

IS THE ROLE OF HRM STRATEGIC IN A M&A' SUCCESS?

EXPLORING INVOLVEMENT OF HRM IN A DUE DILIGENCE PROCESS

INTRODUCTION

Mergers and acquisitions (M&A) have become a compelling strategy for corporate growth for many companies in recent years. However, not all M&A succeed. Even though all companies begin with well-intentioned growth plans and an expectation of financial gain from the ventures, some failures are unavoidable due to unforeseen events or a mismatch, fewer than 20 percent of companies had considered the steps necessary to fully integrate the acquisition into their own companies (Chew & Sharma, 2005; Shi, Sun & Prescott, 2012).

In order to understand the reasons for the high rate of failure, more recent M&A research has focused on human resource management (HRM), particularly during the integration phase (Love, 2000; Rafferty & Restubog, 2010; Teerikangas, 2012). HRM has been often mentioned as a potential factor in M&A failure (Morphy, 1999; Love, 2000; Panda & Krishan, 2000; Daniel and Metcalf, 2001; Briscoe, 2006; Nikandrou & Papalexandris, 2008; Weber & Fried, 2009). However, conceptual and empirical studies of the role of HRM practices in M&A and its contribution to post-M&A performance remain limited. The benefits of HR due diligence are often underestimated and its findings are often don not explain what are the main areas of HRM due diligence that contribute to a company's performance (Howson, 2003).

The limited studies focused on the effect of the HR managers' participation in the due diligence process of M&A seems incomprehensible since, as it was widely discussed, the role of HRM during a transaction is crucial and the overall impact of HR activities on business is out of question (Barkema & Schijven, 2008; Rafferty & Restubog, 2010; Teerikangas, 2012). Hence HRM is nowadays viewed as the source of comparative advantage for the company; it is supposed to play one of the major roles in achieving firm performance, including the success of M&A.

Human resources can be a source of considerable risk in a deal and the importance of the human factor in successful M&A should never be underestimated.

Our study aims to fill this gap proving that a positive correlation exists between HRM involvement in the due diligence process of M&A and a subsequent success of a deal. Moreover, prior primary studies had little focus on the analysis of the particular areas of HRM due diligence, concentration on which lead to the success of a deal. We pose in our study two major research questions that guide us in theoretical and empirical analysis and become a basis for our further hypothesis: 1) What is the nature of the relationship between HRM due diligence and M&A deal successfulness? and 2) What are the specific areas of HRM due diligence that help companies to succeed in M&A?

THEORY AND HYPOTHESIS

M&A are increasingly used by companies to access to new markets and resources, leading to a dramatic growth in number and value of such deals. According to Edwards & Rees (2006), the 1990s saw a boom in cross-border M&A, with their value increasing from \$150 billion in 1990 to \$1,080 billion in 2000. In the year 2000 there were 175 cross-border mergers with value more than \$1 billion. Although M&As are accomplished to achieve success, the research shows that many mergers and acquisitions even with high value fail to reach their initial objectives. Ravenscorf and Sherer (1989) found that profitability of target companies, on average, declines after an acquisition. McManus and Hergert (1988) reported that in the first 12 months following a merger or acquisition, companies typically experienced a loss in market value of 1–10 percent. A McKinsey and Co. study (Hunt, 1988; McManus & Hergert, 1988) found evidence to suggest that most organizations would have received a better rate of return on investment if they had just banked their money rather than acquired another company. Furthermore, there is an evidence of the adverse effect of M&A on behaviors and applications: lowered productivity, worsened strike records, higher absenteeism, and poorer accident rates (Meeks, 1977; Sinetar, 1981).

Various reasons for M&A to fail are discussed (Overman, 1999; Appelbaum et. al., 2007), but of all the reasons typically cited, personnel issues are probably the most common (Morphy, 1999). Seo and Hill (2005) based on a review of more than 100 books and articles in both the academic and practitioner literature have identified different theoretical approaches that have implicitly or explicitly formed the basis for explaining employees' psychological and behavioral responses to M&A-related organizational change. According to Panda and Krishan (2000), despite the fact that during M&A great attention is paid towards financial matters and outcomes, HRM issues still remain neglected. These 'people factors', although assessed to be at least as important as the financial and technical issues, got less attention during the merger process; even if they were considered, they were managed less aptly than other aspects (DeVoge & Shiraki, 2000). Corporate executives generally defaulted to incorporate HRM aspects into the M&A process, possibly because they were not acquainted with the proper ways of managing the change in their companies or because they did not understand that a merger may have a considerable harmful effect on their employees (Love, 2000; Wassmer, 2010; Teerikangas, 2012). Therefore, financial and legal issues are dominating in the pre-merger stage, and HR managers, who could have given advice on managing the human side of the alliance, were hardly ever incorporated in the planning group. Similarly, Bohl's (1989) survey of 109 companies with active M&A programs found that the HR function had not played an important role in the pre-merger planning in about two-thirds of companies reporting post-event problems, while the same was true in only about half of those reporting no problems. As Briscoe (2006) states, many global deals 'have fallen prey to failure' or reduced levels of success because this crucial research effort doesn't reveal the weaknesses or incompatibilities of a prospective business partner. There are many examples of companies engaged in M&A that don't really understand what is of the most importance in terms of corporate due diligence (Clemente & Greenspan, 1998; Norelli, 1998). The ill-consequence of this is that blunders in the due diligence process can destroy much (if not all) of a deal's value.

The influence of HRM practices on firm performance, as Tzafrir (2006) mentions, has been a central question in organizational literature throughout the last decade. Great attention was paid towards the links between different HRM practices and a company's effectiveness in terms of different countries, industries, companies' size and other perspectives. Sels et al. (2006) develop a conceptual framework that links HRM to the financial performance of the small business companies. Even though in comparison with large companies small businesses are less extensive in the usage of HRM practices due to the lack of time and financial resources, effective management of personnel tends to be a good predictor of small business survival. The research conducted by Sels et al. (2006) showed that intensive HRM can add extra value for small firms and the total effect of HRM intensity on profitability is positive and very strong. This effect can be explained by the positive influence of HRM on some intangible operational performance results such as a lower level of disputes, and a better quality and higher level of innovation.

The typical due diligence review of the target firm during the pre-combination phase of partnering rarely considers the critical people, organizational and HR issues (Briscoe, 2006; Teerikangas, 2012). As Burrows (2000) states, these people issues either never surface during the due diligence or the acquirer underestimates their importance and fails to recognize them as warning signs of business problems that could sap value from the deal and even threaten the success of the transaction. To increase the possibility of a long-term, financially successful M&A, comprehensive due diligence must incorporate the realization of the 'people situation' in the target company (Carmeli & Tischler, 2004; Wassmer, U. 2010). As Burrows (2000) says, a thorough due diligence that pays great attention to the acquiree's workforce is aimed to discover both the company's people problems and people strengths. Moreover, according to Schuler, Tarique and Jackson (2004), HRM issues to be addressed in M&A might vary depending on goals and type of M&A. We therefore expect that there is a positive relationship between an M&A deal and HRM, thus we pose:

Hypothesis 1a: In successful M&A the role of HRM is perceived as more strategic if compared with an unsuccessful deal.

Hypothesis 1b: While developing an M&A, the full partner role attribution to the HRM department leads to the success of a deal.

Hypothesis 1c: There is a strong positive correlation between HRM involvement in the due diligence process of M&A and the success of a deal.

Based on a conducted literature review, we can also identify the existing gap in current research on HRM issues in M&A activities concerning the specific focus, which should be of high attention during due diligence. All literature sources that we investigated can be divided into several groups. The first one focuses on studies emphasizing exclusively the role of HR managers in post-merger activities, not even mentioning the due diligence process. For example, Tanure and Gonzalez-Duarte (2007) argue that HRM should first take part in the process during the negotiation period and then during the integration phase.

Secondly, HRM needs to formulate people management policies that are compatible with the objective that stands behind the M&A and the adopted strategy of integration. The second group is concentrated on general thoughts about the importance of HRM involvement in the due diligence process; at the same time they do not give any further information considering what aspects of HRM should be evaluated and how it is needed to be done. As Mulay (2007) states it, ‘due diligence stage goes from the identification and appraisal of people to the management of culture issues and communication’. An even broader description is given by Marks (1997): ‘HR professionals can enhance due diligence efforts by searching for everything from skeletons in the closet to managerial depth’. Leonard (1999) emphasizes two main issues: (1) the need to educate companies’ top management on the importance of considering HRM issues as early as possible in the M&A process; and (2) the need to create a so-called checklist that should be a core component of the due diligence process and include an examination of each functional HRM area and identification of primary responsibilities within each of these areas. Pike (2002) also points out

the importance of HR managers' participation in the due diligence phase of M&A, saying that HR professionals can contribute most to the success of the transaction when they have knowledge of the value drivers in the deal, have business savvy and technical skills in HRM functions, and are prepared to conduct a due diligence analysis. As McKay and Qureshi (2001) mention, the key is to use this stage [due diligence] to evaluate the key personnel and organizational issues at the acquired company, and present a preliminary plan for incorporation. We can mention more followers of this approach: Greengard (1999), Tanure and Gonzalez-Duarte (2008), Papadakis (2007).

The third group of research studies the problem of one or few due diligence issues in terms of HRM. Among these the most frequently mentioned one is organizational culture. The study of Lodorfos and Boateng (2006) finds that cultural differences between merging firms are a key element affecting the integration process and consequently the success of M&A. The study also finds that managers pay less attention to the target selection criteria, and do not analyze thoroughly the cultural fit of the merging entities especially during the pre-merger stages. In fact, as Stephen (2005) mentions, many acquirers lack even an indistinct idea of what it might mean to plan for integration of cultures. Unrelated corporate cultures can impede integration in terms of new norms, work practices, individual and organizational identity; at the same time a strong culture can create a competitive advantage, increase motivation, and organizational effectiveness (Horwitz et al., 2002). Bhaskaran and Gligorovska (2009) argue that not only organizational but also national culture is crucial during cross-border M&A: it influences beliefs about and behaviors to trans-national alliance partners. However, they are not solely built by national culture. It is a complex of social, political, economic and organizational factors and the impact of these factors on such issues as trust, commitment, co-operation and communication. The importance of cultural and talent issues that are needed to be assessed during the due diligence process are also investigated (Grossman, 1999; DeVoge & Shiraki, 2000; Weinstein, 2001; Ryder & Inman, 2002; Salama, Holland & Vinten, 2003; Schraeder & Dennis, 2003; Sikora, 2003; Letney, 2005;

Srivastava & Bhatnagar, 2008; Tanure & Gonzalez-Duarte, 2008). Dealing with personnel's possible reactions towards M&A, Bhal, Bhaskar and Ratnam (2009) indicate that about two-thirds of all mergers fail to achieve the desired results primarily because of the organizations' apathy to the employees' reactions and interests.

Briscoe (2006) argues that the whole point of due diligence from the HRM perspective is that HRM professionals should help their firm prepare for potential liabilities and compatibilities in a merger of HRM practices and programs prior to the signing of the agreement and to establish the likelihood of achieving strategic and financial objectives. This should include the development of a checklist of critical issues to be assessed and the identification of a task force membership that can be called into use as soon as a target firm is identified. This checklist should be evaluated after each acquisition, adjusted and updated to fit the firm's needs, and prepare long before M&A occur. Hence:

Hypothesis 2: Concentration on specific HRM areas such as HRM practices, corporate culture, legal and informational issues increase the probability of a successful deal.

According to Subramony (2009), an even stronger effect on a firm's performance is achieved by so-called human resource management bundles that consist of multiple complementary practices. This is due to synergistic effects that are reached by the bundling of individual HRM practices.

As we can see from the literature review above, research on the relationship of HRM to companies' performance are numerous, at the same time there are just few a empirical studies focusing on the influence of HRM effectiveness in terms of M&A (Chew & Sharma, 2005; D'Amours & Lynch, 2010) and limited is focused on the due diligence process. D'Amours and Lynch (2010) mentioned that involving HRM early in a deal results in the higher possibility of the M&A success. One should pay attention primarily to the integration stage, which actually follows due diligence. Another survey conducted by Towers Watson, a leading global professional services company, in 2009 assessed the impact of people management practices in achieving

M&A success and the specific skills HRM needs to contribute most effectively during a deal. They also found that companies estimating their transactions to be successful spend more time on key change and communication activities with employees at an early stage of a deal. Their HRM functions, typically playing the leading role in these fields, were good at communicating with employees throughout a deal, and at developing and implementing strategies to retain key employees. In fact, respondents who said their companies performed very well in these areas were more than 60% more likely to rate their company's deal as successful in achieving defined objectives. Also, as the survey shows, 42% of companies judging their deals as successful gave HRM a strong performance rating in helping senior leaders handle the process more effectively. By comparison, just 15% of companies judging their deals less successful rated HRM very well in this regard. In other words, where deals were viewed as successful, HRM was nearly three times as likely to provide very effective support to senior leaders as it was in deals deemed less successful (Towers Watson, 2009).

Thus, based on the theoretical overview above, we hypothesize:

Hypothesis 3a: If HRM will moderate a M&A deal's result such as the earlier involvement of HRM in the M&A process the more successful is a deal.

Hypothesis 3b: The involvement of HRM at pre-deal stage leads to the success of M&A in a higher extent if compared with the involvement of HRM in the due diligence process.

METHOD

Research settings and data collection

In order to test the hypothesis, the survey among HRM managers and CEOs, who were engaged in the process of either merger or acquisition 2009–2010, were conducted. These particular years were chosen for several reasons. Since the aim of the research is to analyze the relation between HRM involvement in the due diligence process of M&A and the subsequent success of deals, it is crucial that some time should pass after the deal completion so respondents will be able to assess the level of success. As we executed questionnaires in 2011, as a minimum

one year (and as a maximum two years) expended from the moment of the deal completion and thus results of the transaction should be visible. Another important issue is to reach those respondents who actually had participated in the M&A process. That is why including earlier years in the research may bring the risk of a low response rate due to the fact that targeted respondents could leave the company for different reasons. One of such reasons is the financial crisis of 2008 when large amounts of employees were downsized and HRM specialists were not an exception here: aiming at cost reduction and elimination of extra functions employers dismissed personnel managers among others.

Only completed mergers and acquisitions that took place in 2009–2010 were chosen to eliminate just announced or rumored deals. As soon as this search was completed two lists of M&A deals were made: one includes deals of Russian companies (in case of acquisition Russian companies were acquiring parties) and another includes companies' deals from the rest of the world. Overall 771 deals were selected for further consideration: 186 Russian deals and 585 foreign ones.

After the lists of all selected deals were made, the next step was to gather contact information of all companies involved in a transaction. Contact information was searched at the companies' official websites with the main goal being to find e-mail addresses of HRM departments.

For these particular reasons the lists of potential respondents were reduced almost by the half with the total number of 416 companies (121 Russian ones and 295 foreign ones). Overall the process of collecting lasted six month, by the end of which we were able to get 315 replies, giving a response rate of 75%.

The questionnaire represented a list of 57 questions, the majority of which were closed-end ones. All questions were divided into four blocks and had answering instructions. The first block of questions was dedicated to company profile. The questions from this block were designed in order to gather overall information about the industry, the company's size and country of origin,

and the company's involvement in international business. The second block included questions that were aimed at getting information about HRM within the company. These questions were used for further analysis of the role that the HRM department played within the company and for getting insight concerning HRM practices. The third block was composed of questions about the merger/acquisition deal, which was confirmed in the company. While answering the questions in this block (and also in the fourth block), respondents were asked to think about the M&A deal results about which they could assess. The third block of questions were used for the description of companies in terms of M&A deals in which they were engaged. The key question in this block refers to the estimation of the success of a deal (ranging from absolutely successful to not at all successful). According to the answers of this particular question all companies were divided into two groups of successful and not successful deals; further these groups were compared in order to draw conclusions concerning the success factors, which distinguish between the groups. For the purposes of our analysis, we divided our respondents into two groups: those who considered their deal successful (absolutely successful deals) in meeting the set objectives and those who felt the deal was not successful in this regard (fairly successful, moderately successful, not very successful and not at all successful deals). According to our study, successfulness of the deal refers to the degree of meeting the primary objectives that were set for M&A.

The success level of the deal was estimated by respondents. Even though the question of subjectivity or even incompetence might arise here, we tried to overcome this obstacle by giving respondents clear instructions on answering this particular question. Firstly, we asked them to think about M&A deal results of which they could assess while answering the question (this instruction was given in the very beginning of the third block of the questionnaire). This gave us relative confidence that the respondent participated to a certain extent in the transaction and that he/she was able to assess its results. Secondly, we clearly explained what was meant by the 'success of a deal' by providing respondents with the following definition: deal successfulness refers to the degree of meeting the primary objectives that were set for the merger or acquisition

(this statement is placed right in the body of the respective question). By doing this we guaranteed a clear and common understanding of the notion for all respondents.

The last, fourth block had the largest number of questions and aimed at getting information about the role of HRM in the M&A deal I which the company was involved. This block was particularly targeted at the process of due diligence. The questions of the fourth block actually represented potential success factors that distinguished successful and non-successful deals' groups. Thus, the last question of the third block and all six questions of the fourth block were primarily aimed at answering the research questions set.

The research is aimed at both Russian and foreign companies. That's why the questionnaire was not written only in English but also in the Russian language. This, from our point of view, ought to increase the response rate as English is not so widely spread among Russian managers.

Data Analysis

The information gathered was analyzed with the help of two main methods. The first method is descriptive statistics along with cross-tabulation which was used for two main reasons: (1) to present the description of the sample; (2) to allow the comparative analysis of successful and non-successful deals with respect to different factors.

The second method used was discriminant analysis that was conducted through a SPSS program. There are a lot of quantitative studies that with help from statistical analysis (regression analysis, factor analysis, ANOVA, and MANOVA, etc.) proved the positive impact of management of human resources on companies' financial performances (Chang & Huang, 2005; Stavrou-Costea, 2005; Tzafrir, 2006, Ferguson & Reio, 2010). For instance, Chand and Katou (2007) in their study show that a firm's performance is positively related to the HRM systems of recruitment and selection, manpower planning, job design, training and development, quality circle, and pay systems in a particular industry. Ichniowski and Shaw (1999) in their study of the

effects of HRM on economic performance found that the manufacturing lines, which employ innovative HRM practices are 7% more productive than those employing traditional ones.

During the analysis equality of group means was tested and pooled within—groups matrices were built. Also values of eigenvalues and Wilk's lambda were checked for significance of the discriminant function. All these in sum allowed us to get standardized and unstandardized canonical discriminant function coefficients and functions at group centroids that are the core outcomes of the discriminant analysis. The latter allowed us to determine the factors that are positively correlated with M&A deal successfulness.

RESULTS AND DISCUSSION

Descriptive Statistics Analysis

Firstly we analyzed the role of HRM in the business strategy of companies that responded to the survey. As the results the vast majority of companies that were successful in their M&A deals consider HR as a full partner while developing and implementing business strategy. This means that HRM in these companies is considered an important part of strategy development, because of the importance of human capital in the ability of the firm to carry out its strategy. This supports Hypothesis 1a and Hypothesis 1b stating that in successful M&A the role of HRM is perceived as more strategic if compared with an unsuccessful deal and while developing a M&A, the full partner role attribution of a HRM department leads to a deal success.

Next we analyzed the HRM functions that are considered by respondents as the greatest priority within the company. Corporate culture (13%), personnel assessment (9%), training and development (9%) and personnel search and selection (9%) are those HRM priorities that are common for companies with successful M&A deals. This can be explained in the way that concentrating on these particular functions on a day-to-day basis creates a good basis for preparation of personnel for potential M&A transactions. The last three mentioned functions allow the company to have only those people who are, for instance, ready for change and easily

adapted to the fluctuant situations, which are associated with M&A. Based on this analysis we can see arguments for proving Hypothesis 2.

As the next step we analyzed HRM department involvement in all four stages of the M&A process with regard to the distribution between successful and not successful deals. The main conclusion that can be made is that involving a HRM department earlier in the M&A process strongly correlates with future deal successfulness. It's not surprising to see strong HRM involvement in the integration planning and implementation stages of a deal, when many communication and talent related activities — where HRM historically plays a significant role — are of the highest importance. What is more interesting in terms of our research is HRM participation in the earlier, formative stages of M&A transaction, particularly in due diligence stage. Thus, we can argue that Hypothesis 3a can be proved. But according to the analyzed data, we can state one important exception. The role of HRM increases dramatically at the due diligence stage, which follows the pre-deal phase. Hence, Hypothesis 3b is rejected, we can't prove that the involvement of HRM at pre-deal stage leads to the success of M&A to a higher extent if compared with the involvement of HRM in the due diligence process. The success point here is to involve HRM as early as possible to the deal process. Our findings show that companies with unsuccessful deals didn't put an effort towards HRM due diligence, while 19% of all successful companies involved their HRM departments in the due diligence process to a high extent. That is because HRM insight, guidance and counsel are extremely beneficial during the due diligence stage of M&A. HR expertise can be invaluable in understanding the pros and cons of the target company from the perspective of cultural fit, and can help organizations anticipate key people integration issues and challenges that might otherwise be overlooked. In this context we can find additional arguments for Hypothesis 3a. Here we also found a positive correlation between HRM involvement in the due diligence process of M&A and a successful deal.

Of the highest importance for our analysis is the due diligence support goal, which actually has the largest percentage difference between successful and unsuccessful M&A among the four

goals mentioned above (the difference is 10 points). Thus, we again can conclude that companies that paid high attention towards HRM due diligence increased the possibility to complete a successful deal and this is an additional support for Hypotheses 1a-c.

Our findings also show which particular HRM areas that were of priority during M&A due diligence added the most value to the deal successfulness. According to our results below, general HRM programs (12%), payroll information (12%) and corporate culture with the highest percentage difference between successful and non-successful deals among the rest of the functions represent those areas of attention concentration that lead to a favorable deal outcome. Importance of general HRM programs (such as personnel search and selection, training and development, etc.) along with corporate culture issues was explained above. As for the payroll information area, its appearance in this list can be explained by the fact that compensations and benefits are usually highly sensitive issues for all employees. This is especially the case during such a fluctuant period as M&A transaction when employees are uncertain about their future and especially afraid of losing their income. We also asked respondents which HRM functions should be of priority during the due diligence procedure of M&A. In addition to already mentioned payroll information, HRM practices and corporate culture, areas such as legal issues and employee information were frequently chosen by respondents. Based on these results, we can include chosen areas in statistical analysis to ensure its role in and influence on a deal's performance. It is important to mention that in the cases in which what was actually done during HRM due diligence matched with what should have been done according to the opinion of HR managers the percentage of successful deals is much larger.

Discriminant Analysis

For further analysis of the data gathered and to test our hypothesis statistically, the discriminant analysis was conducted in SPSS program. Discriminant analysis was primarily used to predict membership in two or more mutually exclusive groups.

As the first step of the analysis variables were chosen according to the research objective. Deal successfulness was set as a dependent variable (or, in terms of discriminant analysis, grouping variable). The successfulness of a deal, which is represented through the ninth question of the questionnaire, was coded as 1 for successful deals and 2 for not successful deals. Accordingly, the defining range for the dependent variable (the lowest and the highest coded value) is also 1 and 2. As for the independent variables (or, in terms of discriminant analysis, discriminant variables), those survey questions were chosen that refer to the due diligence procedure of the M&A process and also the question concerning the HRM role in business strategy of the company, giving the total of 12 variables that are shown in Table 1 below. Since several questions are multi-choice ones, several dichotomist variables were created.

 Insert Table 1 about here

Before the actual analysis was started all variables were checked for the two main concerns: existence of missing values and accuracy of independent variables choice. As Table 2 shows there are no missing values in the data set. That is because the partial and not complete responses were not included in the analysis from the very beginning due to the lack of necessary information for the research.

 Insert Table 2 about here

In Table 3 the results of univariate ANOVA's, carried out for each independent variable, are presented. Wilk's lambda is the ratio of the within-groups' sum of squares to the total sum of squares. This is the proportion of total variance in the discriminant scores not explained by differences among groups. A lambda of 1,000 occurs when observed group means are equal, meaning that all the variance is explained by factors other than difference between these means. This is the case for two of the variables – legal documents and employee information – that should be excluded from the further analysis.

Insert Table 3 about here

Anyway, the primary result of the test of equality of group means is determined based on significance levels: values less than 0.05 mean that there is a statistically significant difference among the two grouping variable means for each independent variable. Table 5 (Selection 1 column) provides strong statistical evidence of significant differences (Sig.<0.05) between means of successful and not successful deals for eight out of twelve variables.

Thus, we excluded four variables from our analysis (legal documents, employee information, occupation and safety, industry relations) and proceeded with the analysis again. Now, as it is represented in Table 3 (column Selection 2), significant values for all discriminant variables are less than 0.05 meaning that all of them differ the two observed groups and, thus, can participate in the further analysis.

As the existence of discriminant abilities was proven for those eight variables, they were checked in terms of interdependency in order to eliminate correlations between the independent variables. For this reason correlation coefficients presented in Table 4 below were assessed.

Insert Table 4 about here

Table 4 represents the set of correlation coefficients between independent variables of discriminant function for both observed groups of deals. The coefficient less than 0.5 refers to the situation of absence of correlation dependency among the variables. As it is clear from the table above, variable HRM due diligence importance should be excluded from the analysis, since it strongly correlates with the variable HRM role in business strategy (correlation coefficient is $0.577 > 0.5$). This correlation can be explained by the fact that high involvement in development and implementation of business strategy assumes the understanding of HRM due diligence importance. This supports Hypothesis 1a and Hypothesis 1b proving the strategic role and partnership of HRM in M&A activities.

The analysis was proceeded all over again with the presence of seven discriminant variables. The test of equality of group means showed that significance levels of all independent variables are less than 0.05 and thus all of them can be considered as discriminant.

Further we proceeded with creating the discriminant model, which includes determination and analysis of discriminant function's coefficients. Such a model is supposed to clearly distinguish between two observed groups. The quality of the built discriminant model is defined with the help of information represented in the two following tables.

The maximum number of discriminant functions produced is the number of groups minus 1. Since we are only using two groups here, namely 'successful deals' and 'not successful deals', so only one function is displayed (Table 5).

Insert Table 5 about here

The present correlation is 0.811 and, considering that 1.00 is a perfect correlation, it refers us to a conclusion about strong discriminant function. In our case a canonical correlation of 0.811 suggests that the model explains 65.77% ($0.811 \times 0.811 \times 100\% = 65.77\%$) of the variation in the grouping variable. In other words, 65.77% of the variance in discriminant function scores can be explained by observed groups' differences. In our case an eigenvalue is 1.927 which can be considered large.

The second check for the quality of the built discriminant model is based on the analysis of Wilk's, here it is 0.342. It also indicates a highly significant function ($\chi^2(7)=43,5$, $p=0.000$) and provides the proportion of total variability not explained, i.e. it is the converse of the squared canonical correlation. So we have 34.2% of unexplained variability. With the help of standardized canonical coefficients presented in Table 6 the relative contribution of each discriminant variable to the differences between two observed groups can be assessed. Thus, the table provides an index of the importance of each predictor like the standardized regression coefficients (beta's) did in multiple regression.

 Insert Table 6 about here

According to the standardized coefficients, the largest contribution to discriminating between successful and not successful deals groups was made by the HRM involvement in the due diligence procedure of M&A (0.600). HRM role in business strategy (0.466) was next in importance as a predictor. Following this we also argue about proving Hypothesis 1a and 1b. These two variables along with due diligence support (0.409) and general HRM programs (0.375) stand out as those that strongly predict the allocation to either the successful deals or non-successful deals group. Corporate culture (0.161) and payroll information (0.067) were less successful as predictors. Company organization and management (0.013) is clearly not loaded on the discriminant function, i.e. it is the weakest predictor and suggests that paying attention towards this area of HRM during M&A due diligence is not associated with successfulness of the deal but a function of other non-assessed factors.

It is important to mention that all factors that are claimed to have the greatest contribution to the differences between the two observed groups were also found to be the ones with the largest impact on the future success of deals in the first part of our analysis. All the above leads us to the conclusion that to the following five HRM areas the closest attention should be paid during M&A due diligence. Concentration on these particular areas increases the probability of the success of the deal. Thus, considering the statement above, we prove Hypothesis 2.

Table 7 contains unstandardized coefficients that are actually used for creating a discriminant model.

 Insert Table 7 about here

According to the data presented in the table above, the model made as the result of discriminant analysis can be presented in the following form:

$$D = -1.909 + 0.562 \times Q5 + 0.610 \times Q10_2 + 0.995 \times Q11_4 + \\ + 0.141 \times Q13_2 + 0.131 \times Q13_4 - 0.772 \times Q13_5 + 0.417 \times Q13_7$$

As it was said before, the created discriminant model should be able to clearly differentiate between two observed groups. The clearness of differentiation is defined by the distance between means of discriminant function in both groups. These group means are called centroids and are displayed in Table 8 below.

Insert Table 8 about here

In our case, successful deals have a mean of 1.300 while not successful deals produce a mean of -1.418. Cases with scores near to a centroid are predicted as belonging to that group. Thus, by knowing values of independent variables for a particular deal and calculating the discriminant function for it according to equation above, we can predict whether the M&A deal will be successful or not.

The case-wise statistics output of SPSS presents results of such classification for each case. While the second column shows actual group membership, the third one represents the predicted membership that was determined according to the discriminant model. Cases where actual and predicted membership didn't match are marked with two stars (**). As it is seen from the table, there are just 6 (out of 46; or 13.6%) misclassified cases.

The column $P(G=g|D=d)$ shows the probability with which this or that case can be assigned to the predictable group. For instance, for the case number 8, according to the created discriminant model, there is 69.8% probability that this case can be reckoned among the number of successful deals, even though actually that deal was not successful. The value of discriminant function for this case is 0.250 according to the column 'Discriminant scores'. The accuracy of predictions based on the created discriminant model can be also assessed through the Classification Results SPSS output (Table 9).

Insert Table 9 about here

From the table above, the overall success rate for predictions of group membership is 87.0%. Output also shows that successful deals were slightly more accurately classified in comparison with not successful ones; with 87.5% of the cases correct (for not successful deals this number is 86.4%). In sum, the overall accuracy of predictions based on the discriminant model can be assessed as a high one. Based on this analysis we prove Hypothesis 1c and Hypothesis 3a stating that (1) there is a strong positive correlation between HRM involvement in the due diligence process of M&A and a successful deal, and (2) HRM will moderate a M&A deal's result such as the earlier involvement of HRM in the M&A process, the more successful a deal is. We also argue that the model can be used for forecasting the M&A deal successfulness.

Implication for Practice

Based on the results of the study we have proved nearly all hypotheses. The contribution of the study is based on findings about a positive correlation between HRM involvement in the due diligence process of M&A and the deal success. We also argue that in successful M&A the role of HRM is more strategic if compared with an unsuccessful deal. Besides this, while developing a M&A, the full partner role attribution to HRM department leads to a successful deal. Based on this conclusion, this study contributes to existing research by the development of an understanding of the role of HRM in the M&A due diligence process.

It is clear that HRM department participation in due diligence is associated with successfulness of the transaction and the sooner HRM is involved in the M&A process, the better results are performed by a company. HRM moderates the M&A deal result such as the earlier involvement of HRM in the M&A process the more successful a deal is. We have proved that the involvement of HRM at the due diligence stage is more important for the success of M&A than the involvement of HRM at pre-deal stage. Moreover we found that concentration on which particular areas of HRM due diligence leads to the deal success. It is important to mention, these fields also correlate with the goals set for HRM departments during M&A and are consequently associated with the success of the deal.

We also conclude that one of the important factors of transaction successfulness is the role that HRM plays in the company's business strategy. Our findings show that the high-level involvement of HR departments in strategy development and implementation is positively correlated with the success of a deal.

Another important result is the development of a discriminant model that can be used for forecasting M&A deal successfulness. Independent variables of this model can be considered as M&A success factors, with information about which we are able to calculate discriminant function for a particular deal and thus to predict whether the M&A deal will be successful or not.

Overall the findings gathered certainly lead us to the conclusion about the highly important role of HRM department participation in the due diligence procedure of M&A. Moreover, the conducted research covers the existing literature gap, which was discussed in the theoretical part of the paper.

The results of the research can be also practically applied in the several areas. Since we not only proved the positive impact of HRM involvement in the due diligence stage of M&A on the deal success but also showed which particular HRM areas are so-called deal success factors, this knowledge can be used by practitioners during the transaction. Awareness of the exact areas of attention allows HR managers to use resources more efficiently, not wasting resources on the HR functions that are not important during the due diligence procedure.

The whole point of the due diligence from HRM perspective is that HR professionals should help their firm prepare for potential liabilities and compatibilities in the merger of HRM practices and programs prior to the signing of the agreement and to establish the likelihood of achieving strategic and financial objectives. And here we recommend using a checklist of critical issues to be assessed. A checklist developed by HR should be a core component of the due diligence process and include examination of each functional HRM area and identification of primary responsibilities within each of these areas.

Since with the help of the conducted study the most critical areas of the HRM due diligence procedure were identified, checklists can be developed. These checklists should be evaluated after each M&A and adjusted and updated to fit the firm's needs.

Considering general HRM programs, personnel assessment, training and development and personnel search and selection are those HRM priorities that are common for the companies with successful M&A deals. Thus, we recommend to especially concentrate on these HRM practices during the due diligence process.

Increasing the role of HRM within the company might be the long-term recommendation for HR managers and directors. In other words, HRM needs to move beyond performing the many administrative and legally mandated tasks that traditional personnel functions have performed to add value through directly improving the performance of the business. It can do this by effective talent management, helping with change management, influencing business strategy, and a host of other high-value-added activities that impact organizational effectiveness.

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TABLE 1
Independent variables

<i>Variable label</i>	<i>Coding</i>
HRM role in business strategy	1 - No role 2 - Implementation role 3 - Input role and implementation 4 - Full partner in developing and implementation
HRM involvement in M&A-Due diligence	0 – not present 1 – present
HRM goals in M&A-Due diligence support	0 – not present 1 – present
Priority areas during M&A DD-Legal documents	0 – not present 1 – present
Priority areas during M&A DD-Payroll information	0 – not present 1 – present
Priority areas during M&A DD-Employee information	0 – not present 1 – present
Priority areas during M&A DD-Company organization and management	0 – not present 1 – present
Priority areas during M&A DD-General HRM programs	0 – not present 1 – present
Priority areas during M&A DD- Occupation and safety	0 – not present 1 – present
Priority areas during M&A DD- Corporate culture	0 – not present 1 – present
Priority areas during M&A DD-Industry relations	0 – not present

HRM DD importance	1 – present 1 - Not important at all 2 - Not very important 3 - Moderately important 4 - Fairly important 5 - Absolutely important
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TABLE 2*Analysis case processing summary*

<i>Unweighted Cases</i>		<i>N</i>	<i>Percent</i>
Valid		46	100,0
Excluded	Missing or out-of-range group codes	0	,0
	At least one missing discriminating variable	0	,0
	Both missing or out-of-range group codes and at least one missing discriminating variable	0	,0
	Total	0	,0
Total		46	100,0

TABLE 3*Tests of equality of group means*

	<i>Selection 1</i>		<i>Selection 2</i>		<i>Selection 3</i>	
	<i>Wilks' Lambda</i>	<i>Sig.</i>	<i>Wilk's Lambda</i>	<i>Sig.</i>	<i>Wilk's Lambda</i>	<i>Sig.</i>
HRM role in business strategy	,610	,000	,610	,000	,610	,000
HRM involvement in M&A-Due diligence	,507	,000	,507	,000	,507	,000
HRM goals in M&A-Due diligence support	,694	,000	,694	,000	,694	,000
Priority HRM during M&A DD-Legal documents	1,000	1,000	excluded	excluded	excluded	excluded
Priority HRM areas during M&A DD-Payroll information	,881	,019	,881	,019	,881	,019
Priority HRM areas during M&A DD-	1,000	1,000	excluded	excluded	excluded	excluded

Employee information						
Priority HRM areas during M&A DD- Company organization and management	,799	,002	,799	,002	,799	,002
Priority HRM areas during M&A DD- General HRM programs	,906	,038	,906	,038	,906	,038
Priority HRM areas during M&A DD- Corporate culture	,913	,046	,913	,046	,913	,046
Priority HRM areas during M&A DD- Occupation and safety	,988	,471	excluded	, excluded	excluded	, excluded
Priority HRM areas during M&A DD- Industry relations	,979	,333	excluded	excluded	excluded	excluded
HRM due diligence importance	,459	,000	,459	,000	,459	,000

TABLE 4*Pooled within-groups matrices*

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
HRM role in business strategy (1)	1,000	,218	,030	-,383	,130	,028	,161	,577
HRM involvement in M&A-Due diligence (2)	,218	1,000	-,206	-,196	,113	,165	-,009	,396
HRM goals in M&A-Due diligence support (3)	,030	-,206	1,000	-,041	-,125	-,115	,016	-,031
Priority HRM areas during M&A DD- Payroll information (4)	-,383	-,196	-,041	1,000	-,054	-,017	-,364	-,076
Priority HRM areas during M&A DD- Company organization and management (5)	,130	,113	-,125	-,054	1,000	-,403	,128	,230
Priority HRM areas during M&A DD- General HRM programs (6)	,028	,165	-,115	-,017	-,403	1,000	-,058	,074

Priority HRM areas during M&A DD- Corporate culture (7)	,161	-,009	,016	-,364	,128	-,058	1,000	,149
HRM due diligence importance (8)	,577	,396	-,031	-,076	,230	,074	,149	1,000

TABLE 5*Eigenvalues^a*

<i>Function</i>	<i>Eigenvalue</i>	<i>% of Variance</i>	<i>Cumulative %</i>	<i>Canonical Correlation</i>
1	1,927 ^a	100,0	100,0	,811

a. First 1 canonical discriminant functions were used in the analysis.

TABLE 6*Standardized canonical discriminant function coefficients*

	<i>Function 1</i>
HRM role in business strategy	,466
HRM involvement in M&A-Due diligence	,600
HRM goals in M&A-Due diligence support	,409
Priority HRM areas during M&A DD-Payroll information	,067
Priority HRM areas during M&A DD-Company organization and management	,013
Priority HRM areas during M&A DD-General HRM programs	-,375
Priority HRM areas during M&A DD-Corporate culture	,161

TABLE 7*Canonical discriminant function coefficients^a*

	<i>Function 1</i>
HRM role in business strategy	,562
HRM involvement in M&A-Due diligence	,610
HRM goals in M&A-Due diligence support	,995
Priority HRM areas during M&A DD-Payroll information	,141
Priority HRM areas during M&A DD-Company organization and management	,031
Priority HRM areas during M&A DD-General HRM programs	-,772
Priority HRM areas during M&A DD-Corporate culture	,417
(Constant)	-1,909

a. Unstandardized coefficients

TABLE 8*Functions at group centroids^a*

<i>Deal success</i>	<i>Function 1</i>
Successful	1,300
Not successful	-1,418

a. Unstandardized canonical discriminant functions evaluated at group means

TABLE 9

Classification results^a

<i>Deal success</i>			<i>Predicted Group Membership</i>		<i>Total</i>
			<i>Successful</i>	<i>Not successful</i>	
Original	Count	Successful	21	3	24
		Not successful	3	19	22
	%	Successful	87,5	12,5	100,0
		Not successful	13,6	86,4	100,0

a. 87,0% of original grouped cases correctly classified.