1. Introduction

Due to rapid changes in the business environment, including globalization and technological innovations, the traditional sources of competitive advantage are not sufficient for success in today’s situation. The rising competition requires to develop the internal potential, hereby the great attention is paid to business systems emphasizing that people enable these systems to operate. Therefore, human resources and their management have recently been viewed vital in the attainment of sustainable competitive advantage” [1-3]. Particularly, the significance of HRM is emphasized in the face of globalization [4-8] when the traditional employment practices are changing.

Testing added value of HRM to performance has become increasingly popular since the mid-1990s [9-13]. These empirical studies reveal two main approaches: the first approach is based on caution note – there is no link between HRM and performance, or if it is, it is dubious; the second approach is highly enthusiastic assuming positive and significant HRM and performance linkage. Admitting two approaches the literature review allows to maintain that „some progress“ [14] or even „considerable progress“ [15] has been made in research on HRM and performance, however the complexity of the link exits. Therefore, some variables that allow to reveal the link are in need.

While acknowledging that HRM serves as a value-creating function, there are some issues unresolved and some questions open. These issues can be summarised under the umbrella of the plea of Guest (1997): there is a need for theory on HRM, theory on performance and theory on how the two are linked. Notwithstanding the attempts theoretically and empirically to examine what we mean by HRM, what are the performance outcomes and what is the nature of link, the progress, according to Paauwe (2009), is still modest.
Although deep and comprehensive analysis of the content of HRM and of performance is beyond the scope of this paper, still in order to reveal the pathway from people management to sustainable competitive advantage, we are in need to disclose previous mentioned constructs. Hence, how do we treat HRM and performance in the scientific literature examining the link between them?

Globalization is transforming the world, still each organization operates in market seeking excellent performance which leads to sustainable competitive advantage. However, the choice of performance measures used in research studies varies widely. In terms of performance outcomes proximity to HRM practices Dyer and Reeves (1995) posited four levels of outcomes claiming that the impact of HRM practices on more distal outcomes is made through more proximal outcomes [16].

As regards HRM, it should be admitted that traditionally HRM function has been viewed as a cost to be reduced [3], however, the growth of beliefs and evidence that “how people are managed can make the difference” [17] enhances the value of HRM. Acknowledging that the majority of the researches define HRM in terms of HRM practices or bundles of practices [18], still no consensus exist on what HRM practices are definitively essential to HRM [19]. Different attitudes exist due to particular perspectives on HRM – the universalistic, the contingency and the configurational.

Assuming HRM does influence performance, the most fundamental issue is the linkage between the constructs. That issue is even more important taking into consideration the aspects of globalization. Due to fact that “there is a little understanding of the mechanisms through which HRM practices influence effectiveness” [20], one of the main challenges for researchers is to explicate and to assess the precise pathway through which HRM practices influence organizational performance. "The remaining void” [21] or “largely unexplained facet” [22] of HRM and performance linkage has been referred to “black box” [19]. Understanding the relevance of exploring the pathways leading from HRM practices to organizational value, considerable number of theories and approaches are used in order to clarify what is in this “black box” – the resource based view, human capital, intellectual capital, the behavioural perspective, organizational climate and culture, symbolic view of firm, an attribution approach, social exchange theory [23]. Moreover, particular approaches and theories determine not only the nature of the linkage, but also the significance of organizational strategy, the need for micro-level research and even the reverse causality in linking HRM and performance.

Based on above mentioned theories and approaches and seeking to provide an answer to Becker and Gerhart (1996) question “how do human resource decisions influence organizational performance?”, particular models attempting to indicate the relationships, including intermediary ones, in the HRM and performance chain have been developed [12, 24-27]. All mentioned models are based on Dyer and Reeves’ (1995) categorisation of outcomes emphasizing that in order to understand how HRM practices affect profitability, it is necessary to see what impact they have on proximal outcomes that have an impact on more distal outcomes and consequently have an impact on the most distal outcomes.
Virtually all authors have implicitly or explicitly treated the “black box” as a linear causal process consisting of one or more smaller boxes, however the number of boxes in the “black box” and the content of each box differ in each model. Due to various approaches the mechanism by which HRM practices are translated into competitive success is complicated and not well understood till now, however some general trends could be highlighted.

**Purpose** – Theoretically to discuss the causal pathway by identifying mediating variables in HRM and performance link.

**Paper object** is the content of the “black box”.

**Research method.** The paper is built on the analysis and synthesis of scientific literature on HRM and performance link.

### 2. HRM and performance link

Acknowledging the relevance of all types of resources to contribute to excellent performance, researchers emphasize that in the context of globalization human resources are vital to achieve success in the most effective and efficient ways [28]. It is generally accepted that “people are the key assets in the new world market and that all other assets are nothing more than commodities that can be purchased at market prices, because only the human asset has potential to learn, grow, and contribute” [29]. However, there is a continual debate as to what in particular provides value to the organization – human resources or their management [30]: 1) some authors maintain that sustained competitive advantage lies in the human resources and not in HRM practices *per se*, as the latter are well known; 2) other authors, though, highlight that competitive advantage is created through HRM practises and not human resources, as it does not suffice to hire best people in order to gain the competition; 3) third group of authors suggests a unifying approach to the critical role of both human resources and HRM in the enhancement of sustaining of competitive advantage.

The desire of human resource practitioners to show the value of what they do for the whole organization is of long standing; even Drucker (1954) emphasized that personnel management are worried “about their inability to prove that they are making a contribution to the enterprise” [31]. The presenting HRM as a new approach to personnel management [32] has provided an opportunity to contradict to repeated criticisms that human resources do not add value to the organization. Emphasizing strategic contribution, closer alignment to business, the involvement of line management and focusing on employee involvement provided assumptions and expectations that HRM contributes to a range of positive organizational outcomes. Therefore, the researchers have become active carrying out empirical research aimed at providing evidence that HRM results in higher organizational performance.

The first systematic empirical studies of the HRM and performance link were published by Arthur in 1994, MacDuffie in 1995, including one of the most cited articles in this area by
Huselid in 1995. In the course of eighteen years the huge number of studies in different industries and different countries were conducted. Although the bulk of literature seems to accept that HRM practices have a significant impact on organizational performance, it should be taken into consideration that there are two different approaches: 1) conviction concerning link; 2) doubt about link or even denial.

The agents of the first approach highlight that: 1) A set of HRM practices (high performance work systems – HPWS) are related to turnover, accounting profits and organization market value [11]; 2) „Bundles“ of HRM practices are related to productivity and quality (auto assembly plants) [10]; 3) There is a significant relationships between HR practices and accounting profits (a sample of banks) [33]; 4) Certain combination of HRM practices are related to operational performance outcomes [34]; 5) HRM practices are related to turnover and profitability [35]; 6) It is substantiated and corroborated the relationship first, between a range of HRM practices and important HRM outcomes, such as satisfaction, motivation, turnover, absenteeism and commitment, and second, between these outcomes and more general performance outcomes at the organizational level, like productivity, quality, R&D, customer satisfaction, sales, profit and market value [13]; 7) The effect of a one standard deviation change in HR system is 10-20 per cent of a organization’s market value [36]; 8) An increase of one standard deviation in the use of high-performance work practices (HPWP) is associated with a 4.6 per cent increase in return on assets, and with a 4.4 percentage point decrease in turnover. This fact allows to state that „HPWPs‘ impact on organizational performance is not only statistically significant, but managerially relevant“[37]; 9) Much (though by no means all) of the empirical HRM research in its ‘systems’ form has been found to matter (in a positive sense) for organizational performance [19]; 10) HRM practices help improve firm performance [28].

The agents of the second approach underline that: 1) It is premature to assume that HRM initiatives will inevitably result in performance gain [38]; 2) Using stricter tests there is little or no association between HRM and performance [39]; 3) After the reflection on the available evidence a conclusion sounds that HR practices are at least weakly related to firm performance [40].

However, even researchers who have doubts as Guest, Michie, Conway and Sheehan (2003) or Wall and Wood (2005) assume that the scientific literature conveys a strong message that HRM does promote performance [22]. Acknowledging that HRM can contribute to superior performance as a source of competitive advantage by making organizations more effective [41] and notwithstanding that “some progress” [14] or “considerable progress“ [15] was made in the analysis of the relationship between HRM and performance, there remains the space for emergence the better awareness of link. Whereas “empirical evidence for the existence of an HRM-Performance link is inconclusive“ [42] and the large majority of published studies provided evidence of an association rather than causation [15], the plea of Guest (1997) is still relevant: we need the theory with respect to HRM, the theory concerning performance and the theory with respect to the linkage between two above mentioned constructs.
Assuming the relevance of empirical finding, there is the need theoretically to approve link by providing some theories, otherwise the analysis of constructs and link between them will lack scientific rationale. The theory consists (minimally) of statements that deliver predictions in terms of relations between events (it does so by asking questions “what” and “how”) and statements that deliver explanation in terms of the causal mechanisms responsible for generating these events (it does so by asking “why”) [42]. Identifying the theoretical framework used by scientists for their research provides critical information on the epistemological and ontological assumptions they have about the subject [19]. Although the review of the literature allows for Fleetwood and Hesketh (2008) to calculate 47 theories, approaches and perspective used to ground the link, however despite that fact they draw the conclusion that empirical research is seriously under-theorized - “it is uncontentious to claim that research on the HRM-P Link does have theory, at least in terms of the predictive dimension of theory” [42]. The same attitude share Boselie, Dietz and Boon (2005) highlighting that their “research on research” findings demonstrated a deficiency in the literature regarding alternative theories and concluding that contingency theory [43-44, 33], resource-based view [45-46] and the AMO framework [47] are the three most commonly used theories. The main statements of these theories are provided in Table 1.

<table>
<thead>
<tr>
<th>Theoretical perspective</th>
<th>Author</th>
<th>Main statements</th>
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<tbody>
<tr>
<td>Contingency theory</td>
<td>Jackson and Schuler, 1987; Snell and Youndt, 1995; Delery and Doty, 1996</td>
<td>Seeking for better organizational performance HRM strategy has to fit with business strategy</td>
</tr>
<tr>
<td>Resource-based view</td>
<td>Barney, 1991; Grant, 1991</td>
<td>Competitive advantage comes from the internal resources that the organization possesses</td>
</tr>
<tr>
<td>AMO framework</td>
<td>Appelbaum, Bailey, Berg, and Kalleberg, 2000</td>
<td>Organizational interests are best served by an HRM system that attends to employees’ interests, namely their skill requirements, motivations and the quality of their job</td>
</tr>
</tbody>
</table>

Table 1. The theoretical perspective on link. Source: developed by the authors

**Contingency theory.** Contingency scholars argued that HRM strategy would be more effective only when appropriately integrated with a specific organizational and environmental context [48], accordingly the organizations that closely coordinate their business strategy and HRM strategy achieve better performance outcomes in comparison to organizations that do not [49-50]. Irrespective of the strategic framework being used (Miles & Snow, 1994; Porter, 1985) the scientists propose three or four competitive strategies available to organization and an appropriate HRM strategy for each competitive strategy [51]. As an example of mentioned statement could be the combinations provided by Bird and Beechler (1995) suggesting the appropriate match between business strategy
and HRM strategy type as: prospector business strategy with utilizer HRM strategy, defender business strategy with accumulator HRM strategy, and analyzer business strategy with facilitator HRM strategy [52-53]. Such match stimulates some critical approach whereas limited number of competitive strategies indicates limited number of HRM strategies [51].

**Resource-based view.** Resource-based view led to change thinking from an “outside-in” to an “inside-out” approach: from an emphasis on external industry based competitive issues to internal resources emphasizing effective and efficient utilisation. Hereby, resource-based view has long provided an essential theoretical rationale for human resource potential role [51]. Whereas according to that perspective, differences in organizational performance can be attributed to unique resources and capabilities rather than the industry’s structural characteristics [54], hereof the question arise concerning the features of resources that contribute to the creation of sustainable competitive advantage. The answer was provided by Barney (1991) identifying four criteria of resources: valuable, rare, inimitable and without substitutes. Resources are valuable insofar that they allow the organization to conceive or implement strategies that improve their efficiency and efficacy. In HRM context, the characteristic of rarely depends on the job pool’s heterogeneity and is in connection with the concept of resource specificity and labour mobility. If resources can be duplicated or imitated by another organization, then they are not a source of sustainable competitive advantage. Assuming above mentioned fact the organizations can develop human resources internally or obtain them in the market, but need to take into consideration that the way in which human resources act is limited by the existence of causal ambiguity, social complexity and unique historical conditions. As regards any substitutes, human resources are one of the few organizational resources without the potential to become obsolete and transferable toward a variety of technologies and products [55].

Notwithstanding that internal resources constitute the basic point for understanding organizational success, it should be admitted some critical points concerning resource-based view, for example resource-based view often neglects the social context within resource selection decisions are made.

**AMO framework.** Literature review allows to maintain that theoretical and empirical research in the field of HRM suggests that three independent work system components shape individual and aggregate employee characteristics and thereby contribute to success of organization [21]. These are [16]: 1) mechanisms to ensure the employee has the appropriate skills and abilities; 2) mechanisms to energise and motivate the employee to engage in desired behaviours, apply discretionary behaviour and prevent and resolve process exceptions; 3) work systems that empower employees to contribute their individual and collective efforts toward organisational outcomes.

The researchers have begun to incorporate above mentioned components in the framework of AMO, according to that employee perform well, when they [56]:

they can do the job because they possess the necessary knowledge and skills - they are able to do so – (A = Abilities);

they will do the job because they want to and are adequately incentivised - they have the motivation to do so - (M = motivation);

their work environment provides the necessary support and avenues for expression - (O = opportunity to participate).

Three commonly used theories reflect different traditions in HRM research, whereas contingency theory and resource-based view focus on the examination of HRM at the organizational level and are mainly interested in its performance effects from a business perspective, meanwhile the AMO framework represents an established tradition, having its foundations in industrial/organizational psychology [14]. According to Boselie et al. (2005), in many research the contingency theory and resource-based view are overlapped: together they reflect the central assumptions behind the conceptualisation of what HRM is and does: namely, that it responds accurately and effectively to the organisation’s environment and complements other organisational systems (contingency theory) and that it delivers added value through the strategic development of the organisation’s internal resources (employee) (the resource-based view). In comparison three theoretical perspective it should be admitted that more than a half articles published after 2000 use the AMO framework [14], that is treated as an extension of the resource-based view [18].

Notwithstanding the fact that three most popular theories are identified, in most articles it is not clear how these theories link HRM and performance. Due to that the space for applying another theoretical approaches is left, like social exchange theory or attribution theory. The identification of frequently used theoretical approaches and willingness to disclose the value creation process lead to the analysis of both constructs: HRM and performance.

3. The nature of constructs: HRM and performance

The finding human resources as a valuable intangible asset of the organization have provided an solution to the problem – how to compete in the market. Although one of the main purpose of HRM is to foster the performance of an organization [57], there appears to be no consensus on the nature of HRM [18]. The literature review allows to maintain that besides definition of HRM some other definitions are used, like “strategic HRM” [13], “high involvement management” [35], “high commitment management” [58] or “high performance work systems” [59]. Claiming that no matter how the process of human resources management is labelled, Boselie et al. (2005) found that in 104 research studies for the most part HRM was understood as a set of employee management activities (practices). However “There is no single agreed, or fixed, list of HR practices or systems of practices that are used to define or measure human resource management” [14], meanwhile creating competitive advantage through people requires careful attention to HRM practices that best impact the mentioned asset [60]. Moreover, there is no widely accepted theoretical rationale for selecting practices as definitively essential to HRM, consequently different research studies deal with different practices. Thus the question of what combination of practices are
likely to have the greater impact on performance arises. The answer to that issue depends on
the approach we are follow - the universalistic, the contingency or the configurational.
Adopting universalistic perspective means that there are certain HRM practices (so-called
“best practices”) which have the potential to have a positive impact on performance
irrespective of context. The configurational perspective suggests that the combination of
HRM practices is the power which drives performance. Meanwhile, the contingency
perspective requests to provide an answer concerning under what conditions certain
practices are likely to be more effective. In the context of global competition the
organizations have to apply HRM practices which give more flexibility in utilizing resources
[8]. Despite different perspective, a certain commonality around how HRM is
operationalized when examining the link between HRM and performance already exits, as
the AMO model presents a specific way of defining HRM and moreover, represents an
essentially universalistic perspective [15].

While we agree that it is critical to examine HRM and performance link, it should be
acknowledged that some ambiguity exits trying to clarity and define the performance
measures. According to Colakoglu et al. (2006), performance outcomes vary in terms of two
aspects: first, their proximity to employee contributions or the level of aggregation in which
they are measured, and second, the relevant stakeholder group of focus. Our focus of
attention in terms of the purpose of that paper is just the first aspect. Hereby, we concentrate
on proximity aspect according which the performance outcomes can be grouped at different
levels like individual level, department level, plant level, business unit level, firm
(corporate) level. Due to mentioned levels the research are conducted on micro level
(reflecting a more functionally oriented view of HRM and focusing specifically on the effect
of single or multiple practices on individuals) or macro level (reflecting the more
organizationally focused examination of HRM) [14].

Looking across the potential measures of HRM effectiveness, Dyer and Reeves (1995)
posed four levels of outcomes [16, 61-62]:

- human resource related outcomes; Boselie and van der Wiele (2002) identify perception
  and objective HRM outcomes. Wright and Haggerty (2005) provide another
  classification: affective, cognitive and behavioural reactions;
- organizational outcomes (e.g. productivity, quality, efficiency);
- financial outcomes (e.g. profit, sales, ROI);
- market based outcomes (e.g. stock price).

The relevance of mentioned categorisation is based on two assumptions. First, HRM
practices have most immediate impact on human resource related outcomes, since these
outcomes are in a closer line of sight to practices. Second, the impact of HRM practices on
more distal outcomes is made through more proximal outcomes. Together, these two points
claim that in order to understand how HRM practices affect market based outcomes, we
need to see what impact they have on proximal outcomes that have an impact on more
distal outcomes and consequently - on the even more distal outcomes (Figure 1).
Regardless of the fact that the distance between some of the performance indicators and HRM interventions is simply too large and potentially subject to other business interventions [14], based on the Rogers and Wright (1998) review [63] we can state that very few studies had examined human resource related outcomes, many had used accounting and financial market measures and based on the overview by Boselie et al. (2005) we can maintain that financial measures are represented in half of all articles (104) included in their analysis, accordingly profit is the most common, followed by various measures of sales. Hereby, referring to performance outcomes categorization provided by Dyer and Reeves (1995) and admitting that employee responses to HRM are crucial to sustainable competitive advantage we share the attitude of Paauwe (2009) proposing the need for performance indicators that are far more proximal in terms of what HRM practices can actually affect.

Summing up, it is essential to underline that finding some consensus and commonality on the nature of HRM and performance is related with two aspect of Guest (1997) plea, i.e. we need a theory of HRM and a theory on performance. Meanwhile the third aspect – we need theory on how two constructs are linked – is the most crucial part in the scientific literature which need precision attention.

4. The “black box“ problem

The substantial attention exploring human resource added value to sustainable competitive advantage has to be allocated to causal chain linking HRM to performance, i.e. examining how relates HRM to performance. Recognizing that effectively implemented HRM practices will “cause” higher performance, it is more important to see “how” something is done compared to just “what” has been done [64]. Based on the approach that mechanisms of HRM and performance link and clear constituents are vital to more complete perception and knowing of how HRM drives firm performance, different authors [3, 19, 25, 55, 60, 65-67] describe existing issues using very similar statements (Table 2).

The statements presented in Table 2 illustrate the “black box“ problem - what are key intervening variables that help to explain the link - and foreground that the conceptual development of the mediating mechanisms through which HRM has an impact on performance is still not evident. According to Purcell et al. (2003) the “black box“ refers to the often unclear processes that occur when inputs are converted into useful output.
<table>
<thead>
<tr>
<th>Author</th>
<th>Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Becker and Gerhart, 1996</td>
<td>There is a lack of understanding about the process (how and why) through which HRM creates organisational value and increases performance.</td>
</tr>
<tr>
<td>Huselid and Becker, 1996</td>
<td>To date there is very little research that “peels back the onion” and describes the processes through which HRM influence the principal intermediate variables that ultimately affect organization performance.</td>
</tr>
<tr>
<td>Wright and Gardner, 2000</td>
<td>One of the issues is to theorize means through which the HRM and performance relations occurs, in essence, specifying intervening variables.</td>
</tr>
<tr>
<td>Purcell et al., 2003</td>
<td>Many previous studies have examined the link between HRM practices and shown there to be a positive relationship, but none has explained the nature of this connection – how and why HRM practices impact on performance.</td>
</tr>
<tr>
<td>Wright et al., 2003</td>
<td>Much of the research has demonstrated statistically significant relationships between practices and firm profitability. While these studies have been useful for demonstrating the potential value created through HR practices, they have revealed very little regarding the processes through which this value is created.</td>
</tr>
<tr>
<td>Guthrie, Data and Wright, 2004</td>
<td>It remains true that little is know about the mechanisms by which practices are translated into competitive success.</td>
</tr>
<tr>
<td>Boselie et al., 2005</td>
<td>Between the input (i.e. some form of HRM intervention) and output (i.e some indicator of performance) – moderated possibly by intervening variables – lies what HRM does to improve performance, how and why, but scant attention is paid to examining the “linking mechanisms“ and the “mediating effects of key variables“ in this relationship.</td>
</tr>
<tr>
<td>Lytras and Ordonez de Pablos (2004; 2008)</td>
<td>There is a gap explaining how HRM contribute to the creation of a sustained competitive advantage.</td>
</tr>
<tr>
<td>Theriuo and Chatzoglou (2009)</td>
<td>Despite the quantity and variety of empirical studies little attention has paid on the concept or understanding of the mechanisms through which HRM practices influence performance. There appears to be only a limited amount of research attempting to explore how HRM practices essentially work and to pinpoint the processes through which these practices can lead to competitive advantage.</td>
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Table 2. Statements to mechanisms of link. Source: developed by the authors

The “black box” is also described as “remaining void” [21], “gap” [55] or “largely unexplained facet” [22] in terms of explaining the processes by which the HRM and performance impact operates. In literature the issue of the “black box” is treated extraordinary seriously assuming that complexities and nuances highlight the requirement to consider in more depth the relationship and exact mechanisms shaping the link [51].
Hereby, we need to open the “black box”, notwithstanding the fact that there is huge amount of acknowledgements of the existence of the “black box”, moreover - some suppositions as to its possible contents, however only few studies attempt to look inside.

5. The models exploring the “black box”

In the scientific literature quite big number of theoretical models, explaining the mechanisms through which HRM and performance relationship works, is presented. All these models are designed for opening the “black box” and reflect the order of Becker, Huselid and Ulrich (2001) that “Ultimately, you must have a persuasive story about what’s in the black box. You must be able to throw back the cover of that box and reveal a plausible process of value creation from HRM to firm performance” [68]. Becker & Huselid (2006) argued that the HRM and performance link is not as direct as suggested by the prior strategic HRM literature, admitting that intermediate outcomes, as part of an indirect link, are central to a more complete understanding of how the HRM drives performance. Due to theories which link HRM and performance, the field has advanced from rather simplistic models in the 1990s in which HRM practices were simply shown or assumed to correlate directly to rather distant indicators of performance, to far more advanced ways of theorizing and modelling the relations [14]. The growing sophistication and complexity responds to the plea that future work “must elaborate on the black box” [3] and to move away from simple input-output models which have HRM on the left side and performance outcomes on the right side.

After reviewing the literature, it looks that models of Becker, Huselid, Pickus & Spratt (1997); Guest (1997); Purcell et al. (2003); Wright and Nishii (2006) and Boxall and Purcell (2008) are more frequently used in theoretical and empirical researches. These models is our interest here, presenting at the beginning each of the model, later making comparison of models (similarities and differences).

**Becker et al. (1997) model.** This model was treated as one of the most specific [66] and the most logical and definitive model of the processes through which HRM practices influence performance [60] (Figure 2).

![Figure 2. HRM-Performance link model of Becker et al. (1997). Source: Becker et al. (1997)](image-url)
As is seen from Figure 2, the essence of the model lies in several proposals. First, the core feature of HRM system is that it is linked to organization business and strategic initiatives. Second, HRM system should be properly aligned, otherwise individual best practices can be in a conflict within HRM systems and due to that can actually diminish the value of organization. Third, HRM practices have a direct impact on employee skills, employee motivation and job design and structures, which consequently influence employee’s creativity, productivity and discretionary behaviour. These variables, in turn, result in operational performance, which relates to profitability and growth, ultimately determining firm market value.

Guest (1997) model. The starting point linking HRM and performance, according to Guest (1997) is assumption that improved performance is achieved through the people in the organization. The essence of the model is based on several proposals. First, the role of external context and strategy is acknowledged. Second, Guest (1997) uses the expectancy theory as a possible basis for developing a more coherent rationale about HRM and performance link. The theory proposes that performance at individual level depends on high motivation, possession of the necessary skills and abilities and an appropriate role and understanding of that role. This conclusion is a cause to choose such HRM practices that lead to high employee commitment, high quality staff and highly flexible staff. Third, the model encompasses the list of HRM practices that help to achieve appropriate HRM outcomes. Fourth, the model separates behaviour, performance and financial outcomes (Figure 3).

<table>
<thead>
<tr>
<th>HRM strategy</th>
<th>HRM practice</th>
<th>HRM outcomes</th>
<th>Behaviour outcomes</th>
<th>Performance outcomes</th>
<th>Financial outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Differentiation</td>
<td>selection</td>
<td>Commitment</td>
<td>Effort/ motivation</td>
<td>High:</td>
<td>Profit</td>
</tr>
<tr>
<td>(innovation)</td>
<td>training</td>
<td>Quality</td>
<td>Quality</td>
<td>Productivity</td>
<td>ROI</td>
</tr>
<tr>
<td>Focus (quality)</td>
<td>appraisal</td>
<td>Flexibility</td>
<td>Co-operation</td>
<td>Quality</td>
<td></td>
</tr>
<tr>
<td>Cost (cost)</td>
<td>rewards</td>
<td></td>
<td>Involvement</td>
<td>Innovation</td>
<td></td>
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<td></td>
<td>job design</td>
<td></td>
<td>Organizational</td>
<td>Low:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>involvement</td>
<td></td>
<td>citizenship</td>
<td>Absence</td>
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<td>status and security</td>
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<td>Labour turnover</td>
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<td>Conflict</td>
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<td>Customer complaints</td>
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</table>

Figure 3. HRM-Performance link model of Guest (1997). Source: Guest (1997)

The People - Performance framework (Purcell et al., 2003). This framework, as Harney and Jordan (2008) state, is built on two assumptions central to “unlocking the black box”: first, the framework advances the concept of discretionary behaviour by suggesting that virtually all employee have the capacity to engage in discretionary behaviour; second, the critical role of line managers because they have discretion in the way that they apply HRM and the way they behave towards employee (Figure 4).
The logic of the model is based on several proposals. First, Purcell et al. (2003) do not provide a specific set or “bundle” of HRM practices, instead they simply give an indication of what type of HR practices accommodate the conditions of the “black box”. Hereby, from one side, tradition practices as recruitment and selection, training and development, appraisal and reward, and from another side, choices concerning job security, work life balance, employee voice and work organisation are incorporated in HRM practices list [21]. Second, the performance is treated as function of employee ability, motivation and opportunity to participate. Third, the role of line managers in “bringing policies to life” is highlighted. Fourth, the role of discretionary behaviour is stressed.

**Wright and Nishii (2006) model.** Wright and Nishii (2006) studied some of the mediating processes that might occur in HRM and performance relationship by examining the relationship at multiple levels of analysis. They present the model that includes intended HR practices, actual HR practices, perceived HR practices, employee reactions and performance (Figure 5).

Assuming that there is the gap what is formally required in HRM policy and what is actually delivered by line managers [69], the model draws attention to some aspect: the need to distinguish actual practices, intended practices and practices as perceived by employee, and the key role of line managers by interpreting and implementing HRM practices. The differences between practices will be exploring by making comparison of the models. Here, we would like to focus on another aspect: as is seen from the Figure 5, Wright & Nishi (2006)
model covers some essential processes that have to occur in order that HRM practices impact organizational performance. First, starting with the assumption that decision makers have designed an intended system of HRM practices, the next step is to actually implement those practices. Second, the link between the actual HRM practices and the perceived HRM practices presents the significance of communication. Third, after getting the information concerning HRM practices employee form some internal strategy for how they will react – we face to the concept of moderation, which posit that the impact of one variable (in this case - the HRM system) on another variable (in this case - the employee reactions) varies depending upon the level of a third variable (in this case - individual differences). Fourth, notwithstanding that employee may behave differently as a result of their perceived HRM practices, but whether or not the behavioural differences positively impact organizational performance may depend on the level of coordination across them.

**Boxall and Purcell (2008) model.** This model is based on Wright and Nishii (2004) model and ideas of Purcell & Kinnie (2007) and involves intentions, actions, perceptions and responses and hereby strives to integrate the individual and collective levels of analysis [26] (Figure 6). The logic of the model is based on several proposals. First, intended elements encompass not only top management espoused values and employee relations style and formal HRM practices, but also organizational and financial policies, seeing much that is done in finance and operations management affects what employee experience at work. Second, three parties that deliver management actions are underlined – senior managers, human resource managers and line managers. Each of the parties has different responsibilities and duties, however the actions of all them influence perceptions of employees. Third, the individual and collective perceptions are at the same importance. Fourth, the perceptions lead to employees responses and outcomes which are key mediators that result in organizational performance.

**Figure 6.** The link model of Boxall & Purcell (2008). *Source: Boxall and Purcell (2008)*
The overview of five models provide general awareness on the opening of the “black box”, on exploring the process linking HRM and performance, however it should be admitted that mentioned models differ. The comparison of the models is provided in Table 3.

As it is seen from the Table 3, some debate can concentrate on two kinds of aspects: quantitative aspect and qualitative aspect. Respecting first aspect two main questions are significant: how many boxes should be included in the “black box” and how many variables should be in each box. Concerning the second aspect, the question of Becker and Huselid (2006) -“What are the most important intermediate outcomes” - gains the significance due to the demand to provide the answers or at least thoughts about issues like the relevance of the strategy; the type of the mediating variables; the reverse causality; the identical understanding of content of each box. All above mentioned points are our interest here.

**Quantitative aspect.** While examining the quantity of boxes the main challenge is to decide on the appropriate number of mediating variables between the primary independent and dependent variables [66]. The earliest models simply proposed that a fit between HRM practices and organizational strategy resulted in a generic outcome titled - firm performance. Becker et al. (1997) model added two layers of complexity with the inclusion of employee skills, employee motivation and breaking employee behaviours into three components: productivity, creativity, and discretionary effort. Purcell et al. (2003) stressed the role of line managers and the relevance of skills, motivation and opportunity to participate, in a similar way Wright and Nishii (2006) distinguished between intended and actual HRM practices. From such perspective the list of boxes should not be considered definitive or complete, seeing another researchers could theorize even more specific linear causal models by including more and more “boxes” between HRM practices and market value. That tendency is related with increased globalization also.

In substance, the question of how many boxes need to be included before the model is complete has yet to be settled, although Hope-Hailey, Farndale and Truss (2005) are persuaded that the primary issue in the development of conceptual model is which variables should be included in making step from HRM to organization performance [70]. However, it is worthwhile to underline that, according Wright and Gardner (2000), the consensus exists concerning one issue: any theoretical or empirical effort should at least specify some mediating variable(s), but not how many.

While analyzing the number of variables in each box, i.e. the number of sub-boxes, the task of development of a specific theoretical model to open the “black box” requires specification of the relationships among each of the sub-boxes. It should be taken into consideration that this creates a serious problem for understanding the phenomena as the complexity becomes virtually unmanageable. As it is seen from the Table 3, from one to nine variables are used in each box trying to avoid to many relationships exploring HRM and performance link. In summary regarding the quantity of boxes and the number of variables of each boxes, it is worthwhile to stress that putting too many boxes in the model will not open the “black box” and putting too much items in the boxes will not make the model more insightful.
Table 3. Comparison of the “black box” models. Source: developed by the authors

<table>
<thead>
<tr>
<th>Author</th>
<th>Quantitative aspect</th>
<th>Qualitative aspect</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of boxes</td>
<td>Variables in boxes</td>
</tr>
<tr>
<td>Becker et al. (1997)</td>
<td>7</td>
<td>min -1 max – 4</td>
</tr>
<tr>
<td>Guest (1997)</td>
<td>6</td>
<td>min -2 max – 7</td>
</tr>
<tr>
<td>Purcell et al (2003)</td>
<td>6</td>
<td>min -1 max – 4 (not including practices)</td>
</tr>
<tr>
<td>Wright &amp; Nishii (2006)</td>
<td>5</td>
<td>min -1 max – 1</td>
</tr>
<tr>
<td>Boxall &amp; Purcell (2008)</td>
<td>5</td>
<td>min -2 max – 9</td>
</tr>
</tbody>
</table>

Qualitative aspect. The relevance of the strategy. A strategy could be define as an integrated and coordinated set of commitments and actions designed to exploit the core competencies and hereby to gain a competitive advantage [49], as a set of strategic choices including critical choices about ends and means [27]. Whereas the practical purpose of strategy is to provide a plan that employs multiple inputs, options, and outputs to achieve a company's policy goals and objectives [71]: strategy decides how the organization's goals
and objectives will be achieved, what operational units will be used and how those units will be structured; moreover, strategy determines what resources will be needed and how these resources will be acquired and used.

The answer to the question - What role the strategy plays in HRM and performance link – becomes essential respecting that, as it is seen from the Table 3, some models do no include strategy in the chain of HRM and performance link. The literature review do not allow to provide uniform answer to above mentioned question concerning strategy.

As it was mentioned before, the assumption of a close link between business strategy and HRM is based on contingency theory. The results of empirical research differ: although Bird and Beechler (1995) established that employee performance (e.g. morale and turnover rate) in firms that successfully adopted the strategic fit concept was significantly better than in firms that did not do so and Delery and Doty (1996) found support for a fit with Miles and Snow typology, however Huselid (1995) stated that the simple adoption of high performance work practices is more important than any efforts to ensure that HRM practice are aligned with organizational competitive strategy. Maintaining that typically the research distinguishes three or four different competitive strategies, mostly based on the competitive positioning typologies of Porter (1985) or Miles and Snow (1994) and then tries to link these to appropriate HRM architectures, Paauwe (2009) concludes that research in this area fails to provide conclusive evidence that matching HRM practices to competitive strategy contributes significantly to organizational performance.

However, it should be admitted that Becker and Huselid (2006) see effective strategy implementation as the key mediating variable between the HRM architecture and organizational performance. They emphasize the linkage between strategic business processes and the HRM architecture instead of linking the HRM strategy to one of the market positioning strategies.

**The type of the mediating variables.** The comparison of models allows to identify several types of mediating variables, as employees skills, motivation and opportunity to participate; line managers; employees attitudes and responses. These variables will be later exploring.

*The AMO framework.* As it was mentioned before, the AMO framework is the most popular theoretical perspective linking HRM and performance. The elegance of the AMO framework is that it encompasses mediating changes in employees abilities, motivation and opportunities to participate. Here we notice the duality: from one side, HRM practices have the most significant direct influence on employees skills, motivation and empowerment [72], from another side, the AMO framework provides the skeletal structure of the typical best practice prescription [19]. As it is seen from provided models, the components of AMO framework as critical intermediaries were included already in the initial models. For example, in Guest (1997) model high quality staff is related to capabilities and knowledge and skill of employees. The core of the Purcell et al. (2003) model links employee attitudes, discretionary behaviour and performance where the three AMO conditions are presented.

*Line managers.* People management occurs in each organizations and therefore it is performed by a number of different of agents [73]. In that sense, agents other as human
resource managers may be involved in the process: mainly these agents are top management and line managers. Sisson (1994) states that the key role for top management and line managers is evident: top management should offer “transformational leadership” through the establishment of an organization’s mission and values, and by being highly visible and sharing their vision for future success with other employees, meanwhile line managers play an essential role through their ability to “inspire, encourage, enable and facilitate change by harnessing commitment and co-operation of (the organization’s) employees” [74].

The involvement of line managers in the process in HRM is not a new phenomenon, whereas line managers have always had some responsibilities in people management field. However, in the recent 20 years the emphasis on role of line managers have increased due to some reasons [75]: the emergence of new concept - human resource management – and arguing that management of people should be more integrated and shared with line management [32]; the decentralisation of decisions making; the growth of teamwork; the trends toward individualism.

Following an approach that “HRM is too important to be left to personnel managers” [76] and accepting that HRM is an aspect of all management jobs, line managers are increasingly involved in the delivery of HRM, particularly in relation to their own teams [77]. Hereby, line managers may serve as critical intermediaries in shaping not only the actual form HRM practices take in practice, but also the perceptions of these practices by employees. Notwithstanding these findings, the role of line managers has been largely ignored in the huge volume of research on HRM and performance causal chain [19].

Analysing line managers as intermediaries, it should be taken into consideration that line managers do not act as “robot conformists” [78], whereas they vary relevantly in how they fulfil their activities. That leads to statement that employee's perceptions of HRM practices will vary as well. Moreover, managers priorities between financial, market and human resource issues will affect the priority they give to HRM and constantly there is the risk that line managers simply fail to implement practices [15].

The comparison of provided models for opening the “black box” (see table 3) allows to fix that three of five models include line managers in causal pathway explaining some aspects of their activities. Purcell et al. (2003) identify four different aspects of line managers activities: implementing, enacting, leading and controlling. Implementing HRM practices refers to whether line managers put HRM policies into operation. Enacting is concerned with the way in which line managers enact the policy to make it effective. Leading includes the actions of line managers which they undertake on a daily basis that have a great impact on employees experience about work in certain organization. Controlling is concerned with controlling the behaviour of the employees and their influence over the job duties. Boxall and Purcell (2008) underline in their model the role of three actors: seniour managers, human resource specialists and line managers and keystone on the behaviour when they enact practices. The extend to which the line managers need to enact and the extent to which the line managers want to enact practices are stressed arguing that line managers are responsible for converting much of human resource policy into actual practices, “given the
resources they are allowed to work with and their judgement about what will work or what serves their interests” [27]. Wright and Nishii (2006) underlying the role of line managers propose in their model some of the basic processes that seemingly have to take place in order for the HRM practices to have an impact on performance. Here we would like to discuss here only the communication process which shapes linkage from actual to perceived HRM practices. Communication is the exchange and flow of information and thoughts from one individual to another. Communicating is a critical skill for the managers - they must be able clearly to communicate both inside and outside the organization [26]. According to Wright and Nishii (2006), Bowen and Ostroff (2004) provides one of the most thorough multi-level frameworks for understanding the strategic HRM process which is based on communications theory: they highlight the consistency of messages about HRM practices, both in terms of what is communicated and the sources of communication [15] and argue that HRM practices are organizational communication devices that aim to communicate to employees particular messages [79].

The incongruity between rhetoric and reality in HRM field was noticed already by Legge (1995) [80] and that fact encouraged Wright and Nishii (2006) to try to open the “black box” by distinguishing intended, actual and perceived HRM practices, on that idea is based also the model of Boxall and Purcell (2008). Both models integrate two aspects: line managers as a key intermediaries and three kinds of practices as the gap between these practices is often explained by line managers variability in behaviour [75]. Wherefore analyzing the qualitative aspect of the “black box” we focus on mentioned kind of HRM practices.

Intended HRM practices are practices designed by the organization to contribute to the achievement of organization strategy. The practices are influenced by the articulated values of organization and includes the ways the work is structured and organised, because that impact employees attitudes and behaviour [75]. Actual HRM practices are those practices that are implemented, this means that not all intended HRM practices are actually implemented, and that practices can be implemented in ways that differ from the initial intention [69]. Actual HRM will be perceived and interpreted subjectively by each employee, further based on the perceived HRM practices, employee will react in some way. Hereby, the perceived HRM practices and employee reactions are two individual level variables that are central to causal pathways and core to the “black box” opening. Referring to Wright and Haggerty (2005) considerable variance at individual level can occur due to two reasons: variation in the actual HR practices and variation in the schemas individuals employ in perceiving and interpreting HRM related information.

A look inside the “black box” in the models of Wright and Nishii (2006) and Boxall and Purcell (2008) is explained using not three already discussed theories (contingency, resource-based approach and AMO framework) but focusing on an attribution approach and social exchange theory.

Whereas attribution approach suggests that individuals have a tendency to derive causal explanations about events, occurrences and other individuals, it may be able to explain how some mechanisms work in the organization [23]. Wright and Nishii (2006) have used
Attribution theory to explore the way in which employees interpret HRM practices and to show how that interpretation can shape their response. According to the theory, although the employees have the understanding about how they are expected to behave in response to practices, they also have a tendency to derive causal attributions about the intention of the organization in implementing certain HRM practices. Two kinds of attributions are identified: external and internal. If employees make a conclusion that the implementation of HRM practices is due to external factors, these attributions may not impact behavior of employees. As regards internal attributions, the situation is different: the internal attributions will likely effect how the employee react to HRM practices [23]. This is the confirmation that it is not sufficient to restrict the focus to the presence of practices, there is a need for organizations to pay much more attention to communication [15].

Social exchange theory explores the exchanges that occur between two parties: employee and employer regarding the perceptions of reciprocity at the individual level of analysis [23]. According to social exchange theory, HRM practices are viewed by employees as a commitment to them by the organization, hereby employee feel obligated to respond equally to treatment of the organization.

Employees attitudes and behaviour. Increasing globalization has important implications for employee relations [6]. Central to more sophisticated ways of thinking about the relationship between HRM and performance is the idea that HRM practices at the organizational level affect the attitudes and behaviour of employees at the individual level [14]. The message in the bulk of the literature is the same: at the core of the chain are employee attitudes and behaviour [75]; virtually all scholars who specify a causal chain between HRM and performance see employee attitudes and behaviours as a critical linking mechanism [27]; employees reactions are at the heart of all HRM and performance linkage models, because causal link is flowing from practices to performance via responses of employees [81]; it is accepted that performance depends at least partly on the behaviour of employees [82]. The fact that employees outcomes have largely remained dormant in research is ironic because how HRM affects performance rests on the assumption that it is through employees attitudes and behaviours. The comparison of models allows to state that they incorporate employees attitudes and behaviours, mostly – organizational commitment and job satisfaction are included. Moreover, Purcell et al. (2003) even include discretionary behaviour assuming that competitive advantage stems from the ability of organisations to elicit effort from their employees above and beyond the immediate requirements of the job [21]. Discretionary behaviour means making a choice regarding the do, the way the job is done - the speed, the time, the style, the innovations and so on [25].

Reverse causality. Already at the beginning of elaborating to open the “black box” Paauwe and Richardson (1997) notice the risk not to examine the possibility of reverse causality in HRM and performance link. The analysis lets to mention that not all authors include reverse causality in their provided models, although reverse causality can be illustrated by such example, the organization with high profit may have a higher willingness to invest in HRM. This assumption was confirmed by Schneider et al (2003) who found that profitability is more likely to cause job satisfaction than job satisfaction is to cause profitability [18].
The identical understanding of content of each box. The main challenge is choosing a level of specificity within each box. It is not enough to maintain that a “operating performance” box has great value. Such proposition will bring some confusion, because if one is to explore this relationship empirically, on which aspect(s) should one focus? To response to the above question is not simple, since numerous measures of operational performance exist such as customer satisfaction, customer retention, sales revenues. As Wright and Gardner (2000) state, this leads to a multiplicative effect in determining the process of the model, at the same time the relationships among each of the sub-boxes should be described.

As a consequence of the comparison of the models, five main findings could be drawn. First, although all authors have implicitly or explicitly treated the “black box” as a linear causal process, different models encompasses different number of boxes and the content of that boxes is not homogeneous. Second, although the accurate assessment of HRM-Performance link requires reliable and valid assessment of HR practices [16], but as seen from Table 3, different models comprise various HRM practices, acknowledging that HRM deals with a wide range of issues [83]. Third, employees abilities, motivation and opportunity to participate (AMO framework) and role of the line manager to „bring policies to life“ [25] are two crucial variables through which HRM practices influence human resource related outcomes. Forth, employees reactions are at the core of all models, because causal link is flowing from practices to performance via responses of employees. Fifth, human resource related outcomes impact more distal performance outcomes: only when human resource related outcomes are achieved it is possible to expect higher performance.

The comparison of the models highlight that there is an ongoing debate over the number of mediating variables and its content. This means that till now exist no answer to the Wright and Gardner (2003) question – how many boxes should be taken into account when studying the HRM-Performance linkage. The answer to this question is important as, according to Becker and Huselid (2006), “a clearer articulation of the ‘black box” between HRM and firm performance“ is the most pressing theoretical and empirical challenge in the Strategic HRM literature. However, the literature review and comparison of he models allows us to elaborate model that includes the frequently used variables (Figure 7).

![Figure 7. HRM and performance link model. Source: developed by the authors](image-url)
In summing up, it could be stated that assuming the relevance to open the “black box” and to reveal the precise mechanisms through which HRM practices influence organizational performance, till now there is an ongoing debate over quantitative and qualitative issues. However, some commonality around the mediating variables shaping the “black box” already exits by acknowledging the core significance of employee skills, motivation and opportunity to participate and of line managers.

6. Conclusions

1. Assuming that in the context of globalization human resources and their management are vital to achieve sustainable competitive advantage, many of HRM research efforts have been directed to understand HRM and performance link. Notwithstanding the statistically and managerially significant relationships between two constructs and growing number of research demonstrating that HRM can serve as a value-creating function, still there remains considerable space for improvement the understanding. Although contingency theory, resource-based view and the AMO framework are the three most commonly used theories for linking HRM and performance, however, due to the growing sophistication and complexity these approaches do not provide answers to huge amount of questions in relation to HRM theory, performance theory and theory on how the two are linked.

2. Different attitudes: the universalistic, the contingency and the configurational determine that there appears to be no consensus on the nature of HRM: there is no single agreed, or fixed list of HRM practices or systems of practices that are used to define or measure human resource management. Despite various approaches, a certain commonality around how HRM is operationalized when examining the link between HRM and performance already exits, as the AMO model presents a specific way of defining these practices. Although performance outcomes vary in studies widely, however, based on the proximity to employee contributions, the outcomes can be divided into four groups making two assumptions: HRM practices have most immediate impact on human resource related outcomes, since these outcomes are in a closer line of sight to practices; the impact of HRM practices on more distal outcomes is made through more proximal outcomes.

3. Assuming HRM influence on performance, it is important to consider the intervening steps in HRM and performance link, to explain the processes by which HRM and performance impact operates and to open the “black box”. Notwithstanding that in the scientific literature quite big number of theoretical models, explaining the mechanisms through which HRM and performance relationship works, is presented, these models due to different approaches varies in respect to quantitative and qualitative aspects. Concerning quantitative aspect two main questions are significant: how many boxes should be included in the “black box” and how many variables should be in each box. As regards qualitative aspect, the relevance of the strategy, the type of the mediating variables, the reverse causality and the identical understanding of content of each box are the core issues.
4. Although different models encompass different number of boxes and the content of that boxes is not homogeneous, however some obvious features can be presented: employee abilities, motivation and opportunity to participate (AMO framework) and the role of the line managers are two crucial variables through which HRM practices influence human resource related outcomes; employees reactions are at the core of all models, because causal link is flowing from practices to performance via responses of employees; human resource related outcomes impact more distal performance outcomes: only when human resource related outcomes are achieved it is possible to expect higher performance.

5. Acknowledging that putting too many boxes in the model will not open the “black box” and putting too much items in the boxes will not make the model more insightful, future research need to elaborate on more precise mechanisms and to theorize deeply the means through which the HRM and performance link occurs.

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7. References


