# Electronic Human Resource Management Strategies for Atypical Employment

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Keywords: Electronic Human Resource Management, Atypical Employment, Strategy Formulation.

#### Abstract:

As part of corporate Human Resource Management, the configuration of the workforce becomes more and more challenging since an increase of non-permanent, temporary, timely restricted labour can be observed, the so-called 'atypical employment'. At the same time, advancements in electronic HRM are promising a better handling of operative, but also of strategic HRM tasks. It is the objective of this paper to propose a conceptual design for the formulation of a strategy integrating e-HRM and atypical employment. Which advanced objectives can be reached by such an integrated strategy? Which tasks have to be covered in regard to this intersection? And which are the requirements for strategy formulation in respect to that integrated strategy? By this paper, we would like to strengthen the theory-practice-nexus by applying IT-related progress to a real-world phenomenon being relevant for contemporary workforce management on the strategic level

## **1** INTRODUCTION

The workforce of modern organisations changed drastically in the recent years, with its configuration shifting towards flexible work conventions (Kalleberg, 2000). This shift strived a debate about new employment relations (Bosch, 2004). Córdova (1986) was one of the first coining the phrase of 'atypical employment'. These employment relations are often called 'non-standard' (Felstead and Jewson, 1999). That type of relation, however, does not fall under the standard employment regulations and is not grasped by general solutions of Human Resource Management (HRM). Even though the extent of non-standard employment is rising (OECD, 2012), in organisations, atypical employees are neglected by HRM. In some industries the situation is precarious, for example in the health care sector in Germany in 2011, 43.9% of all employees are in an atypical employment situation (Statistisches Bundesamt, 2013). Strategies are not adequately adapted to the needs of those employees. Moreover, if there are any specific strategies for atypical employees, they still reflect the way of HRM dealing with standard employment and thereby are not fitting the specific requirements of this special kind of employment.

In addition to this gap between organisations and

atypical employments, companies are discovering electronic Human Resource Management (e-HRM) as a tool to solve the problems related to the modern workforce. Especially because of the digitalisation of work processes, it becomes an inevitable necessity to use the advancements of e-HRM. They are not solely based on social media (for recruiting) or process automation (for the administration of employee payment), but also on IT trends such as crowd sourcing and cloud working (Konicz, 2012), real-time controlling (Espinosa and Luján-Mora, 2010), mobile applications (Olivas-Lujan et al., 2007), or 'strategic big data' (Chien and Chen, 2008). Strategic big data in this case means to derive strategies from the data that has been mined. E-HRM could thereby transform the classical HRM (Strohmeier et al., 2012).

Even though there is technological progress and potential to find specialised solutions for atypical employments, there is no fitting strategy available. Therefore, in this paper we are aiming at proposing a framework for the formulation of an integrated strategy covering e-HRM and atypical employees. We want to design conceptually what will be necessary to effectively integrate the challenges of managing atypical employees to an HRM landscape shaped by the recent e-HRM developments. The objective is to

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DOI: 10.5220/0004497201290136

In Proceedings of the 4th International Conference on Data Communication Networking, 10th International Conference on e-Business and 4th International Conference on Optical Communication Systems (ICE-B-2013), pages 129-136 ISBN: 978-989-8565-72-3

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reach a more professional HRM (Stein, 2010). Furthermore, we will look into the requirements of a fitting e-HRM strategy for atypical employees to lay the groundwork for further research. By presenting the cornerstones of such an e-HRM strategy, we contribute to an alignment between the potential technological abilities and the needs of this individual but important and rising group of employees within an organisation.

# 2 THEORETICAL BACKGROUND

## 2.1 Atypical Employment

In order to define 'atypical employment', it is necessary to define typical or standard employment first. Bosch (1996:165) states it as "stable, socially protected, dependent, full-time job. The basic conditions of which (working time, pay, social transfers) are regulated to a minimum level by collective agreement or by labour and/or social security law." Based on that, every job which does not fulfil one of those criteria can be classified to be an atypical employment (Keller and Seifert, 2006).

Atypical employment can be regarded as an umbrella term for hybrid forms of employment on the continuum between regular, non-casualised employment and independent self-employment. Schirmer (2012) identifies the following employment forms as core forms of atypical employment: Part-time employment, fixed-term employment, temporary and agency work, teleworking, freelancer, and self-employment. An example of an industry where atypical employment is dominant is the media industry (Stanworth and Stanworth, 1995).

The main reason for the existence of atypical employment from the company's perspective lies in the opportunities to adapt to the changes on the markets and the deviation of orders (Hoffman and Walwei, 2001). As long as HRM needs to adjust to deregulation, flexibility and externalisation of labour conditions (Martin and Nienhüser, 2002), organisations are moving towards the liquid workforce (Shaughnessy, 2012) with a decreasing staff of standard employment and an increasing amount of employees in atypical employments (Addabbo and Solinas, 2012).

## 2.2 Electronic Human Resource Management

E-HRM has become a dominant field of research in

modern HRM, in particular because of the farreaching developments that the evolution of the internet brought along. Several definitions (Lengnick-Hall and Moritz, 2003); (Rüel et al., 2004) of e-HRM can be found, among them the following: "E-HRM is the (planning, implementation and) application of information technology for both networking and supporting at least two individual or collective actors in their shared performing of HR activities" (Strohmeier, 2007:20). Strohmeier develops the following framework (Figure 1) that describes the embeddedness of e-HRM in its situational environment.



Figure 1: e-HRM framework (based on Strohmeier, 2007:21).

Focusing on strategy, we can see in this framework that e-HRM strategies are influenced by the overall e-HRM context of an organisation. But in addition to this, strategies are again part of the e-HRM configuration. In it, they are influenced by the collaborating actors (today we would phrase it as "relational" or as "networks") as well as by technologies, which are developing at accelerating speed. E-HRM strategy implementation will then lead to distinct activities within the company. All this is resulting in extended dynamics of the whole system. The outcomes of the e-HRM configuration are labelled e-HRM consequences, not only influencing the standard employees but as well a broad range of other organisational stakeholders.

## **3** CONCEPTUAL DESIGN

While the basic idea of this paper is to integrate two recent trends in HRM in order to meet the reality of contemporary HRM in practice, the conceptual design of an e-HRM strategy formulation for atypical employees has to refer to all four elements of the e-HRM configuration from figure 1. In this context, solutions have to be found for a special kind of employees, recognising that the application of standard strategies is no longer feasible. This will lead to a conceptual design from the scratch. In it, the tools within e-HRM are supposed to have the ability to solve many of the problems with such a strategy comes along.

Primary objective for the *strategy* itself is the way how e-HRM can support the integration of atypical employees into the corporate workforce. As described in the theoretical background, it becomes important for e-HRM to deal with the context consisting of the intra-organisational context made of strategy, structure, systems, and corporate culture as well as of the extra-organisational environment.

Furthermore, the involved actors are relevant for the conceptual design of a strategy. The main interaction takes place between the HR department and the atypical employees who are nowadays essential for corporate value creation. One important objective for integration is that those employees are not seen as second class workers. Atypical employees have distinctive needs. Therefore, their special, individualised treatment is crucial for integration success. Besides, there are several other internal as well as external stakeholders like the top management, the head of HRM, the IT department, the works council, the line managers, or the trade unions, who might intervene in the formulation of the strategy. In particular, the corporate management has an interest in an efficient and stable handling of the increasingly flexible workforce. At the same time, the 'standard employees' are not interested in being disadvantaged.

As far as specific e-HRM *activities* in regard to atypical employees are concerned, two strategic fields have to be focused: 'good leadership governance' and 'performance controlling'. All operative and more administrative activities are already covered by traditional 'universalistic' HRM.

Good leadership governance means to ensure that atypical employees are not excluded or led different than other employees. Furthermore, it reflects their special time-restricted contract and thereby has to provide that there is no overstepping of any agreements between organisation and atypical employees. E-HRM could contribute to that by giving workforce management the strategic overview, by creating 'strategic big data' on the extent of using cloud working and by developing a multi-workforce management system.

However, through that disregard, atypical employees are partially working off the radar and thereby are not controlled in an efficient way or at all. This deficit has to be met by an effective performance controlling. E-HRM could contribute methods for real-time controlling of that distributed and flexible workforce, applying performance measurement experiences from international virtual teams (Algesheimer et al., 2011). This might result for example in apps for mobile performance reporting.

Finally, *technologies* matter: Web-based solutions with multiple network embeddedness lead towards new organisational solutions such as virtualisation (Lepak and Snell, 1998); (Nafukho et al., 2010) or – recently – the so-called cloud workforce (Konicz, 2012) with ultimate flexibility and almost real-time accessibility. One cross section topic with relevance to e-HRM technology is quality management (Kern et al., 2010). Every actor has a keen interest in evaluating the quality of the other involved actors. Especially due to the given flexibility, every actor can be easily replaced. Therefore it will become important that those technological relationships reflect the relational type of leadership and are based on a many-to-many (m:n) logic (Desai, 2010).

# 4 STRATEGY FORMULATION REQUIREMENTS

In order to formulate an e-HRM strategy for atypical employment, the common general requirements for strategy formulation have to be met, such as rigour and relevance of strategy planning (Mintzberg, 1994) and strategic fit (Venkatraman, 1989).

In particular, we must add further strategy formulation requirements, which specify agreements that are necessary for the intersection between e-HRM and atypical employment. The choice of these agreements has to reflect all of the four e-HRM configuration aspects from the e-HRM framework presented in figure 1. Therefore, we will address strategies by the Complexity Level Agreement, actors by the Professionalisation Level Agreement, technologies by the Technology Level Agreement, and activities by the Accountability Level Agreement. The general requirements and those four specific agreements will cover the e-HRM configuration entirely. It is important to state that completeness is a necessary condition for any strategy (Porter, 1996); (Richardson, 2008).

#### 4.1 **Complexity Level Agreement** (CLA)

In regard to strategy, we see that the complexity of workforce management increases through atypical employment and standard HRM strategies are not vet fitting towards this problem. Furthermore, the task of formulating such a strategy needs to overcome the contradiction between individual integration and overall standardisation (Barabási, 2012).

In order to strategy individualise and standardise strategy at the same time, one requirement for an e-HRM strategy is to agree on a 'standard atypical employment. With it, it will become possible to determine the individual profile differences in every atypical employment more precisely.

A Complexity Level Agreement (CLA) will differentiate strategic layers. While standardisation is mainly possible on an aggregated layer, beyond that layer, more individualised strategies have to be implemented. Web-based solutions can help with the realisation but the HR department needs to supervise the fitting quality of individualised solutions to overall workforce management.

#### 4.2 **Professionalisation Level Agreement (PLA)**

Focusing on the *actors*, the task to manage atypical employment by the means of e-HRM leads to distinct task-related roles for e-HRM. They can be described by a professionalisation approach (Stein, 2010). According to it, professional HRM has to consider differentiation, continuity, and expertise requirements.

Differentiation is essential for the distinct situation due to the vast amount of different atypical employments. By a broad and open view it can be assured that the atypical employees are served right. Violating the differentiation proposition, however, reduces the commitment of the atypical employees.

Through the flexibility of atypical employment it is evident that continuity needs to be established which means that e-HRM strategies gain long-term stability. Only by that, e-HRM can assure a minimum consistency in the (still fluid) workforce and keep up the value-adding processes. Violating the continuity proposition, however, reduces the trust of the atypical employees. However, trust is a key ingredient for long-term success with atypical employment and organisational justice among the actors has to be achieved (Aryee et al., 2002).

Expertise in e-HRM means that knowledge and competence for those tasks are available and can be

used for the operational areas. In detail, even e-HRM has to know exactly about the situation of atypical employees and furthermore learn any new developments concerning atypical employments such as changes in labour law. Violating the expertise proposition, however, reduces the atypical employees' acceptance of e-HRM's decisions. E-HRM has to check for the usefulness and the acceptance of use (Davis, 1989) for every actor in the system (including itself).

A Professionalisation Level Agreement (PLA) will define the extent of professional preparation of the actors, i.e. their range of expertise as well as their focus on detail work (differentiation) and reliability (continuity). In particular, the role of e-HRM changes, because it is no longer limited to the ITrelated aspects of HRM.

#### 4.3 **Technology Level Agreement** (TLA)

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Moving to the field of technology, the core of e-HRM is concerned. Although e-HRM already has competences in this field, some specifications in respect to atypical employment still have to be considered.

The first point is the requirement for a general IT logistics that can serve basic services.

Second, IT should be on the highest standards of data security and data protection (Avanso and Herath, 2011). Related to the flexibility within atypical employment, sensitive data are more likely to be floating outside of the organisation. While protecting proactive its interests, the organisation still has to safeguard privacy for their atypical employees. Going beyond data protection, it becomes necessary that those regulations need to be completely transparent (Elia, 2009); (Pirson and Malhortra, 2011) and achieve a secure environment for mobile architectures, cloud platforms and collaborative systems.

Third, atypical employees call for individual solutions and, therefore, specialised service units have to be put in place. Such individual user-groups and decentralized workflows (Atluri et al., 2007) should be clearly labelled and should be able to be found easily in the sense of usability (Pleuss et al., 2012). Furthermore those services have to implement context-awareness in order to adapt towards those individual needs (Bernardos et al., 2008).

A Technology Level Agreement (TLA) will provide for the technologically advanced implementation of e-HRM.

# 4.4 Accountability Level Agreement (ALA)

A decisive point related to the *activities* is the accountability for them. Who will be responsible and in the end be held accountable for strategy formulation and strategy implementation?

This is again a part of the governance question especially due to the reason that governance means that something becomes visible for corporate management. Since atypical employees are neglected systematically within an organisation, it is of utmost importance that this changes. Moreover, the decision to deal with atypical employment in a modern e-HRM way has to be backed by HR strategy as well as by corporate strategy (Sheehan, 2005). It is crucial that e-HRM will be empowered to guarantee that no atypical employee is exploited and thereby becomes an actor that is likely to exit the system.

An Accountability Level Agreement (ALA) will support e-HRM regarding its empowerment. It contains specifications about the range of decisions, which can be taken autonomously by e-HRM as well as about the controlling and reporting requirements of the formulated strategy.

## 4.5 Itemising the Agreements

Our conceptual approach towards a strategy formulation is based on specific level agreements in order to grasp the specific requirements for an e-HRM configuration for atypical employment.

Depicting the presented level agreements means the necessity to itemise them. Therefore, we will propose examples in table 1. They have to refer to the organisation-specific definition of 'atypical employment'. As general formulation rule, the term 'atypical' has to be used continuously in order to emphasise the special target group for those level agreements.

Based on these examples we can see that strategy formulation can obtain a binding nature and that the organisation's commitment towards the specific needs of atypical employees can be induced. Furthermore, it becomes evident that the stated completeness of a strategy and the e-HRM configuration (figure 1) can be achieved through this classification for agreements. Table 1: Examples of Itemised Agreements.

	C	
		mplexity Level Agreement (CLA)
	•	All standardised e-HRM processes for regular
		employment have annually to be put to the test
		whether they apply to atypical employment.
	_	Every existing e-HRM strategy has to be
	•	
		specialised for the needs of atypical employees.
	•	E-HRM strategies concerning atypical employees
		have to be regularly attuned to strategies
		concerning other parts of the organisation.
	•	E-HRM has to screen all HR-relevant information
		for appropriateness for atypical employees.
	•	Atypical employees have to be provided with an
		overview on all relevant e-HRM services.
	•	Atypical employees are required to share relevant
		information and data for classification purposes
		with the HR department on a regular basis.
	Pro	ofessionalisation Level Agreement (PLA)
		Atypical employees will not be seen as one single
		'type' of employment but differentiated by e-
		HRM regarding their situational variety.
	•	E-HRM strategies for atypical employees will
		have a long-term reliability and will not constantly
c	<b>1</b> 1	be changed. They are given a minimum validity
		period.
	•	Changes within the overall e-HRM strategy have
	•	to be inspected for relevance and necessity in
		relation to atypical employment.
	•	In the HR department, expertise concerning
		atypical employment has to be build up,
		continuously trained and actualised, and annually
		evaluated.
	Тес	chnology Level Agreement (TLA)
	100	All e-HRM services will be available for all
	•	
		atypical employees.
	•	E-HMR services will be accessible for atypical
	•	employees at least 99% of the time.
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## 5 DISCUSSION

## 5.1 Contributions

There are several significant contributions of this paper. First, while current research is widely neglecting the field of HRM strategy formulation for atypical employees, we propose that on the basis of specified agreements, strategy formulation can be improved and adapted towards the differentiated needs of this target group, in particular e-HRM strategy formulation.

Furthermore, we contribute to making the e-HRM strategy and e-HRM strategy formulation more systematic by introducing four frameworkbased types of agreements. As a result of our systematisation, a growing number of aspects dealing with atypical employment will be anticipated and become part of the intended strategy. Consequentially, the amount of emergent strategies (Mintzberg, 1978:945) can be reduced, moving e-HRM for atypical employment away from a solely reactive approach.

Another contribution is the expansion of e-HRM towards 'soft' factors, in the sense of Legge (1995) who distinguished them from 'hard' factors. Current research on e-HRM usually looks at the 'hard' factors like technology and cost-relatedness of the strategies. More 'soft' factors such as the actors involved and the activities influenced by e-HRM are underrepresented. In particular, our agreements focusing the actors and the activities have built-in ethical components: As an outcome of the Professionalisation Level Agreement, reliability as well as sustainability will be reached for e-HRM strategies, trust in e-HRM can be increased, and work ethic of those HRM employees dealing with e-HRM for atypical employment can be strengthened. As an outcome of the Accountability Level Agreement, responsibility for actions is precisely assigned, making it possible to name somebody who can be called to account for wrong decisions. This is not only an ethical question but also a necessity of governance.

Finally, regarding the practical benefits, our proposed strategy formulation can be used for internal e-HRM strategy formulation but also for external strategy formulation as part of an outsourcing relationship. The discussed agreements will then be part of the outsourcing contract.

## 5.2 Implications for Future Research

As the consequence of the conceptual nature of this paper, the empirical validation of our propositions

will become necessary: Will the application of the four strategy-related agreements lead to a measurable improvement of the situation of atypical employees and higher performance of e-HRM?

In particular, it becomes relevant for future research to establish effective criteria on which the e-HRM strategy for atypical employment can be analysed. Such criteria could be the perceived clarity of strategy formulation, the effectiveness of the four agreements as part of the e-HRM strategy, communication effectiveness towards atypical employees as well as their strategy acceptance, the effectiveness of e-HRM strategy governance, the degree of existing knowledge about atypical employment, e-HRM strategy adaptability in the face of changes in the external environment, professionalisation and commitment of the HRM employees in regard to the formulated agreements, and the contributions to e-HRM strategy standardisation and reduction of complexity of the e-HRM system.

As an outside criterion, the organisation's competitiveness for atypical employees on the labour market can be assessed. An e-HRM strategy for atypical employment could result in a specific employer branding, could increase employer attractiveness, and could improve overall labour relations with atypical employees.

# 6 CONCLUSIONS

Atypical employment is becoming the new standard in employment and will be demanding a fitting strategy. The term 'atypical' already implies that there has to be a renunciation of standard solutions. The cornerstones of such a strategy are individualisation as well as the collective integration of actors by creating a 'we-feeling' (Batson et al., 1979) and enhancing relational leadership (Uhl-Bien, 2006). The related increase of complexity can be effectively matched by an e-HRM strategy. E-HRM can become a professional partner for atypical employees within the organisation.

However, an e-HRM strategy for atypical employment has to go beyond technology. This means the need to think about the strategic consequences from an overall systems perspective, to anticipate the strategy implementation process, and to look for acceptance among all affected actors. The result is that the formulation of an e-HRM strategy for atypical employment has to address four agreements: Complexity Level Agreement, Professionalisation Level Agreement, Technology Level Agreement, and Accountability Level Agreement. Modern organisations will integrate them in their more and more standardised processes of managing atypical employment.

By fulfilling the related strategic tasks and by building a task-focused e-HRM configuration for the management of atypical employees, e-HRM is able to find a new role for itself. It faces the widely new opportunity to be empowered and professionalised.

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