

## FACTORS INFLUENCING INFORMATION SHARING INTENTION FOR HUMAN RESOURCE ANALYTICS<sup>3</sup>

*In the past few years, Human Resource Analytics (HRA) has drawn interest of the academic community and HR practitioners. However, an in-depth analysis of practice and research in HRA, is required. In this research paper, the authors have attempted to revisit the literature in HRA and present a clear understanding of the existing state and the key areas of research. A research gap was identified in ethics and privacy concerns in the acceptance of HRA and a research model was proposed for further research. The objective of the paper is twofold: a) review research in human resource analytics and identify a research gap; b) research proposition and Research model.*  
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### Introduction

In this highly competitive business world, organization's want more from their talent and investments. The decision-makers are challenged by questions such as: Why does one executive outperform his/her colleagues? How do investments in employees impact workplace performance? What is the effect of employee engagement programs on the company's bottom-line? How do we know when to staff employees and when to cut back? What will be the minimum duration for new employees to get acquainted with the system and start showing results? Why do some teams perform well while others do not?

Using people-related data and analyzing it with systematic reasoning can help provide answers to such questions. Early work in analytics implied devising simple HR metrics such as employee headcount, absenteeism, turnover, and cost per hire. This made way for benchmarking HR delivery, policies, and practices between comparable organizations. However, this information did not provide the business intelligence needed to gain a competitive edge through talent. In present-day organizations, abundant transactional data is available from knowledge management systems and social networking sites. But the important question is how to analyze it and use it logically. HRA has progressed beyond

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graphic data collection and reporting. It involves data collection and analysis, with the help of statistical tools to assist in business planning and decision-making. HRA can also be used to keep track of HR investments and outcomes and identify causal relationships between talent variables.

In recent times, HRA has been recognized as a practice that can improve the standing of the HR function. The organizations, that build HRA, as a core competence can not just improve the overall HR service delivery and effectiveness but also contribute to the bottom-line (Bassi et al., 2011). Since 2010, the research efforts in HRA have increased considerably among scholars (Bassi et al., 2011; Aral et al., 2012; Kapoor, Kabra, 2014; Angrave et al., 2016; Vidgen et al., 2017; Heuvel, Bondarouk, 2017; Kryscynski et al., 2018; Mayo, 2018). As a result, research in HRA has gained prominence and grown by leaps and bounds.

In view of these events, the authors are keen to understand the research and literature development work in HRA and provide useful direction for further research. Specifically, we have studied research articles published during the period 2010-2019, and then suggest an area where further research may be helpful for practitioners as well as researchers.

## **Literature Review**

At the outset, it will be useful to understand the steps adopted, in the research paper. The first step was to identify the period of the study. The global economic depression lasted from December 2007 to June 2009. The economic downturn endured for 18 months and impacted financial markets as well as the banking and real estate industries across many countries in the world. In response to the economic recession, governments and central banks undertook exceptional steps to save the financial system and adopted wide-ranging policy measures. As per the OECD report published in 2009, OECD countries had taken extensive measures in infrastructure investment, taxes and labour market, regulatory reforms, and trade policy. These developments seemed to have set the stage for a global recovery. This heightened emphasis on performance, coupled with the realization that data and analytics, have the potential to transform the activities of companies and scientific researchers, resulted in a surge in the practice of HRA. The researchers also noticed a constant rise in the number of articles, published on the subject of HRA from the year 2010. Bearing this in mind, the period of the study was chosen to be from 2010 to 2019.

The second step was to collect literature related to HRA. To achieve this, appropriate keywords were ascertained and electronic databases such as EBSCO, Proquest and J-Stor were searched using these keywords. The third step was to investigate the subject matter and check the relevance of the selected articles to the present study. A final shortlist of 56 articles was critically examined and included in the literature review.

In the fourth and final step, the researchers identified the research gap and presented a research proposition and model for further research.

Table 1

A shortlist of 56 articles, related to HRA

No	Author	Findings
1.	Bassi, McMurrer, Moss, Sidhu, and Vickers, 2011	An account of the several debates around HRA, to achieve a consensus on its value to the business.
2.	Rasmussen and Ulrich, 2015	Strategies, that can help HRA from becoming just another management fad.
3.	Angrave, Charlwood, Kirkpatrick, Lawrence, and Stuart, 2016	The article discusses the drawbacks of human resource analytics and stresses that the present trends may damage the interests of the employees and not be beneficial to the organization.
4.	Anjali, 2018	The objective of the research is to study the existing state HRA and uncover its benefits, importance, and business impact.
5.	Davenport, Harris, and Shapiro, 2010	A review of the six types of HRA, in vogue in today's organizations, i.e., Human-capital facts, Analytical HR, Human-capital investment analysis, Workforce forecasts, the Talent value model, and the Talent supply chain.
6.	Harris, Craig, and Light, 2011	The paper proposes a ladder of six analytical capabilities: Employee database, Critical talent management, Focused HR investments, Customized EVP, Workforce planning and Talent supply chain.
7.	Alexis, 2010	The study explores new and current trends in leading organizations and recent work of thought leaders in human capital analytics.
8.	Falletta, 2014	The study is an insight into the HR Research and analytics practice of high performing Fortune 1000 companies.
9.	Du Plessis and De Wet Fourie 2016	A longitudinal research project to study the influence of big data on the HR practitioner's role, goals, and activities.
10.	Lismont, Vanthien, Baesens and Lemahieu, 2017	Organizations are rated based on Analytics maturity stage: no analytics, analytics bootstrappers, sustainable analytics adopters and disruptive analytics innovators.
11.	Bose and Jose, 2018	An exploratory study on the evolution of HRA
12.	Sousa, 2018	The study identifies the kinds of analytics systems employed by organizations to improve their business decision-making.
13.	Levenson, 2011	Case-study based paper illustrating how to design apply and integrate analytics into the human resource function.
14.	Mondore, Douthitt and Carson, 2011	A case-study based paper explaining the implementation of HRA with the help of a HR business partner roadmap.
15.	DiBernardino, 2011	By providing a financial approach to human capital analytics the paper attempts to gauge effectiveness and impact of Human capital investments at enterprise level value.
16.	Aral, Brynjolfsson and Wu, 2012	The empirical research paper tests three-way complementarities between HRA, performance pay and Information technology.
17.	Dulebohn and Johnson, 2013	This study provides a framework which helps inform the selection, and application of HRA to the operational, managerial, and strategic decision-making levels in human resource.
18.	Douthitt and Mondore, 2014	Provide a blueprint for organizations to follow as they improve their HRA practice with the help of an integrated talent scorecard focused on business outcomes.

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No	Author	Findings
19.	Sharma and Sharma, 2014	The research paper illustrates how human resource analytics can help assess the impact of human resource activities on business planning and implementation.
20.	Collins, 2015	The article considers the role of mission, stakeholders, champions, to build the Workforce analytics capability of the human resource function.
21.	Minghui, 2017	The paper illustrates how academicians & practitioners can collaborate in building HRM causal models, and quasi experimental designs, to improve organization decision making.
22.	Boudreau and Cascio, 2017	The research paper proposes the LAMP model which stresses the four elements necessary for the wider use of HRA in organizations, (logic, analytics, measures, process).
23.	Vidgen et al., 2017	The empirical research paper suggests that organizations work towards a business analytics ecosystem by ascertaining key business areas and functions to accomplish this transformation.
24.	Kaur and Fink, 2017	The paper provides a high-level roadmap for building the talent analytics function and offers a review of key approaches, competencies, and tools for talent analytics in 16 corporations.
25.	Marler and Boudreau, 2017	An evidence-based literature review of published articles in human resource analytics by using integrative synthesis research methodology.
26.	Kremer, 2018	A literature review to discuss the impact of moderating factors on HRA and come up with suggestions on how to work around these factors.
27.	Ben-Gal, 2018	ROI based review on HRA to guide decision-makers in its implementation.
28.	Gupta and Shaikh, 2018	A research review paper that suggests how people analytics is fast becoming a novel approach in human resource management.
29.	Tursunbayeva et al, 2018	A mixed method 'scoping review' of the term people analytics (PA), the value proposition offered by PA services and tools vendors and sought-after PA skillsets
30.	Nocker and Sena, 2019	With the help of case studies, the paper deliberates the benefits vis a vis the costs involved in implementing talent analytics and how it can improve organizational decision making.
31.	Mohammed, 2019	A study of the existing literature on the relationship between HRA and its role in improving managerial decision making and HR tasks.
32.	Mc Cartney and Fu, 2019	The research paper provides empirical evidence on the business impact of HRA.
33.	Netten, Choenni and Bargh, 2019	The paper presents a framework that exploits HR data for the implementation of HRA in practice.
34.	Etukudo, 2019	A qualitative paper, adopting a case-based approach to study ways of utilizing HRA to improve company performance.
35.	Telu and Verma, 2019	A literature review that explores the concept of HRA and its importance in the business industry, obstacles that hinder adoption of HRA and solutions for overcoming them.
36.	Zeidan and Itani, 2020	A systematic review to highlight processes, emerging trends, antecedents, consequences, and influences impacting the adoption of HRA.

No	Author	Findings
37.	Vargas et al, 2018	The empirical study aims at developing an appreciation of the factors that influence HRA adoption at the individual level.
38.	Kryscynski et al, 2018	This empirical study tests the relationship between the analytical skills of HR professionals with perceived job performance. Further the study explores moderating factors such as industry, company, and job-level factors.
39.	Coco, Jamison, and Black, 2011	A case-based research that demonstrates with the help of causal modeling how employee engagement leads to measurable business outcomes at Lowes.
40.	Ramamurthy et al, 2015	The author employs propensity to leave analytics in the form of a talent management tool.
41.	Sharma and Sharma, 2017	The conceptual paper proposes HRA as a potential solution for issues related to performance management.
42.	Chattopadhyay et al, 2017	An empirical study that illustrates how HRA can be applied to address issues such as attrition, employment branding and work-life balance.
43.	Gudivada and Indira, 2017	An in-depth study on the application and use of HRA in the talent acquisition function at Dr. Reddy's, an Indian pharma MNC.
44.	Mayo, 2018	A practical paper to provide guidance to talent managers on how HR metrics and analytics can be applied in talent management.
45.	Barber, Choughri and Soubjaki, 2019	The study investigates how HRA may be used to advance the training and development strategy in private organizations in Lebanon.
46.	Valentine, Hollingworth and Francis. 2013	This empirical research suggests that quality-based HR practices advance an ethical context, yielding more favorable employee attitudes.
47.	Slade and Prinsloo, 2013	The article suggests a framework to come up with appropriate ways to address ethical issues in learning analytics in higher education institutions.
48.	Holt, Lang, and Sutton, 2017	This analytical study investigates, the impact of organizational monitoring practices on potential employees' beliefs and intentions.
49.	Mittelstadt, 2017	A conceptual paper proposes the concept of group privacy and discusses the commercial and social benefits while evaluating the ethicality of analytics platforms.
51.	Guenhole, Feinzig and Green, 2018	An empirical study on how different cultures have an impact on employee's willingness to sharing their personally identifiable data for human resource analytics.
52.	Nersessian, 2018	This article assesses the extent to which International human rights law exercises a legal or ethical check the proper handling of big data and analytics in the modern networked world.
53.	Kapoor and Kabra, 2014	The research paper analyses recruitment of analytics experts and professionals in different business areas. These models are utilized for indication of HRA adoptions in the present and future.
54.	Pape, 2016	The study offers a blueprint to estimate the data items that are required for Business analytics. The framework was applied in HR function and a list of 30 data items for HRA was furnished.
55.	Heuvel and Bondarouk, 2017	A qualitative study comparing the purpose of use and value provided by HRA in 2015 and in 2025.
56.	Afzal, 2019	The paper deliberates the prospects, challenges, and benefits of implementing HRA in the Indian IT sector.

Research provides a critical evaluation of the concept of HRA, for e.g., an account of the several debates around the concept of human resource analytics and the need to achieve a consensus on its value to the business. (Bassi et al., 2011). Though HRA is touted as a practice that can improve the standing of the HR function, yet realizing its complete potential remains a challenge. Adopting a business centric, 'outside-in' approach can enable implementation and avoid HRA from becoming just another management fad (Rasmussen, Ulrich, 2015). An exploratory study on the evolution of HRA infers that factors, adopting appropriate methods of analytics and collaborative interventions can help achieve maximum business impact (Bose, Jose, 2018).

Initial years, witnessed researchers proposing ways to design, apply and integrate HRA in organizations (Levenson, 2011; Mondore et al., 2011). A research by Douthitt and Mondore (2014), presents a blueprint for organizations to follow as they improve their HRA practice with the help of an integrated talent scorecard focused on business outcomes. Subsequent research started examining how academicians & practitioners can collaborate in building HRM causal models and quasi-experimental designs to improve organization decision making (Minghui, 2017). Aral et al. (2012), conducted an empirical study by combining data on human capital management software adoption with detailed survey data on incentive systems and HR analytics practices for 189 firms. The empirical research suggests how performance pay, HRA and Information technology can lead to a larger productivity premium when implemented as a system of complements, rather than when implemented in isolation. Boudreau and Cascio (2017), in their research paper proposed the LAMP model, which highlights the four elements necessary for wider use of HRA, in organizations, (Logic, Analytics, Measures, Process). A recent paper by Kaur and Fink (2017), suggests a high-level roadmap for building the talent analytics function and offers a review of key approaches, competencies, and tools for talent analytics in 16 multinational corporations. Ongoing research emphasizes how HRA can influence the effectiveness and impact of HR practices such as employee engagement, performance appraisal, training, and development (Sharma, Sharma, 2017; Gudivada, Indira, 2017; Mayo, 2018; Barber et al., 2019). Several evidence-based literature reviews on HRA also provide decision-makers with guidance in its implementation (Marler, Boudreau, 2017; Kremer, 2018; Ben-Gal, 2018; Mohammed, 2019; Telu, Verma, 2019). Lately, a systematic review on HRA deliberated issues such as the processes involved, emerging trends, antecedents, consequences (such as, organizational effectiveness), and the influences impacting its adoption (Zeidan, Itani, 2020)

Parallely research focused on exploring new and current trends in HRA practices (Alexis, 2010), in Fortune 1000 companies (Falletta, 2014; Sousa, 2018). Case-based research studies investigate the types/levels of HRA practiced in modern organizations and suggest a ladder of six analytical capabilities for managing talent and directing programs toward the long-term needs of the business: employee database, critical talent management, focused HR investments, customized EVP, workforce planning and talent supply chain (Davenport et al., 2010; Harris et al., 2011).

While HRA is known to build the organization's analytical and decision-making capabilities, it is important to track return on investment. A research paper, published recently, provides empirical evidence on the impact of HRA on organizational performance (Mc Cartney and Fu, 2019). A qualitative, multiple case-based study by Etukudo (2019), explores how HR

managers can utilize analytics to improve company performance. Literature has also modelled future trends in terms of prospects, challenges, and benefits of adopting HRA (Kapoor, Kabra, 2014; Heuvel, Bondarouk, 2017; Afzal, 2019).

One of the key challenges is balancing ethics and privacy concerns alongside realizing potential business benefits from the implementation of HRA. A recent study considers the extent to which the International human rights laws operate as a legal constraint and provide a baseline for ethical practices and globally acceptable standards about the proper handling of big data and analytics in the modern global society (Nersessian, 2018). At the organizational level, Holt et al. (2017), performed an analytical study to investigate the impact of organizational monitoring practices on potential employees' beliefs and intentions. These were complemented by detailed studies centred on privacy concerns of employees and explored the impact of culture on the individual's willingness to provide their personal data for HRA (Guenhole et al., 2018). A notable empirical research relating to ethics in HRA, suggests that quality-based HR practices can be used to advance an ethical context, yielding more favourable work attitudes (Valentine et al., 2013).

### **Research Gap**

As espoused by research, HRA is viewed as a strategic tool that provides value by supporting evidence-based decision making and improving the efficiency and effectiveness of human resource policies and services. (Rasmussen, Ulrich, 2015). In the present-day business context, it is important for organizations to have well-defined information governance policies and adopt a proactive approach to address employee's concerns with regards to sharing information (Fawcett et al., 2011). Further, Fawcett endorsed the view that the Information sharing intention of an employee or customer advances organizational performance and profitability. Personal information allows people to be individually identified and includes written records such as individual's name and address, photographs, images, video, or audio footage. Such information may be generated at the workplace as well as on social media. When an employee is required to share personal information, for human resource analytics, there is apprehension about how that information will be collected and used. There are growing concerns about potential violation of business ethics and privacy and employees and other stakeholders will not be willing to share their information for human resource analytics (Bassi, 2011).

A research on HR attributions suggests that an employee's response to HR practices is subject to the perception he/she forms regarding senior management's objective to implement certain HR practices (Mignonac, Richebe, 2013). Literature suggests that it becomes difficult to achieve desirable employee-level outcomes when employees attribute human resource practices to have intimidating motives. However, the reverse is true when employees perceive organizational actions as understandable and free of any covert objectives (Nishii et al., 2008). Hence, it is proposed that employee's perceptions of the organization's objective behind use of HRA has an impact on their intention to share information.

Another important line of research, advocates that apparently well-intentioned human resource practices may not achieve the intended results if the implementation does not

consider the employee's perceptions (Woodrow, Guest, 2014; Guest, Bos-Nehles, 2013). In January 2019, IPSOS and the World Economic Forum released a report titled Global citizens and data privacy, which cites lack of information and low trust around the usage of personal data by companies and governments. The report concludes that if organizations are transparent about their data protection policies and have a clean security record, it can help mitigate employees and customers fears around misuse of personal information. It is therefore important to explore employees' beliefs and attitudes to see whether there are significant factors in the workplace that can be controlled to maximize the impact of HRA. In addition, research examined how the cultural setting can impact an employees' openness to allowing their personal information to be utilized for HRA (Guenole, Sheri, 2018). Though there is considerable research on ethics and privacy domain in HRA, the underlying forces influencing individual-level acceptance of HRA in an organizational setting has not been explored. There are a few studies in the context of bio-medical research and learning institutions that explore the importance of gaining an individual's trust before using his or her personal information, however none in the organizational context. Even if individual acceptance is studied, it receives minimum to modest academic attention. An empirical study applies innovation theory to investigate an employee's decision to adopt HRA in organizations (Vargas et al., 2018). The primary goal of this research is to recognize the factors that facilitate or come in the way of adoption of HRA and suggest ways to improve the adoption rate. The research examines the impact of attitude on the individual's adoption of HRA, however, not in-depth.

Further research is required to investigate the antecedent/personal characteristics that influence an employees' acceptance of HRA and willingness to share information. It becomes vital for organizations to consider employee's perceptions during the implementation of HRA to attain the full breadth of operational and strategic benefits from the initiative. Improved acceptance for HRA is likely to step up its success rate.

### *Objective*

Sharing information by employees is critical for maximizing the effectiveness and success of human resource analytics. The rationale of the study is to ascertain the psychological as well as social factors that induce employees to share information for human resource analytics. The researcher has attempted to answer the below questions:

RQ1: What are the underlying factors at the Individual level that influence information sharing intention for human resource analytics?

RQ2: What are the factors at the organizational level that build information sharing intention for human resource analytics?

RQ3: What is the relationship between organizational trust and information sharing intention for human resource analytics?



### *Methodology*

The methodology adopted for the study comprises of three steps including: literature review in HRA; identification of factors influencing organizational trust and information sharing intention for HRA; and presenting a conceptual model for further research.

- A. Published articles in HRA were searched from journals, published books and web-based articles.
- B. Individual and organizational factors influencing information sharing behaviours for HRA were identified and a literature review was conducted on each factor.
- C. A conceptual model was proposed for further research on information sharing intention for HRA.

### **Research Proposition and model**

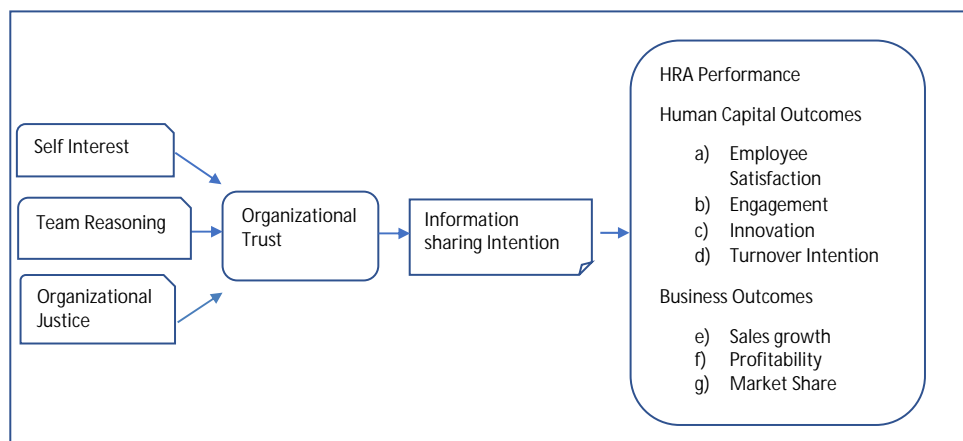
The feature of an individual's willingness to share information is often overlooked (Fawcett et al., 2007). Previous studies, such as the research by Du et al., 2001, cite gains from sharing information, but disregard the results of willingness to share. However, multiple researchers draw attention towards the need to examine the social and psychological factors that persuade people to share information (Zhao et al., 2013; Tokar, 2010; Narayanan, 2004). Our research focuses on identifying specific social and psychological factors that influence the intention of employees to share information for HRA. The researchers propose to investigate how this willingness influences the quality of information shared and the effectiveness of HRA. The active phrase here is "the willingness of individuals". As postulated by Gibbert and Krause 2002, in practice, one cannot be forced, but can only be encouraged and facilitated to share information. For firms wanting to improve their employee's information sharing behaviours, it becomes important and challenging to influence employee's intentions. Therefore, researchers, as well as practitioners, have a shared interest in understanding the motivating factors behind information sharing (Reinholt et al., 2011). But what are the factors that motivate or encourage such behaviours?

Szulanski (1996) submitted that motivational forces come from two sources: (1) employees' personal belief structures, and (2) institutional structures, i.e., values, norms and accepted practices which are instrumental in shaping individuals' belief structures (De Long, Fahey, 2000). As suggested by Hall (2003), insights from social exchange theory and social contract theory can be used to better understand the role of individual factors and social determinants in the willingness to share information. In this regard, information sharing theory by Constant et al. (1994) proposes that social exchange factors (like trust and reciprocity) and social psychology factors (like attitudes, feelings, and self-identity) influence an individuals' intentions to share information. According to Constant et al. (1994), **information sharing is affected by rational self-interest** as well as the social and organizational context. The researchers propose that "organizational culture and policies as well as personal factors can influence people's attitudes about information sharing".

The theory of planned behaviour may be applied to identify factors affecting information sharing. According to the theory (TBP) proposed by Ajzen and Fishbein (1980), beliefs and evaluations would impact the individual's attitude, while normative beliefs and motivation to comply would influence subjective norms. Thus, we may assume that attitudes and subjective norms shape an individual's intention, and intention in turn influences behaviour. Drawing on the theory of planned behaviour, a study by Bock et al. (2005) proposes that an individual's attitudes towards sharing information, the prevailing subjective norms, along with the organizational climate shape an employee's intentions to share information. From an employee's standpoint, the principles of self-interest, team reasoning and organizational justice uphold organizational trust. Organizational trust in turn, improves the information sharing intention of employees and builds acceptance for HRA. Better acceptance for the HRA practice and enhanced information quality is likely to impact human resource and business outcomes positively.

The researchers thus propose conceptual research model for further study (Figure 1).

Figure 1  
Proposed research model: Building organizational trust for information sharing intention for HRA



#### a) *Self Interest*

Self-interest was identified as an independent factor that influences the trust and information sharing intention of employees. As per Adams and Maine (1998), Self-interest is described as an individual's drive to fulfil his own desires, ignoring the other person's interests or how his / her actions may impact other people to fulfil his own desires (Adams, Maine, 1998).

Drawing on expectancy theory and behavioural decision theory, Meglino and Korsgaard, (2004) propose that considering their values and risk preferences, most individuals strive to achieve their self-interest or outcomes. A study by Mellers et al. (1998) adopts the view that in pursuit of attainment of their self-interests, people normally resort to maximizing their results/benefits.

Table 2

Self Interest

Author	Key Findings
Adams and Maine, 1998	an individual's drive to fulfil his own desires, ignoring the other person's interests or how his / her actions may impact other people.
Meglino and Korsgaard, 2004	having considered their beliefs and possibilities, most individuals are inclined to maximize their self-interest.
Mellers, Schwartz and Cooke, 1998	in pursuit of attainment of their self-interests, people normally resort to maximizing their results / benefits

Information privacy can be expressed as the confidentiality of personal information and usually associated with personally identifiable information stored in computer systems. As stipulated by Foxman and Kilcoyne (1993), Information privacy is said to exist only when an individual (1) can exercise control over the use of his/her personally identifiable information and (2) advised about information collection and other procedures. As argued by Culnan (1995), and Foxman and Kilcoyne, (1993), control is the operative aspect and practiced by allowing for consent, modification, and choice to participate or not, whereas awareness relates to the extent to which an employee is informed about the organizations' information privacy practices. Self Interest of the employee can be safeguarded by providing autonomy and transparency in collection, storage, and information sharing practices. Obtaining employee's consent and providing transparency in the collection, use and sharing of personal information for human resource analytics can give a sense of control and autonomy to employees.

**Proposition 1:** Self Interest is significantly related with information sharing intention.

*b) Team Reasoning*

However, Self-interest may be extended to the interest of the group with which an individual is interested in sustaining an ongoing relationship. If an individual wants to be in an enduring relationship with a group, then that individual will be inclined to take the interest of that group into account while taking a decision. As per Coleman et al. (2008), this type of decision-making grounded in an inclination towards the group is called team reasoning. In comparison to individual utility maximization, Team reasoning is a distinct factor. In his probe into 'shared cooperative activity' Bratman (1993) presents a different account of collective intentionality. Bratman suggests that when an agent has the intention to engage with the other in the process of mutual responsiveness and mutual support, the agent team reasons. Subsequent theories propose that 'We' in the team reasoner's perception, is an agency, acting as a distinct entity pursuing a single objective. Gold and Sudgen (2007), investigate the thought that a team of individuals is a distinct agent and decision-makers may be inclined to extend either individual or shared objectives contingent with the situation. According to Gilbert (2008), team reasoning occurs when individual parties are jointly committed to follow, by virtue of their individual actions, a single body with a single objective.' As stated by Pacherie (2013), participants in a team are inspired for team-directed reasoning by identification with the group and by viewing a situation where a decision

regarding the group is to be taken as a problem facing the group. An individual engages in team reasoning when, in a situation wherein the presence of other agents, she quizzes What should we do? Instead of What should I do? Bacharach (1999) suggests that when an individual must make social choices, a team reasoner identifies with the group conceiving of himself as part of a team and takes a decision as a unit irrespective of the circumstances. Team reasoning improves organizational trust and encourages him to engage in behaviour's that benefit the organization. In effect, it furthers the information sharing intention for human resource analytics.

**Proposition 2:** Team reasoning is significantly related with information sharing intention

Table 3

Team Reasoning

Author	Key Findings
Colman et al., 2008	If an individual wishes to be in an enduring relationship with a group, then he takes the group's interest into consideration at the time of taking decisions
Bratman, 1993	Team reasoning happens when an individual is a commitment to engage with the other by practising mutual responsiveness and mutual support.
Gold and Sudgen, 2007	A team of individuals is a distinct agent and decision-makers may be inclined to extend either individual or shared objectives contingent with the situation
Pacherie, 2013	When participants in a team identify with the group and view a situation where a decision needs to be taken as a task facing the team, they are inspired by team reasoning.
Bacharach, 1999	A team reasoner adopts a 'We' perspective by taking decisions in favour of the agency regardless of the circumstances.

### c) Organizational Justice

Besides self-interest and team reasoning, organizational justice forms the moral basis for a trust relationship between an employer and an employee. Moorman (1991) described organizational justice as an employee's understanding of the extent of fairness in the organization. Greenberg (1987) introduced the concept of organizational justice in relation to how an employee evaluates the organization's behaviour, thus influencing the employee's resulting attitude and behaviour. Initial research suggested that justice in organizational context may be divided into two types of perceptions: distributive justice and procedural justice. Distributive justice is concerned with the equality of distribution of results among deserving employees. The organization is understood to have observed distributive justice if the outcomes are equally distributed among deserving employees (Leventhal, 1976; Homans, 1961; Deutsch, 1975; Adams, 1965). In contrast, when the procedures employed to make talent-related decisions and implement these decisions are fair, the organization is perceived to have adhered to Procedural justice. (Leventhal, 1980; Thibaut, Walker, 1975, Karuza, Fry, 1980). Procedural justice can be practised by lending an ear to the employee's voice while taking a management decision or by acknowledging an employee's influence over the outcome, as explained by Thibaut and Walker, 1975. Leventhal et al. (1980) propose that when an organization follows the basic principles of equality, such as fairness, reliability, correctness, proper representation, and adherence to ethics, while implementing a practice, it

is called Procedural justice. Bies and Moag, (1986) put forward an altogether new aspect of justice, called Interactional justice. The relational treatment received by employees during the institution and practice of organizational policies, is described as Interactional treatment. The researcher proposes that, Interactional justice is practised when managers taking decisions are sensitive and respectful towards team members and provide a clear basis for their decisions. Greenberg (1993) came up a four-factor model for organizational justice. As per him, since respect and sensitivity towards employees may alter reactions to decision outcomes, thus Interpersonal justice can be considered as the relational side of distributive justice. Also, since the information required to evaluate justice is provided by explanations, interactional justice may be viewed as the interpersonal angle of procedural justice.

Organizational justice serves as a precursor for gaining employee trust and commitment. Greenberg and Colquitt in their handbook of organizational justice (2005), suggest that employees have more trust, are more committed to the organization, and are more satisfied when justice is perceived as being fair. Multiple studies on organizational justice have endorsed the view that the commitment demonstrated by an employee relates to the perceived equality/objectivity in the organization. (Cohen-Charash, Spector 2001; Colquitt, 2001; Masterson et al., 2000). Maintaining organizational justice at the workplace can lead to favourable results. Incorporation of the principles of organizational justice provides the basis for gaining employee trust, acceptance, and participation in HRA.

**Proposition 3:** Organizational Justice is significantly related with Information sharing Intention

Table 4

Organizational Justice

Author	Key Findings
Moorman, 1991	An individual's opinion of the degree of fairness in the organization
Thibaut and Walker, 1975	Procedural justice can be furthered by allowing room for an employee's say or employee's influence at the time of making decisions / or in a business outcome.
Leventhal et al., 1980	Procedural justice happens when an organization follows the basic principles of equality, such as fairness, reliability, correctness, proper representation, and adherence to ethics, while implementing a practice
Bies and Moag, 1986	The relational treatment employees receive during the institution and practice of organizational policies.

#### d) *Organizational Trust*

As per Gills (2003) when an organization is willing to aptly expose itself to risk, along with the understanding that the significant other is concerned, competent, consistent, and identified with the shared value system and goals, comprises organizational trust. Schoorman et al. (2007), suggested that when an employee is agreeable towards their organization's actions or policies, then he/she, demonstrates organizational trust. As per Tam and Lim (2009), the employees are willing to trust their organization only when it clearly communicates the rationale behind its policies, practices, and actions by way of formal and informal channels. The fundamental belief is that the other person will act justifiably, not malevolently, and will be competent, honest, and fair. Fulmer and Gelfand (2012) defined

organizational trust, where an employee is willing to accept vulnerability based on the expectation that the organization will conduct its interactions with the employees fairly and positively. Research contends that organizational trust is a crucial input for cooperation and effectiveness in organizations (Rousseau et al., 1998; Zand, 1972; Zand, 1997; Lewis, Weigert, 1985; Nooteboom, 2002; McAllister, 1995; Lane, 1998; Sousa-Lima et al., 2013) support the view that organizational trust is essential for developing social exchange relationships, especially taking into consideration the dynamic nature of the reciprocal relationship. In agreement with Blau (1964), and Luo (2002), trust is the foundation for social exchange relationships. Drawing from social exchange theory, trust is a key construct in any social exchange relationship (Luo, 2002). Thus, we may infer that employees are more likely to respond with higher effort and demonstrate a positive attitude at the workplace when they have high trust in their organization.

Several researchers agree that a high degree of trust in the organization can make them more effective by paybacks such as organizational commitment, better employee cooperation and employee relations, information sharing, positive attitude, organizational citizenship behaviour, and better job performance etc. (Tan, Tan 2000; Mayer et al., 1995; Laschinger et al., 2001; Dirks, Ferrin 2001; Chen et al., 2005; Rousseau et al., 1998; Tan, Lim, 2009). Building employees' trust in an organization, not only makes it more efficient but also facilitates the adaptation to new processes and forms of work. Therefore, improving organizational trust is a beneficial goal for an employer. When employees trust their organization, they will be inclined to support its mission and respond positively to HR practices. From an employee's standpoint, the principles of self-interest, team reasoning and organizational justice uphold organizational trust and build acceptance for HRA.

**Proposition 4:** Organizational trust is related with Information sharing intention

Table 5

Organizational Trust	
Author	Key Findings
Gills, 2003	When an organization is willing, to aptly expose itself to risk, along with the understanding that the significant other is concerned, competent, consistent, and identified with common value systems and goals.
Fulmer, Gelfan, 2012	organizational trust when an employee is willing to accept vulnerability based on the expectation that the organization will conduct its interactions with the employees fairly and positively
Shoorman et al., 2007	Employee's trust is their' openness to be accepting to organization's policies and actions.
Sousa-Lima, Michel, Caetano, 2013	Organizational trust is essential element in social exchange relationships, especially considering the discretionary nature of the reciprocal relationship

*e) Information sharing intention*

As put forward by Bock et al. (2005), the information-sharing behaviour is a direct outcome of the willingness to enact that behaviour. De Vries et al. (2006) described willingness to share as the openness of an 'individual' to allow another 'individual' access to his information assets. Information sharing theory by Constant et al. (1994) asserts that social

exchange factors such as i). trust and reciprocity and ii). social psychology factors such as attitudes, feelings, and self-identity, influence an employee's willingness to share information.

Fawcett et al. (2007, 2011) maintain that the amount as well as the quality of information is affected if an individual is not willing to share information. An employee will be willing to share his personal information for human resource analytics only if he places high trust in the organization. Thus, trust is an important input in social exchange relationships (Konovsky, 1994). McCarter and Northcraft, 2007, contend that information will be passed on spontaneously when trust is high among social contract partners, and this, in turn, will help design, implement, and manage value-adding business initiatives. To conclude, reliable, accurate and complete information sharing is not possible without a high degree of trust (Kwon and Suh, 2005). Employees' information sharing intention for HRA serves as an indicator for how well the practice has been accepted by employees. Higher acceptance will lead to effective HR decisions and improved business impact.

Table 6

Information Sharing Intention

Authors	Key Findings
de Vries et al., 2006	Intention to share information is the extent to which an individual is willing to allow another individual access to his information capital
Constant et al., 1994	Two categories of factors, social exchange and social psychological factors, influence an individuals' intention to share information.
Konovsky, 1994	Trust is a key input in social exchange relationships and when there is high trust, information can flow spontaneously
Fawcett et al., 2007	If an individual is not willing to share information, not just the amount of information but the quality of information shared is also affected
Kwon, Suh, 2005	A high degree of trust enables reliable, accurate and complete information sharing.

Considering the dynamic and competitive nature of the business environment, trust can play an important role in building a sustainable organization (Mishra, 1996). The acceptance and success of HRA can be measured in terms of human capital and business outcomes.

Human capital is a bridging concept between human resource and business with the help of which employees' attitudes can be logically related to tangible business outcomes (Boudreau and Ramstad, 2002). Human capital outcomes are leading indicators of performance and have been identified in the research and best practice literature as the key drivers of sustainable competitive advantage and future organizational performance (Becker et al., 2001; Pfau, Kay, 2002). In the same breath, a study in the context of the Indian steel industry found a strong positive relationship among Business strategy, strategic HRM practices (such as HRA), human resource outcomes and organizational performance (Muduli, 2012).

Business outcomes include financial measures and are lagging indicators in that they reflect what has been produced in the past. We propose a list of human capital measures and business measures that demonstrate the effectiveness and high business impact of HR practices informed by human resource analytics.

### Research limitations

This paper is restricted to a review of academic articles obtained from an online database such as EBSCOhost and Google Scholar with the words “human resource analytics”, “HR analytics”, “people analytics”. Apart from this, only research and articles from high quality, peer-reviewed journals were considered. Other academic sources, such as books and conference papers, were not included in the study.

### Conclusion

Organizations are responsible for leveraging their resources to earn profit for their shareholders, but the way they choose to do business impacts a broader set of stakeholders.

Effective implementation of HRA with high business impact improves HR’s strategic influence and quantifiable business contribution. However, ethics and privacy concerns restrain employees from sharing personal information, and it is not being fully utilized as an organizational resource to support business objectives. Effective information sharing is essential for the success of HRA practice and the fulfilment of HR and business outcomes. Therefore, it becomes a business imperative to identify and address the factors that influence organizational trust and information sharing intention of employees. This will not only improve the information quality but also lead to better acceptance of HRA.

The paper makes a significant contribution to research as well as practice. From a research perspective, the paper can provide valuable insights for further research in the root cause of poor information sharing intentions of employees and customers. From a practical perspective, the paper provides useful guidelines for HR organizations to design and develop effective policies for HRA.

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