SUSTAINABLE COHESIVE HRM FRAMEWORK LINKING HRM COMPLIANCE MODULES TO REDUCE FINANCIAL RISKS BY APPLYING SOFT-SYSTEMS DESIGN

Tarnima Warda Andalib, BRAC University
Shosunth Chandra Sarker, Techno India University
Ahshanul Labby, BRAC University
Abtahi Noor, BRAC University

ABSTRACT

This paper aspires to inaugurate the cohesive HRM framework with HRM compliance modules to reduce financial risks and enhance sustainability by applying soft-systems techniques in the manufacturing large, medium and small companies of Bangladesh. To amend this attribute, here researchers have deployed the integration of the employees' rights' regulations as part of HRM compliances with the HRM framework. There are two main dimensions in this cohesive HRM framework, which are firstly, the HRM modules regarding its core functions and secondly, the Employee rights' regulatory protocols coming from the guidelines of Universal declaration of human rights (UDHR), International labour organisations (ILO) and Bangladesh Labour Act 2006 (BDL). The study is comprehensively qualitative with in-depth analysis and coding method in NVIVO tool. Twelve cases with eighty-seven participants have been interviewed to gather and analyze data. The concept of integration is also applicable as a technological upgradation in any demo-smart manufacturing company.

Keywords: HRM framework; HRM Compliance; Soft Systems Technology; Manufacturing; Sustainability

INTRODUCTION

In significant manufacturing companies of Bangladesh, especially in some garments' companies certain issues of deprivation and deviation regarding employees' roles and responsibilities have occurred as for example 2012 incident of Rana Plaza Collapse and 2012 incident of Tazreen garment factory Burn have shaken the humanity of entire world and identified the background issues, which needed to be addressed and solved (Andalib et.,al, 2018; Andalib et.,al, 2019). Researchers have scrutinized the HRM functions and HRM compliances modules in segregated manners in the manufacturing large, medium and small companies of Bangladesh and then came up with an cohesive solution here, where these two dimensions, which are HRM framework with core HRM modules and functions and HRM compliance modules which are employee rights' regulatory protocols like UDHR, ILO and BDL (United Nations, 1945).

Human resources Management policies usually entails employees of all sorts in an organization, either full-time or part-time, seasonal or year-round employees. Usually, HRM decides any organization's size as well. Therefore, in any business where several people have to be dealt with, conflicts and risks are going to be part of it that can hamper the business continuity and

success of any organization (Meyer, Roodt, & Robbins, 2011). First and foremost, there are various risks involved with employees' work-related well-beings as well as their financial well-beings. People management brings in a lot of risks from recruitment to retention. Employees' training oriented financial risks becomes more prominent since after the taking the training program if any employee leaves before a year the risk have to be borne by the company. Moreover,

Employees' occupational health hazards, accidents or unexpected conflict resolution-oriented works can generate an immense financial risk. Along with these, redesigning a job, hiring external consultants, employees' doing unnecessary delays at launching projects incur financial risks as well. Employees in risk management arena exposes the point that employees are major to assume most marketing, operational along with production and financial decisions and to accomplish organizational goals directed by the managers of the organizations (Hutahayan, 2020; Lawler& Boudreau, 2020). As per (Caligiuri et al., 2020), challenging people oriented risk may take the organization's incorporations outside its habitual restrictions to identify and meet serious workforce and managerial cracks.

Interestingly, as per (Clarke & Short Jr, 1993) even though experts dealing with risk issues customarily emphasize generally on vital causes of risk such as nature and its calamities or sudden change of weather or any outbreak of disease, and ways to deal with the risk; they have been very little attentive to employees' and their personal issues like family discrepancy like divorce, any severe and chronic illness, sudden and accidental death, or the impact of interpersonal relations on businesses and families (Chuprova et al., 2019). On the otherhand, risk management entailing finance usually deals with monitoring regular chores and managing their effects, where often it is perceived and predicted that the company get into financial risky zone due to the debt payments (Kramoliš & Dobeš, 2020). Risk management's inseparable component is this prediction of corporate default issue. Essentially the magnitudes of risk are the research-oriented instrument h and advancement of methods-models, which facilitate to envisage the economical and financial condition in precise far-reaching environments and frugalities (Valaskova, 2018; Kovacova et al., 2019).

Therefore, researchers here have thought of an innovative idea to deal with the HRM framework and HRM compliances as a whole in the manufacturing base; whether it is a large manufacturing company or medium or small enterprises it will work the similar way (Andalib, 2018; Andalib et., al, 2018). The proposed solution has been brought where an cohesive HRM framework has been proposed for smoother processes to reduce complexity, financial risks and enhance sustainability, where soft systems technology has been pertained as per (Denai, 2007 & Andalib et al., 2020). Technology Roadmapping (TRM) as a measurement instrument directly reflects and reveals that this entire procedure is a sustainable way (Adam, 2009).

Background

Employees are abused around the world for decades. Numerous companies often exclude 'employee rights' protocols' from their companies' compliances for human resource management policies or framework. Such incidents with strong literature gap have propelled and motivated this study (Andalib, et., al, 2018). An incident in Bangladesh has triggered it more. On April 2013, a gigantic complex in a city named Savar of Bangladesh crumpled, where officially 1,127 employees got exterminated (Mccavish, 2012). The audit engineers previously asked to immediately stop all sorts of movements and maneuvers in the compound as a warning to safeguard the employees'. Nevertheless, none paid any heed along with the owners and the top-level management board

members rather continued functioning regularly without even considering the action as risky for employees' health and lives (Candy et al., 2020). The company exploited the employees' other benefits by taking them for granted, as they were recruited inspite of the mandatory BDL guideline.

As per United Nations (1945), the Articles 3, 4, 21, 23 in UDHR platform have talked about employees' diverse issues, ILO became the vital devoted organization, computed to protect employee rights and became more meticulous, designed protocols 'P155', 'P147', 'P110', 'P089', 'P081' and 'P029' etc linking those under discrete conventions (ILO, 2012). As for example, ILO Convention named Employment & Occupation, 1958 (No. 111) has described the employees' rights regarding the equal remuneration in the Articles 1 to 14. Nevertheless, Bangladesh Govt. has ratified Bangladesh Labour Act 2006, including 25 necessary labour laws after series of tripartite negotiations, which are related to wage, retirement facilities, compensation amenities for disability and death, gratuity and provident-fund, punishment for sexual persecution etc (BEF, 2009). In various studies, the extreme gap has been witnessed between the practical scenario and employee rights' regulations' theories. Therefore, these situations aggravated the thoughts of 'what' are the causes of no connections and 'why' and 'how' the connections are possible.

Manufacturing companies are the base since, most of the machineries – auto, semi or manual are used in these companies and because of these machinery usages in the production several employee rights' protocols are highlighted in the international as well as in the local guidelines with various ISO standards regarding SOP of the human resources of these companies are mentioned those need to be complied with. Nevertheless, the deviation scenarios regarding employees' rights occurred several times in the manufacturing companies of Bangladesh, therefore this study aims to propose the cohesive HRM framework with HRM compliance modules.

Research Objectives

1. To segregate the main HRM functions and modules from the MCS' case-analyses
2. To identify the necessary HRM compliance codes regarding employees' rights and roles of the manufacturing companies
3. To design and develop the cohesive HRM framework combining HRM compliance modules and bring under one platform

LITERATURE REVIEW

The Human Interface

As per (Erven, 2019), Risk regarding human resources is inescapable in any organization. Human resource management is extensively impactful whenever decision making is integrated. This indicates the fact that each production, financial, and marketing decision has a human component or influence. Any human component is dedicated with own choices, the methods of decision-making, the process of decision-flow, the follow-up and monitoring of employees' significantly vary. Nevertheless, separating the management team along with employee issues from the management of production, financial, and marketing creates distances and frustrations among people by generating unnecessary risk in the organization (Erven, 2019).

The comprehension of human resource management along with risk management becomes smooth, when human resource management's core functions like staffing, training,

development, motivation, and maintenance of employees are scrutinized while accomplishing the organizational goals as well each employees' career goals (Albrecht et al., 2015). Human resource management is a procedure that can be a compilation of specific tasks like job analysis, writing job descriptions, hiring, orientation, training, employer/employee interactions, performance appraisal, compensation, and discipline (Erven, 2019). The relationship between these tasks and financial risk need to be observed and understood well because any failure to attain any task may increase the financial risk as well as penalize the organization's business in some way.

Employment compensation package includes both the monetary and non-monetary rewards. The management team and employees carefully choose these rewards. The rewards need to be realistic for the organization while helping fulfil the employee needs. Discipline is giving each employee expectations, rules, policies, and procedures and then working with the employee to get behaviour consistent with employer expectations. Human resource activities lead to four important implications for risk management (Erven, 2019). First, these activities are necessary to keep human resources in harmony with the risk management tools adopted by the management team. Risk management decisions are carried out by people. Having the "right" people in place, trained, motivated, and rewarded is essential to success in risk management (Smith & Merritt, 2020). Second, human resource calamities, e.g., divorce, chronic illness, or accidental death, can hamper carefully made and appropriate risk management decisions. Risk management should anticipate the likelihood of human resource calamities (Meyer et al., 2011). Human resource contingency planning needs to be an integral part of risk management. Third, no management team stays together indefinitely. Every farm will eventually have different managers or be out of business. Management succession is a significant source of risk. Human resource considerations, plus legal and financial considerations, directly affect success in management succession and thus risk management. Management succession requires each of the human resource management activities: job analysis, job descriptions, selection, training, interaction, performance appraisal, compensation, and discipline (Aycan, 2005).Fourth, human resource performance evaluation should be tied to risk management. Risk management strategies are carried out through people. Human resource failures can cause the best planned risk management strategies to fail. Risk management depends on explicit duties being specified in managers' job descriptions, delegation of power and authority to manage risk following indicated guidelines, and responsibility at the action level of risk management (Hopkins, 2011).

Manager's Skills

Efficient amalgamation of risk-management and people-management entails assured level of managerial skills, leadership styles, skills and concepts regarding communication, training and development, motivational arena, conflict management and evaluation (Erven, 2019). Each HRM manager has a certain level of responsibility as a leader as well as capability because the missing of this won't be able to bring any effectiveness or closeness of subordinates. Planning(P), organizing(O), staffing(S), and controlling(C) can alternate few measures of leadership indeed, because when employees are provided with some level of authority, empowerment and responsibility in particular cases the necessity of leadership decreases (Ignore, 2009). Therefore, the three dimensions named organizational trust, individual motivation and policy development become useful, nevertheless, and each ship must have a captain and a technique of leadership.

People and risk are as basic to any sort cultivation project an organization as are weather-change, price-change and technological up gradations. Employees should be carefully scrutinizing about the managers' comprehension of organizational resources along with their risks and how the alternates are met. Managers' theories, consideration of employee management, and employees' skills regulate the accomplishment (Boudreau & Ramstad, 2005). Like the rest of risk management, blaming others for management shortcomings neither solves problems nor provides escape from the problems. The worthy information is that managers can make human resource management one of their strengths. The result will be better risk management, more effective management, and greater satisfaction from working with people (Erven, 2019).

Results from Analysis

Researchers have found certain evidence from each case that gradually assisted towards the framework developing process. Human resource management compliances involve all management decision and practices that directly affect or influence the human resources of the organization. Therefore, the following analyses are done, and result has been drawn.

Cross case analysis

Integrations of various technologies and frameworks in the manufacturing companies have encouraged this analysis, where the company specific compliances regarding employees and complex social relationships besides basic rights are cohesive in one platform. Therefore, Human resource management compliances involve all management decision and practices that directly affect or influence the human resources of the organizations. As for example, in this research, participant 1 from case 4 said, "HRM policy has been customized, designed and some outsourced. Process of HRM has been taken from a consultant plus it has been also modified into new versions." This indicated that the companies' HRM policy is modified to bring outsourcing and other customizations in HRM practices. The categorized codes here are 'HRM action plan' and 'HRM guidelines'. Manufacturing Companies' Compliances have got constructed using the following three themes, HRM Action Plans, HRM guidelines and regulations (Company ACT 1996 & Public Listed Rules) and HRM Standard Operation Procedures (SOP). These were rated as Strongly Documented and Implemented (++, SDI), Weakly Documented and Implemented (+, WDI). This component got distinguished as compliant or less compliant in different cases. The following Table 1 reveals the Case matrix with summary with Evidence Rating. Evidence showed that cases 1, 4, 5, 6 and 12 were compliant. On the other hand, evidence showed that cases 2, 3, 7, 8, 9, 10 and 11 were less compliant.

Table 1 CASE MATRIX WITH SUMMARY WITH EVIDENCE RATING		
Case	**Rate**	**Transcription's Node and Evidence**
Case 1	++, SDI	"Yes we have 13 HRM action plans and we have Implemented that in our company all throughout".
Case 2	+, WDI	"No we do not use any tool for HRM yet but
		we are developing a new tool to use. Customized in-house we have a tool, which we change every year usually we are doing manually and do not have the software yet"
Case 3	+, WDI	"We have detailed code of conduct. We can give you code of conduct in details. Beside

		this, we have certain norms & principles designed by our top most leaders of the company; however not necessarily all are written"
Case 4	++, SDI	"We have HRM policies in place and also HR
		Department follows up all actions."
Case 5	++, SDI	"Our HR Department is developed with much care and we indeed have HRM guidelines and every year slightest Change is addressed."
Case 6	++, SDI	"Our HRM portfolio is very high and we have
		Dedicated software, urls for this system. We have many HRM actions."
Case 7	+, WDI	"We are developing the HRM policies."
Case 8	+, WDI	"Our company is improving the HRM policies,
		Action points and guidelines recently to update it."
Case 9	+, WDI	"We are planning to form the standardized HRM policy".
Case 10	+, WDI	"We have HR department to address the issues well, we are re-engineering some old parts and replacing with some new action points and guidelines."
Case 11	+, WDI	"We don't have any software yet, we do manually."
Case 12	+, WDI	"Our HR department is constantly working to follow up all the procedures and stay compliant as much as possible."

Table 2 reveals the in-depth interview analysis of Manufacturing Companies' compliances of human resources; where cases 1.4.5 and 6 are compliant but other cases 2,3,7,8,9,10,11 and 12 are less compliant. Here, Compliant is rated as '++ and Less compliant is rated as '+. Table 2 In-depth interview analysis of Manufacturing Companies' compliances manufacturing companies' compliances regarding human resources are coded as 'HRM Compliances', where three themes have been identified and coded those are HRM Action plan, HRM guidelines and HRM Standard operating procedures. In Table 2, HRM action plans stand for =HRM AP, HRM Guidelines stand for HRM G and HRM SOP = HRM Standard Operating procedures. '++ =stands for 'strongly documented & implemented' and '+ = stands for 'weakly documented and implemented'. Here, Org. HRM Compliances for each case has been measured as Compliant, Partially Compliant and less compliant. Outcome of each case 'HRM compliances' is either compliant or less Compliant'.

Table 2 COMPUTING CASE MATRICES OF EMPLOYEES' COMPLIANCES				
Themes of OC	HRM AP	HRM GR	HRM SOP	Outcome
Case 1	++	++	++	Compliant
Case 2	+	+	+	Less Compliant
Case 3	+	+	+	Less Compliant
Case 4	++	++	++	Compliant
Case 5	++	++	++	Compliant
Case 6	++	++	++	Compliant
Case 7	+	+	+	Less Compliant

Case 8	+	+	+	Less Compliant
Case 9	+	+	+	Less Compliant
Case 10	+	+	+	Less Compliant
Case 11	+	+	+	Less Compliant
Case 12	++	++	++	Compliant

Connectivity of HRM Compliances (HC)

"HRM Compliances" (HC) has been cohesive with Organizational Culture (OC) (values, philosophies, objectives, and strategies) and with Relationship between Leaders and Employees (RLE) (leadership style, administration of trust and org commitment). Here, HC, OC and RLE are significant components of HRM framework. Meanwhile, the categorized code of HRM policy (HP) directly got cohesive with 'registration of Trade Union' and with 'Employee rights standards' (Employee Rights Protocols) and its categorized codes named 'UDHR's Article 23: (1: Everyone has the right to work, to free choice of employment, to just and favourable conditions of work and to protection against unemployment), (2: Everyone, without any discrimination, has the right to equal pay for equal work), (3: Everyone who works has the right to just and favourable remuneration ensuring for himself and his family an existence worthy of human dignity, and supplemented, if necessary, by other means of social protection) and (4: Everyone has the right to form and to join trade unions for the protection of his interests)', 'ILO conventions (C154, C173)' and 'Bangladesh Labour Act sections regarding trade unions (Andalib, 2018; United Nations, 1945; International Labour Organization,2012).

The theme Manufacturing Companies' HRM Compliances got derived from categorized codes named HRM action plans, HRM guidelines and HRM tools developed from interviews with the direct participants' The code 'HRM guidelines' got linked with classification of workers and probation period (chapter 2: 2 Clauses (e), (f) and (g) were substituted for original clauses (e) and (f) by section 6(a) of the Bangladesh Act (Amendment) of 2013. Sub-section (4) was substituted for original sub-section (4) by section 6(b) of the BDL Act (Amendment), 2013 (BEF, 2009). See Figure 1.
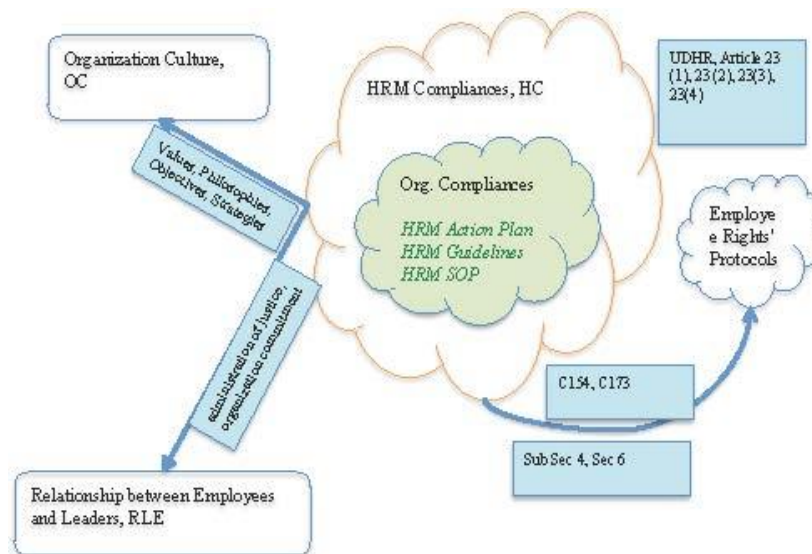
Figure 1
LINKED HRM COMPLIANCE (HC) FRAMEWORK

The above HRM Compliance (HC) Framework has been designed with connections drawn by using soft-systems technology. After the case wise analysis, integration between the 'manufacturing companies' compliances with the generated themes and detail level design has been done with the categorized codes by using soft-systems methodology as well.

Reduction of Financial Risk Factors

Researchers' have identified the financial risk factors those can be reduced through this entire framework development process. First of all, Due to the Organizational compliances and its' integration with employees' rights protocols employees' right inclusions in their wage and compensation packages' oriented insecurity issues get reduced, which means the overall integration effects the risk factors' reduction process (Sobhani et al., 2016). Therefore, the mandatory compensation due to its failure gets reduced as in the OPEX cost get reduced (Shen, 2011). Moreover, relationship turmoil or grievance issues can be avoided as in the excessive financial costs due to the adhoc issues can be reduced (Becker, 2016).

MATERIALS AND METHODS

Researchers' have applied Qualitative methodology with base of philosophical ontological notion through multiple-case-studies (MCS) by following Yin and Eisenhardt in the manufacturing companies of Bangladesh, where in-depth interview sessions have been done (Yin, 2009; Eisenhardt, 1989). As per (Andalib, 2018), twelve cases and eighty-seven participants are purposefully selected to collect data. Purposeful sampling facilitated researchers to categorize 500 manufacturing companies of Bangladeshi, categorized those and found the ones which have heavy machinery usage where employees' rights deviations have highest chance to occur.

Ontological Philosophy and MCS Methodology

Besides, literature review has been done where both the scholarly articles and the annual reports of the companies are scrutinized. Merriam's content analysis of the scholarly articles found from Scopus, Proquest, Emerald, Elsevier, Wos and etc and Yin's simulation technique with logic of replication in MCS methodology has assisted the researchers to get the real outcome from data. After collection, data has been stored as transcripts, memos, reports, audiovisual materials and documents, where data has gone through coding processes and analyzed thoroughly to find out the final themes of the framework to be developed by using NVIVO tool (Auerbach & Silverstein, 2003; Stake, 1995; Corbin & Strauss, 2008; Miles et.al, 2014). After all the themes have been identified, soft systems technology by (Denai, 2007) has been used to finalize the framework design. Researchers' applied the methodical step by step, systematic procedures to detect and joint the finalized themes for the cohesive framework.

Here, researchers applied the replicated methods in the cases to identify and finalize the themes to develop the final cohesive HRM framework combining HRM compliances. The HRM framework's core themes like RLE that indicates relation between leaders and employees, OC that indicates organizational culture and their open codes are joined with the codes of employee rights' protocols and organization's HRM compliances to design the cohesive framework, where Employees' subjective experiences are transferred into a coherent story and made their story vivid and real (Andalib et., al, 2014; Andalib et., al, 2018). Literature review along with data analysis have been brought under one platform to define the final themes and codes of 'manufacturing companies' compliance framework. Researchers have emphasized and finalized the interpretation of logics to facilitate the comprehension of each case. Therefore, the dominating value emerging from the cases was considered adequate for grouping codes generated from analysis.

Purposeful Sampling data

Researchers have run purposeful sampling technique to find out the companies from the listed companies of the Dhaka Stock exchange (DSE). Below is the sample size and participants' list with their positions besides the name of the manufacturing company. Researcher has developed this following table 3 to reveal this information.

Table 3 SAMPLING DATA			
Case	Participants' Number	Participants'	Manufacturing Company
		Positions	
1	6	HR Director, HR Manager, 2 HR Executives, Factory Manager, Deputy Admin and logistics Manager	ACI Chemicals Ltd.
2	7	HR manager, 3 HR executives, Admin and Logistics Manager, HR Assistant, Consultant	Active Fine Ltd.
3	7	HR manager, Deputy Manager, 2 Assistant Managers, 2 Executives, Factory Production Manager, Factory Supervisor	Kohinoor Chemicals Ltd.
4	5	HR Director, HR payroll manager, 2 HR Executives, Admin & Logistics Manager	IBN Sina Pharmaceuticals Ltd.
5	14	Founder and Chairman, HR Director, HR manager, 2 Deputy Managers, 2 Assistant Managers, 4 Executives, 1 Factory Supervisor,	RAK Ceramics Ltd.

		2 Union Representatives	
6	6	Acting HR head, IT Manager, 2 Factor Supervisors, Senior Union Representatives, Admin Manager	British American Tobacco Ltd.
7	9	HR Manager, 3 HR Executives, Compliance Mamager, Factory Manager, 3 Factory Workers three wings	BD Lamps Ltd
8	6	HR Director, Assistant HR Managers, 2 HR Executives, 2 Logistics and Admin	EnergyPac Ltd.
9	7	HR manager, Deputy Manager, 2 Assistant Managers, 2 Executives, Factory Production Manager, Factory Supervisor	Pran RFL Ltd.
10	6	HR Director, HR Manager, 2 HR Executives, Factory Manager, Training and Talent Manager	NAZ Garments Ltd.
11	6	HR head, IT Manager, 2 Factor Supervisors, Senior Union Representatives, Admin Manager	Karnaphully Paper Mill Lt.d.
12	7	HR manager, 3 HR executives, Admin and Logistics Manager, HR Assistant, Finance Manager	Ahasania Nawab Jute Mills Ltd.

Data saturation: NVIVO nodes and references

Researchers have included all data in NVIVO tool and after the transcriptions, the final meaning Nodes were Only a few but while segregating case by case the Nvivo Nodes and References found were the below numbers. Behind each node, there has been coding done in NVIVO tool see table 4.

Table 4 NVIVO NODES AND REFERENCES		
Case	NVIVO Mac Nodes	References
1	32	43
2	42	65
3	30	50
4	46	56
5	101	123
6	36	45
7	32	48
8	44	65
9	32	44
10	43	64
11	31	48
12	34	49

In this study, Miles, Huberman and Saldana's procedures of 2014 are implemented to describe the array and configuration of each code and theme. Auerbach & Silverstein discussed that categorizing and grouping the components have been done based on soft coding that validates and justifies data with generalizability and Andalib also supported this process with

evidence (Andalib, 2018). To make a comparison of data the results got extracted from the published scholarly materials. Firstly, literature data and primary interview data both got identified and sorted where all transcriptions are validated by using triangulation formula, test of conformability, transferability and justifiability, which is tedious and time consuming as per (Auerbach & Silverstein, 2013). Secondly, transcribed data generated the codes by using NVIVO and Thirdly, the soft systems technique has been used to integrate the HRM framework themes with HRM compliance' themes (Andalib et al., 2014; Onwuegbuzie et al., 2009). The generated HRM Compliance' themes are 'HRM AP', 'HRM GL' and 'HRM SOP' those got cohesive with employee rights' protocols and regulations from UDHR, ILO and BDL (Andalib, 2018).

DISCUSSION AND CONCLUSIONS

Researchers have revealed that the combined form of cohesive HRM framework with HRM compliances not just resolves a lot of hassle in managers' decision-making process but also ensures a holistic working environment by ensuring employees' rights and by reducing frustrations of employees in the manufacturing companies of Bangladesh (Andalib et al., 2013; Andalib et al., 2015; Andalib et al., 2019). Even though the MCS has been done in the context of Bangladeshi manufacturing companies, the simulation work can be implemented in various manufacturing dimensions. As for example (Sotirios, 2014) mentioned about the smart city integration that can enhance human-machine infrastructure, governance in the manufacturing companies and citizen engagement where HRM compliance can be implemented. In future, this cohesive framework can extend more dimensions like block-chain technology and bring lots of distinct sets of common multi-dimensional components underlie in the concept of cohesive framework and smart-city technologies (Salah, 2020; Spencer, 2018; Xu, 2020). Previous scholars have identified by exploring and analyzing that certain core factors are necessary for a successful smart city initiative, therefore scholars like Nam and other have developed conceptual frameworks regarding smart city as well that aligns three main dimensions related to technology, people, and institutions (Sotrios, 2014). In future, the researchers can do more qualitative studies in specific industry in Bangladesh or in any country to analyse the detail conditions of the 'manufacturing companies' compliances for any departmental or divisional work provisions so that re-engineering can be done as well. Moreover, scholars can do survey and empirical studies as well after the implementation of the re-engineered compliance model in the company to find out if the implementation has assisted the organization. Furthermore, a survey can be done in the managerial level asking them if their decision- making capability and space have increased for this re-engineered component or not. There can be several multiple case studies and individual single case studies can be done to observe the existing situations of the companies regarding manufacturing companies' in Bangladesh or in any country of the world as well.

It is critically claimed by Andalib and Darun that the HRM framework along with its practices and policies are embedded within any organisation ; whereas HRM compliances are always considered as a separate policy (Andalib et al., 2019; Andalib et al., 2020). Scholars have put much effort into developing sophisticated HRM models to manage the human resource management components, employees' performances and employees' rights but haven't put much struggle to converge the related policies. HC is one significant component of an HRM framework. Therefore, in this study the effort has been taken by the researchers to re-engineer and integrate this distinct component HC with the employee rights' protocols for the manufacturing companies of Bangladesh. The continued study also discloses that these sort of

integration and cohesiveness not just enhance sustainability but also reduces Financial risks. (Andalib et al., 2015; Andalib et al., 2019).

Conflicts of Interest: "The authors declare no conflict of interest."

REFERENCES

Albrecht, S. L., Bakker, A. B., Gruman, J. A., Macey, W. H., & Saks, A. M. (2015). Employee engagement, human resource management practices and competitive advantage: An integrated approach. *Journal of organizational effectiveness: People and performance*, 2(1), 7-35.

Andalib, T. W., & Darun, M. R. (2018). An HRM framework for manufacturing companies of Bangladesh mapping employee rights' protocols and grievance management system. *Indian Journal of Science and Technology*,

Andalib, T. W., & Darun, M. R. (2019). Re-engineered and integrated industrial relations model for governance integrity: multiple case studies in Bangladesh. KnE Social Sciences, 1254-1270.

Andalib, T. W., & Halim, H. A. (2019). Convergence of conceptual innovation model to reduce challenges faced by the small and medium sized enterprises'(SMEs) in Bangladesh. *Journal of open innovation: technology, market, and complexity*, 5(3), 63.

Andalib, T. W., Azizan, N. A., Halim, H. A., Adresi, A. M., Darun, M. R., Sultana, U. S., & Halim, H. A. (2020). Converged Entrepreneurial framework integrating block-chain for the SMEs of the emerging economy: Case studies with soft systems analysis. Test, Engineering and Management, 83.

Andalib, T. W., Darun, M. R. B., & Azizan, A. (2014). A process of developing an HRM framework based on qualitative study in Technology companies in Bangladesh and Malaysia. *International Journal of Research in Business and Social Science* (2147-4478), 3(2), 148-163.

Andalib, T. W., Darun, M. R., & Azizan, A. (2013). Frustration of employees: Reasons, dimensions and resolving techniques. *WCIK E Journal of Integration Knowledge*, 15-25.

Andalib, T. W., Darun, M. R., & Azizan, N. A. (2015). Western trends of human resources management: Theories and Practices. *International Journal of Industrial Management* (IJIM), 1(1), 8.

Andalib, T. W., Darun, M. R., & Azizan, N. A. (2019). East Asian trends of human resource management: theories and practices. *International Journal of Human Resources Development and Management*, 19(2), 135-149.

Andalib, T. W., Darun, M. R., & Halim, H. A. (2020). Green compensation package of HRM framework and its impact on the supply chain management in Bangladeshi manufacturing companies'. *International Journal of Supply Chain Management*, 9(1), 366-374.

Andalib, Tarnima Warda (2018), A study on convergence of international employee rights within human resources management practices in Bangladesh. PhD thesis, Universiti Malaysia Pahang

Andalib, Tarnima Warda, Darun, Mohd., Halim, Hasliza, Sultana, Umme Salma (2019). An Innovated HRM Framework for sustainability: multiple case studies in Bangladesh, ICBSI 2018 - International Conference on Business Sustainability and Innovation, *The European Proceedings of Social & Behavioural Sciences*

Auerbach, C., & Silverstein, L. B. (2003). Qualitative data: An introduction to coding and analysis (Vol. 21). NYU press.

Aycan, Z. (2005). The interplay between cultural and institutional/structural contingencies in human resource management practices. *The International Journal of Human Resource Management*, 16(7), 1083-1119.

Bangladesh Employees' Federation, BEF, The Bangladesh Labour Act 2006, (2009)

Becker, K., & Smidt, M. (2016). A risk perspective on human resource management: A review and directions for future research. *Human Resource Management Review*, 26(2), 149-165.

Boudreau, J. W., & Ramstad, P. M. (2005). Talentship and the evolution of human resource management: From professional practices to strategic talent decision science. *Human Resource Planning Journal*, 28(2), 17-26

Caligiuri, P., De Cieri, H., Minbaeva, D., Verbeke, A., & Zimmermann, A. (2020). International HRM insights for navigating the COVID-19 pandemic: Implications for future research and practice. *Journal of international business studies*, 51, 697-713.

Candy So Suk, YiEric Yung, Christopher, FongShilpi, Tripathi (2020). Benefits and Use of Blockchain Technology to Human Resources Management: A Critical Review April 2020. *International Journal of Human Resource Studies*, 2019, 10(2):131,

Chuprova, D., Gudkova, S., & Marinets, I. (2019). Personnel safety as a tool for leadership in public administration. *In 4th International Conference on Social, Business, and Academic Leadership* (ICSBAL 2019) (pp. 51-55). Atlantis Press.

Clarke, L., & Short Jr, J. F. (1993). Social organization and risk: Some current controversies. Annual Review of Sociology, 19(1), 375-399.

Creswell, J. W., (2013), Research Design Qualitative, Quantitative, and Mixed Methods Approaches. London: SAGE Publications

Denaï, M. A., Palis, F., & Zeghbib, A. (2007). Modeling and control of non-linear systems using soft computing techniques. *Applied Soft Computing*, 7(3), 728-738.

Eisenhardt, K. M., & Graebner, M. E. (2007). Theory building from cases: Opportunities and challenges. *Academy of management journal*, 50(1), 25-32.

Erven, B. L. (2019), The Role of Human Resource Management in Risk Management.

Foorthuis, R., & Bos, R. (2011). A framework for organizational compliance management tactics . In Advanced Information Systems Engineering Workshops: CAiSE 2011 International Workshops, London, UK, June 20-24, 2011. Proceedings 23 (pp. 259-268). Springer Berlin Heidelberg.

Guest, D. E. (1997). Human resource management and performance: a review and research agenda. *International journal of human resource management*, 8(3), 263-276.

Hoon Lee, Jung., Phaal, Robert., Sang-HoLee, (2013). An integrated service-device-technology roadmap for smart city development. *Technological Forecasting and Social Change*, 80(2), 286-306.

Hopkins, A. (2011). Risk-management and rule-compliance: Decision-making in hazardous industries. Safety science, 49(2), 110-120.

Hutahayan, B. (2020). The mediating role of human capital and management accounting information system in the relationship between innovation strategy and internal process performance and the impact on corporate financial performance. *Benchmarking: An International Journal*, 27(4), 1289-1318.

Ignore, H. (2009). Managing behind the scenes: A viewpoint on employee empowerment. *African journal of business management*, *3*(1), 009-015.

International Labour Organisation: Handbook of procedures relating to international labour Conventions and Recommendations, 2012

Kovacova, M., Kliestik, T., Valaskova, K., Durana, P., & Juhaszova, Z. (2019). Systematic review of variables applied in bankruptcy prediction models of Visegrad group countries. Oeconomia Copernicana, 10(4), 743-772.

Kramoliš, J., & Dobeš, K. (2020). Debt as a financial risk factor in SMEs in the Czech Republic. Equilibrium-*Quarterly Journal of Economics and Economic Policy*.

Lawler, E., & Boudreau, J. W. (2009). Achieving excellence in human resources management: An assessment of human resource functions. Stanford University Press.

Mccavish, P. (2012). Rana Plaza a disaster from which we learn boxwood- works where it matters

Merriam, S. B. (1995). What can you tell from an N of 1?: Issues of validity and reliability in qualitative research. PAACE Journal of lifelong learning, 4, 51-60.

Meyer, M., Roodt, G., & Robbins, M. (2011). Human resources risk management: governing people risks for improved performance: opinion paper. *SA Journal of Human Resource Management*, 9(1), 1-12.

Miles, M. B., Huberman, A. M., & Saldaña, J,. (2014), Qualitative Data Analysis. A Methods Sourcebook. Los Angeles, London, New Delhi, Singapore, Washington DC: SAGE Publications, 2014

Onwuegbuzie, A. J., Dickinson, W. B., Leech, N. L., & Zoran, A. G. (2009). Toward more rigor in focus group research: A new framework for collecting and analyzing focus group data. *International Journal of Qualitative Methods: ARCHIVE*, 8(3), 1-21.

Paroutis, S., Bennett, M., & Heracleous, L. (2014). A strategic view on smart city technology: The case of IBM Smarter Cities during a recession. *Technological Forecasting and Social Change*, 89, 262-272.

Salah, D., Ahmed, M. H., & ElDahshan, K. (2020). Blockchain applications in human resources management: Opportunities and challenges. In Proceedings of the 24th International Conference on Evaluation and Assessment in Software Engineering (pp. 383-389).

Shen, J. (2011). Developing the concept of socially responsible international human resource management. *The International Journal of human resource management*, 22(06), 1351-1363.

Smale, A., & Heikkilä, J. P. (2009). IT-Based integration of HRM in a foreign MNC subsidiary: A micro-political perspective. In Handbook of research on e-transformation and human resources management technologies: Organizational outcomes and challenges (pp. 153-170). IGI Global.

Smith, P. G., & Merritt, G. M. (2020). Proactive risk management: Controlling uncertainty in product development. CRC Press.

Sobhani, A., Wahab, M. I. M., & Neumann, P. W. (2016). Integrating ergonomics aspects into operations management performance optimization models: A modeling framework. *IIE Transactions on Occupational Ergonomics and Human Factors*, 4(1), 19-37.

Spence, A. (2018). Blockchain and the Chief Human Resources Officer. Transforming the HR Function and the market for skills, talent, and training. A Blockchain Research Institute.

Stake, R.: Data Gathering: The art of case study research, 1995,49-68

Valaskova, K., Kliestik, T., & Kovacova, M. (2018). Management of financial risks in Slovak enterprises using regression analysis. Oeconomia copernicana, 9(1), 105-121.

Xu, M., Chen, X., & Kou, G. (2019). A systematic review of blockchain. *Financial Innovation*, 5(1), 1-14.

Yin, R. K. Case study research design and methods, Sage publications, (2009),4, 24