan processen
- geen HR kennis nodig
- kan HR SSC de rol van de BP (lokale HR professional) vervangen?
- heb je in een SSC nog wel HR kennis nodig?
- lange termijn HR processen vanuit de top, en daardoor niet door SSC
- could SSC replace HR Business Partner role?
- skills BP HR vs. SSC
- what can the HR SSC do for local HR?
- introduction of FSS has resulted to moving of tasks and responsibilities to line and less HR professionals
- relation between BP <-> SSC
- what are the consequences for HR business partners? What is the impact?
- the HR professionals are needed as they have the overview and can make connections

### standardization

- SSC is about standardization and not customization **(4)**
- when to standardize, when to customize?
- how to balance standardize and harmonize?
- we need indicators for standardization versus customization or model
- top management is important as they stand standardization

### quality

- how to measure success of the SSC? **(1)**
- hoe borgen we compliance en hoe houden we datakwaliteit op orde? Zeker met analytics rol
- the SSC is unsuccessful if there are complaints
- data quality gets worse as processes are not performed by experts but employees and managers
- success goes beyond costs and efficiency, but what should we measure?

### line managers

- line managers are important; the better they are, the less questions you get at the SSC. Will the contact center be absolute? **(1)**
- introductie ESS heeft geleid tot verplaatsing naar lijn (minder lokaal HR)
- toch heeft een line manager ook geen tijd voor HR werk → spanningsveld
- conflict for line managers. As SSC is implemented they need to do more but have less time
- what is the optimum division of tasks and responsibilities between line management and HR SSC?
- responsibilities are taken away from line managers, but still accountability

### employees

- 'concept' of employees will change, what is the effect on the HR SSC? **(1)**
- effect of increase of contract workers and requirements of SSC **(1)**

- do SSC employees need to know context of customers? **(1)**
- job decisions of employees of SSC general or expert?
- career for employees in the SSC?
- job satisfaction of SSC HR employees
- employees are important

## Competences & responsibilities of HR professionals

### werkindeling & HR-functie

- HR separate function? **(3)**
- how will work be organized in the future?
- HR has to develop its own functionality

### HR requirements & skills

- what knowledge, skills and attitudes are needed with (future) HR professionals to achieve business and HR strategy? **(14)**
- what are the functional requirements for HR?
- different levels of HR pro's → differentiation tasks/roles
- (shift from professionals to line managers →) new competences HR professionals
- knowledge/skills/attitudes:

(Legal) knowledge	Skills (/attitudes)
<ul style="list-style-type: none"> <li>- business analytics</li> <li>- risqué inventarisatie</li> <li>- business goals and strategy <b>(2)</b></li> <li>- organizational design and effects</li> <li>- knowledge of the business <b>(2)</b></li> <li>- new workforce</li> <li>- professional HRM expertise</li> <li>- terms of employment</li> </ul>	<ul style="list-style-type: none"> <li>- coordinating / synthesizing / binding <b>(3)</b></li> <li>- convincing (line man.)</li> <li>- ethics <b>(1)</b></li> <li>- change management / understanding change <b>(1)</b></li> <li>- communication</li> <li>- self-insight</li> <li>- interpersonal abilities</li> </ul>

### staff/line management

- gives HR enough room to the line to take their responsibilities? **(9)**
- difference between size, sector, countries? **(4)**
- shift from professionals to line managers
- shift from staff to line or not?

## HRM & Technology

### benefits

- benefits of mobilization (examples: recruitment, communication, use of data to learn about relationships **(1)**)
- less cost for the organization

### disadvantages

- dark side of it? **(6)**: making employee profiling assumptions about single employees based on average analytics? Can you secure privacy?

- what are some unintended consequences? (→ managers fill forms 'badly', need to find alternating solution)? **(5)**
- seldom HR department is connected with the design of the IT systems **(1)**
- costs: less talking to employees, more use of data as proxy for making predictions, tech traffic/saturation, get lost in data?
- but problem in implementing → some employees don't see the benefit of filling in using the digital platform
- but sometimes it is more cost in effort from the employee cost transfer
- failure to take stakeholders into account from the start
- more concern in organizational processes but forgets users

### important

- consistency of company values and systems you implement **(7)**
- we should think of users from the start **(2)** rather than when it is already designed
- technology allows for higher contact
- role of consultant to train the HR department
- 'less technology' and more 'change management'

### Employees' involvement in HRM

#### role of management

- what should managers do? **(2)**
- which management skills are needed to stimulate/facilitate employees in skills development?
- manager becomes 'facilitator'/'coach'/'awareness-creator' through: - goal setting **(4)** → discussing with employees how to keep their job/drawback of no development **(1)**
- supervisor as facilitator of employee development
- learn/teach line managers to customize HRM for different groups of employees
- personal development, facilitated by line manager/HR professionals

### employees

- employees becoming 'mini-company' offering a smile to employer, but depends on organizational structure **(5)**

- what are determinants of employee involvement in HRM?

Employees' interests:

- doing operational work/intrinsic motivation → assume they have no power/influence
- gaining (soft) skills/development
- hygiene factors
- balance work-life **(1)**
- employability **(3)**
- personal development
- personal data maintenance
- goal setting; performance goals; both personal goals + department goals
- feedback; giving and receiving
- discussing/agreeing on conditions

### organization/regulations

- what is an organization
- training on feedback giving/seeking; coaching/leadership; on organizational goals to aligning them with individual goals
- law/regulations allow for changes contract once a year
- how to customize vs. how to standardize HRM for employees **(10)**
- how to deregulate/how to cope with conflicting laws? **(8)**
- implications of blurry organizational boundaries **(1)**

### development

- personal development, facilitated by line manager/HR professionals
- how to motivate/train them to become more engaged in personal development; goals setting + line manager making that happening **(10)**
- who is responsible for development of employees? **(7)**



## Appendix B: World Café 2

### Technology: future technologies to support HR analytics

#### sensing

- how can sensing support HR analytics? **(4)**
- sensors automatically data from employees **(3)**
- which sensing data influences performance employee? **(1)**
- sensing in beds in hospitals when bed is empty etc.

#### role of human

- who checks whether system is connect +how? **(3)**
- the 'human' will still need to ask the relevant question **(2)**
- employee will decide which data will be shared

#### robots

- what is the influence of robotizing on well-educated employees? **(1)**
- robot → does human adjust to self-learning robots?
- is robot pet or leading?
- HR analytics develops from analyzing human to analyzing robot
- robots replace people who cannot do job efficiently enough

#### social media

- how reliable is applicant data via social media?
- measuring happiness/satisfaction via facebook/cell phone

#### important

- linking HR to non-HR is main challenge **(5)**
- how does context influence HR analytics? **(1)**
- how can tech bring in intelligence to make suggesting/connect us/feedback **(1)**
- data collection across organizational boundaries **(1)**
- software should protect the interests of all stakeholders **(1)**
- open source will drive lots of developments of HR analytics **(1)**
- government influences development of tech by legislation **(1)**
- combination of open source development + open data

### Employees' responses: generating employee acceptance for HR analytics

#### benefits

- conclusions and results must lead to visible follow up **(3)**
- define hypotheses for people benefits **(2)**
- definitions of benefits are required **(1)**
- guarantee a benefit for employees
- show from analytics in other areas how business and people can benefit

### thinks to consider

- results of HR analytics to be able to be applied by the individual employee themselves (5)
- stimulate long term thinking (4)
- from business objectives to people drivers in order to define what data you want to analyze (4)
- most data is available already so most concerns are covered and nonsensical (2)
- do HR analytics dosed (1)
- make clear that analysis is not about judging and it is about groups
- a set of clear rules transparently and confidentially is required (privacy)
- it has to be made clear
  - who has access
  - to what is access
  - what is it used for
  - hoe lang info blijft

### acceptance

- what are the important factors which drives employees away from HR analytics and which drivers are needed for employees to adopt HR analytics? (8)
- policies need to be in place to get employees approvals (legislation) (1)
- direct managers are most important to create acceptance for a culture of leadership and trust (1)
- mandatory participation/provision of info will increase resistance, voluntary will increase participation

### Competencies: teaching HR analytics at universities

#### needed competences

- it is a team effort (6)
  - data analyst
  - business analyst
  - strategic HR
- what are the team composition requirements for effective HR analytics? (4)
- we need to know the client environment (2)
- we need to understand the process (need to communicate + listen) (1)
- you have to be involved as early as possible (1)
- we need to have a 'distant' view (1)
- we need to disentangle the 'official' process and the 'real' process
- we need research for building models
- HR knowledge needed?

### disruptive thinking

- which competencies are needed for disruptive thinking? (5)
- how can HR analytics contribute to disruptive thinking? (5)
- HR is able to think disruptive (4)

### teaching

- learn from other disciplines **(5)**
- but start with practice, it's a new area **(1)**
- both theory and practice

### other

- how to benchmark HR analytics compared to other disciplines? **(7)**
- how to create awareness among practitioners/academics **(1)**

### Practices: future applications of HR analytics

#### goals of HRA

- HRA should find evidence for HR strategy **(4)**
- aiding policy decisions **(2)**
- sustainable talent allocation **(1)**
- HRA delivers context specific insights **(1)**
- should be robust/solid research but also fast/flexible
- team composition

### other

- in what sectors does HRA add the most value? **(6)**
- what are factors that determine 1 of 3 options: **(5)**
  - HR analytics
  - enterprise analytics
  - it disappears
- can university aid business by designing practical models? **(5)**
- analytical skills directly towards enterprise level **(4)**
- what are best practices? **(2)**
- should HR analytics research ethical culture? **(1)**

## Appendix C: World Café 3

### Innovation in HRM practices

#### voorwaarden voor innovatie

- CEO is involved and thus create a climate for innovation **(2)**
- create a climate to make mistakes → trial and error **(1)**
- knowledge sharing and learning help to come to new ideas and products **(1)**
  - cognitive skills that are needed to learn and think out of the box/different perspectives **(1)**
- being role model for making mistakes/learn
- communicate with employees by/through technology → stimulate employee to think about innovation
- start a continuous dialogue with employees
  - how can technology enhance this dialogue?
  - create a (digital) platform to communicate
  - public org.: less freedom to stimulate dialogue/sharing knowledge because the whole work is looking at us/public eye
- HR practices for coming up with creative ideas/thinking out of the box
- learning and development for creativity
- rewarding for idea generation
- organize sessions to develop new ideas
- communication becomes important

#### implementation

- how to create a team to be innovative/implement innovation? **(2)**
- create a profile for what you are good at/interested in → give people time to do it
- create a good team to implement innovation
- what is the role of HR in building teams for innovation?

#### role of HR (practices)

- how can HR really add value in the transition of (large) organisations? **(7)**
- how can HR work beyond their boundaries to empower innovation? **(6)**
- how can HR managers experiment with HR practices to create innovation? **(6)**
- how can HR really make a difference? **(6)**
- which HR practices facilitate change? **(4)**
- what are generic HR practices for innovation (universalistic)? **(3)**
- how can HR prevent to be the bottleneck for innovation? **(3)**
- what are context-specific HR practices for innovation? **(1)**
- how could HR managers generate new ideas of HR practices?
  - what do they need to do to find innovative HR ideas? **(1)**
- what is the common sense of innovation? → role of HRM to understand innovation
- independent HRM role → be allowed to make mistakes
- creating an innovation system of HR practices
- HR practices for coming up with creative ideas/thinking out of the box
- what is the role of HR in building teams for innovation?

### other

- how can we create a good balance between legislation and an innovative culture? **(4)**
- how can we facilitate co-creation within the company? **(3)**
- how can labor laws prevent companies from being innovative and what is the role of HR (managers) to cope with this? **(3)**
  - how can labor laws enable innovation in companies? **(1)**
- open boundaries – see competitors as co-makers/co-producers/co-innovators **(1)**
- talent management: how to deal with them? Who is a talent? Why?
  - taking care of talents
- how could technology help to get rid of HR/implement HR?

### Employee-driven innovation

#### advantages of EDI

- satisfaction, engagement, ownership **(1)**
- more involvement
- innovative capacity
- motivation increasing
- using knowledge
- attractive employer
- better performance

#### disadvantages of EDI

- stay in idea phase
- costs time and money
- unusable ideas → disappointed people
- different understanding of innovation
- changing all over too many
- feedback necessary

#### facilitation of EDI

- how to facilitate people to be innovative? **(8)**
- what are the conditions for effective implementation of EDI? **(8)**
- how to change the mindset of the manager? **(6)**
- less hierarchy and more freedom to innovate in right direction **(3)**
- give employees autonomy to develop further **(2)**
- co-creation → provide feedback during and after process **(2)**
- what is the new role of management? **(2)**
- learning organization **(1)**
- HR tools: bonus, promotion, selecting creative people **(1)**
- what culture do we need for EDI? **(1)**
- use the brains of your employees **(1)**
- leader participation **(1)**
- share ideas by creating communities/teams
- employees need time
- value employees for initiative

### what is EDI

- what do we understand with EDI/definition? (2)
- mobilization of people to become innovative (2) → use innovative thought
- make employees use autonomy (1)
- responsibility for everyone (1)
- getting ideas from more people than selected employees (1)
- execution of ideas
- creating new ideas
- solving problems
- putting needs of employees central

### other

- how to develop a system that doesn't feel like a system? (7)
- how can we tap into the collective mind of the organization? (3)
- do we want to involve all employees in innovation? (1)
- what is the right balance between innovation and making money? (1)

### Innovation in networks

#### voordelen network

- networks help to create knowledge (1)
- effectiveness of networks
  - criteria (deliverables) (1)
  - dialog for co-creation
  - part of innovation 'eco system'
- network creates teams, facilitates connections, connects dots of talents, is flexible, facilitates network activity
- creates value
- community
- facilitates

#### drawbacks

- conflicting interests
- unpredictable outcomes
- security
- risks
- getting the job done

### important

- how to support the network to go beyond organization & how to facilitate? (14)
- how to prevent networks from being bureaucratic given the fact that now the networks are institutionalized? (7)
- how do you create a culture of failure? (4)
- is the network something that you build or it gradually develop? (3)
- do we have to work in the future? (3)
- we have to trigger people, not to teach them (2)

- to maintain a network: know the role/rules, know purpose of collaboration, shared passion, network in a value chain, shared interest, shared problem, courage to start, openness for new ideas, shared beliefs
- innovation is beyond change, improving, creating value, new
- innovation involves breaking rules
- future is in the innovating in networks with a purpose

### parts of the network

- even competitors can be a part of a network
- within own team
- government
- university
- clients (co-creating)

### Implementation of innovations

#### climate for innovation

- what characteristics do people need to create a climate for innovation? **(2)**
- does a culture of continuous improvement lead to innovation? **(1)**
- a safe environment for making mistakes and bring up ideas **(1)**
- a climate open for ideas, creativity
- learning from mistakes
- ownership
- agility of the organization
- open culture for everything, without judging
- must be realistic, with a clear view on that you want
- innovation is no goal itself
- do not aim for 100% perfectness
- the need of the client should be central, not the product itself

#### role of context

- how does context play a role in successful implementation of innovations? **(8)**
- are innovation skills context-specific? **(2)**
- which elements are more generic and which more context-specific? **(1)**
- what culture is necessary for the effective implementation of innovation? **(1)**
- can you always change to such a culture
- depends on context; can be planned, but also a learning process
- culture plays a big role
- context-driven

#### members of team

- how does the composition of stakeholders influence implementation? **(6)**
- how do you identify people with innovation skills, and which are those skills? **(4)**
- how do you compose teams to foster innovation? **(4)**
- what effect does team composition have on the implementation? **(2)**
- designing teams well

### implementation of innovation

- does employee-driven innovation enhance the implementation process? **(8)**
- organic process, evolving along the way learning **(1)**
- it involves people **(1)**
- not something that is only on paper
- it is an ongoing process
- it needs to be scalable
- people need to agree
- users must adopt
- benefit must be visible quickly
- clear goal and purpose is important



## Appendix D: World Café 4

### HRM practices in smart industries

#### digitization

- new jobs will be created for robots & machines **(1)**
- no, robots cannot take over emotions & social interactions
- robots do not need to take over emotions **(1)**
- people get emotionally touched to robots **(1)**
- opportunities to 'escape' digitization stay in people **(2)**
- robotization offers a lot of free time to develop yourself (→ no need to escape) **(4)**
- HRM will offer services to robots
- HRM becomes 'RM' (= robots?) = resource management **(1)**

#### HR department/competences

- HRM will not survive **(4)**
- instead of 'tradition' HR pro's we will need HRM-trained software engineers **(2)**
- competencies for HRM pro's : - empathy – agile **(2)**
- competencies: - curious; - change management
- HRM pro's come to 'working teams', outside of HRM departments **(1)**
- HRM departments will integrate with ICT, F&A, marketing, purchasing, supply → no HRM department **(3)**
- HRM competencies become a part of every managerial job **(4)**
- networked business = future **(9)**
- HRM expertise will survive
- HRM function will be divided between top C-level and employees
- HRM institutions will be delegated into the teams
- new HRM competence: match-making **(3)**

#### role of HRM

- HRM should have a business focus **(4)**
- consumers come inside the organization → 'free labor' → role of HRM?
- the role of HRM
  - to support transfer skills **(1)**
  - to empower employees
  - risk management (small mistakes lead to stronger impact) **(1)**
  - branding **(6)**
  - to find good combinations
  - to compose teams
  - find good networks

#### SMART

- what are new boundaries for 'smart' services? **(3)**
- in 'smart' times, consumers, once notice full benefits, from services, give all private infer.
- the gap 'HRM – business' becomes smaller in smart industries

- smart industries = multidisciplinary & flatter than before **(1)**
- physical boundaries of business will disappear → type of companies/business models will change **(3)**

#### other

- performance will be accessed by peers **(6)**
- how to switch out traditional 'old' mindset towards a new one? **(1)**
- how to find a balance between well-being and happiness of employees in a 'smart' company? **(1)**
- what is the balance: well-being & effectiveness? **(1)**

### New competences for HRM professionals

#### the HR function/role

- as HR-functions: difficult to keep track of technology → but is that necessary **(2)**
- should HR ask more questions? Depends on the HR-role
- HR is moving to organization-side instead of employee-side **(3)**
- is there a different impact on employees and what does HR need to do in respect to that?
- HR is more policy function
- role of HR will be different depending on organization **(1)**
- as long as there are humans in organizations there should be an HR-function
- more technical skill. E.g. engineering/number skills to be able to communicate with employees from different departments (fading boundaries of function **(1)**)
- but also more automation etc. within HR → so analytical skills
- HR function is widened in their tasks. E.g. more involved with private life of employees etc. **(1)**
- HR has different roles → maybe more than the 4 from Ullrich **(1)**
- why are we still talking about HR-functions? Won't people/employees organize or manage themselves? → not everybody is able to. HR might not exist as a function but facilitating/managing is still needed

#### technology

- difficult to fit persons to companies with all the technology around
- as HR-functions: difficult to keep track of technology → but is that necessary **(2)**
- universal laws/nature is more important than technological development
- it is humans who develop the technology
- robot development: take over social roles → how does this inform how people work?
- struggle: circle of info on the internet → not a problem, but what do you want to do with it
- new balance needed with new technologies
- does HR needs to be able to balance this?
- how smarter the world, how smarter the student → bigger gap between technology and people capabilities
- line managers can take on more tasks when supported by systems (→ not the case yet) so we need less HR in future **(1)**
- network companies: HR needs to recognize together with the system what is needed → key is to find the best fit

## competences

- competences become much more important, as well as business processes. If you can match persons to business processes
- creating competence passport to match them to smart business practices
- with students UT trains more on competences (besides learning theories)
- which competences do you need in the future?
  - for HR/employees: communication, research skills, project management competences, portfolio management, cooperation, using best practices **(3)**
- competences needed really depend upon role
- create variety. Is consistency important or not?
- you need mix of competences. Career dynamics are not straightforward anymore → different task for HR **(1)**
- do you need competences within organization or outside (with others) **(1)**
- very analytical: need to see what is happening and what works **(1)**
- theory real forming competence. Being able to build conceptual models **(1)**
- soft skills also important **(1)**
- policy/implementation also important
- competence: analytical skills/working with big data. Also designing HR-systems **(3)**
- always stay curious and keep sense of humor **(9)**

## other

- recognizing talent is key → lifelong learning is key **(1)**
- workforce planning is necessary, looking into the future is really difficult → how to recognize the talent?
- CSR is a new recognized focus/business model → future business model. Is a need so people work together
- that needs new competences or do new competences create the business model? **(1)**
- ethics and culture: they are not fixed but an ongoing process **(5)**
- team-building expertise to build teams for specific purposes **(1)**
- more business skills needed to communicate with different departments → not only horizontally but also vertical when it comes to market orientation, strategy etc. **(4)**
- team composition in such way that all competences are there
- measuring HR performance: employee satisfaction, firm outcomes
- we're moving towards project-companies **(1)** → in that? What should HR exactly manage?
- branding will still be important. Of what? **(1)**

## Datafication of HRM

### aims of data

- use data to predict to which function individuals would function best **(7)**
- aims of data:
  - planning
  - who fits where?
  - life-job satisfaction
- we want data, but what do we do with it?
- what can we do? Which can we translate in KPI's (key performance indicators)? **(1)**

- link data to strategy **(6)**
- why? → to serve executives, personal needs , stakeholders and HRM practices
- ultimate aim is increased productivity **(1)**
- improve decision making **(4)** → succession planning
- to show/prove performance **(1)**
- data could help to identify hidden factors **(1)**
- what do we need data for?
- talents can be judged based on online profiles **(1)**
- data is available, but what should we do with it?

### analyzing data

- data = hard, HRM = soft → gap
- how to deal with this gap?
- HRM misses analytical skills **(4)**
- is it better to let other departments make data based decisions?
- is it even possible to train 'soft' HRM people in 'hard' data analytics?
- absence: different systems difficult to analyze inefficient to gather
- HRM datafication is not necessarily an HRM activity, but analyzing is an HRM activity

### other

- data → many sources **(1)**
- struggle: getting accurate data, still very basic, systems are not ready
- combine sources of data: finance & operations **(1)**
- HRM is not (yet) data/ICT driven **(2)**
- who is responsible? **(2)**
- reliability **(1)**
- HRM = abstract, data = very concrete → how to deal with this? **(1)**
- CEO needs to be responsible for datafication
- line manager should collect data
- so many opportunities but limited applications **(2)**
- the 'money ball' concept **(3)**
- how can data help the organization? **(2)**
- what data should we gather, internally and externally?

### New jobs in smart industries

#### new jobs

- digitalization – self-servicee/employee as clients (as HR administrators) ← shared services/call center
- HR practitioners
  - disappear (30%)
  - move to more managerial/interesting/added value tasks (70%)
- automatisisation of data entry → all data goes in, control happens after
- HR analytics as a job
- data analysis + interpretation jobs **(5)**

- supervision + decision making jobs
- creative people to produce experiences/inspire/lead **(2)**
- transforming data into visually attractive + understandable images/for non-experts **(4)**

### disappearing jobs

- manufacturing jobs/industry
- administrative jobs
- data collection + entering
- staff in supporting functions
- traditional career (vertical)

### new characteristics

- new characteristics of work rather than new jobs **(2)**
- combining business models
- jobs in people development/talent development
- shorter term organisations arranged around a specific objective or project
- increasing specialization
- HR to supervise
- new jobs in traditional sectors
- individualization
- networks of organizations + capabilities
- more jobs dedicated to added value, less jobs dedicated to repetitive **(6)**
- content vs. purpose of jobs
- people working for several companies
- redefining 'job' → capabilities rather than people (full profiling) **(8)**

### important

- more data, foster communication, better productivity, flexibility (space & time), more innovation, more knowledge sharing **(1)**
- connectivity; smart companies are global
- develop within or collaborate/buy outside
- will there be low-skilled jobs? How many? What will happen to low-skilled? **(1)**
- is the middle-skilled group more at risk of disappearing? **(1)**
- how will we be able to update the next smart industry? Who?
- will big corporations sustain their advantage given that highly-skilled/educated young people don't want to work for them? **(8)**

### challenges of new model

- belonging, social engagement, impact on organization, easy to get lost **(3)**
- technology that doesn't work for people: feeding the system & stressful
- onus on the worker: to show expertise, to sell his/her skills, to find 'clients', to be part of other functions