Management Education for Achieving Sustainable Development Goals in the Context of Bangladesh

Department of Management
University of Dhaka

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PREFACE

The Sustainable Development Goals (SDGs) are a combination of 17 interlinked goals that are designed to achieve a better and more sustainable world for all. The SDGs were set in 2015 by the United Nations General Assembly and are intended to be achieved by 2030. Though there are some challenges, Bangladesh's progress towards the attainment of SDGs is quite satisfactory. Management education makes efficient and skilled management experts who possess the competencies to provide realistic and inclusive strategic action plans for achieving various SDGs at different levels.

It gives me immense pleasure that the Department of Management, University of Dhaka has published a book titled *Management Education for Achieving Sustainable Development Goals in the Context of Bangladesh* to mark the 100 years of the University of Dhaka and the 50th anniversary of the independence of Bangladesh. The book presents how management education plays a significant role in achieving the SDGs in Bangladesh. The book would also assist the policymakers to deepen and broaden their sustainable efforts and align their plans with SDGs with the help of the management experts. The authority of the University of Dhaka has taken numerous progressive steps to achieve the SDGs. The authority has also taken initiatives to celebrate the 100 years of the University of Dhaka and the 50th anniversary of the independence of Bangladesh. My deepest gratitude to the authority of the University of Dhaka to provide the necessary financial support and assistance to publish this book.

The chapters in this book are multifaceted covering (a) *Role of Networking Skill to Career Success* -- Networking is viewed as a critical competency when employees are pursuing protean or boundaryless careers as employees are making frequent career moves. In this chapter, an attempt has been made to discuss the concept, benefits, determinants, barriers, and challenges of networking and then suggest strategies or ways that an individual should use to increase their networking skills throughout the course of their career development. (b) *High-Performance Human Resource Management and Organizational Performance* -- Aligning HR strategies to performance culture recognizes that employees are the valued owners and partners who can think strategically, contribute to implement strategies, and add value through identifying and optimizing opportunities to create and maintain sustained competitive advantage. To

support SDGs in the Bangladesh government's five-year plan, both private and public sector's organizations should focus on creating performance-oriented culture keeping people at the center of performance excellence. HPHRM could be an enabler to this purpose. (c) *Artificial Intelligence in Human Resource Management* --AI has the potential to revolutionize HR processes in areas where there is sufficient data and where that data can be used to increase efficiency, communicate at scale, give suggestions, and anticipate outcomes since AI-based solutions can predict, recommend, and communicate based on data. (d) *Fourth Industrial Revolution and Preparedness Required for the 21st Century Managers.* This chapter has covered the meaning and different phases of the industrial revolution, skills, characteristics, and intelligence required by company leaders and employees, practices that must be performed by leaders, and a new concept: Smart HR 4.0. The chapter has also focused on the impact of 4IR on human resources and therefore how HR departments of different organizations need to respond to this situation. (e) *Trajectory of the Internationalisation of Small and Medium Enterprises and Effectuation Theory* -- Effectuation has emerged as an important theory for the creation of new ventures and it also plays a pivotal role in the internationalisation of the SMEs. The chapter covers the five principles of effectuation, and small and medium enterprises internationalization. (f) *Career Depression among University Graduates: Causes and Consequences.* Career depression is a common phenomenon and the actual number of people suffering from it may be much higher than known due to limited understanding of the concept and the stigma associated with reporting depression. This chapter has covered the causes, consequences of career depression and prevention and coping mechanisms with it. (g) *Personality and Career Choice* --This chapter examines how individuals explore a suitable career that fits their characteristics. It discusses the domains of careers and personality. It also explores the link between personality and career choice. (h) *Role of Big Data for Achieving Competitive Advantage* -- Big Data isa data set that is so huge and complicated that no typical data management technologies can effectively store or process it. This chapter examines the characteristics of big data, sources of competitive advantage, the role of big data in achieving competitive advantage. (i) *Robotic Process Automation* **--** Robotic Process Automation uses robotic technology to automate various repetitive tasks in business. This chapter covers the applications of RPA, cases for robotic process automation in HR, the benefits of implementing RPA technology. (j) *Authentic Leadership: A Critical Review* -- A positive, genuine, transparent, ethical form of leadership is known as authentic leadership.

This chapter examines the leadership in general perspectives, authentic leadership behaviors, and the significance of authentic leadership. (k) *Soft Skills-- The Key to Career Success* – soft skill is a personal attribute that supports situational awareness and enhances an individual's ability to get a job done. This chapter attempts to explore the necessity of soft skills for people to make their careers successful in the organizations. Here it is shown that the soft skills are highly essential for people to get success in the workplace. And (l) the final chapter focuses on *Management Education to meet the Future Challenges.*

We are grateful to the researchers who have contributed to the chapters for this book and the members who are extending their efforts for the publication. The selected chapters underwent double-blind review by the scholars in their respective fields before they were accepted for publication. Gratitude to the distinguished reviewers for their excellent contributions. Sincere thanks and gratitude to the Editorial Board and all its members including those who have supported in many ways to publish the book and also to ensure its quality. Thanks to the officers and staff at the Dhaka University Press who are involved in publishing this book.

Dr. Faruq Ahmed
Editor,
Management Education for Achieving Sustainable Development Goals in the Context of Bangladesh

For celebrating the 100 years of the University of Dhaka and 50th anniversary of the independence of Bangladesh.

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The views expressed in the articles or papers are those of the authors and not necessarily those of the Editor or members of the Editorial Board.

Department of Management: Excellent Path to Enlightenment

The University of Dhaka

On the first day of July 1921, the University of Dhaka opened its door to the students with Sir P.J. Hartog as the first Vice-Chancellor of the University. In 2021 Dhaka University (DU) has celebrated its centennial anniversary with one hundred years of glorious past, being blossomed into a giant educational and political powerhouse in all aspects. DU now has the pride of housing 13 faculties, 13 institutes, 84 departments, 60 bureau and research centers, 19 halls of residence, four hostels, 138 affiliated colleges and institutions, 46,150 students and 2,008 teachers.

It is the leading and forerunner university in the country. The main objective of the university is to create new areas of knowledge and disseminate this knowledge to the society through its students. Since its inception, the university has a distinct character of having renowned scholars as faculties who have enriched the global pool of knowledge by making notable contributions to the fields of education and research.

It started its journey with three faculties (such as Arts, Science, and Law), 12 departments, 60 teachers, and 877 students in the first academic session. Subsequently, the number of faculties, departments, teachers, and students were increased gradually. It is located at the heart of Dhaka, the capital of Bangladesh. The university campus spreads over 200 acres of land surrounded by many renowned establishments. With the passage of time, the university came to be known as the 'Oxford of the East'. University of Dhaka is now one of the leading institutions of higher education in Asia, and the largest university in Bangladesh. This university, in the public sector, is administered as an autonomous body in accordance with the provisions of the Dhaka University Order, 1973.

Housed in three separate buildings, the university library has in its possession over 5,50,000 volumes, 30,000 manuscripts in various languages, and over 300 foreign journals in its subscription list. Also, the university provides students counseling and guidance services with a view to helping students to adjust to campus life, effectively pursue curricular and co-curricular activities and solve individual problems. Moreover, the

university organizes sports and recreational activities, offers free medical advice and pathological examinations to students and staff through its medical center.

The University of Dhaka offers undergraduate, graduate and postgraduate programs in various disciplines, including. Doctorate of Business Administration (DBA), Ph.D. and M. Phil. Several scholarships are awarded to the students every year. The major scholarships /stipends/ awards are UGC Scholarship, Government Talent Pool Scholarship, Government General Merit Scholarship, University Graduate Awards, University Undergraduate Awards, Hall Awards, BNCC Award, Ranger Award, Rover Award, and Awards for Blind Students.

Faculty of Business Studies

Faculty of Business Studies (formerly, Faculty of Commerce established in 1970 elevating the Department of Commerce) is a leading 'Faculty' of the University of Dhaka, which consists of nine departments (Management, Accounting information Systems, Finance, Banking and Insurance, Marketing, Management Information Systems, International Business, Tourism and Hospitality Management and Organizational Strategy and Leadership). The Faculty has its own state-of-the art e-library for the students and the teachers of the constituent departments. Headed by the Dean who is elected by the teachers of the nine departments, the faculty attires are governed by a committee composed of all professors and chairpersons of the nine departments, one teacher representative (other than professors & chairpersons) from each department, the Deans of the Faculties of Arts and Science, Chairperson of Economics, Director of IBA, two representatives of the Academic Council of the University of Dhaka, and four outside-the university representatives having expert knowledge and professional skills in subjects taught in the Faculty. All the departments under the Faculty of Business Studies offer BBA and MBA programs as well as research programs such as Master of Philosophy (M.Phil), Doctor of Philosophy (Ph.D) and Doctor of Business Administration (DBA). Recently the Faculty of Business Studies inaugurated an international standard food court, day care center for the children of faculty members, ATM booth installed by the South East Bank Limited, Biddya Nahar and WiFiFacilities.

Department of Management

The Department of Management was established in 1970 when the Department of Commerce emerged as an independent faculty. In fact,

'commerce' was introduced as a separate area of study in the academic session of 1922-23, just immediately after the establishment of the University of Dhaka.

The Department is empowered to provide teaching for the degree of BBA and MBA as per rules and regulations of the University of Dhaka. It also offers academic programs leading to the award of Doctoral Degree, DBA, and Master of Philosophy. Additionally, Department organizes special programs, conferences, seminars and short courses.

With a complete paradigm shift, the Department now looks towards fundamentally changing the teaching-learning methods in an endeavor to cope with the changing demands for job-oriented business education and to enable the graduates of the Department to face the challenges in the competitive world of the new millennium.

The Department of Management is located in the Business Studies Building in a screen natural environment enriched with hundreds of green trees. It is within yards from the Arts Building, the University Central Mosque, International Hostel, the Administrative Building, British Council, and major student dormitories such as Zia Hall, Bangabandhu Hall, Jasimuddin Hall, Zahurul Haq Hall, Bijoy Ekattor Hall Salimullah Muslim Hall, Rokeya Hall, Shamsunnahar Hall. Surja Sen Hall, Haji Muhammad Mohsin Hall. The Central Library of Dhaka University is just a five-minute walk from the department. The important public places near the Department are National Museum, Bangabandhu Medical University, Suhrawardhi Udyan, Supreme Court of Bangladesh, Dhaka Medical College, BUET and such shopping complexes such as New Market and Elephant Road-based numerous shopping centers.

The vision of the Department of Management is to be the premier center for management education.

The mission statement of the department is:

To provide professional knowledge and skills in management with a view to enhancing the efficiency and effectiveness of managerial manpower in business and non-business organizations to face the emerging challenges in the competitive world of new millennium.

The very recent achievement of the Department of Management is the publication of a Centenary Book as a part of the "Centennial Book Series Project of the University of Dhaka" to mark the 100 years' journey

of the university. This centennial book must glorify the university's history, culture, and contributions while also promote research and academic activities that are critical to Bangladesh's development journey. This initiative allows our faculty members to share their expert opinions, views, insights, analysis, and recommendations on a variety of current issues with relevant policymakers, industries, and other key stakeholders on a national and international level. This might also aid in forecasting future academic and research paths for the relevant subjects, as well as the University as a whole.

Academic Programs

Department's academic programs consist of Bachelor of Business Administration (BBA), regular *M*aster of Business Administration (MBA), Evening Master of Business Administration (EMBA), Master of Philosophy (M.Phil), and Doctor of Philosophy (Ph.D) and Doctorate of Business Administration (DBA), MPHRM Program, Diploma and Certificate Programs.

BBA Program

BBA in Management is our undergraduate program of 126 credit hours, to be completed in four years divided into eight semesters. Each semester is of 19 weeks of which 15 weeks are for class-teaching, one week for break and 3 weeks for holding the semester final examination. Each course unit is of 100 marks. There are two midterm tests of minimum one hour duration each carrying 30% weightage while a term paper carries 10% weightage. The final examination scripts are evaluated by two examiners and the average is taken for grading. If the difference between the marks of two examiners is significant, the script is graded by a third examiner and the average mark is taken into account.

The students of BBA are exposed to various business-related courses/issues in order to enable them to equip themselves with modern knowledge in business and technology. The courses offered broadly include such areas of learning as the basics of business, accounting, management fundamentals, mathematics for decision-making, business and industrial law, marketing, business communication, business statistics, economics, financial management, behavioral science, industrial relations, human resource management, insurance and banking, entrepreneurship development, auditing and taxation, MNC management, and computing fundamentals.

MBA Program

The regular MBA program is a full-time 48 credit hour professional program designed to meet the needs of the students who want to develop their career as executives or as teachers and researchers. Only 4-year BBA graduates of the departments are eligible to get admission into the regular MBA program. Currently, MBA students can attain their major in any of two areas, such as Strategic and International Management, and Human Resource Management.

MBA (Evening) Program

MBA (Evening) Program is an addition to the existing academic programs of the Department of Management. This self-financed program, primarily aimed at helping executives of the business and nonbusiness organizations to develop their career, was approved by the Academic Council of the University of Dhaka on October 12, 2001. There is no defined duration of the program. It is uniquely designed to address separate situations of each and every individual student. Generally, a student with Master Degree should be able to complete the program within 18 to 24 months. However, a student must take at least 2 courses in a semester in normal cases. Graduates in any discipline may apply for appearing in the admission test conducted thrice a *year*. The written admission test of one hour is centrally conducted by the Faculty of Business Studies on aptitude, logical reasoning, general knowledge and analytical ability. Applicants selected for the admission test results are called for interview.

Admission seekers to the EMBA program are categorized into three groups. The groups are: (a) students with M.Com. or BBA or equivalent degrees; (b) students of any discipline with Master (non-business) degrees who qualify for exemptions; and (c) students of any discipline with Bachelor (non-commerce) degrees. Students in Group (a) are required to take courses for 36 credit hours; those in Group (b) for 66 credit hours; and those in Group (C) for 96 credit hours with no course exemption. Every graduated student, after the completion of MBA coursework, is required to conduct an internship program for at least three months and write a project paper/ report under the supervision of a departmental teacher.

MPHRM Program

The demand for human resource management is gradually increasing due to the complexity and size of the modern business organization.   HR professionals and graduates will make fabulous contribution to the

accomplishment of the organizational goals. Keeping this in mind, the Department of Management has recently launched Master of Professional Human Rsource Management in order to build qualified professional human resources to meet the demand of the country. Bangladesh cannot speed up the desired economic growth without having adequate human capital.

Doctor of Business Administration (DBA)

For the last few years DBA program has been introduced. The Program is designed to produce quality doctoral level education to professional practitioners in different sectors like Government, business and private. The DBA program is aimed at producing graduates ready to serve their respective organizations and the nation with professional knowledge and expertise. There is a DBA committee headed by the Director. The committee consists of here senior teachers from among the professors. A candidate having a master's degree, preferably in a business discipline from an institution with CGPA of three in a scale of four in both undergraduate and Master's levels can be eligible to enroll in this program.

M.Phil and Ph.D Programs

Every year students are admitted into M. Phil and Ph.D programs according to the rules of the University. Master degree holders in management/ business administration from any recognized educational institution may apply for the admission subject to the fulfillment of the conditions set by the university. The terms and conditions regarding admission, examination, and other matters relating to these degrees are prescribed by the regulations formulated by the Academic Council and the Syndicate of the university.

Resources and Facilities

Physical Facilities

The Department offers an enjoyable teaching-learning environment, which has been made possible by the existence of some unique physical and related facilities. The facilities include:

- A well-equipped computer lab that helps provide one student one-computer for computer related classes and simulations.

- Network system and 24-hours on-line internet connection in the computer lab.

- Fully air-conditioned spacious classrooms in a peaceful natural environment with adequate lighting.

- Inbuilt microphone system in all classrooms.

- Big-sized white board facilities in all classrooms.

- Chairs with writing facility for every student.

- Sophisticated multimedia projectors for visual presentation using computers.

- Fully air-conditioned and well decorated meeting room and department office.

- Very progressive curriculum,

- State of the art educational infrastructure and resources.

- Well-furnished room for each faculty member, fitted with air-conditioner and computer for individual use.

- Department offices and rooms of the teachers are well equipped with personal computers, internet and air-conditioned facilities.

- Gold media for the student securing the highest CGPA in the BBA Program.

- A common specialized international standard e-library rich in latest-edition books on the 2nd floor of the faculty building having separate reading rooms for students, teachers and researchers along with 200 hundred computers.

- Library Facilities

- Management Development Program

- Student Counseling and Guidance

Residential Accommodation

The University has 21 halls for accommodating male and female students, and one for foreign students. Every student must be either resident or attached to a hall. Students shall have to abide by the rules of discipline of the hall. The halls can provide residential accommodation to a limited number of students and any student willing to have a seat in the hall should apply to arrange finance for a living, tuition, books and accommodation.

For foreign students, accommodation in International hall is available if requested well in advance.

Departmental Publications

The Department publishes a peer-reviewed professional journal, namely, Journal of Management. Several issues of this journal have already been published. The journal has an editorial board comprising of professors of the Department and few outstanding external experts. It contains research-based articles on management and related fields. The department also published a book entitled 'Readings in Management', first of its kind in the country.

Organizational Attachment

Students of both BBA and MBA programs are required to complete an internship assignment for a period of three months preferably in a business organization. Internship for each student is mandatory. Our department maintains regular contact with the public, private sector organizations, and multinational companies, and students are placed in those organizations for the internship. As an integral part of their academic program, each student, after the internship is over, must prepare a report under the supervision of a departmental faculty. In the case of the MBA program, students are required to defend the reports before the MBA Examination Committee.

Research Centers of the Department

The Department of Management has two research centers:

1. Center for Trade and Investment (CTI):

A. The primary objectives of the center are to conduct trade and investment research, provide training, and render consultancy& advocacy services. The center is currently conducting analytical studies on trade and investment topics and training courses for the stakeholders.

B. *Center for advanced Research in Strategic Human Resource Management (CRSHRM):*

Just a while ago, the Department of Management has opened this new center. Short training programs and workshops are organized for the executives of private and public organizations in order to disseminate knowledge and skills in management and human resource management (HRM). It is also the objective of the center to conduct research on various

issues of HRM. Recently, the center has taken an initiative to publish edited books written by the faculty members of the Department of Management and the experts in the relevant fields.

Linkage with Business Community

The Department of Management maintains a strong linkage with the business community. Business leaders and professional managers are invited to deliver lecture on contemporary business-related issues. A good number of seminars and workshops have been organized for the students and faculties. Seminars, workshops and roundtable meetings with the business professionals are held to generate innovative ideas regarding management issues as well as to elicit opinion about further refinement of the BBA and MBA curriculum. We feel proud to incorporate in our curriculum the expert suggestions of the business people so that our academic programs reflect the reality of the business world.

Monitoring and Supervision

The class-holding and students' attendance and performance are closely monitored and supervised. The BBA Batch Coordinators and the MBA Supervision Committee are primarily responsible for monitoring and supervising of all activities related to BBA and MBA programs respectively. The departmental chairperson generally oversees the performance of both students and teachers. The department is continuously committed to improving the quality of teaching-learning to meet the need of the country.

Scholarship and Financial Assistance

Meritorious students are given a limited number of scholarships by the University of Dhaka, although these scholarships are not sufficient enough to cover all educational expenses. The Department of Management in collaboration with banks and other organizations arranges part-time jobs and financial assistance for students not having adequate financial support. Dutch Bangla Bank Limited has been providing scholarships for the poor and meritorious students. 'Colonel Malek Trust Fund' has been providing financial assistance for the last few years. Recently, our former colleague Professor Dr. Moinul Islam has established a trust fund entitled 'Moinul Islam Trust Fund' to provide scholarships to the meritorious students. The student securing the highest GPA at the BBA Program will be awarded Gold Medal. The department provides financial assistance to the financially handicapped meritorious students. The department also collected funds from different organizations, namely Bangladesh Bank, Islami Bank

Bangladesh Ltd. and many financially affluent former students to enhance academic facilities and help disadvantaged students. Management Net, and Management Alliances, the associations of former management students are extending their financial support in different departmental programs.

Prospect for Graduates

There is a high demand for our graduates in the market. Major employers are Banks, Insurance Companies, Public and Private Universities, Educational Institutions, Autonomous Bodies and other Government Organizations. A good number of our graduates are doing excellent in their career, even in foreign countries. Many of our former graduates hold/held top positions (Vice Chancellors, Deans, Managing Directors of Banks and Institutes) in different public and private organizations.

Dean's Honor List and Dean's Merit List

Two categories of awards for graduate students:

1. Dean's Honor award: students with CGPA:3.85 & above.

2. Dean's Merit award: students with SGPA: 4.00.

Two categories of awards for post-graduate students:

1. A list of regular meritorious students who have been awarded MBA degree with a CGPA of at least 3.90 shall be included in the Dean's Honor List of the year of Graduation.

2. Regular students who have earned a SGPA of 4.0 in any semester shall be included in the Dean's Merit List of the semester.

Concluding Comments

In continuing the legacy of quality and excellence and in pursuit of its goal and vision, the Management Department of the Faculty of the Business Studies, University of Dhaka, is always looking for innovative ways to improve the learning experiences and align it with the evolving demands for world-class business education. The volatile corporate climate would necessitate a planned intervention to ensure that academic programs are relevant and responsive to these changes and difficulties. The rapidly increasing technology, which has dramatically altered the way business is conducted around the world is one of the major challenges academic institutions are facing. To support the progress of technology, the government and non-governmental organizations and institutions have

established policies and initiatives. To make a difference, the country's human resources must be equipped with knowledge and skills. The university plays an essential part in this aspect of educating and offering relevant experiences to students who are seeking globally competitive knowledge and abilities to deal with rising business difficulties. The Department of Management is one of the university's most successful departments. In response to the needs and expectations of the times, it is constantly reforming its curricular program and courses, upgrading faculty competencies, improving facilities, and applying innovative teaching methodologies.

This chapter is written and compiled by Dr. Nadia Newaz Rimi, Professor, Department of Management, University of Dhaka.

Role of Networking Skill to Career Success

Md.Ali Akkas[1]

Introduction

All human beings want to be successful in their personal and professional life. Success makes people happy and happy people are usually more productive. It is true that success means many things to many people depending on our values, faiths, beliefs, religions, culture, experiences, and stages of life. Thus, the indicators of success are not identical for all. Individuals define career success from their own perspective. Career success can be explained mainly from two perspectives- objective and subjective (Nabi, 2003; Judge, 1999). Objective success is measured by financial and material accumulation. It is measurable, visible, and tangible attainment. Examples are position, power, promotion, and compensation. Subjective success is intrinsic, and it is personal satisfaction that an individual receives from his job. Examples of intrinsic success include the employee's job, interesting and meaningful work, doing good for the society, autonomy, life satisfaction and recognition. There is a positive association between subjective and objective career success (Gu, Q and Su, Y, 2016).

Researchers identified many factors that are likely to contribute to career success of an individual (Akkas,2021; Tracy ,2019' Grimland,2012; Greenhaus,1990; Judge,1994), The main factors, among others, are education, connectivity/networking, performance, exposure, knowledge in organizational politics, proactive personality, organizational sponsorship, and luck. These factors are interrelated. This paper deals with only the role of networking/connectivity in promoting and building the career success of an individual. Success in both personal and professional life depends mainly on a person's ability to build a strong and meaningful relationship. The objective of networking is to build, maintain and strengthen real and authentic relationships to access information, resources and support that individual can use to make personal and professional progress. It is a process that is required throughout all stages of a person's professional journey. Networking is viewed as a critical competency when employees are pursuing protean or boundaryless careers as employees are making

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frequent career moves. Few people today work for the same organization throughout their careers whether because of downsizing or because of the boundaryless or protean nature of modern careers (Arther, 1996; king, 2004; Eby and Lockwood, 2003; Gunz,2007). Interpersonal relations are critical to self-manage careers. Now the economy is becoming more and more digital, the workforce is becoming more mobile, and people will engage in short term employment (Hossain, 2019). Examples of the gig employees are freelancers*, contract workers, and part-time employees.* Employees shift their jobs continuously. In the eras of gig economy and boundary less careers, the responsibility for an employees' careers has shifted from the organization to the individual. This transformation has heightened the need for self-career management behaviors, namely, networking, and visibility (Drucker,1992; Sturges, 2008). We need to understand how to manage and develop- our careers.

Networking skill is key to boosting social capital, managerial behavior, and career success (Janasz, and Forret, 2008; Singh, 2006). Networking will not only help an individual to find a job faster, but it will also give a person a competitive edge throughout every stage of his or her career. It is the lifeblood of a person's career. However, many individuals have a negative attitude towards networking and feel unpleasant about networking. Students who are shy and introverted are poor in networking skills. There is an absence of understanding/awareness of the importance of networking skills among many students and employees They assumed that people use it to get special favors from others or to enjoy an unfair advantage. They do not believe in the unlimited power of networking in personal and career development. That is why, they undermine the vital role of networking. The reality is that it is not about begging for favors. Given the importance of networking for employees, college and university students, an attempt has been made to discuss the concept, benefits, determinants of networking, barriers, and challenges of networking and then suggest strategies or ways that an individual should use to increase their networking skills throughout the course of their career development. This paper also helps employees, businesspersons, and job seekers to avoid the common mistakes they are likely to make in their networking practices. This paper is based on a detailed review of available literature on different aspects and issues of networking. The author makes an insightful analysis based on his long working experience. As a result, this is a descriptive qualitative study.

What is Networking?

People have mixed feelings about networking. It is often misunderstood. The mindset of people matters. People with introverted mindsets consider networking as a necessary evil when they are engaging in it(Lee and Chen, 2017). They are also known as prevention-focused people. They try to engage in it the least. They feel uncomfortable engaging in it. It is an exploitative, manipulative, and inauthentic human activity. It is an unethical way to get things done. They consider networking as an unpleasant task of trading favors with strangers (Ibarra and Hunter, 2007). People engaging in networking to gain more favors. It is an opportunistic practice. Even some people think that they do not have time for it.

While promotion-focused people consider networking is a necessary skill. They think primarily about the growth, advancement, and accomplishments that networking can bring them. Promotion-focused people make contacts to find out all possible opportunities to reach the goal with excitement, curiosity (Casciaro, Gino, and Kouchaki, 2016). Networking should not be confused with selling oneself. It is not only the exchange of information with others. In today's dynamic business world, networking is not a luxury, rather it is a necessity. It is about creating and cultivating long-term, mutually positive relationships with the people known to an individual. It is a process of building and maintaining a network of contacts. It is an ongoing process. It needs to happen all the time. Networking refers to the ability to exchange ideas and information between two or more persons to create long term relationships for gaining mutual interest and benefits. Networking skills are the ability to make contacts through a two-way process. When building a network, one must provide something back. It is a give-take approach. For finding and promoting a career an individual must have competencies to build and maintain social or professional contacts.

Researchers and experts define networking as behaviors that are aimed at building, maintaining, and using informal relationships that possess the (potential) benefit of facilitating work-related activities of individuals by voluntarily granting access to resources and maximizing common advantages (Podolny & Baron, 1997; De Janasz, Dowd and Schneiders, 2002; Wolff & Moser, 2006; Forret & Dougherty, 2004).It facilitates resource mobilization. The relationship is informal, voluntary, and reciprocal. The best networking comes from genuine and authentic relationships. Networking may be internal (within the organization or external (outside the organization). Through networking, individuals expand their relationship arrangement by forming relationships with those

internal to the organization (e.g., peers, and senior managers,) and those external to it (e.g., members of professional associations; Higgins & Kram, 2001). Individuals who are well connected enjoy a strategic competitive advantage (De Man,2004). Networking has been defined as a mental and emotional need to connect, socialize, and work with others (Van Winkelen, 2003). It meets people's need for affiliation. Employees make personal and professional relationships to access information, and supports (DeJanasz, Dowd and Schneiders, 2002).

Determinants of Networking Behavior

There are many factors that influence the networking ability of a person. It is influenced and determined by individual psychological attributes such as proactiveness, a five-factor model of personality (extraversion, openness, neuroticism, and agreeableness conscientiousness), individual motivation for safety and security, gender, (Fuller & Marler, 2009; Klein and Mayer, 2004; Wolff,2012). Let us briefly explain these points. . Proactiveness is acting earlier before the problem becomes more serious or unmanageable. Proactive people do not wait for something to happen rather they make something happen. According to Thompson (2005, there is a strong association between networking and proactiveness. A proactive person has more capability to build connections across the organization that lead to career success.

Personality matters at work. Researchers found a strong relationship between personality traits and the networking behavior of individuals. The big-five personality traits have a strong impact on the psychological foundation of networking behavior of individuals (Rapp and Ingold,2019). For example, people with high extraversion are more powerful in their networking behaviors than people with lower extraversion (Wanberg, Kanfer, & Banas, 2000. Who are extroverts? Extroverts are usually talkative, assertive, sociable, friendly, approachable, and outgoing. Extraversion facilitates networking because Individuals with extraversion actively seek social attention and this nature persuades individuals to engage in interactions at work. Extroverts are more closely related to building contacts than to maintaining and using contacts. Therefore, they will make many useful connections over time, which may provide many opportunities in the future. Additionally, extraverted people are more relaxed meeting new people (Digman, 1990; Goldberg, 1993; McCrae & Costa, 1987). Extroverted persons demonstrate a preference for networks with powerful ties (Rapp and Ingold,2019).

People who are low in extraversion (or introverted) do not like to invest more in social settings. They are more comfortable working by themselves. Due to the more social interactions, extroverts have higher confidence levels compared to introverts and confidence is a key to success in various stages of life. They are courageous and are not afraid of taking a stand if they do not like certain thing. People with low confidence feel that keeping silent is better than talking a stupid. The degree of extraversion differs as per the situations. It has been observed that the same person is extraverted in some situations and more introverted in other situation (Cherry, 2021). They remain silent to talk with people holding powerful positions in the organizational hierarchy. Because of personality traits, some individuals experience more barriers to networking than others.

Motives also influence and shape networking behavior. Motive explains the reason for doing something. People act in a given way because of motives. Human behavior is motivated. A study found a strong relationship between networking behavior and an individual's need for power, achievement, and affiliation (Wolff, 2018). To meet these needs, people try to build and use contacts.

Demographic factors such as Individuals from the higher socioeconomic background (Forret & Dougherty, 2001) and the more educated (Klein et al., 2004) are better skilled in developing and maintaining relationships instrumental to one's career. People with high socio-economic status have more access to resources, wealth and power and can easily establish and maintain networks with high profile and powerful people of the society and this strong network plays a big role in their career achievement. For example, youths with well-connected parents tend to have choices in selecting work (Bengston, Biblarz and Roberts, 2002). If a youth's relatives are unemployed and they lack job contacts, their choices are restricted to other kinds of contacts (such as peers) that do not lead to long-term earnings benefits. Children can receive better education when their parents are financially affluent, and the quality of education has a tremendous influence on a person's career success. Attaining higher education from a reputed institute may provide opportunities to build strong connections. Thus, socio economic status determines a person's human, social and cultural capital.

Network patterns and objectives differ across gender (Volkovich and Laniad, 2014; Venkatesh and Morris, 2000). Gender influence on access to networking often varies according to local and cultural practices. Female employees encounter several networking challenges compared to men that

hinder their career advancement (Lahtinen and Wilson, 1994). Women utilize their networks less effectively than men, which leads to men experiencing more career satisfaction than women (Van Emmerik, 2006). Men are more likely than women to use networking for searching for a new job (Zikic , 2008). Perceptions of the social networking practices of female employees are different from those of men. Women see their networks in terms of close social friendships, while men see their networks as alliances rather than friendships. Men tend to use networking to promote their careers. Women feel hesitation to ask for help from other people due to moral and cultural concerns. They do not feel comfortable demanding a favor if they cannot return it in kind. Women are much more likely to connect with other females as their initial friends who are in the same professional levels Networking approaches of women and men are also different. Women perceive themselves to be more emotional in their networking approach and men are more direct and women are more emotional in their approach to networking (Bogaards, 2012).

 Women with children find it more difficult to establish networks due to tight work schedules and family responsibilities. Women need to spend more time than men taking care of children and family members (Gordon and Whelan-Berry, 2004) This leads to women spending less time than men networking after work hours (Linehan, 2001). Networking cuts into family time. Women also face the difficulty of entering typically male-dominated networks, especially when interactions are often informal and occur outside of work (Hoffman, 2008). Women face more uncertainty of joining new groups in male-dominated professions. Women have little access to men dominated network within an organization (Linehan, 2001). Due to these and other factors, women usually fail to build multiple networks and cannot leverage their networks to advance their careers as their male counterparts are likely to do. The exclusion of female employees from social and business network impedes their building of a strong connection. These studies confirm the existence of gender differences in networking. The above analysis shows that men and women experience a different set of barriers to networking.

There are many challenges and barriers to effective networking. Some people are suffering from fear of failure. They lack self-confidence. Their self-efficacy level is low (Bandura, 1999). They feel intimated or frightened by people who know more than them. They are suffering from an inferiority complex. They think that they are not knowledgeable enough to talk to other professionals. They feel nervous to talk to a stranger. People do not like to talk with people with more status or power than them (Hofstede,

2012). Many people feel uncomfortable asking for help or assistance and they think they are good enough to take care of themselves and asking for assistance hurts their ego. Many people are proud and ego -driven. They are afraid that people perceive them as weak, needy, or vulnerable.

It is more advantageous if individuals build diverse network with people different from themselves because it will allow them to access new information and resources. We are uncertain about the norms and expectations of new groups with different backgrounds. Cultural differences act as a hindrance (Bochner, and Hesketh, 1994). As a result, people tend to build connections with homogeneous groups. This may act as an obstacle to getting new ideas and opportunity.

Some people feel shame to begin the initial conversation. They feel uneasy to connect with those who are senior in terms of power and position. Networking may be expensive. Networking meeting involves cost. For example, to be a member of a professional club (e.g., Lions Club, Rotary Club, Dhaka club) one needs to pay a huge subscription and donation. Networking takes time. Networking is a long-term game. Many people expect quick returns. They cut off networking after a short period of time. Networking will be stronger if one can provide value. Strong networking depends on a person's ability to respond to other's challenges or problems. It is a two-way street. It is important to me oneself useful. It is essential to demonstrate one's value to others.

Forms of Networking

Networking takes mainly three forms, namely, operational, personal mad strategic and all these are distinct in nature but interdependent (Ibarra and Hunter, 2007; Uzzi and Dunlap 2005). These different types of networking are critical to succeed as a manager. Leaders must have all three types of networks, and not just one or two. As a leader rises through an organization, he or she must master these three kinds of networking in succession. We shall need to utilize all three kinds of networking skillfully.

Operational networking is needed to perform current internal activities. The purpose is to get work done efficiently and the contacts or networks are mostly within the organization or group and the routine and short-term demand determine ties or connections. Colleagues, peers, and other members of the group have the power to block or support a project. All managers need to build good working relationships with the people who can help them to do their jobs. Cross, Davenport, and Cantrell (2003) stated that the ability to create maintain personal networks distinguishes between

high and poor performers. Building a diversified personal network across the organization should be a part of an ambitious manager's development plan because it improves personal and professional growth and success.

Personal networks are mostly external and oriented towards current and future interests. Through professional associations, alumni groups, clubs, religious groups, and personal interest communities, managers gain new perspectives that allow them to advance in their careers.

Networking is critical to play the leadership role. Top managers or business leaders must be good at strategic networking, it occurs both within and outside the organization. That is, inside and outside links are needed to be a successful leader. They need stakeholder support to become successful leaders. As Ibarra and Hunter (2007) found in their research, strategic networking is the ability to marshal information, support, and resources from one sector of a network to achieve results in another. It deals with broad strategic issues. Strategic networking provides top managers or leaders with the power to achieve personal and organizational goals. Successful leaders and managers place networking at the heart of their new leadership roles. The following section deals with the importance of networking to acquire career success.

Why is Networking Important?

Networking can provide an individual with many tangible and intangible benefits. In a rapidly changing business world, it is a reality and absolutely a necessary skill for employees across the industries to have a strong personal and professional network. Networking is viewed as a powerful tool for making a career successful. Networking is an essential; skill for career success (Naderman and SunHee, 2018). Networking serves as a catalyst to find employment and to make the expected move in a career. A strong and wide network provides a person knowledge and understanding of trends as well as insider information on job openings (Wolff and Moser, 2009). People like to do business who are well known, and they like to recommend people they trust. A survey shows that 85% of the best jobs in the USA are filled as the result of a third-party recommendation or through a referral from a trusted source (Tracy, 2019). Many jobs do not get advertised and many people are hired through the recommendations. The best networkers usually do not remain jobless for a long period. They use the backdoor to have access to the secret job market in the private sector (Adler, 2016}. Networking is the key to a successful job search for many people. This is an indication that most of the jobs are filled via networking.

Networking behaviors are essential to career success (Nierenberg, 2002; Torres, 2005; Welch, 1980). Networking is the process through which people make interactions with others to exchange information and build contacts, which results in advancing one's career. The business world is guided and influenced by connecting the right people with each other. Many studies found a strong positive relationship between networking and career success or outcome in terms of subjective (career satisfaction) and objective (salary or position, number of promotion) perspectives (Eddleston and Baldrige, 2004; Forret& Dougherty, 2004; Langford, 2000; Michael & Yukl, 1993; Orpen, 1996). Studies show that the most successful managers spend 70% more time engaged in networking activities (Luthans, Hidgetts and Rosenktantz 1988). Performing traditional management activities is not good enough to go ahead, even without networking ability managers find it difficult to do their routine management function. That is, the ability to network is a strong predictor of managerial success. It is a powerful tool to climb up the career ladder.

A person with high networking has more capacity to control alliances, connections, and social capital. Networking also helps a person to receive an adequate and acceptable performance ratings (Sturges, Conway, Guest, & Liefhooghe, 2005; Thompson, 2005; (Wanberg, Kanfer, & Banas, 2000). People engaging in networking behaviors can easily build and sustain unofficial contacts that boost career success (Forret & Dougherty, 2004; Luthans, Rosenkrantz, & Hennessey, 1985; Michael & Yukl, 1993). Individuals can gain access to needed information or resources, social support and guidance (Janasz and Forret, 2008). Social support can be used to accelerate career success. Networking with professionals can provide access to information about job opportunities, influence career paths, and create possibilities of mentoring within a chosen field (de Janasz & Forret, 2008). Networking has been shown to relate to concurrent salary, salary growth, and career satisfaction (Wolff & Moser, 2009; Gould and Penley, 1998). Networking increases an employee's visibility, development opportunities and capacity to negotiate promotion (Claes and Ruiz, 1998).

Networking is a specific career competency critical in this era of boundaryless careers (Hall, 2002; Grimland, 2012). In today's dynamic, unpredictable and turbulent environment, employees are often changing their careers and the responsibility for managing careers lies with the employees, not the organization. That is, the responsibility is on an employee to take control of his career development. Contemporary careers are boundaryless than the more traditional linear career, especially in

private sector organizations. One way in which employees can increase their careers is through networking (Wolf and Moser, 2009). This is an indication of the importance of networking for career development.

Networking skill is essential to make human capital effective. The formal education systems are designed to build and develop the right kind of human capital. Human capital consists of education, training, skills, experience, knowledge, and ability that increase our value in the workplace. People and their expertise and competency are an organization's primary asset and source of competitive advantage in today's knowledge- driven economy (Drucker, 1992). However, managers and professionals need to give emphasis on the development of social capital also to make them marketable. Networking is a key human capital skill that is unique in its ability to increase an individual's social capital (Seibert, Kraimer, and Liden, 2001; Baker, 2000). Human capital is not enough, there is a need for social capital to make human capital effective (Monica, 2006). Both human and social capital makes us marketable (De Janasz & Forret, 2008). Social capital is meant by the networks of relationships among the people living and working in each organization and society. Social capital facilitates the flow of knowledge and information. Managers and professionals with protean career attitude need to use their social capital to be flexible, self-directed, and concentrated on their employability (Hall, 1996; 2002). Baker (2000) describes social capital as the resources available to an individual because of his or her personal relationships. Social capital can offer individuals huge benefits in their careers (Adler & Kwon, 2002; Baym and Larson, 2021). It contributes to lower absenteeism and employee turnover, and higher organizational performance. Moreover, social capital is harder to replicate than human capital (Forret & Sullivan, 2002). That is, education, training and work experience are easier to obtain and replicate than relationship with others. As a result, individuals enjoy a valuable and distinctive advantage in the competitive market.

Networking serves as a path to create and sustain long-term relationships with mutual benefits through exchanging information. It is an avenue to exchange ideas and information. It broadens our exposure to new ideas and solutions and provides access to resources (Dulworth, 2006). Success in a career is mostly attributed to the pool of information or ideas a person has accumulated over the past. Many successful people in different fields have attributed their career success to the networking channel they have created over time.

Networking makes a person prominent in an organization and society in

general. It makes an individual more noticeable. People quickly notice others who have stronger capabilities to make them relevant. Networking within an organization makes a person a better candidate when a promotion opportunity arises. When two people are equally qualified for a position employers or top managers hire one whom they like and trust more. Having contacts with the right persons will help a person to move next career movement.

Networking provides avenues for newer opportunities. We are surrounded by unlimited opportunities, and we can tap these opportunities when we relate to the right kind of people. When a person can draw the attention of senior managers, it opens the door for newer opportunities. Career-minded individuals are incredibly good at networking and thus they are more capable of reaching their career destination with minimal effort. Because networking creates more avenue of newer opportunities. Sometimes, performance or academic qualification is not a guarantee of success, the roadmap to reach the top ladder of an organization is possible if an individual has a strong network and a good relationship with others.

Networking improves subjective career success. It enhances the physical and mental health and overall, well -being. Professional networks improve the quality of work and increase job satisfaction (Casciaro, Gino, and Kouchaki, 2016). Social connection is positively related to long- term happiness and success. This is a big predictor of happiness and success. Success does not make us happier, but happiness makes us more successful (Achor, 2018). Individual happiness is possible, but it may not last long. Gross or collective happiness is good for a society and through networking a group of individuals works together towards a common goal. Success and happiness cannot be designed in isolation.

Networking competencies provide a person with a great opportunity to share ideas and information. It improves learning and knowledge acquisition (Luthans, Hidgetts and Rosenktantz, 1988). Professional networks leadto a broader and deeper knowledge and improved capacity to innovate. It leads to We can take lessons from other's experiences. Through networking, we can see things differently. It enriches our knowledge base.

Networking improves a person's creative intellect. People having contacts with other influential persons over a longer period can easily utilize and release their creative talent. For example, a new learner can be an excellent performer if he has interactions with powerful and knowledgeable teachers in his field. Networking provides support from high profiles individuals.

Good networking with high -profile individuals from the same career path can serve as support whenever any possibility arises. These high-profile individuals can help us manage our challenges effectively by giving advice and linking to the right direction. Individuals with powerful connections always go ahead.

Networking helps a person meet potential mentors, partners, and clients, and gain access to the necessary resources (for example, information, job market and industry trend) that will foster your career development. It is clear from the above discussion that successful people use their network to get ahead.

Networking builds self-confidence (Subrameyer, 2021). Well-connected people usually switch jobs frequently and they do not mind getting out comfort zone because strong networking helps them build invaluable social skills and self-confidence. They can use these skills throughout their professional life. They gain self-confidence by interacting with people in various fields. They know the art of getting things done through others.

It is not easy to choose a right career, but it is more stressful to achieve success in the chosen career. Social networking can be a useful tool to relieve stress. Knowing the right people can help us reduce the stress in choosing the right career and achieve career success. Meeting with people facing similar stress or problem can provide us an opportunity to solve them more prudently. Persons with sound networking skills might have easy access to new and valuable information, resources, and support. This learning opportunity may make a person a better individual. Thus, in crisis situations, individuals with strong and right good networking abilities can utilize their network for help and support. We can take lessons from others' mistakes and successes. Considering the benefits of networking, let us now suggest measures or develop strategies to promote and build networking skills.

Ways to Improve Networking Skills

From the above discussion, it can be concluded that networking skill is crucial for one's career success. It is vital to an individual's professional growth. Networking skills (for example, speaking, writing, listening, sense of humor, positivity, and empathy) are the capacity to make contacts through a process that is two-way (Flaherty, 2019). People are engaged in many different professions; whatever the profession they are in, networking is the fuel to accelerate their career success. People are not   the same as per as their networking is concerned. Kay (2004), Taylor (2006) and

Boe (1994) assert that certain people are gifted or blessed with the natural ability to build the appropriate connections and relationships. They are at an advantage in the modern competitive world where relationships and connectivity are so vital.

There are many people who are deficient in this critical skill, and they do not feel comfortable about approaching people and asking people to connect with them. But they must need to develop these skills by practice. This skill can be acquired through learning, practice, and feedback. A person must develop this skill so that he can network efficiently and effectively. A study suggests that most professional jobs are not attained through classified advertisements; rather, professionals are hired through effective and consistent networking (Koss-Feder, 1999). Despite its importance, many students' dearth of the knowledge and skills needed to effectively make contacts. People use different networking tactics to make their careers successful. We need to design and use different strategies to interact with people holding different positions. Networking strategies to interact with the immediate senior and CEO of an organization are not identical. Study shows that effectiveness of tactics depends on the situation. There is no one best strategy. A given strategy may not match or fit all. Different tactics work for different people. For example, shy and introverted people are less likely to use networking. They prefer small group discussions. Extrovert type people have a natural talent or passion for networking, they love and thrive on more social interaction A combination of two or more tactics works better. Let us now mention several different strategies to build and improve a person's strong networking skills and thereby develop personal and professional development.

Always be ready to help. Giving is a strong tool to build and maintain networking. We should do something for others without expectation of return and then others will feel obligated and grateful to help and favor us when the time comes. "Successful people are always looking for opportunities to help others and unsuccessful people are always asking 'What's in it for me? (Tracy, 2019). Give first and receive later. Expecting too much too early is a common networking mistake (Haden, 2016). So start networking early. We should build a network before we need it. To develop a network of close-minded friends, an individual needs to be honest, free, and frank, and sincerely involved in serving their interests.

Be curious about mutual benefit. Develop relationships with people over time that is mutually beneficial. Networking serves as a path to build long-term relationships with mutual benefits; it works better when it is

reciprocally advantageous (Paul and Kaltenbach, 2004). Creating a win-win situation is especially important for any long-lasting connections. When one party reaps more benefits than the other party, he or she will feel cheated and used. Only through networking we will get help and ideas from surprising sources. We must work together for a common goal and mutual benefits.

A key to success in our personal and professional relationships largely lies in our ability to communicate well. Communication skill helps a person build a strong relationship with others.   Communicate frequently both in online and person. Work on communication skills such as speaking, writing, listening and interpersonal. Read body language (facial expression, eye contact, body movement, posture and gesture, tone of voice} of both senders and receivers correctly. An individual needs to pay attention to the body language of the person with whom he is speaking. This will confirm whether other parties agree or disagree.

Relationships will be more cordial and sincere when an employee could focus on the needs of others before his own. It should be a win-win approach, not a win-lose. We must have a mentality to do something meaningful for the people we want to connect with. Kindness or generosity is the key to building good relationships. Usually, people receiving earlier benefits will feel obligated to give returns when the opportunity arises.

Build a relationship with people from a point of common or similar interest (for example, Dhaka University Management Association).The need and interests of the two parties must be aligned. For building a collaborative and long-lasting relationships, it is necessary to work together on tasks that require one another's contributions. Task interdependency is a great source to build a constructive force in professional contacts. Through networking both parties are empowered. .

It is wastage of resources to have a network with everyone. We often make mistakes in choosing people with whom we like to be connected. We are spending our time with people who can be of no help at all because these people are not particularly ambitious or well-connected (Tracy, 2019). It is essential to identify the sign of wrong or bad contact. The signs of a bad contact are absence of reliability or credibility, demanding favor frequently and focusing only on their own needs (Stella, 2018). These people may become a burden and can prevent a person from making real, and strong contacts that might benefit his career. A person should develop network with the right people, who will be mutually beneficial (Cast, 2018). The

single most critical factor in determining the value of an individual's network is the breadth of connections with the right people—people who are willing to recommend. Right people include past or present professional colleagues, bosses, friends with similar interest, past or present teachers/ professors, family and relatives, neighbors, and alumni association. The right people are always helpful. They show sincere interest in others, do not focus on themselves, and they genuinely want other people to succeed (Goins, 2019). Right people are those who can assist us with a job search and career move. To succeed we must rely on others being a member of a society. Working towards a common goal will build long -lasting relationships.

Build both internal and external networking. It is just as necessary to build relationships within the organization as it is to do so with external parties. The internal network helps a person to build a strong personal brand. Make short- and long-term career plans when we are meeting people.

Participate in networking events to get acquainted with influential people of a person's career field. When a person frequently attends professional and social events, he can make himself known to others. He can get his face known. Exposure is essential to succeed in career. People quickly become aware of others who have stronger capabilities to make them relevant. This will satisfy our need for social interaction. We can get noticed among the crowd of many talented professionals through networking. Being visible is not about showing up at every event, it is about showing that we are a reliable and supportive member of our profession.

Create a feeling of intimacy. *Intimacy* in a relationship is created when we are emotionally and psychologically connected and supported. Keeping discussion on common issues make us feel happy. People are willing to help those who are already known to them

Networking works better if there is an effective follow-up (Whitemore, 2018). Follow-up is everything when it is timely. Follow up is trying to get more information about something or someone to reinforce or reevaluate a previous action. Always get in touch. Follow-up immediately. It takes huge time to grow and develop a sound relationship. .

Express gratitude and appreciation. People like to be acknowledged, and it is common courtesy to thank those who have helped a person in his or her network (Garver, 2018). Gratitude is a thankful appreciation for receiving something from others. The benefit may be tangible or intangible. People can use gratitude to form new social relations or to strengthen current ones

(Klerke, 2010).). It produces long lasting positivity. Showing appreciation to others will help a person maintain a professional image. Forgetting to say thank you can make a negative impression. Congratulate other's new achievements such as promotion or publication of a paper or book may strengthen relationships.

Make short- and long-term career plans when we are meeting people in networking events to get acquainted with influential people of a person's career field. When a person frequently attends professional and social events, he can make himself known to others. He can get his face known. Exposure is essential to succeed in career. People quickly become aware of others who have stronger capabilities to make them relevant. This will satisfy our need for social interaction. We can get noticed among the crowd of many talented professionals through networking. Being visible is not about showing up at every event, it is about showing that we are a reliable and supportive member of our profession.

Accept and welcome constructive criticism. Constructive criticism is far better than flattery. It provides scope for further development. We must identify our weaknesses and flaws and take measures the areas of improvement. Constructive feedback clarifies expectations.

Be active in social media platform. Social media is a powerful tool if we can use it judiciously. Engaging in social media (Facebook, YouTube, WhatsApp, Facebook Messenger, Instagram, Twitter, LinkedIn.) to follow up new contacts.Make the best use of digital technology because digital competency can contribute to networking skills (Lee and Chan, 2017. Generation Y, also known as millennials, are people, who are comfortable with technology and online networking as an integrated part of their lives from a young age (Korzynski,2013). They are habituated with the internet and other sophisticated communication technology to get connected with others. They are highly motivated to use modern communication technology. The traditional office is becoming less important to them. Today's workplace is a combination of online and offline environment, characterized by networking and collaboration among employees, who can perform activities anytime and anywhere (Kabral, 2010)Connecting with people on social media allows an employee to communicate with other people in his or her industry, which helps him build a strong network with meaningful, beneficial connections.

Networking is an ongoing process. It requires persistence, goodwill, sincerity, and attention, when a person networks to meet his need for a new

job or something else, his chance of success will be the least. Keep the relationships active. It takes time to build a real and authentic relationship. People will help those who are already known to them.

Stay positive. Invest time and resources to create a positive image. A positive attitude is an extremely critical networking skill (Porat, 2020). Positivity and confidence go hand in hand. Positivity may develop a powerful relationship with others quickly and help a person to be more likable and memorable. When we extensively use negative words and phrases, people will think of us as a negative, possibly even pessimistic person. On the other hand, if we use positive language, others will see us as positive persons, always ready to tackle new challenges.

Making networking is a two-way process of giving and taking to build a long last relationship it is not just about meeting people. It is not a way -street. Be purposeful when networking. Forming relationships that are mutually beneficial to both parties. There are people who like to take advantage and give us nothing in return. They are in every profession.

Keep the promises we make to other persons in our network, otherwise our relationships will be damaged and broken. Stay away from people who make over promise but under deliver (De Man, 2004; Misner, 2000) . We should set realistic expectations and try our best to meet them. Commitment and credibility make a person popular. Many political leaders make commitments which they do not believe in.

Building connections that are truthful, honest, and of worth to both parties. Trust is a necessary condition to build a long-lasting relationship. Trust plays a big role in building effective networking (Baker, 2000). Sufficient trust and mutual respect are required to build a strong relationship. It takes time to develop trust as individuals have positive interactions and support one another. Shows sincerity and builds trust because it actively shows an interest in someone else's opinions and thoughts (Wolfe, 2019).

Networking is building about relationships, not just selling oneself. It is not a selfish game. Follow the give and take policy. Do not be self-centered or selfish. It is built not to fulfill one's own needs only. Give first and receive later. We should help people without expecting any immediate returns. But the reality is that helping others will often come back to us many folds.

Be empathetic and considerate. Empathy permits people to develop social relationships with others. Employees can react or answer correctly and properly in social situations when they understand others' opinion,

emotions, and feelings. A person must have the ability to feel what another person is feeling. Make others feel that they are worthwhile, and important. We must honor their emotions and sentiments. Empathy decreases stress and fosters strength, trust, healing, personal growth, creativity, learning and builds connection (Zaki,2019).

Being polite is a strong networking behavior that contributes to successful networking efforts. It is important to be always polite when networking (Kay, 2004). A punctual person does not make excuses for being late (for example, traffic jams).

Be an active and good listener. Listening and hearing are the same. It is more than hearing. Hearing is an inactive action that occurs spontaneously, but listening is a distinct skill that needs to be learned over time with practice. Listening is hearing something with full attention. A good listener needs to receive, understand, evaluate, remember, and respond appropriately (Newstrom and Davis, 2016).Most of the people do not like to listen, rather they enjoy talking. As human beings, we are endowed with two ears and one mouth, so we should listen twice as much as we talk. Listening means we are valuing and respecting others. Networking deals with both receiving and giving information. Active listening increases our understanding of the needs of others, as a result, we can ask the correct questions to keep a conversation moving forward. Talkative people are considered impolite, rude, and dominating. They are the least reciprocal. Talking more is boring. It is essential to make a balance in the conversation. Try to avoid the conversation one does not agree on.

Asking thoughtful and insightful questions. Ask questions only to ensure understanding. Asking irrelevant questions is a sign of immaturity. Do not ask about political and personal issues. Keep the conversation short and meaningful. The irrelevant conversation is a barrier to networking. Do not waste others 'valuable time. Do not take too much time in conversation. Make judgments wisely and consciously. Respond appropriately.

The tips and tactics mentioned above will certainly make employees think differently about managing their careers. These measures help a person avoid career derailment by becoming more self-aware, more agile, and effective. These strategies and tactics help people shift change their mindset from prevention to promotion so that they can see networking as an opportunity for discovery and learning rather than a difficult task. It is no more inauthentic and exploitative. These valuable insights are crucial for both individual career development and organizational effectiveness.

These tips help a person to build long- term relationships as well as a good reputation over time. These tips and strategies might be helpful even for a shy, nervous, and introverted person.

Conclusion

A strong professional network exerts tremendous influence over the career success of an individual. Employees' personal success ultimately can contribute to organizational success (Judges and Higgins, 1999). Experts are of the opinion that the most connected people are usually the most successful. Strong networking makes a big difference between a mediocre career and a phenomenal career. The best networks help build the best career (Klerke, 2010). Great connections can offer employees and graduates learning and promotional and new job opportunities. The alternative to networking is to fail. Our experience suggests that people with poor networking skills will lag in today's competitive and global environment. Prevention-focused people consider networking a necessary evil and inauthentic. They view networking as a challenging and often distasteful task, as a result, they try to avoid it and their performance is not satisfactory (Lee and Chen, 2017). They are ambivalent about networking. Students must be aware of the importance and skills of networking. Cast (2018) explains that in today's workforce, the burden is on an employee to take control of his or her career development. The responsibility to manage and promote a career lies with the individual employee. Hence the importance of networking for career development cannot be undermined. Talent, skill, performance and drive might not be good enough to stop a person's career from spoiling or ruining (Klerke, 2010). An employee with strong networking skill can unearth or uncover opportunities to connect with different types of mentors and advisors. It may increase his familiarity with senior management, and develophis areas of expertise, and improve his soft skills. Networking helps a person to become a good team player. Networking is a specific career competency critical in the era of boundaryless careers. Fortunately, these skills can be acquired through learning and practice. Networking takes conscious effort. One must invest time and resources to develop and sustain relationships. Despite the importance of networking, it has not received emphasis in the education and training systems up to now. Davis and Warfield (2011) suggest that networking skills can be taught and nurtured within academia. Janasz and Forret (2008) showed that teachers can enhance the networking skill of their students by encouraging them to engage in group discussion and participation in the classroom. Mutual trust, empathy and generosity are crucial to develop and sustain genuine relationships. (Baker, 2000). Good

networking has a basis of trust and support and can mean the difference between an average career and a great career. It is about creating trust and assisting one another toward goals. Social capital is created when employees can participate in "real work" with one another that results in their cultivating trusting relationships (Cohen & Prusak, 2001). Frequent interactions with others can build trusting relationships. Employees at all levels of an organization will need to modify their attitudes and mindsets about the authenticity and necessity of networking.

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High-Performance Human Resource Management and Organizational Performance

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Introduction

Contemporary researchers are in great interest to redress the devastating effect on natural resources and the overall environment of the exponential rise of human business and economic activities (Almarzooqi, Khan and Khalid, 2019; Stahl, Brewster, Collings, & Hajro, 2020). Latest studies have shown what could be done to combat the impact of human factors on resource preservation and sustainability performance (Chams, & García-Blandón, 2019; Islam et al., 2020). Accordingly, organizations are now found interested to set environmental goals other than making profits, such as sustainable development and social responsibility (De Prins, Beirendonck, Vos, & Segers, 2014; Aust, Matthews, & Muller-Camen, 2020). Even earlier in 2012, it was found that 70% of 2800 international organizations surveyed have business strategies and plans including sustainability issues (Kiron et al., 2012). After that in 2015, the General Assembly of the UN presented "the 2030 Agenda for sustainable development" comprising of 17 sustainable development goals (SDGs) and 169 targets aiming to complete the unfinished objectives of the Millennium Development Goals (MDGs). From these goals, three-dimensional sustainable development areas have been identified: economic, social, and environmental corresponding the goals related to 5 Ps: people, planet, prosperity, peace, and partnership.

Regarding "people" as well as "prosperity", SDGs intend to ensure a decent workplace for the people to make efficient use of resources, sustained economic development and collective prosperity. The business perspective of SDGs is to establish an all-inclusive particularly women and young generation to create sustainable, innovative, and people-oriented economies. The mission set for the organizations focuses on having healthy and well-educated workforces, making them productive employees and preemptive citizens to make social contribution. For

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successful accomplishment of sustainability, environment-friendly production and ensuring congruous societies, SDGs require participation and collaboration of several agents: individuals, organizations from both private and public sectors, local and international organizations, non-government and charitable organizations and local government. The 2030 Agenda describes itself as "an Agenda of the people, by the people, and for the people – and this will ensure its success" (United Nations, General Assembly, 2015, p. 12).

Consequently, it needs two-fold roles of people as initiators and recipients of the benefits of achieving SDGs. At the organizational level, Human Resource Management (HRM) could be one of the mechanisms to contribute to capitalize human elements as both initiators and recipients of SDGs benefits.

HRM and SDGs have a common component of the people factor, since human attitudes, behaviors, and eco-friendly performance are directly related to social and environmental accomplishments and HRM could shape and influence people attitude and behavior and mold their knowledge, skills and abilities directed to the sustainability mission. HRM can be identified as the managerial actions of shaping people

skills and abilities to achieve SDGs goals for all actors. Here, resource-based view (RBV) theory, Ability-motivation-opportunity (AMO) theory and contingency theory could frame the bridge connecting HRM and social and environmental matters (Arulrajah & Opatha, 2016; Nejati, Rabiei, & Jabbour, 2017). HRM and sustainability are two models that work together toward common organizational benefits, doing business in a sensible manner for fulfilling all stakeholders' needs and at the same time ensuring collective social welfare and protecting natural resources. High performance HRM (HPHRM) as performance oriented HRM fulfills the criteria to be the means of SDGs end as it uses human capital, develops their ability motivation and creates an opportunity to the sustainable performance of the responsible employees. Hence, HPHRM and employees are the complementarities for overall SDGs performance.

Meaning of High Performance Human Resource Management

Human resource management is continually facing the challenges of proving its strategic importance on achieving organizational success. In doing so both academics and practitioners are showing their concerns on exploring what constitutes HRM and how it contributes to business. A contemporary research interest on HRM is investigating its role in making

organization high performing through superior employee performance and identifying HRM as high performance HRM (HPHRM) or high-performance work system (HPWS) or high-performance work practices (HPWP). This interest is mainly concentrated on the potential of HRM to act as a distinctive and sustainable HRM mechanism to support the realization of business strategy and the attainment of corporate goals. Today, organizations have realized that human resources are the main source of sustained competitive advantage, and they invest and want to invest more on HR for utilizing as well as developing the collective human attributes in terms of knowledge, skill, experiences, training, and creativity possessed by the workforce of the organization. Such realizations have sparked a new interest on organization people being identified as intellectual capital and assets and on creating a system to attract, use, develop and retain them for superior organizational performance.

Consequently, HRM researchers have designed and suggested to implement and even tested in several work settings a HRM approach focusing on utilizing human capital within an organization for making high performing organization and name it HPHRM or HPWS (Shin & Konrad, 2017; Zhai& Tian, 2019; Rubel, Kee & Rimi.,2020). HPHRM is defined as a HRM mechanism that makes employees productive in a way through which employees achieve a real success in their jobs and the wider organizational accomplishment (Mitchell, Obeidat, & Bray, 2013). The focus of such HRM practice is to establish a performance-oriented culture, where working people would experience workplace norms and values in achieving superior performance and would take such norms as a normal work-life phenomenon (van Esch, Wei, & Chiang 2018). The current effort conceptualizes what HPHRM is, explains the benefits and pitfalls of HPHRM, describes how they make an impact and recommends some suggestions on how they can be utilized in practice.

HPHRM includes a bundle of consistent practices viewing people as a source of competitive advantage. The scholarly evidence of the relation between HRM and performance is substantially available. What is interesting is over recent decades attention has been given to identifying the most specific and yet effective HRM bundle to improve performance results (Rubel et al., 2020). In pursuit of such a performance oriented HRM bundle, HPHRM is recognized as a collection of logical and coherent HRM practices combined and intended to boost employee ability, commitment, and productivity to create superior performance and competitive advantage for an organization (Garg & Sharma, 2015).However, still

researchers are in debate in consistently defining or uniformly naming such HRM approach (Fu et al., 2017).High-commitment (Walton,1985), high-involvement (Lawler, 1986) and high-performance (Appelbaum, Bailey, Berg, & Kalleberg 2000) approaches to HRM are similar as far as their goals are considered common, namely superior performance. High performance organizations seek to ensure that their employees are equipped to make decisions, have the necessary information, skills, and incentives and are responsible for decisions essential for innovation, improvement, and rapid response to change, bringing all approaches close together for improved performance. Similarly, HPHRM is synonymously used as "high-performance work systems" (Delaney & Godard, 2001) and both share some common HRM practices including selective staffing, extensive training and development, performance management, compensation and incentives based on performance directed to organizational goals, participation and communication(Mitchell et al., 2013; Fu et al., 2017; Peccei, R., & Van De Voorde, 2019).Accordingly, throughout the current work, HPHRM and HPWS/HPWP are used interchangeably.

HPWS aims to attain, refine, and emphasize employees'skills and behaviors essential to execute the firm's competitive strategy (Huselid, 1995). HPWS provides the conceptual basis that organizations use persistently to achieve business vision and mission through human resources (Fareed, Isa & Noor, 2016). This is an HRM approach that allows high organizational performance through making a practical influence on employees' competencies, empowerment and commitment (Sun & Pan, 2011; van Esch et al., 2018; Arefin et al., 2019). It has been claimed as an operational means of promoting human capital within an organization(Wang & Chen, 2013). As such it is further recognized that it is a people management philosophy that organizations believe to be imperative for utilizing human capital to perform successfully and sustain competitive advantage (Fareed, Noor, Isa, Salleh, 2016).

HPHRM creates integrated HRM content, process and climate, which promotes both employee and organizational performance. HPHRM is a system of strongly integrated HRM content, process and climate (Bowen and Ostroff 2004). The HRM content is a cluster of practices and policies that organizations use to make their employee selection, retention and development processes more efficient, and to improve the use of human capital in line with their strategic goals (Arefin et al., 2019). Selective hiring and rigorous selection help organization to get high quality human capital; training and development mark organizational opportunity creation for

tapping human capital; and compensation and reward motivate workforce to invest their intellectual capital in their jobs and altogether influence the overall climate in the organization and thereby its performance. The HRM process is about how HRM practices are communicated to employees and whether employee understanding of HRM practices are similar as intended by the organization (Li, Frenkel, & Sanders. 2011). The strength of a HPHRM system means that it ensures the common understanding and interpretation of HRM practices by employees, thus fostering their positive attitudes and behaviors and consequently enhancing the organization's performance (Rogozińska-Pawełczyk, 2020). The HRM climate is an employee's subjective experiences and the assessment of general work climate of an organization (Veld &Alfes, 2017). HRM climate is equally important as it determines how individual employee perception of work climate differs and to what extent from expected. Since individual perception and experiences affect their performance, variations in perceptions would result performance differences. When employees' perceptions of HRM practices are consistent across the organization, HRM climate will be stronger, employees' performance would fulfill organizational expectations (Bowen & Ostroff, 2004). Bowen and Ostroff (2004) concluded that for a HPHRM system to have a real influence on performance its content and process must be well integrated. They also observed that the manner of communicating HRM practices (HRM process) can develop a relationship between HRM practices (content) and the way they are perceived and experienced (climate). From such understandings, it can be concluded that the HPHRM bundle may have different sets of HRM practices, but they should be interrelated and reinforcing in terms of content, process and climate.

HPHRM ignores employee control rather encourages employee independence, judgmental capacity and responsibility. HPWPs or HPHRM are expected to manage a workforce who are very skilled, well-motivated, and sufficiently empowered having their task-related aims and responsibilities fully integrated with the wider organizational objectives (Boxall, 2012). Employees are assumed to be internally controlled, intrinsically motivated, and fully encouraged to exert their efforts in decision making and taking responsibilities for the organization. It is a self-initiated process in which managers do not try to impose external forces to control employees and their decisions rather employees trust the organization and perceive HRM positively that influence them to utilize their efforts and talents for organization. Equally organizations trust employees and believe that their contribution is the ultimate source of competitive advantage since

other traditional sources (quality, economies of scale, technology etc.) have become easily imitable. HRM acts as a strategic weapon in utilizing human knowledge and potentiality in facing the contemporary business challenges and provides flexibility and adaptability to the organizations. As other sources of competitive advantage have become dysfunctional, organizations could realize and tap the development of high performing workforce to open the opportunity for creating sustained competitive advantage. Employees have the freedom to decide whether they would use their time and talents for the organization and as such they have the chances to perform below their actual capacities. Lack of discretionary power and required job opportunity may instigate employee reluctance to employ their knowledge, skills and abilities (KSAs). To address such challenge, organizations need to search the ways of motivating employees to work for the organizations and HPHRM is found as a solution to this purpose.

Theories in HPHRM

HRM scholars have used different theoretical frameworks to portray their epistemic assumptions related to HRM and the objectives they want to achieve through exploring HRM. Likewise, their theoretical frameworks facilitate to understand what HRM practices they would select and what would be their related expected outcomes based on the propositions they developed from the frameworks. HRM researchers have widely relied on the theoretical foundation of HRM-performance relation by grounding on the acumens from the 'Big three' theories – AMO theory, RBV theory and contingency theory. The grace of the 'AMO' theoretical framework is that it incorporates enabling modifications of employees' abilities, motivations and opportunities to participate through HRM and thus, improve employee performance and consequential organizational performance. RBV has as its basic belief in recognizing employees' contribution to value-adding performance (that their responses are potentially pivotal for sustained competitive advantage). Contingency theory says that HRM strategy-performance relation is basically determined by the contextual factors and here, business strategy is an obvious candidate. These three are thought to offer congruent frameworks: AMO's attention to employees' skills, motivations and opportunities to participate in individual and organizational productivity achievement justify HR and HRM importance in organizations; RBV views HR as a critical source to create and sustain competitive advantage; while contingency approaches offer a lens on the possible link between these two, emphasizing in particular the vital

importance of examining the impact of contextual factors from the external environment for instance competitive business strategy and its impact on human capital building for gaining competitive advantage. However, researchers are yet to reach a consensus regarding how these theories need to be translated into a unified model regarding the operationalization of the HRM-performance relation. Nevertheless, all these three theories hold a sophisticated position in research to shape HRM-performance linkage philosophy as reflected particularly in HPHRM.

Why does HPHRM Matter?

HRM scholars have proved scientifically the positive link between HPHRM and performances of both employees and organizations and thus, justified when HRM can be approached as high performance HRM. HPHRM has its beneficial impact on both employees and organizations. HRM interventions, derived from an HR strategy, are understood to give rise to HRM-related outcomes, typically manifested in influencing employee attitudes and behaviors, employee related outcomes of HPHRM- also known as proximal outcomes of HPHRM. Better employee attitudes and behaviors then contribute to delivering improved internal performances (such as increased productivity and quality, profitability and CSR performances). Following table shows why HPHRM matters for the organizations.

Table 1: Summary of Research on HPHRM/ HPWP/HPWS

Authors & Year	Constructs	Context	Black-box Factors (Mediator/ Moderator)	Findings
Global Perspective				
Shin & Konrad (2017)	**<u>Organizational level study</u>** In this study, the authors consider HPWS as multi-dimensional constructs with five dimensions such as, training, incentive compensation, employee involvement, empowerment and participative work design.	The study tests the causal relationship between HPWS and organizational performance employing a large longitudinal data set with three time points from Canadian context.		Findings of the research exhibit that in all three different cases HPWS was found as the contributor of organizational productivity. The reciprocal relationship supports the need to extend strategic human resource management theory by considering productivity as an antecedent as well as an outcome of human resource management practices.
van Esch, Wei, &Chiang (2018)	**<u>Organizational level study</u>** Five dimensions are incorporated as HPWS such as, selective staffing, training, performance appraisal, rewards and self-managed work teams.	The study focuses on the influence HPWS on firm performance through employee competencies in the context of China. The study also uses climate for creativity as moderator.	Employee competencies as mediator and climate for creativity as moderator.	Positive relationship between high-performance HR practices and firm performance was found that was partially mediated by employees' competencies. The organizational climate for creativity was found to strengthen such relationship.

Dastmalchian et al. (2020)	**Organizational level study** In this research the authors have used Ability-Motivation –Opportunity (A-M-O) dimensions of HRM practices as HPWS.	The study tests the relationship between HPWSand organizational performance based on financial and non-financial performances from 14 countries data.	Three dimensional societal culture such as power distance, in-group collectivism and institutional collectivism as moderator.	Results of the study show that all three dimensions of HPWS have significant positive influenceson two dimensional organizational performances. Moreover, Three dimensional societal culture also has significant moderating effect between HPWS and organizational performances.
Garg & Sharma (2015)	**Individual level study** This study employs five dimensional HPWS such as, job design, selective hiring, training and development, performance appraisal and compensation.	The research tests the cross-sectional relationship among HPWP, employee engagement and job performance of employees from different organizations in Indian context.	Employee engagement as mediator	Result of the study shows significant relationship between HPWP, employee engagement and job performance of employees. Moreover, the current study employs employee engagement as mediator and findsits significant mediating effect between HPWP and employee job performance.
Van De Voorde, &Beijer (2015)	**Individual level study** **F**ive dimensions are employed to measure HPWS for instance, selective hiring, employee development, performance appraisal, career opportunity, rewards and participation.	This study is a multi-level analysis combining both line managers and workers and examines the impact of HPWS on employee attribution and employee outcomes in the context of Netherlands.	HR Well-being attribution and HR performance attribution are employed as mediator	Findings of the research show significant positive effect of HPWS on both dimensions of HR attribution as well as employee outcomes (commitment and Strain) in the work place. Both dimensions of HR attribution also play a significant mediating role between HPWS and employee work outcomes.

Zhai& Tian (2019).	**Organizational level study** This research employs unidimensional measures to explain HPWS.	The research is a meta-analysis approach and to see the influence of HPWS on organizational performance (OP) with the moderating effect of performance measures.	Moderator-performance measure, country of origin and level of analysis.	Output of the meta-analysis show the significant influence of HPWS on organizational performance. HPWS strongly influences operational performance rather than financial performance. Moreover, performance measuresas moderator enhance organizational performance with HPWS.
Ogbonnaya& Valizade (2018).	**Both organizational and Individual level study** This research employs Ability-Motivation – Opportunity (A-M-O) dimensions of HRM practices and HPWS.	This study is conducted using secondary data from the British National Health Service.	Job satisfaction and employee engagement as mediators.	HPWS minimizes absenteeism through job satisfaction and engagement. HPWS increases customer satisfaction through employee job satisfaction.
Heffernan, & Dundon (2016)	**Individual level study** Under HPWS the research employs employee resourcing, training and development, performance appraisal and remuneration and communication and involvement.	Cross sectional research conducted in the context of Irish organization. The study examines the effect of HPWS on employee attitudinal outcomes (satisfaction, commitment and work pressure) with mediating effect of organizational justice.	Three dimensions of organizational justice	Result of the study shows significant relationship between HPWS and three different attitudinal outcomes of employees in the organization. Among the three dimensions of organizational justice two (distributive and procedural justice) are found significant mediator between HPWS and employee outcomes. Whereas, one dimension such as, relational justice is found insignificant.

Hauff et al. (2020)	**<u>Individual level study</u>** Ability-Motivation-Opportunity (AMO) oriented HRM practices are used in the current study. Single dimension such as training activity is employed under ability enhancing practice. Whereas three dimensions such as, job security, careeradvancement prospects, and incentive compensationare incorporated under motivation enhancing practice. Lastly autonomy, self-directed teamwork, and organizational participationare considered under opportunity enhancing practice.	The study is cross-sectional research in the context of three Garman speaking countries such as, Austria, Germany, and Switzerland. The focus of the study is to explore the effect of high performance HRM/HPWP on employee well-being with the mediating effect of job satisfaction and employee engagement.	Job satisfaction and employee engagement are mediators. Furthermore, supportive leadership is moderator.	Result of the study shows significant positive influences of HPWP on employee well-being through job satisfaction and employee engagement. Supportive leadership lessens HPWPs' effects.
Local Perspective				
Aktar&Pangil (2017).	Three dimensions are employed as HPWS such as training and development, rewards and recognition and employee participation.	The Focus of the study is to examine the effect of HPWS on employee commitment in the context of banking industry in Bangladesh with 376 valid respondents.		The study finds all three dimensions of HPWS are positively related with employee commitment in the banking industry in Bangladesh.

Arefin et al. (2019)	**<u>Individual level study</u>** Six dimensions are used as HPWS such as, staffing, selection, training, performance appraisal, compensation and flexible wok design.	Data collected from 287 employeesin a large manufacturing organization are analyzed using structural equation modeling and hierarchical regression analysis.	Psychological empowermentis used as mediator.	The results show that perceived HPWS and psychological empowerment positively influence jobengagement. Psychological empowermentmediates the influence of HPWS on job engagement.
Rubel et al. (2020)	**<u>Individual level study</u>** The study considers HPHRM as a second order reflective model and employsfive dimensions in explaining HPHRM such as, competency development, compensation, performance appraisal, training and development and participation.	The study is a cross sectional type of research on hospital employees in the context of Bangladesh. The study finds the influence of HPHRM on employee behavioral outcomes through the mediating effect of perceived organizational support.	Perceived organizational support as mediator	The research finds significant positive effect of HPHRM on both dimensions of employee outcome as well as perceived organizational support. Perceived organizational support significantly mediates the relation between HPHRM and employee retention and performance.
Wahid& Prince (2020)	Five dimensions are employed as HPWS such as, selective hiring, training and development, performance appraisal, self-managed team and rewards	The current research aims to identify the effect of HPWS on employee performance in telecom industry in Bangladesh with a mediated-moderating effect of power distance.	Power distance as both mediator as well as moderator.	The findings indicate that HPWS have a positive impact on employee performance, and that power distance mediates and moderates the relationship between HPWS and employee performance.

How does HPHRM Create Impact on Organizations?

HRM researchers have further proved how HPHRM could be a good thing for the organizations. In this effort, they have answered the black box effect of HRM-outcomes relations. Black-box concept of HRM exclaims that it is not enough to say that HRM is good for organization, rather it should be answered that what makes HRM good. Accordingly, it can be stated that HPHRM is significantly influencing organizations however, it should be again evident what makes significant impact of HPHRM on organizations. Between the input (HPHRM intervention) and output (performance indicators) –lies what, how and why HPHRM does to improve performances. This interference is popularly referred to as the so-called 'black box', because we know little of what happens at these interactions, and hence, its contents remain somewhat mysterious (Wright and Gardner, 2003). In search for such answer, several black box factors have been identified that explains how HPHRM impacts its outcomes. These black box factors are widely known as mediators in the research. For instance, Hauff et al. (2020) find that HPHRM enhances employee job satisfaction and engagement which eventually lead to increased employee well-being. Table 1 also shows the black box factors between HPHRM and its outcomes.

Limitations of HPHRM

ThoughHPHRM is usually expected to have positive results on employees and organization, there have some certain opposing views. Since it follows universalistic approach of HRM, it ignores contextual differences of organizations that are more likely to influence HRM strategy of a particular organization. HRM of a star-up is naturally different from that of a matured organization. Similarly, quality -oriented business have HRM strategy different from HRM of an innovative organization. However, each organization would focus on improving performance whatever performance it might have in terms of its business objective considering where it operates and what workforce quality it might have. Moreover, self-discipline in a team setting may disorient employees from business as they may not know exactly what organization expect from them and members may pass responsibility from one to another. So having fun and freedom in an empowered environment characterized by flat organizational ladder, independence, agility and flexibility, self-motivation might be counterproductive. As workplace is a place for work, a well-stated work-life edifice including the aspects of systematic rules and regulations, explicit performance standard as well as measurement criterion, and

formal ways of communication are must to create a work environment for workers to feel work-oriented, comfortable and responsible. It is recommended that sensible access to information, accurate directions, certain responsibilities, and a genuine business culture could make employee satisfied with work and workplace that make workplace as a new home for fun and performance. HPHRM might lack such work life aspects as HPHRM signifies employee freedom and empowerment.

Implementation of HPHRM

HPHRM capitalize human capital through enabling them to employ their KSAs to make organizations benefitted. Adequate and proper recruitment and selection make sure of availability and utilization of KSAs; KSAs are further improved through related job design, training and development program; and retention of KSAs are ensured by availability of motivating factors such as adequate compensation, reward, empowerment and involvement practices. All are possible when organizations synchronize among HR content, process and climate.

Bangladesh and Implementation of SDGs: The role of HPHRM

Bangladesh has been identified as one of the leading nations in implementing the MDGs through accomplishing some targets before set time. Such success has inspired the country to fix a vision of achieving the SDGs within 2030. Before the pandemic, Bangladesh was progressing towards the goals; however, the uncertainty of the achievability of the SDGs has been raised due to the challenges of COVID-19. Bangladesh Government is working sincerely to combat the pandemic effect and accordingly, measures are taken. Under the dynamic and visionary leadership of the Honorable Prime Minister, the Bangladesh government is moving ahead to be the next Asian Tiger for which all sectors from both private and public and from individual to society should focus on making the best use of our available resources to renovate our export-led economy to manufacturing-led economy. Following such metamorphosis need, the present financial plan of the government stresses on employment generation for utilizing our labor force by adopting more productive and inclusive job identification in the economy.

In a report published in The Financial Express, Alam, (2019) mention that Bangladesh has accommodated the global goals and targets into its national five-year plan with a particular emphasis on SDGs implementation by including all the ministries of the government, private sector, civil society organizations, non-governmental organizations (NGOs), development

partners and other stakeholders, and named it as the "whole of society approach". HPHRM may work as an engine to make performance drive of all involved in SDG implementation.

Key Insights to Take-Away

HPHRM centers on leading employees for organizational achievements. HPWPs improve organizational performance by increasing employees' knowledge, skills, and abilities. Three broad concepts underpin HPHRM/HPWPs:

a. A people-centered, open and empowered culture, where people have the discretionary power to take their task-related decisions, properly communicate and share information in the organization.

b. Organizational investment in human capital for developing their KSAs.

c. Organizational responsibility to motivate and retain people to use their KSAs through HR content, processes, and climate.

Conclusion

Since organizations want to make a wise use of money in managing employees, an increasing number of research confirms that HPHRM or HPWP pay off in terms of getting return in the investment of time and effort on people. Aligning HR strategies to performance culture recognizes that employees are the valued owners and partners who can think strategically, contribute to implement strategies, and add value through identifying and optimizing opportunities to create and maintain sustained competitive advantage. To support SDGs in the Bangladesh government's five-year plan, both private and public sector's organizations should focus on creating performance-oriented culture keeping people at the center of performance excellence. HPHRM could be an enabler to this purpose.

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Artificial Intelligence in Human Resource Management

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1. Introduction

Artificial Intelligence (AI), a key component of the Industrial Revolution 4.0, has become a hot topic in a variety of areas, including corporate management. Marketing, human resource management (HRM) and manufacturing are some of the sectors where AI and machine learning are currently being used (Son, Lee & Chang, 2019). In HRM, technology has been utilized to improve employee engagement, provide customized vocational training and evaluate diverse HR data in order to make business-critical choices (Dorel & Aleksandra, 2011). The use of these technological solutions in the HRM sector is a unique situation since it has always been viewed as a human realm that deals specifically with people (Lengnick-Hall et al., 2009).

AI has the potential to revolutionize HR processes in areas where there is sufficient data and where that data can be used to increase efficiency, communicate at scale, give suggestions, and anticipate outcomes since AI-based solutions can predict, recommend, and communicate based on data. With the use of AI-driven technologies, many organizations now have a wealth of data about applicants and workers that can be used to better efficiently find, analyze, hire, train, develop, and pay people (Bersin,2019). Global investment in AI systems is expected to reach $79 billion by 2022(International Data Corporation, 2019). According to Gartner, the value of AI-derived business will reach $3.9 trillion by 2022 (Gartner, 2018). HR has the opportunity to lead technological change and generate corporate value through AI-powered solutions because of its enormous volume of underused data. To function effectively, artificial intelligence necessitates a large amount of data, which necessitates adequate storage and administration. To run and maintain the sophisticated software, businesses would need additional employees. The best way to apply AI in HR management is to use AI tools to evaluate the data and delegate decision-making to human employees.

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2. What is AI in HRM?

HRM is concerned with all elements of people's employment and management in businesses. Strategic human resource management, human capital management, knowledge management, organization development, resourcing (human resource planning, recruitment and selection, and talent management), performance management, learning and development, reward management, employee relations, employee well-being and health and safety, and the provision of employee services are all included in it (Armstrong& Taylor, 2020).So, HRM is the process of hiring, training, evaluating, and paying workers, as well as adhering to their labor relations, health and safety, and fairness issues (Dessler, 2018). HRM is focused on the hiring, training, and retention of workers, and it is vital to the performance and profitability of a firm(Kramar, 2014;Saridakis, Lai & Cooper, 2017).According to Boxall et al, HRM is the management of work and people towards desired ends(Boxall, Purcell & Wright, 2007). Grimshaw

and Rubery (2007) suggested that HRM is concerned with how companies manage their employees. HRM is a different approach to employment management that aims to gain a competitive edge via the strategic deployment of a highly dedicated and competent workforce, utilizing a diverse set of cultural, structural, and people approaches (Storey, 1995).

On the other hand, Artificial Intelligence (AI) is not a new word; it dates back to World War II, when Alan Turing released his article "Computing Machinery and Intelligence," in which he raised the question "Can computers think?" Thus, John McCarthy coined the term "Artificial Intelligence" (Tecuci,2012; Stuart & Peter, 1995). Despite early scientists' significant contributions, AI as a business was not established until the 1980s, coupled with hardware development. Early AI applications included the automation of complicated, repetitive, and precise work activities, such as industrial robotics manufacturing, which displaced human occupations in a number of companies. After the mid-1990s, AI software saw significant advancements, such as IBM's "Deep Blue" clever software, which defeated Gary Kasparov, the World Chess Champion, text prediction on cell phones, and speech synthesis technology (Lucci & Kopec, 2016). AI, on the other hand, is a resurrected science, and it is now agreed by all that manufacturing robots and speech synthesis are no longer regarded as AI. Today's AI consists of software and machines that imitate human intellect. Lucci & Kopec (2016) defined Artificial Intelligence as being able to create computer software and/or hardware systems that

exhibit thinking comparable to that of humans, to display characteristics usually associated with human intelligence. To put it another way, this intelligence is capable of perceiving, analyzing, and interacting with its surroundings, as well as learning from prior experience and solving difficult issues without the need for human involvement (Chui, Manyika and Miremadi, 2015).However, why do we need these intelligent systems to replace people if they are meant to mirror human intelligence? Intelligent software and robots are now capable of doing complicated tasks beyond human competence because of significant advancements in big data, internet connectivity, and computer hardware such as memory capacity and high-speed processors (Lucci & Kopec, 2016). Smart systems and robots not only do jobs quickly, but they also reduce the dangers of human mistake and bias. Artificial intelligence encompasses a variety of fields and methods, including neural computing, data mining, genetic algorithms, expert systems, and artificial neural networks (ANN) (Kantardzic, 2011).

An *Expert System* (ES) is a knowledge-based artificial intelligence system that leverages information about its application area and applies inferencing (reasoning) processes to solve issues that would otherwise need human skill or competence. The database of expert information relevant to a restricted topic, codified into a "knowledge base," is the most important component of an expert system.An inference engine, which is generally designed using "if-then-else" rules, and a user interface that allows non-expert users to query the knowledge base are the other two important components of an expert system. An expert system's main flaw is that it will fail if it is confronted with a scenario that isn't pre-programmed in its knowledge base (Kantardzic, 2011; Portugal, Alencar & Cowan, 2018).

Machine Learning (ML) simulates human learning by allowing software systems to recognize and absorb information from the actual world, and then enhance task performance based on this new knowledge. The following are the different types of machine learning algorithms depending on how they learn and make inferences from data: supervised learning, semi-supervised learning, and reinforcement learning are the three types of learning (Portugal, Alencar & Cowan, 2018).

Natural Language Processing (NLP) is the capacity of a computer program to comprehend human language as it is spoken, and it is quickly becoming a popular AI application in devices like Apple Siri and Amazon Alexa. Developers can use natural language processing (NLP) to organize and arrange knowledge for tasks including automatic summarization, translation, named entity identification, connection extraction, sentiment

analysis, audio recognition, and topic segmentation(Kantardzic, 2011).

So, we can say that AI in HRM is the use of different AI technology in the field of HRM that allows computers to learn from and make or recommend actions based on previously collected data on human resources to streamline processes and improve efficiency.

3. New Trends of AI in HRM

Automation, artificial intelligence, and intelligent systems are all part of our daily lives. In several processes, human resources have a lot of potential for development. For example, talent recruitment, engagement, and retention. HR will be able to speed up and improve their processes by incorporating artificial intelligence into their systems. The data is used by AI. Human resources, on the other hand, will perform better if they can analyze their large datasets more thoroughly.

According to Gartner (2019), roughly one out of every four businesses that have already piloted or used AI in the HR sector are doing so. AI would produce 2.3 million new employments, according to a Gartner estimate from a 2019 report. According to a latest survey done by Oracle and Future Workplace, human resources professionals believe AI may provide possibilities for learning new skills and freeing up time, allowing HR professionals to expand their existing responsibilities and become more strategic within their organizations. However, 81 percent of HR leaders who took part in the study stated it is difficult to keep up with the speed of technological development at work [Oracle and Future Workplace, 2019]. As a result, it's more critical than ever for HR executives to grasp how AI is transforming the business. According to Deloitte's 2019 Global Human Capital Trends study, just 6% of respondents said their company had best-in-class technology recruiting procedures, while 81 percent thought their processes were standard or below standard (Deloitte, 2019). As a result, professionals have a lot of room to modify their operations and take advantage of employing sophisticated technology. According to a research conducted by Eightfold (n.d.),HR staff who used AI software completed administrative duties 19% more efficiently than those who did not. HR personnel will be able to dedicate more time to corporate strategic planning as a result of the time savings.

Some AI software can analyze important indications of employee success in order to identify people who should be promoted, according to recent research from the Human Resources Professional Association (2017). This has the potential to lower talent recruiting expenses while also increasing

staff retention. Identifying the appropriate candidate with the proper abilities and history amid the vast quantity of resumes is the most difficult element of the recruitment process, according to 52 percent of HR leaders. Some of these tedious manual screening activities may be automated with the help of artificial intelligence. Employees who have gone through a structured onboarding process are 58 percent more likely to stay with the company after three years (Comemit, n.d.). As a result, AI may have a significant impact on HR in this process as well.

Andrew Ng, a Chinese-American scientist who specializes in machine learning and AI, claimed, "Deep-learning will revolutionize every single sector." According to McKinsey's machine learning prediction, AI will have a $13 trillion global economic effect by 2030 (Durrani, 2020).AI will have an impact on the Human Resource department as well. For a fluid workflow and intuitive work environment, HR experts recognize the necessity of improving the human mind's interaction with machine learning. Surprisingly, this tendency has a wide-ranging influence on human resources. HR has a lot of tactical duties that AI-driven automation may take over.

4. How AI will help HRM/Application of AI in HRM

Some of the first improvements HR professionals could anticipate seeing are in recruiting and onboarding, employee experience, process optimization, and the automation of administrative chores, among the many uses of AI in the human resources industry.

4.1 Recruitment

The most visible application of AI in HR is in the hiring process. It saves personnel by reducing the amount of time spent on boring duties such as screening candidates, updating databases, arranging interviews, and responding to job seekers' questions. While a growing number of companies are incorporating AI into their recruiting efforts, the vast majority are not. Only 40% of organizations and sectors utilize artificial intelligence (Amla & Malhotra,2017). As a result, professionals have a lot of options for adapting their operations and reaping the benefits of new technology. Manually reviewing resumes is still one of the most time-consuming activities in the HR department's recruitment process. The most difficult element of the recruitment process, according to 52 percent of HR executives, is identifying the appropriate individual with the necessary skills and background amid the vast quantity of resumes. Some of these repetitive manual screening activities can be automated using

AI. Candidate resumes may be automatically screened using machine learning techniques. It may then classify those that are most relevant to each position.

Chatbots powered by artificial intelligence may interact with prospective applicants and align their profiles to the job criteria. It will reduce the number of applicants to only those who meet the employment requirements (Bersin, 2019).After that, the AI-assisted system will arrange interviews and recruit the best candidates. It will save the HR staff time and effort, allowing them to focus their efforts on other responsibilities.

AI may be utilized to assist both the employing firm and the job candidates throughout the recruiting process. For example, AI technology may speed up the application process by creating more user-friendly forms that job applicants are more likely to finish, lowering the number of applications that are abandoned. While this method has simplified the job of human resources in recruiting, artificial intelligence also allows for simpler and more relevant applications on the candidate's end, which has been found to increase application completion rates.

Furthermore, AI has aided in the rediscovery of candidates. AI technology may assess the existing pool of candidates and identify individuals who would be a suitable fit for new positions as they become available by maintaining a database of previous applicants (O'Connor, 2020).HR professionals may utilize this technology to find eligible personnel more quickly and easily than ever before, rather than wasting time and money looking for new hires.

So, through standardized job matching, AI will undoubtedly save HR time and enhance the quality of their recruiting. It substantially lowers hiring time, allowing HR to focus on other tasks like sourcing, recruitment marketing, and employee management. The AI-assisted screening will assist in identifying individuals with the most appropriate skill set and relevant experience to meet the company's needs.

4.2 Interview Process

Artificial intelligence can help to optimize the interview process by analyzing applicants using word or speech pattern exams. AI software may be used to conduct digital interviews, and AI can also help applicants have a better experience. Amy and Clara are tools that are used to arrange interviews and working sessions.

These technologies also use Pattern Recognition and Analysis in addition

to machine learning. These tools conduct and record video interviews with candidates before analyzing the material. The video interviews are divided into smaller chunks dependent on the question asked or the amount of time. For each part, data on applicants' facial expressions, voice, and tone is recorded and compared to similar candidates or successful employees in similar jobs (Kulkarni & Che, 2019). The competitors are ranked based on their performance during the competition. For example, a candidate for a sales role may earn a 34 percent on an interview session on how to deal with an unhappy client, which may not be sufficient for this position.

4.3 Onboarding

The onboarding process begins once recruiting managers have discovered the best candidate for their available roles. On their first day, the AI-integrated system will present the new employee with corporate information. Everything they need to know about their work, including business regulations, reporting authority, team members, task assignments, and other details, will be delivered to them through an app or laptop. Onboarding is the term used to describe the complete procedure. This procedure doesn't have to be limited to regular business hours thanks to AI, which is a significant advance over previous onboarding methods.

Onboarding is a critical component of enhancing employee retention and HR productivity. According to research conducted by Click Onboarding (n.d.)workers who have a positive onboarding experience are more likely to stay with a firm long-term. Artificial Intelligence enables process customization to meet the needs of individual personnel and their roles. Algorithms may be used in software for a variety of purposes, including:

- Outlining the job description, responsibilities, and compensation.
- Contacts within the organization who are relevant and significant.
- Responding to common queries posed by new workers.
- Verification of documents
- Requests from devices, and more

It is directly related to providing a positive employee experience through successful onboarding. The first 90 days of a new employee's employment are crucial in motivating them to stay with the firm for longer (O'Connor, 2020).As a result, AI may have a significant impact on HR in this process as well. A clever chatbot, for example, may make new workers' first working days more enjoyable and stress-free by answering all of their

pertinent inquiries about the firm, the teams, and the process. It begins interacting with each newly recruited employee with tailored interaction based on specific established criteria and algorithms, and functions as a 24/7 Assistant for each individual and in any place. This shift not only allows workers to complete the onboarding process at their own pace, but it also minimizes bureaucratic load and usually leads to faster integration.

4.4 Internal Mobility and Employee Retention

HR practitioners may use artificial intelligence to increase internal mobility and employee retention in addition to improving the recruiting process. Human resources departments may now evaluate employee engagement and job satisfaction more precisely than ever before with tailored feedback questionnaires and employee recognition programs. This is especially useful given how vital it is to understand employees' general requirements, but there are also numerous significant organizational benefits to having this knowledge.

According to recent research from the Human Resources Professional Association in 2017, certain AI software can analyze important indications of employee effectiveness in order to identify people who should be promoted, resulting in more internal mobility. This has the potential to lower talent recruiting expenses while also improving staff retention.

This system can also forecast who in a team is most likely to resign, so it's not just for identifying possibilities to promote from within. Knowing this information as soon as possible helps HR professionals to implement retention initiatives before it's too late, reducing employee attrition in a planned manner (Sen, n.d.)

4.5 Automation of Administrative Tasks

One of the most significant advantages of incorporating artificial intelligence into various human resource procedures is the same as it is in other disciplines and industries: HR practitioners may devote more time to corporate strategy planning by automating low-value, readily repeated administrative chores. As a result, HR may become a strategic business partner inside their businesses.

Smart technology can automate operations like benefits administration, candidate pre-screening, interview scheduling, and more. AI can help speed up the employment process from screening to interview scheduling. Although each of these activities is critical to an organization's overall

performance, completing the tasks required in such procedures takes time, and the stress of these responsibilities frequently means HR professionals have less time to contribute to supporting their workers in more meaningful ways.

AI software that automates administrative chores can help alleviate this load. For example, according to research by Eightfold (n.d.) HR staff who used AI software completed administrative duties 19 percent more successful than those who did not. HR experts may spend more time on strategic planning at the corporate level with the time saved. It may help with HR strategy, personnel management, policy and practice analysis, payroll administration, and more. It has the ability to automate workforces, examine company compliance, and develop litigation tactics. It may also distribute office space and equipment, freeing up HR personnel to focus on other important responsibilities (Rathi, 2018).

Another AI-based tool that can aid HR decision-making is smart chatbots. It may relieve HR personnel of the burden of communicating company-related information to workers while also giving them a holistic perspective of the firm. AI-enabled systems can respond quickly to employees' questions and uncertainties, as well as handle the submission and processing of leave applications, using the right algorithms.

4.6 Learning and Training

Employees may be taught and trained in their respective fields using AI-integrated technologies. The abilities that are necessary for a work role are continuously evolving. To keep on top of the new developments and software on the market, we must study and adapt to new technology. Based on the work requirements, AI will analyze the employees' talents and propose films or study programs. It will read documents or evaluate an employee's behaviors automatically and provide relevant learning programs.

AI technology can evaluate data gathered over many years of experience and tell the HR department as to which employees require training and in what fields. It will also propose the ideal method to assist individuals in learning more effectively and quickly using sophisticated algorithms. Companies may also use AI in conjunction with e-learning systems to improve their employees' abilities. Individuals will be given a tailored training program depending on their talents and the needs of the organization. Employees will be able to acquire new methods, improve existing skills, and more at their own speed with the aid of e-learning systems.

Furthermore, an AI system may be used with an algorithm that identifies a person's professional path based on their education and training. The results may be used by the management to help their teamwork together more effectively.Using computers and modern technology, industries may manage data analysis and provide real-time feedback during training, as well as modify the course of action based on progress and responses (Riebli, 2018). Microsoft 365 was embraced by businesses to save time and increase workplace productivity by supporting people in their jobs. Some of the AI tools that have been used are Engazify (for feedback), Obie and Niles (for knowledge exchange), Wade and Wendy (for career advancement), and Duolingo (for learning domain (Amla& Malhotra,2017). Watson Career Coach is a career coaching system that helps workers figure out where they lack competence (Lewis, 2019; Sheopuri & Stachura, 2018).

4.7 Cognitive-Supporting Decision-Making

In 2017, IBM performed research into how cognitive computing will affect HR. Artificial intelligence, according to the study, can assist professionals in making rapid judgments on a daily basis.Aside from their professional contributions, the Human Resource department is responsible for an employee's mental and emotional wellness. Before and after a client conversation, AI-enabled technologies will monitor and analyze employees' moods. The HR department can then determine if the employee requires a break or can continue working. Anxiety can also be detected by a person's conduct and vocal tone. It will assist companies in determining if they should investigate and address the situation before it becomes damaging to the employees and the firm.

4.8 Leadership

Because AI improves employee productivity, it may also be used to assist leaders to learn how to be better leaders. AI-enabled technologies will poll the leaders' team members and evaluate their responses to create a personalized coaching module for them. Leaders may also examine a comparison of their management to that of their peers using online dashboards. It will assist them in determining the efficacy of their techniques as well as ways to enhance them.

4.9 Employee Performance Feedback

Each employee brings to his or her job a unique set of abilities, interests, and perspectives. They all want to get better, but managers seldom devote enough time to giving their staff tips on how to enhance their abilities

and performance. Managers, too, may benefit from AI's assistance. As a result, machine learning algorithms can give advice on the steps others in comparable situations may have taken to advance in other organizations provided enough data about each person, his job, and his talents is collected. AI may propose personalized training and learning depending on an employee's abilities and job by looking at historical performance trends.

4.10 Employee Engagement

Employee engagement is influenced by a variety of significant internal variables. Various perks, awards, motivation, and suggestions are required by different employees. Smart systems may learn from past patterns and establish a baseline of engagement elements for each feature, as well as create a turnover pattern based on employee expectations and unhappiness.

4.11 Compensation

Time tracking, payroll, expense reporting, and benefits administration are all aided by AI-powered analysis, employee nudges, and predictive capabilities. Compensation is an important topic. Only around 40% of companies undertake any racial or gender compensation equality analysis, according to a Pay Scale survey of pay practices done in 2019. AI-based solutions to help organizations compute fair pay and ensure that all employees are paid fairly are in great demand right now, with so much pressure on businesses to report gender pay equality. When deciding pay, objective factors such as education, experience, job responsibilities, performance assessments, and market competitiveness should all be taken into account. By removing subjective biases like gender, race, age, and preference, as well as recognizing potential disparities, AI can aid in establishing fair remuneration. CogniPay is an AI-based platform that analyzes employee performance and provides data such as compensation levels and market demand to assist managers to make better decisions (Lewis, 2019;Sheopuri&Stachura, 2018).

5. Will AI Take Over HRM?

There has been a lot of discussion about how AI platforms would enable large-scale automation, therefore removing the necessity for some employment. However, this is mostly restricted to repetitive, process-based jobs that don't need a lot of human interaction. HR will be able to outsource a large percentage of process-based duties (both manual and cognitive) and cognitive decision-making in the future. Instead of a restricted focus on the efficiency of existing procedures, the future of HR

will focus on a whole-new set of objectives, such as choosing the proper workplace technologies and developing the employer brand (Mallik, 2020).

With automation displacing numerous jobs in a variety of industries, those considering a career in human resources or presently engaged in HR are understandably anxious about whether automation will also displace their employment. While no assurances can be made because technology is always growing and changing, this industry is in a great position to retain human labor.Many occupations have already been lost to automation, and this trend will continue. Manufacturing employment has been especially badly impacted. Unfortunately, most businesses would prefer robots over human labor if given the option since robots are frequently cheaper and more efficient. However, just because it is possible to replace labor with equipment does not guarantee it will happen. The cost of creating and implementing the technology, as well as the return on investment, are also important considerations. If an employee's employment is in jeopardy, they have a number of choices. They can present themselves as someone who can manage and supervise automated processes, train for a different line of work, or provide such a high level of human value that replacing them is a bad idea.

"AI will not replace all of HR, but it will create substantial change and upheaval, including the loss of certain jobs," said Lazarus, CEO of Scout Exchange, an AI-powered recruiting marketplace. "AI may be seen as an automation technology (but for intellectual rather than manual labor), and like any automation technology, AI will have the greatest influence on activities with a high volume and low decision complexity," he said.AI is frequently depicted in science fiction as a futuristic technology powered by robots and autonomous devices. However, the fact is that AI can easily integrate into our daily lives, and while it may destroy certain occupations, it allows us to redirect our energies in other areas. The same may be said about human resources."Will 'HR robots' replace HR workers in the future? "Not likely," Lazarus replied. "However, AI is here to stay, and it will eventually replace or help HR in tasks like recruiting, engaging, assessing, and keeping people. HR professionals must accept and prepare for this new world, in which administrative skills are less valuable," he added.

In general, jobs that need a high level of social contact are less likely to be automated in the near future. HR roles are unlikely to be replaced since they require this set of abilities. Human resource managers, in fact, are one

of the occupations least likely to be automated in the future, according to MSN. Jobs that need you to supervise others are less likely to be automated in the future. HR roles are unlikely to be replaced by machines, along with other subjective, medical, and creative vocations such as authors, attorneys, and dental experts. Human resources necessitate constant face-to-face human connection. HR practitioners must be able to think critically and adapt to the circumstances of each situation they face. Each employee and applicant at a company is unique, and an automated HR department will not be able to meet their demands. Allowing automation to completely replace the recruiting process would be terrible, since employers would have a poor sense of fit for the job and would overlook superior individuals with less attractive qualifications on paper.

Payroll and benefits administration have the most automation possibilities in the future. Artificial intelligence algorithms will almost certainly have no problem distributing them efficiently. HR workers will save time and be able to focus on the most important aspect of their jobs: interacting with employees. When it comes to going through applications, applicant tracking systems already handle a lot of the hard work, but humans are still needed to finish the job. Timesheets leave requests, and expense claims are among the other operations that can be automated. Because no one can forecast the future or how far technology will go, it's likely that many HR roles and tasks may be automated in the future. The need for complicated human interaction in HR, on the other hand, will prevent robots from entirely taking control. Human resources are unlikely to be entirely mechanized in the near future.

6. Advantages of AI in HRM

6.1. Reduce the burden

Organizations can minimize administrative staff's time-consuming repetitive labor with the aid of AI. As a result, staffs are able to focus more on creative activities (Arntz, Gregory& Zierah,2017).

6.2. Talent acquisition

AI assists companies in identifying the proper people for the position by sourcing, screening, and assessing based on capabilities (Rajesh, D. S., Kandaswamy & Rakesh, 2018).

6.3. Employee retention

AI-based solutions assist managers in better understanding employee

abilities and performance in the workplace, and maintain employee retention through proper feedback and training. AI can readily estimate the organization's retention rate (Arntz, Gregory& Zierah,2017).

6.4. Overcome the limitations of human

AI can rapidly and efficiently analyse massive volumes of data and offer relevant responses. As a result, managers can make rapid choices, reducing human limitations.

6.5. Error will be less

Humans make mistakes, and the possibilities of making one while working with a huge volume of data are considerable. However, if an AI-based solution is properly built, the possibilities of mistakes are significantly reduced.

6.6. Maintain the workflow:

AI enables managers to interact with important information required by managers, allowing organizations to effortlessly maintain their workflow with other departments.

6.7. Get accurate results

Managers may obtain reliable information on a worker's abilities, performance levels, productivity, absenteeism, and other factors with the aid of AI, allowing them to make better decisions.

6.8. Employee engagement

Through the use of AI, the HRM department may quickly analyze how involved an employee is in his or her profession, as well as how he or she interacts with the environment and colleagues.

6.9. Minimize the biased behavior

Many HRM tasks, including resume screening, interviewing, performance assessment, and remuneration, are replete with bias, and many of these technologies are designed to assist eliminate racial, gender, education, and age biases.

7.   Challenges/Barriers of AI in HRM

Artificial intelligence's participation in the human resource department has necessitated the development of essential skills for employees. Employees find it tough to adapt and use AI tools and to be proficient in the field of digital technologies the majority of the time (Jain, 2017). The human

resource department is the most important element of any organization, and adding an AI system might have an influence on management levels, making workers more fearless. Finding the appropriate individual to manage AI technologies is a major problem for the business, and finding the right candidate can be tough for HR. Filling this talent gap may be expensive. Another issue is concern over privacy. Confidential HR data must be accessed securely and available only to the authorized person. As with other innovative technologies, AI requires deep learning and regular review and updates. This new move may be met with opposition from many employees.

First and foremost, the company must recognize and address employees' fears and apprehensions about AI technology. It is necessary to explain the company's collaborative intelligence-based approach in order for this to happen. This should not be flowery rhetoric, but rather a constant message. Even more crucial, while building and deploying AI systems, human experience and ideas must be taken into account. As soon as feasible, it is preferable to increase performance through human-AI collaboration. This type of "quick-in success" might help to solidify the partnership.

Second, the company must train its staff in digital literacy. Basic statistics and computer language expertise are required. It is, in reality, a fundamental language for humans and AI to communicate and comprehend one another. This ability and expertise must be factored into the recruiting process. Alternatively, digital literacy training for incumbents might be given. Individualized learning programs can be supported by businesses. Make the staff more diversified by adding data scientists, functional experts, and artificial intelligence.

Third, in order to deal with continual work reconstruction, it is critical to build and promote learning agility. In reality, AI technology is continuously affecting the substance of labor, lowering the value of experience and making the future more uncertain. Work must be updated on a regular basis in order to keep up with the ongoing development and growth of technology. Learning agility is critical in this situation. Learning agility may be used as a criterion for recruiting newcomers by management. It may also be utilized as a key component in the development and selection of future leaders.

Fourth, management must encourage people to think beyond the box and come up with new ideas. This is, in some ways, humanity's most significant contribution. What AI can't accomplish, humans must. As a

result, it's crucial to encourage people to question "why" all of the time. It's possible that raising questions is more essential than answering them. Through collaborative intelligence or open cooperation with collaborators outside the company, humans and AI can find a solution.

Last but not least, management should foster an open atmosphere inside the company. Managers must pay close attention since new ideas and skills might be overshadowed by age or experience. Especially for companies with a collective and hierarchical culture, it is critical developing an open and productive environment in which everyone freely expresses their thoughts. Surviving in the face of technological calamity would be a miracle (Isbert, 2020).

8. How Will You Implement AI in HRM?

It is self-evident that businesses must act fast. With appropriate planning and preparation, an organization may reap the benefits of early technology adoption while also obtaining an advantage over the competition. To properly adopt an AI solution in any organization, a measured and piecemeal approach will be required: assess the impacts of AI and scale it according to business demands. Srivastava(2020) proposes a five-step AI methodology to aid AI deployment in HR. This method will help a business meet its AI implementation goals while minimizing disruption to HR operations.

Step 1: Identify AI opportunities in your HR department

Step 2: Prioritize AI applications according to the matrix

Step 3: Estimate the cost of deployment of AI applications

Step 4: Set a timeline for implementing these applications

Step 5: Train your employees for using these applications

9. Conclusion

HR strategies that incorporate AI-based candidates have a significant influence on the growth of organizational performance. Or, while AI applications may not be as emotionally competent as humans and cognitive capabilities, these powerful HRs are built on AI apps that can analyze, forecast, diagnose, and so on, making them a valuable resource for any business. The true terror of global employees, though, is the way AI manifests itself in the most cutting-edge job areas throughout the world. However, modern technology does not replace humans; rather, it

is about how people should adapt their perspectives and use technology in order to generate wealth and success. The actual meaning will be the percentage of workers affected by AI-based jobs, therefore HR executives and companies must concentrate on their employees' requirements and potential consequences. The majority of companies have succeeded in incorporating AI-based technologies into their employment processes. Hiring, training, riding, performance analysis and maintenance are just a few examples. However, due to the high cost of integrating AI with HR practices, most companies are still falling behind. As a result, AI implementation should be viewed as a positive anticipated opportunity, because AI enhances lives and contributes to a better future when properly understood and used.

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Trajectory of the Internationalisation of Small and Medium Enterprises and Effectuation Theory

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Introduction

Small and Medium Enterprises (SMEs) have been regarded as the most important sector of any economy. In this era of globalization, the internationalisation of the SMEs has become critical. At present, the studies on the internationalisation of the SMEs have attracted growing interests of the researchers. Several studies focused on SME internationalisation and its drivers in the last few decades. Among them, effectuation has emerged as an important theory for the creation of new ventures and it also plays a pivotal role in the internationalisation of the SMEs. In 2001, Sarasvathy introduced effectuation theory and it is now at the intermediate stage of development (Matalamäki, 2017). Primarily, effectuation theory explains two opposite logics (causation and effectuation) used by the expert entrepreneurs in decision making. Effectuation explains working on the means given to the effectuator and trying to explore possible effects from those means. The effectuator always tries to identify and exploit new opportunities in the entrepreneurial process. This section addresses hitherto under-explored area of internationalisation where effectuation is used in explaining the trajectory of the SME internationalisation.

There are five principles in the effectuation theory: the bird-in-hand principle, the affordable loss principle, the patchwork quilt principle, the lemonade principle, and the pilot-in-the plane principle (Sarasvathy, 2001). The bird-in-hand principle focuses on the means (identity, knowledge and network) and the inputs from the stakeholders who are actually committed. Here, the effectuator needs to decide what he/she can do with the available means those are under his / her control. The affordable principle depicts how much an effectuator can lose to start a new venture. In addition, he/she needs to focus on his/ her financial and psychological condition, when the effectuator thinks about affordable loss. Moreover, the affordable loss

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principle motivates the effectuator to choose stakeholders with geographical or socio-cultural proximity or from the same social network. In this principle, the important issue is "self-selected stakeholders" (Sarasvathy, 2022, p. 84). The patchwork quilt, also known as crazy quilt, emphasises on getting engaged with partners from the inception of the new venture. Moreover, customer into stakeholders is considered here and thus partnership becomes the major concern. The fourth principle, the lemonade principle, is the centre of the entrepreneurial expertise where effectuator tries to consider uncertainty or contingency as an opportunity. The last principle is the pilot-in-the plane principle. Effectuator believes that if the future is in control then there is no need for prediction. Here, the key word is co-creation and new opportunities are co- created in the uncertain environment.

Effectuation and Causation

Causation considers only about the specific possibilities and influences the entrepreneurs to choose means to get or create that certain effect (Sarasvathy, 2001). It is assumed that while an entrepreneur follows causation theory, he/ she is goal - driven while effectuation theory motivates an effectuator to be means - driven. In causation, the goal is predetermined and then means/ resources are selected to achieve the goal. On the other hand, effectuation emphasises the entrepreneurs to create/ determine the goals with available resources (Galkina & Chetty, 2015; Chetty et al., 2015). In effectuation, improvising gets more importance over planning (Nielson et al., 2017). That's why causation process is considered as static while effectuation process is regarded as dynamic (Westhead & Wright, 2013). Effectuator believes that opportunity can be identified or fabricated instead of given (Sarasvathy, 2001). Westhead & Wright (2013) identify that causation focuses on search & select while effectuation deals with creation & transformation. Read & Sarasvathy (2005) explain that causation is more concerned about the competition while effectuation helps to create market with customers, suppliers and prospective competitors. Sarasvathy (2001) and Lingelbach et al. (2015) argue that the use of effectuation logic helps the entrepreneurs to work in an uncertain environment while causation logic helps to work in a predictable environment. Here, causation depends on predictions while effectuation depends on control (Sarasvathy, 2001). In fact, Sarasvathy did not ignore causation all the time. She emphasises that causation is also important. Besides, Sarasvathy (2001) argues that both the theories might occur at the same time depending on different contexts, situations, decisions and actions. It means causation and effectuation

theories are not mutually exclusive. In fact, the entrepreneurs may switch between effectuation and causation to exploit the opportunities, especially when the situation demands (Nielson et al., 2017; Westhead & Wright, 2013). Prior research on effectuation theory mainly explains the principles of the effectuation theory in entrepreneurial decision making. The systematic review of the extant literature on effectuation might help to explore the effect of effectuation theory on SME internationalisation.

SME Internationalisation

Traditionally, it is always believed that the entrepreneur's identity, his/her characteristics, perceptions, education, family background, etc. play important roles in the internationalisation process. Whether it is traditional SME internationalisation or born global internationalisation, the entrepreneur is the key focus area while his/ her actions are certainly influenced by his/her characteristics, environment and networks. Here, effectual decision making plays an important role. Galkina & Chetty (2015) uses effectuation theory along with the Uppsala model to explain SME internationalisation process. Initially, the Uppsala model (Johanson & Wiedersheim-Paul, 1975; Johanson & Vahlne, 1977) explains that firms usually go for internationalisation with low psychic distance where cultural similarities are available. Moreover, firms commit more resources while firms have more information about the foreign markets. Furthermore, the Uppsala revisited model (Johanson & Vahln, 2009) focuses on the networks and relationships for internationalisation. Besides, Johanson & Vahlne (2009) commented that effectuation theory is consistent with the revised Uppsala model. In the internationalisation literature, born global firm (Knight & Cavusgil, 2004) or International New Venture (INV) firm (Madsen & Servais 1997; Oviatt & McDougall, 1994; Rialpa et al., 2005) is getting attention now-a-days. Born global firms internationalise within a very short period of their inception. It is found that networking and partnerships accelerate rapid internationalisation (Sekliuckiene & Maciulskaite, 2013; Freeman et al., 2006).

Internationalisation becomes difficult without available resources (Luostarinen, 1980; Welch & Luostarinen, 1988) as lack of resources is the major barrier to internationalisation (Banu, 2019; Johanson & Wiedersheim-Paul, 1975). Some authors identified similarities between effectuation and bricolage as both the theories emphasise on resources for opportunity identification (Lingelbach et al., 2015). Entrepreneurial bricolage influences the entrepreneurs to use different combinations of resources to handle different challenges and to identify new opportunities

in the external environment (Westhead & Wright, 2013). In addition, network is a meaningful source of tangible and intangible resources in the resource constraint environment (Coviello & Munro, 1997; Oviatt & McDougall, 1994; Varela et al., 2015). In 1988, Johanson & Mattsson define internationalisation on the basis of relationships and networks. It is also explained how foreign network plays an important role in the SME internationalisation (Prashantham, 2004a; Pranshantham, 2004b). Johanson & Vahlne (2009) use the term effectual network consisting of all the stakeholders. Moreover, Galkina & Chetty (2015) also focus on effectual network which helps to work in markets where network emerges and thus network becomes very important in both effectuation theory and the revised Uppsala model. Effectuation theory influences the decisions of an entrepreneur and it also includes the internationalisation decisions and patterns (Andersson, 2011). It is believed that effectuation theory might better explain the internationalisation pattern of the born global firms. Prashantham et al. (2019) presents effectual approaches to network building as follows:

Table 1: Effectual Approaches to Network Building

The Principles of Effectuation	*Effectual Network Building*
The bird-in-hand principle	Starting venture with known people
The affordable loss principle	Pursing a relationship despite knowing its downside
The patchwork quilt principle	Working with self-selected and committed stakeholders
The lemonade principle	Reviving old relationships or approaching new connections
The pilot-in-the plane principle.	Providing necessary resources or influencing others for being a part of any activity

Source: Prashantham et al. (2019)

Table 1 presents the corresponding effectual networking actions in the light of the five principles of effectuation theory. Effectual networks might motivate the entrepreneurs to go for early internationalisation while causation networks might take a longer time for internationalisation (Prashantham et al. 2019). Internationalisation with known people (the bird-in-hand principle), partner (the patchwork quilt principle), acceptable loss (the affordable loss principle), open to serendipitous opportunities in an uncertain environment

(the lemonade principle) and co-creation (the pilot-in-the-plane principle) encourage the entrepreneurs for quick initial entry to foreign markets in comparison to causal network building. Sarasvathy (2001) explains in her bird-in-hand principle that it is important for the entrepreneurs to know who he is, what he knows and whom he knows. "Who he is" deals with the identity of the entrepreneur, "what he knows" reflects knowledge while "whom he knows" is regarding network (Sarasvathy et al., 2014). These ideas are very important for the entrepreneurs to go for venture creation. In effectuation "who I know" is emphasised and it can be coined with networks and relationships (Chetty et al., 2015; Galkina & Chetty, 2015). Moreover, the effectuator focuses on the "size and breadth of networks" (Sarasvathy et al., 2014, p.73). Then, the patchwork quilt principle is about partnerships with self- selected stakeholders for resource acquisition (Prashantham et al., 2019). Chandler et al. (2011) argues that entrepreneurs get engaged with many relationships which might help them to share both risks and success. Effectuation theory emphasises on contingency plan instead of predetermined plan and it can be better explained in the internationalisation of the born global firms (Andersson, 2011).

Entrepreneurs who follow effectuation theory might have access to many markets within a short period of time with low risk (Andersson, 2011; Laskovaia et al., 2017). In addition, alliances with the customers & partners play an important role in resource acquisition, opportunity identification & exploitation (Laskovaia et al., 2017). It is believed that effectuation has positive influence on SME internationalisation as it might improve firms' performances in the emerging markets (Guili & Alami, 2020). Karami et al., (2020) presented a conceptual framework where the network is considered as the main mechanism which contributes to international performance. Moreover, rapid and early internationalisation of the born-global SMEs is influenced by networks and relationships (Andersson, 2011; Freeman et al., 2006; Sharma & Blomstermo, 2003; Zhou et al., 2007). Freeman et al. (2006) identified personal network as one of the key variables for the rapid internationalisation of the born global firms as personal network help to establish partnerships and alliances. They also emphasises on the adaptation of the relationships for meeting the changing demands of the partners. On the other hand, Zhou et al., (2007) identified social network as significant factor. It is evident that network positively influences the performances of the SMEs both in the local and international market. In the resource constraint and risky external environment, networks and relationships positively influence the early internationalisation of the firms. Researchers have studied entrepreneur's networks and environment

as important actors in the internationalisation field for decades. The theory of effectuation might help the researchers to explore the contributions of network in SME internationalisation.

Conclusion

The scholars have long argued that networks and relationships play important roles in the internationalisation of the SMEs, along with the born global firms. Effectuation theory contributes to the internationalisation studies considering networks and relationships. In the born global research, networks and relationships are also highlighted in the early and rapid internationalisation of the new ventures. It is found that effectuation focuses on different perspectives and dimensions of internationalisation. New foreign market selection, entry mode, timing, performances in the international market, etc. are greatly influenced by effectuation. Usually SMEs & born global SMEs have limited resources. Networks & relationships might help them to survive & grow in this risky & uncertain environment. Few studies explained entrepreneurial decision making regarding SME internationalisation by using effectuation theory. This review might be used for understanding the research gap and provide an outline for future research. Integrating previous internationalisation theories, especially network model and resource based view (RBV) with effectuation theory might explain the trajectory of the SME internationalisation in a unique way. Moreover, empirical studies on the connections between SME internationalisation and effectuation might offer a greater insight about the role of effectuation in SME internationalisation.

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Fourth Industrial Revolution and Preparedness Required for the 21st Century Managers

Lamiya Rahman[1]

Introduction

The last few years have been marked by the disruption of technologies (National Academies of Sciences, Engineering, and Medicine, 2010). To keep pace with the development of technology, the business world is continuously changing. Rapid changes in the industry are the result of continuous improvement in ICT (Information and Communication Technology). Over the centuries, the world has witnessed different industrial revolutions which are evident by various technological breakthroughs. The latest revolution that has taken place in the business sector is the fourth industrial revolution (4IR). 4IR has impacted the business environment in both ways, positive and negative. Therefore, all the business stakeholders need to adapt accordingly to keep themselves competitive, to utilize the opportunities from the positive impacts, and to confront the threats.

4IR will have a great impact on the global workforce due to the adoption of artificial intelligence and automation. Few sectors (manufacturing, logistics, retail, wholesale, and lower-skilled occupations) will shift to vulnerable positions but jobs requiring human interaction, high degree of imagination, creative analysis and strategic thinking, supply of personalized services, and training and education sector will gain during 4IR (Sun, 2018). The World Economic Forum reports that 50% of companies believe that this adoption will decrease their full-time employees by 2030, 38% of businesses believe that new productivity enhancing jobs will be carried out by their employees and 25% think that new roles will be emerged (World Economic Forum, 2018). So, employees will need to upskill or shift their specialization to new disciplines. Therefore, it can be said that the recruitment industry will have a significant impact on 4IR. That is why managers need to focus on bringing changes to different managerial issues to stay in the game.

This chapter has covered the meaning and different phases of the industrial revolution, skill, characteristics, and intelligence required by company leaders and employees, practices that must be performed by leaders, and a new concept: Smart HR 4.0. The chapter has mainly focused on the impact

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of 4IR on human resources and therefore how HR departments of different organizations need to respond to this situation.

Definition and Phases of Industrial Revolution

To understand the fourth industrial revolution, we first need to know the previous phases and their impacts. The first industrial revolution was the consequence of the invention of the steam engine which brought mechanization to the manufacturing sector; the second industrial revolution was brought up by the use of electricity which results in mass production; the third industrial revolution was driven by the introduction of digital processes which spread automation processes and use of the internet (Petrillo et al. 2018 and Oliver, 2018). The fourth phase of the industrial revolution was characterized by the cyber-physical system which results in increased automation, advanced communication, and the production of smart machines that enabled to perform different tasks with little human interventions. So basically, the fourth industrial revolution (4IR) is the use of modern smart technology which limits human interventions in manufacturing and industrial practices (Moore, 2018). This term was first mentioned in a book of the same name in 2016 by the founder of the World Economic Forum, Klaus Schwab. It is a fusion of, but not limited to a few technologies, such as artificial intelligence, Internet of Things, robotics, virtual reality, mobile devices, 3D printing, smart sensors, big data/analytics, augmented reality (AR), data visualization, cognitive computing, location detection, customer profiling, block chain, quantum computing, cloud computing (Wigmore, 2020). The interesting thing is fifth industrial revolution is coming in the near future which will be characterized by the co-working of

humans and machines in the workplace. As it has not occurred yet, the impacts are still unknown. The following table shows the five phases of the industrial revolution along with their timing, drivers, and outputs in brief:

Table 1: Phases of the Industrial Revolution along with their timing, drivers, and outputs

Phases	1st	2nd	3rd	4th	5th
Timing	End of 18th century	Beginning of 20th century	Beginning of 21st century	2013	2020+
Drivers	Water and Steam Power	Electricity	Digital processes	Cyber physical system	Co-working of human and machines
Outputs	Mechanization of manufacturing	Mass Production	Automation processes and use of the internet	Automation, advanced communication, production of smart machines	As it has not occurred yet, the impact will be seen in future

4IR and 21st Century Skills required by Employees

Technology is continuously developing in the 21st century which is making the working environment more dynamic. To cope up with this dynamic working environment, employees need to reskill themselves and show flexibility and adaptive capabilities (Schwab, 2016). In a study, it has been found that among the hiring managers, 59% believe that artificial intelligence will change the skill requirements of the future workforce (Salesforce Research, 2017). So, to future-proof the workforces, businesses need to assure the right mix of skills. Here skill refers to those learned abilities that help one to perform the job properly. Rather than learning these skills only once, employees will need to upgrade these several times throughout their professional life (McGinnis, 2020). World Economic Forum (2015) referred to these skills as '21st Century Skills'.

In different surveys and report different skills have been identified as 21st Century Skills. Results found from these sources have been presented in the table below, where similar skills mentioned in different names by different surveys/reports have been mentioned in name of the skills column by putting a slash (/). In the table, survey 1 included 750 hiring managers, conducted by Salesforce research in the year 2017; survey 2 included 951 employers, conducted by Hays company (a recruiting company), and the

report was prepared by the World Economic Forum, titled as Future of Jobs. Both surveys presented the percentage of respondents who gave importance to the particular skills, although the report only mentioned the skills, not the degree of importance. Therefore, only tick marks (√) have been given to exhibit the report's result:

Table 2: 21st Century Skills

Skill Categories	Name of the skills	Percentage of Survey 1[*1]	Percentage of Survey 2[*2]	Result of Report[*3]
Hard Skills	**Data Analysis (i.e., gaining insights from data)/ Data based decision making**	80%	35%	
	Data Science (i.e., building models from data)	78%		
	Software development/ Coding	77%	6%	
	Digital proficiency in new technology		64%	
	Technical skills		43%	
Soft Skills	**Collaboration and Team work/ Coordinating with others**	76%		√
	Judgement and Decision making	73%		√
	Critical thinking		61%	√
	Interpersonal communication	68%	77%	
	Social skills (e.g., negotiation, persuasion) / Emotional Intelligence	65%	53%	√
	Creativity/ Creative thinking/ Innovation	73%	63%	√
	Cognitive Flexibility			√
	Adaptability		66%	

Mixed	Service Orientation			√
	Complex Problem Solving			√
	People Management			√
	Service Orientation			√
	Self-learning		40%	

*1 Survey of Salesforce Research in 2017 among 750 hiring managers (Salesforce Research, 2017)

*2 Survey of Hays (a recruiting company) among 951 employers (Deligiannis, 2018)

*3 WEF's report titled as 'Future of Jobs' report (World Economic Forum, 2018)

From the above-mentioned table, it can be said that few skills have more importance than others. Hard skills, such as developing software, analyzing data, and making decisions based on that have more significance. But, as humans are more capable than machines in terms of applying intuition, creativity, motivation, artificial intelligence alone is not enough to run the business (O'Connor, 2016). Rather, there will be a shift towards learning soft skills, such as emotional intelligence, creativity, innovation, social and communication skills. Even, few authors have found in their studies that employees dealing with interpersonal communication believe that this role will never be replaced by any machine or robot, and that is why will always be performed by humans (Akihito, et al., 2017).

Characteristics and Leadership Skills required by Company Leaders in the Era of 4IR

World Economic Forum has identified few characteristics of company leaders which will help them not only to survive but also shine in the era of 4IR (University of the Witwatersrand, 2021). These characteristics have been classified into four categories. They are mentioned below:

❖ *Social Supers*

These leaders are informed about their teams' readiness for change and provide the right training adequately to prepare them.

❖ *Data-Driven Decision Makers*

They take the correct decisions based on their company's data and

strategies.

❖ *Disruption Drivers*

These are the leaders who invest in disruptive innovations and make their decisions following a structured process.

❖ *Talent Champions*

These leaders can recognize their talents and prepare them for the digital transformation.

During 4IR, as the business environment will change dramatically, so people who will lead the organizations will require certain skills. They will need to be agile, emotionally intelligent, humble but confident, accountable, visionary, courageous, flexible, technologically knowledgeable, intuitive, collaborative, quick learners, culturally intelligent, authentic, and focus on the objectives of the organization (Marr, 2019).

4IR Intelligence required by Leaders

Different scholars have identified ten types of intelligence for the leaders to combat the challenges and explore the opportunities inherited in the 4IR (Schwab,2016; Oosthuizen, 2016 and Oosthuizen, 2017). These intelligence are described below:

❖ *Contextual Intelligence*

Leaders must have the ability to understand and apply their knowledge (Schwab, 2016).

❖ *Emotional Intelligence*

Leaders must have the ability to monitor and discriminate among feelings and emotions and use this data to direct their followers' thoughts and activities (Salovey and Mayer, 1990).

❖ *Inspired Intelligence*

Leaders need to motivate, develop trust, and engagement to inspire their employees (Horwitch and Whipple, 2014).

❖ *Physical Intelligence*

Leaders should pay attention to the physical well-being of their followers. Leaders should take necessary steps so that employees can maintain a

healthy lifestyle (Schwab, 2016).

❖ *Entrepreneurial Intelligence*

Leaders must be able to recognize opportunity and combine resources in new ways to create or renew something economically and/or socially valuable (Oosthuizen, 2017).

❖ *Strategic Intelligence*

Leaders must be able to adapt to the changing situations so that they can change their courses of action as and when needed (Wells, 2012).

❖ *Transdisciplinary Intelligence*

Leaders must have the ability to respond according to the requirements of the subject matter, not by the boundaries of subject matter (Montuori, 2013).

❖ *Ecosystem Intelligence*

Leaders need to consider the mutual relationship between organism and environment (Bloom and Dees, 2008).

❖ *Socratic Intelligence*

Leaders must have the ability to find out the answers to some fundamental questions by discussing those in small groups for a considerable amount of time. Here leaders only act as a facilitator, not as a decision-maker (UNESCO, 2007).

❖ *Ethical Intelligence*

In situations where ethics are challenged, leaders must be able to respond to those situations effectively and correctly (Ocreus,2016).

Six Mandatory Practices of Leadership for Future Workforce

Poor leadership can act as the biggest obstacle to a successful 4IR strategy (Akberdina and Pushkareva, 2019). Therefore, leadership practices need to be updated for successful strategy implementation in 4IR. Six new leadership practices that can act crucially for the future workforce are mentioned below with examples:

Table 3: Six Mandatory Practices of Leadership with Examples

Imperatives	Examples
Develop new leadership capabilities	Make a blend of operational management, technology integration, and people management skills
Manage technology- workforce integration	Reskill workforce whose job is being automated
Escalate employee experience	Use technology for engaging employees
Build a customized learning culture	Stimulate lifelong learning
Establish benchmarks for human capital evaluation	Employ new technologies and data for creating benchmarks for human capital evaluation and decision making
Embed diversity and inclusion (D&I)	Rigorous use of data analytics for measuring and assessing D&I

Source: Based on Spagnoletto, L., AlabdulJabbar, D. and Jalihal, H., 2019. HR4. 0: shaping people strategies in the fourth industrial revolution. In World Economic Forum.

Smart HR 4.0

Emerging technologies along with the entry of generation Y and Z into the workforce have brought enormous changes in the business environment. Especially, the new generations are dominating the world of IT and they want customized treatment. These changes have made the emergence of a new concept: Smart HR 4.0 (PuhovichovaandJankelova, 2020.). The basic characteristics of this concept are given below:

Table 4: Basic Characteristics of Smart HR 4.0

HRM Elements	4IR Technologies Used	Improvements in the system
Recruitment	Intelligent applications on smartphones	Candidates can get notification of job advertisements based on individual profiles and preferences mentioned in the 'Settings' option.
	Big data and artificial intelligence (AI)	Companies can select specific candidates' resumes based on their requirements set on the program within a short time and less manual effort.
		Companies can arrange automated and customized interviews for each candidate.
	Faster data network	Distant interviews via video chat can be arranged which will shorten the whole recruitment process.
	AI chat robots	Candidates' reactions can be interpreted and verified in real-time and thus the number of selected candidates for an interview can be reduced.
Training and Development	Artificial intelligence	Companies can identify knowledge gaps of employees by comparing them with market requirements.
		Companies can arrange customized induction programs to provide 'on-demand knowledge' to the newly appointed employees based on their jobs, positions, etc.
	Augmented reality/ virtual reality	Employees can participate in training.
		New employees' orientation can be arranged.
	Faster network	Training through video conferencing can be arranged to not only reduce time but also solve space and distance issues of offline training.

Performance Appraisal	Artificial intelligence	Companies can set personalized performance goals for individuals.
		Real time feedback of employees can be received and recorded.
Compensation and Benefits	Big data	Companies can determine compensation and benefits based on the analysis of demand and supply of skills from the existing database
Employee Health and Wellbeing	Health-oriented applications in smartphones	Employees' fitness criteria can be monitored in real-time which will help to reduce absence from work.
Employee Termination	Big data	Companies can identify high/low performing employees.
		Proactive actions can be taken to prevent the turnover of high-performing employees.

Source: Based on Sivathanu, B. and Pillai, R., 2018. Smart HR 4.0–how industry 4.0 is disrupting HR. Human Resource Management International Digest; Shamim, S., Cang, S., Yu, H. and Li, Y., 2016, July. Management approaches for Industry 4.0: A human resource management perspective. In 2016 IEEE Congress on Evolutionary Computation (CEC) (pp. 5309-5316). IEEE, and Puhovichova, D. and Jankelova, N., 2020. Changes of human resource management in the context of impact of the fourth industrial revolution. Industry 4.0, 5(3), pp.138-141.

Other than these HRM elements, changes are also required in the structure and culture of the organizations to become compatible with the 4IR (Angrave et al., 2016). Some of those points are mentioned below:

Structural Change Required

A flat organizational structure is required for implementing Smart HR 4.0. It helps in many ways, namely:

- ❖ Reduce communication levels
- ❖ Speed up decision making
- ❖ Help to respond to the sudden environmental changes

Cultural Changes Required

- ❖ Power must be decentralized.

- ❖ Open leadership style is required.

- ❖ A culture that stimulates innovation is needed.

- ❖ Focus should be given on knowledge

- ❖ Rewards need to be given for innovative thinking.

- ❖ Conflict among generational groups should be minimized.

- ❖ Modern technologies need to be installed to achieve long term goals of the organization and attract the talents of Y and Z generations.

4IR and Bangladesh Context

Bangladesh will face a few challenges during the 4IR. It will also provide attractive opportunities to be availed by the country. Different scholars have also provided suggestions to the government and other stakeholders to keep and grow Bangladeshi businesses in the competitive market in the era of 4IR.

Opportunities and Challenges to Bangladesh

4IR has possessed both opportunities and challenges for Bangladesh. This will help Bangladesh to produce products at a cheaper rate and of better quality as well as reduce the harmful effect on the environment (Rumi, Bala, Shah, Sayem, and Abedin, 2021). Moreover, it will help to expand communication efficiency, reduce accidental hazards, and form a sustainable environment (Islam, Jantan, Hashim, Chong, Abdullah, and Abdul Hamid, 2018).

The deficiency of knowledge of the top-level management is one of the greatest challenges in introducing automation in the manufacturing and production industries in Bangladesh. Lack of education and ideas about new technologies and concepts of the owners of the textile garments create barriers to introducing automation in their companies. Poor infrastructural facilities, weak broadband connection, and recurrent occurrence of natural calamities also pose barriers to the implementation of automation. The unwillingness of the owners and associates to change the system without government intervention is another constraint in introducing 4IR. Although the elements of 4IR are expensive, they are highly efficient and

useful. This primary expense creates unwillingness among the owners and associates (Shabur and Hridoy, 2021).

However, even if organizations adapt to the latest technologies, they will not get the benefits immediately. It will create a loss of jobs for both manual and knowledge workers. In a study by a2i study, it has been found that 60% of garment workers will lose their jobs by 2030 and 5.5 million jobs by 2041. Due to automation, a good number of SMEs have also shut down. So, the Bangladesh government should take an integrated plan and act strategically to combat the negative impact of automation in order to stop losing the international market. (UNDP, 2020; Rumi, Bala, Shah, Sayem, and Abedin, 2021; Kabir 2022).

Suggestions to Avail the Opportunity and Counter the Threats of 4IR

In Cisco Digital Readiness Index 2019 and Network Readiness Index (NRI), 2020 Bangladesh secured 118th and 115th place, respectively (Nile, 2022). These two indicators signify that the Bangladesh government needs to rethink and redesign the plans to adapt to 4IR. It should concentrate on building awareness, forming capital, developing skills, providing training, and bringing infrastructural development (Bhuiyan, Ali, Zulkifli, and Kumarasamy, 2020). Different stakeholders also do need to take the necessary steps. To acquire the benefits of 4IR, concentration should be given to task level rather than occupational level as well as bring skill transformation (UNDP, 2020). Upskilling and reskilling can also help to counter the threats possessed by 4IR. As all the redundant manpower cannot be upskilled, they can be reskilled and placed in other professions. An example can be a laid-off garment worker who may be reskilled and placed as a nurse or caregiver (Kabir,2022). Hence, it is needed to build awareness among the stakeholders and take necessary actions to avail the opportunities for the benefit of the country.

Conclusion

The concept of 4IR is relatively new in the business industry of Bangladesh. The business sector still needs to learn the present and following phases of 4IR and their impact on different aspects of the business. The fourth industrial revolution is going to bring negative impacts, like downsizing to a few industries but it has many positive impacts, such as enabling more work flexibility, allowing working at home/ in the office, working during on and off duty hours, reducing office expenses and many more. As the world is moving towards a Gig economy, businesses need to embrace technological advancements. The employees should not feel threatened,

rather they should focus on skilling/reskilling themselves. The company employers, top managers, and other company leaders should pay attention to taking actions and measures to keep themselves in the competition and gain from these changes.

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Career Depression among University Graduates: Causes and Consequences

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The Phenomenon of Career Depression

We use the word career all time, but what does it really mean? It has different meanings. It can be viewed from the different perspectives. It is a job or profession that someone does for a long time. It is also used to refer to the series of jobs an individual has over his or her lifetime. It also means advancement. A career describes an individual's journey through learning, work and other aspect of life. A career is defined as the unfolding sequence of a person's work experiences over time (Arthur et al., 2005; Arnold & Cohen, 2008). A career is typically undertaken as a permanent calling and is expected to produce progressive achievement over the course of one's life.

In fact, it is the aspiration for a successful career that motivates most human beings to pursue education. Yet, despite availing of tertiary level education from universities and securing jobs upon graduation, many graduates develop disillusionment and dissatisfaction surrounding their careers. In some cases, lack of contentment takes a more severe form known as career depression.

Depression is one of the most common mental ailments among adults (Richards, 2011). It is a disorder that affects the mental health of individuals and their behavior and is associated with prolonged feelings of sadness, passivity, and disinterest in activities that were previously found enjoyable (WHO, n.d.). Beck (1972) conceptualizes depression as a "cognitive triad", whereby an individual operates under a set of distorted schemata pertaining to the self, the world, and the future. Where such a negative mental state can be traced to one's job or career, he/she is said to

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be suffering from career depression. While some authors have suggested that there exists an inextricable link between career problems and mental health concerns (Betz & Corning, 1993; Swanson, 2002), research on career depression remains relatively scarce. This may perhaps be attributed to its covert nature and the reluctance on the part of affected individuals to acknowledge their condition. Yet, career depression can become crippling and negatively affect not only the individual concerned, but also their families, the organizations that employ them, and society at large (Gadassi et al., 2015).

Causes of Career Depression

Lack of Person-Job Fit – Person job-fit refers to the congruence between individual knowledge, skills, abilities and job requirements (Zhou et al., 2011). Prior studies have shown that a lack of person-job fit hampers career satisfaction and engagement (Cai et al., 2018). Hence, it may be inferred that career depression often arises when the person-job fit is missing. In many developing countries, including Bangladesh, students graduate from universities, only to find that jobs which match their education or specialization are not available (Ara and Khan, 2019). These graduates then have to adapt to roles that do not fully utilize their academic learning. This is often the starting point of disillusionment with the job. Even if jobs and qualifications are in sync, most professions today require a vast array of soft skills, such as interpersonal skills, communication skills, and leadership skills, among others. Unfortunately, many tertiary level institutes do not adequately prepare their graduates in these areas. This amplifies the lack of person-job fit and curtails career progress. The result is low self-esteem and eventual depression.

Family Expectations– In certain situations, the family may be a major force in shaping one's career choice. However, where such a choice conflicts with one's preferred vocational choice, disillusionment and depression can result. For instance, in a study of Jordanian nurses, Yousef et al. (2017) found that individuals who opted for the nursing profession under family pressure were considerably more likely to be depressed than those who chose the profession on their own. Individuals forced by family into a profession were even more likely to be depressed than individuals who felt forced into a career due to a lack of other options in the job market (Yousef et al., 2017). The problem may be particularly acute in countries with collectivist cultures where freshly graduated individuals

find themselves caught in a tug of war between a perceived sense of duty towards fulfilling their family's expectation and a longing for their preferred career path – thus making family pressure a key antecedent of career depression.

Career Indecision and Low Vocational Identity– Career indecision has been identified by authors as one of the strongest predictors of career depression among young adults (Walker & Peterson, 2012). In a study of college students, Rottinghaus et al. (2009), for instance, found that individuals who were certain about what career they wished to pursue had far fewer depressive symptoms than individuals who had limited clarity on their career choice. In a related vein, Saunders et al. (2000) stress the danger of having a low vocational identity as this leads to career indecision and subsequently, depression. Vocational identity is defined as having a clear understanding of one's career aspirations, abilities, academic interests, and values (Koo & Kim, 2016). Where such identity is strong, Saunders et al. (2000) suggest that individuals are able to make the transition from academia to work life more easily and enjoy greater occupational satisfaction. However, where such identity is weak, the state of career indecision becomes acute and prolonged, acting as a major antecedent of negative affective states such as anxiety and depression.

Financial Pressure – The transition from academic life to work life has been noted as a difficult one for many young adults, since it requires the assumption of greater financial responsibility and the loss of any university stipends, accommodation facilities, etc., that could have served as safety nets. This is supported by research which indicates that emerging adulthood, which coincides with graduation from university and starting of a career is one of those life stages in which the incidence of depression is particularly high (Rhode et al., 2013). Financial pressure as an antecedent of career depression may be particularly prevalent in developing countries, where a large cross-section of university graduates come from humble socio-economic backgrounds (Ara and Khan, 2019). For such families, the cost of tertiary education is a major financial burden. Hence, it is a common expectation that upon graduation, an individual will secure a high-paying job that allows him/her to reciprocate the support received from the family. Such high paying jobs are scarce and out of reach for the vast majority of graduates. This causes many employed graduates to be dissatisfied with their compensation packages and hence, their careers.. When coupled with

family expectations, this creates acute financial pressure and propels them towards despair.

Perception of Inequity – The perception of having received unfair treatment at the workplace is often a major source of job dissatisfaction and subsequent career depression. Many managers hold antagonistic attitudes towards certain employees, and this makes the employees feel that their performance appraisal does not adequately reflect their contribution to the organization. In addition, some organizations have highly political work environments and individuals find their growth stunted unless they are able to engage in actions such as coalition-building, ingratiation, subservience to dominant in-groups, among others. Despite dissatisfaction with such toxic work environments, many individuals feel compelled to stay back in the fear that a better job may not be available. This creates an actual or perceived lack of control over one's own career, thus inducing depressive thoughts.

Lack of Intrinsic Satisfaction – Intrinsic satisfaction refers to the satisfaction that is derived from the characteristics of the job itself rather than from factors external to the job such as its rewards. Even when fortunate enough to find high-paying jobs, many individuals become dissatisfied due to lack of intrinsic motivation. One reason for this is the lack of task significance. This is a situation where one feels that the work he/she is doing is not meaningful and does not contribute to broader organizational and/or societal goals. Lack of autonomy on the job also reduces intrinsic satisfaction. This occurs because some organizations have highly centralized decision-making processes and do not permit employees to exercise judgment or creativity. In such situations, university graduates with high aspirations may fail to find pride and contentment in their job, leading to eventual depression.

Work-Life Conflict –Work-life conflict refers to the perplexing situation where individuals find themselves in a tug of war between their professional and personal lives. Young employees today are under intense work pressure, which often requires them to work beyond the stipulated 40-hours a week. Technological progress has also meant that employees are expected to be available "on demand", such that no time of the day is truly free from work (Deloitte, 2020). Inability to resolve work-life conflict causes individuals to feel that they are not being able to do justice to the demands of their job or their family, leading to depression. It is

worth noting, that an increasing number of today's university graduates are millennials. Research shows that millennials may be predisposed to such depression, more than generations before them (Moody's Analytics, 2019). Hence, as more millennials enter the workforce, career depression resulting from work-life conflict may become more manifest.

Environmental Uncertainty – The growing incidence of mental disorders in the wake of COVID-19 demonstrates how factors in the external environment can contribute to career depression. While the pandemic has left many employed individuals feeling insecure and anxious about their career prospects, research suggests that university students and/or graduates who are contemplating joining the job market are the worst affected by such uncertainty (Mahmud et al., 2021). The state of anxiety may be manifested in an inability to make appropriate career choices and thus contribute to career depression both directly and indirectly. University graduates in developing countries such as Bangladesh, which have abundant supply of labor but limited employment opportunities, may be particularly susceptible to such depression. This is because pandemics such as COVID-19 and associated economic downturns further tilt the balance of power in favor of organizations, in what is already an employer's market.

Consequences of Career Depression

Consequences for the Individual–Career depression traps individuals in a vicious cycle from which it becomes very difficult to escape. This may be attributed to several reasons. First, when individuals are depressed, they start losing interest in their work, which hampers productivity and performance. Low productivity and performance, in turn, reduce self-efficacy, which is an individual's belief in his/her own ability to accomplish desired goals. Once self-efficacy is lowered, success may be hard to achieve. This creates a series of failures, which aggravates the depression (Maddux & Meier, 1995).Second, a depressed individual may have difficulty in engaging with others at the workplace, thus reducing interpersonal effectiveness.

Third, research shows that depressed individuals suffer from dysfunctional career thinking (Saunders et al., 2000; Walker & Peterson, 2012). According to Woo & Keatinge (2008), depressed individuals display impairment in cognitive functions, including the capacity to make rational decisions.

This is supported by Beck (1972) who suggests that the cognitive process through which depressed individuals process environmental stimuli is faulty, which in turn leads to suboptimal responses to such stimuli. Hence, a person suffering from career depression due to toxic work situations may find himself/herself incapable of accurately assessing the factors causing the depression and coming up with an appropriate response, such as looking for alternative employment. This has the potential to impair not just short-term career prospects, but also long-term success and life satisfaction (Gati et al., 2006).

Career depression also creates negative externalities for an individual's personal life. When work becomes a cause of bitterness rather than a source of gratification, individuals may distance themselves from their family and friends. They may also engage in meaningless conflict with the same, thus leading to unstable personal relationships (Ibrahim et al., 2013).This is a major problem because a supportive network of trusted ones is often key to helping depressed individuals. But if the depressed individual himself/ herself shuns this network, the latter may have little means of helping, thus creating a self-perpetuating cycle of despair. At the very extreme, depression may also cause suicidal tendencies among affected individuals (Westefeld & Furr, 1987; Ibrahim et al., 2013).

Consequences for the Organization

Effective and efficient human resources are the key to building and maintaining competitive advantage in any organization. Depressed employees do not able to perform well as they cannot use their full potentials l. As a result, the resources invested in recruiting, training, and developing these individuals may produce lower returns than originally predicted. This is supported by an abundance of research which links depression to work impairment (Kessler et al., 2001; Stewart et al., 2003; Gadassi et al., 2015). Depressed individuals are also likely to display higher absenteeism and lower organizational commitment (Donohue & Pincus, 2007). In this context, it may be noted that mental health problems, including depression, are the second leading cause of days lost owing to work-related illness in the UK (WHO, 2006). Likewise, in the United States, mental health problems cause more absenteeism than do physical illnesses, and depression is ranked as the third most important work-related problem (WHO, 2006).

The concept of emotional contagion may also be relevant in this context. Emotional contagion refers to a situation where the positive or negative emotions of one individual has a spillover effect on others in the workplace. Hence, to the extent that a depressed individual has a contagious effect on others, the entire organizational climate might suffer (Barsadeet al., 2018). The costs, in this case, will not be restricted to a single individual, but will be multiplied several times.

Consequences for Society–The youth represent the most productive population in an economy. Hence, any condition which hampers the productive capacity of the youth is detrimental to the nation, with career depression being no exception in this regard. While exact statistics related to career depression are rare, it is estimated that mental health issues can cost a staggering 3-4% of the GDP of developed countries (WHO, 2006). In the US, depression cost an estimated $80 billion in the year 2000, and 62% of such depression emanated from workplace issues (Greenberg et al., 2003). In Bangladesh, the incidence of depression among people suffering from mental health conditions is 4.6% (Kar, 2013) making it one of the most prevalent psychological disorders in the country. Bangladesh is currently experiencing a once-in-a-lifetime demographic dividend, which presents opportunities for accelerated economic growth. However, such growth cannot be sustained if university graduates, who are supposed to spearhead innovation and efficiency,perform at sub-par levels owing to depression.

Prevention and Coping Mechanisms

The Role of the Individual -The first step towards overcoming career depression is to acknowledge that it truly exists and that it deserves special care, just like a physiological disorder does. The importance of this first step is even more salient in the case of developing countries such as Bangladesh where mental health issues do not receive due attention (Ara and Khan, 2019) owing to the associated social stigma.

Once the person has acknowledged his/her condition, it is necessary to proactively engage in career management, which may simply be defined as taking charge of one's own career (Greenhaus et al., 2009) through analysis, planning and action (Forsyth, 2002). People suffering from career depression tend to undermine their strengths and exaggerate their weaknesses. Such a tendency must be overcome to avoid getting

entrapped in the vicious cycle of low self-efficacy. Given the difficulty of conducting a proper self-assessment when one is depressed, feedback on strengths and weaknesses can be sought from trusted individuals including seniors at work, peers, or even family numbers. Based on this feedback, the individual can take initiatives to address areas of deficiency, while continuing to contribute to the organization through his/her strengths. Proactively seeking out training and skill-development opportunities, for instance, can be an effective way of overcoming weaknesses and thus minimizing the lack of person-job fit.Depressed individuals can also help themselves by setting small incremental goals instead of stretch goals in their personal and professional lives. Attainment of the former can create a series of small successes and heal low self-esteem.

When unfair treatment and appraisal are the cause of career depression, it is important to introspect upon whether one is actually being treated unfairly or whether it is a mere perception. Ifthe former is true, then it is important to overcome inertia and look for a better, more equitable job. Individuals are often reluctant to switch jobs simply owing to the preconception that another job may not be available. However, this preconception needs to be evaluated against actual evidence regarding unemployment statistics, compensation levels for similar jobs, vacancies in comparable roles, among others. Support for this proposition is found in King (2004) who suggests that decisions about career paths need to be made not in a vacuum, but in the context of the broader world.

Finally, one of the best ways to prevent career depression is to make realistic and well-informed career choices (Cedefop, 2008). Individuals, particularly in developing countries, often aim for a career to fulfill family and societal expectations without due evaluation of their own predilections. Sometimes, they even lack proper knowledge of the requirements of the concerned job. Such an approach can be highly detrimental and lead individuals towards careers which are not aligned with their skills, qualifications, and personal characteristics. University graduates who have been fortunate enough to receive tertiary level education should not assume that a University degree by itself will guarantee a high-paying job and eventual career satisfaction. Rather, they should engage in evidence-based decision making to make rational career choices and avoid the pitfalls of career depression.

Role of Organizations

Organizations must playan active role to handle career depression of their employees. Since depressed individuals do not always feel comfortable sharing their troubles, it is imperative that organizations watch out for telltale signs of depression such as sudden tardiness, sudden lack of concentration, a growing tendency to procrastinate and other behavioral changes in employees (Baldelomar, 2018). When such signs are manifest, organizations must initiate open dialogue with the concerned employee to find out whether career related depression is indeed the reason behind the changes in behavior. If the answer to this question is yes, then the appropriate organizational response will depend on the root cause of the employee's depression. Flexible scheduling is one reasonable accommodation that is heavily supported by research (DeTienne et al., 2020), especially where stress and work-life conflict are causing depression. Organizations can assist depressed individuals to build self-efficacy to fight nervousness and adverse effect through setting small goals (DeTienne et al., 2020). Organizations must also remember that a proactive stance might be the best line of defense against career depression. In other words, while it is important to help employees who have already fallen into a state of depression, it is even more critical to ensure that toxic elements such as abusive supervision, low autonomy, political climate, inequity, etc. are not allowed to pervade the organization in the first place.

The Role of Counseling Practitioners

Depressed graduates can choose right career when their educational institutes offer them effective career counseling services. Universities which do not offer such counseling services should therefore contemplate offering the same and allocate both time and resources to this endeavor. Universities which already offer career counseling should encourage the concerned practitioners to be more vigilant in identifying individuals with higher chance of suffering depression and offering necessary help. Saunders et al. (2000) and Dieringer et al. (2017) for instance, suggest that standardized instruments such as career interest inventories, skill and ability measures, etc. can be used to better guide individuals into the right career track by matching individual and job characteristics. Also, empowering graduating students to make their own career choices, without familial or societal pressure, can also be a focal point for counseling as suggested by Yousef et al. (2017).

Conclusion

In conclusion, given the importance of a career in shaping the financial and social standing of adults, along with their self-esteem and identity, it is not surprising that disillusionment and/or dissatisfaction with one's career can lead to depression. Career depression is, therefore, a common phenomenon and the actual number of people suffering from it may be much higher than known due to limited understanding of the concept and the stigma associated with reporting depression. As discussed above, some of the common causes of career depression include lack of person-job fit, financial pressure, family expectations, career indecision, and work-life conflict. Wrong career choices may cause career depression among the graduates in many developing countries. This happens because of insufficient job opportunities, and impractical familial/societal expectations. There is no doubt that the dysfunctional consequences of ignoring career depression is significant. Hence, it is imperative to address this issue firstly by helping individuals to make a smooth transition from academic life to work life and secondly by helping them to find contentment in their careers. This will be possible only if conscious efforts are made not just by the graduates at an individual level, but rather by academic institutes, employers, and counseling practitioners at the collective level.

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Personality and Career Choice

Razib Hossain[1]

This chapter examines how individuals explore a suitable career that fits their characteristics. It discusses the domains of careers and personality. It also explores the link between personality and career choice. In examining these issues, this chapter discusses the contemporary concepts of personality. Then, in this chapter, the author mentions different theories of personality and discusses the Big Five Model and the RIASEC Model of Personality. It reviews the various definitions of "career" and tries to discuss the different career choices of individuals. Then, it presents empirical evidence regarding the relationship between personality traits and career choice. It also tries to conclude with the analysis of career choice and personality matching. After studying the chapter, the reader can answer questions like: Is it essential to have a definite personality when choosing a career?

Introduction

Selecting a career that is a good fit for one's personality is considered a key determinant for future success in the workplace. Different jobs are better suited to different personalities. So, one should be cautious while selecting a career (Alwis, 2018). Personality, abilities, intelligence, background, attitudes, perceptions, motivation, culture, roles they play, gender, race, and disability are all variables that distinguish individuals. These factors are the primary contributors to individual behavior. People desire to pick a profession that best suits their abilities. A career provides a person with identity and status. It boosts a person's self-esteem, creates a sense of belonging, and makes it easier to form relationships with other members of society. For these reasons, a career is crucial for individuals. It raises the issue of the right career choice (Alkhelil, 2016).

What is Personality?

Personality is the sum of how an individual reacts to and interacts with others. Personality refers to measurable traits that a person exhibits (Robbins and Judge, 2019). Britannica (2002) defines personality as a

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"characteristic way of thinking, feeling, and behaving." According to Long (2000), personality refers to those stable characteristics that distinguish individuals and serve as the foundation for their actions. It is a term used to describe interpersonal behavior; for example, we would say that someone who is socially outgoing has an extrovert personality. Personality is a distinctive variation in the general design of human nature (McAdams, 2015). Personality evolves during the span of a person's life, from birth to old age. A person's personality develops throughout their life. Academics discuss personality models and approaches, such as:

- ✓ The Five-factor Model of Personality
- ✓ The RIASEC Model of Personality
- ✓ Extroversion Introversion Typology
- ✓ Myers-Briggs Type Indicator
- ✓ Personalities of Types A and B
- ✓ Eysenck's Approach
- ✓ The Dark Triad

Much of the empirical research on career and personality has employed the Big Five model and the RIASEC model of personality. These models are stable, reliable, valid, and universal. So, academicians use these models frequently. The five-factor model and the RIASEC model have shown stability across cultures based on comparisons of information acquired from various nations. These two models claim to be comprehensive, as evidenced by meaningful convergence among other main personality structures.

The Five-Factor Model of Personality

The five-factor model has five broad factors. It represents personality at a comprehensive level of abstraction. Consciousness (C), agreeableness (A), neuroticism (N), openness to experience (O), and

extraversion (E) are the big five-factor; generally used acronyms for the big five-factor are "CANOE" or

"OCEAN". *Table 1* shows these factors and their descriptions. Every single dimension of the big five denotes a group of some distinct but closely connected personality traits that explain a continuum between two extreme poles. Here is the description of these five factors:

i) ***Openness to Experience:*** Individuals with this trait are highly innovative, independent-minded, sensitive to internal beliefs, and creative. They can examine problems in a different way, show an interest in art, and have a desire for uniqueness and diversity. They are interested in recognizing unknown thoughts and deducing them to various points of view (Cattell and Mead, 2008). These types of individuals are open to new ideas, knowledge, perspectives, and experiences.

ii) ***Conscientiousness:*** Conscientiousness is an individual's ability to be organized, thoughtful, self-managed, and forward-thinking. Conscientious employees are careful, orderly, graceful, self-disciplined, and trustworthy. Professional success has an impact on them. They tend to be very cautious about their plans, schedules, and surroundings. They prefer to avoid risk (Burch and Neil, 2008). Conscientiousness is about regulating, organizing, and managing one's impulses and involves several personality qualities such as being analytical, responsible, cautious, patient, and hardworking. It relates to a person's ability to be disciplined, organized, and goal-oriented (Abdullah, Omar, and Rashid, 2013).

iii) ***Extraversion:*** People with this trait are energetic, social, forceful, and emotionally upbeat. They are talkative, argue their points of view, interact with everyone openly, and seek excitement in all aspects of life (Burch and Neil, 2008). This personality trait causes people to be more social, with an outgoing personality that is constantly eager to communicate with others.

iv) ***Agreeableness:*** This type of person prefers social conformity and cooperation. They are kind, cooperative, and courteous. Agreeable people grow along well with other people as they are positive towards human nature. People who were more agreeable as a personality attribute were more accommodating, trusting, giving, tolerant, and sympathetic. Individuals who score highly on this attribute are always trying to help others, are prepared to solve problems by producing a win-win situation, and are generally liberal in their negotiations in a sociable atmosphere to maintain equilibrium with the concerns of their opponents. They desire societal peace and collaboration. Because they are born with the desire to help others, they assume that others are similarly honest and trustworthy (Olorunleke, Adesida, and Benjamin, 2020).

v) *Neuroticism:* The common characteristics of a neurotic personality are frustration, anxiety, loneliness, envy, worry, fearfulness, emotional instability, and jealousy. Frustration, anger, despair, tension, and self-blame are all symptoms of high neuroticism. They are commonly pessimistic and overreact to their failures and flaws. They are emotional and worried (Orthogonal, 2002). When expressing feelings and behaviors, they are virtually always unhappy and frustrated.

Table 1: **The Big Five Personality Model**

Factors	Description	
	High Score	**Low Score**
Conscientiousness	Structured, efficient, account-able, reliable, achievement oriented, and steady.	Careless, unreliable, lethargic, chaotic, and unorganized.
Agreeableness	Supportive, kind, good-na-tured, gullible, cooperative, and forgiving.	Unkind, antagonistic, self-centered, offensive, and uncooperative.
Neuroticism/Emotional Stability	Adjusted, self-confident, cool, unwavering, and resilient.	Nervous, awful, tense, doubtful, and neurotic.
Openness to Experience	Creative, flexible, probing, visionary, intellectual and innovative.	Artless, closed-minded, and shallow.
Extraversion	Reward-seeking, outgoing, garrulous, aspiring, enthusiastic, and assertive.	Shy, introvert, silent, unadventurous, and reserved.

Source: Personality traits and personal values: A meta-analysis. Parks-Leduc, L., Feldman, G., and Bardi, A. (2014). Personality and Social Psychology Review, 19(1), pp. 4.

The RIASEC Model of Personality

American psychologist John L. Holland developed a career choice theory based on personality types commonly known as Holland Occupational Themes (RIASEC). It is one of the most studied and applied ideas in the field of career choice. The theoretical framework of the RIASEC hexagon (*Figure 1*) consists of six basic personality attributes: realistic, investigative, artistic, social, enterprising, and conventional. Here is the description of John Holland's six occupational personality types:
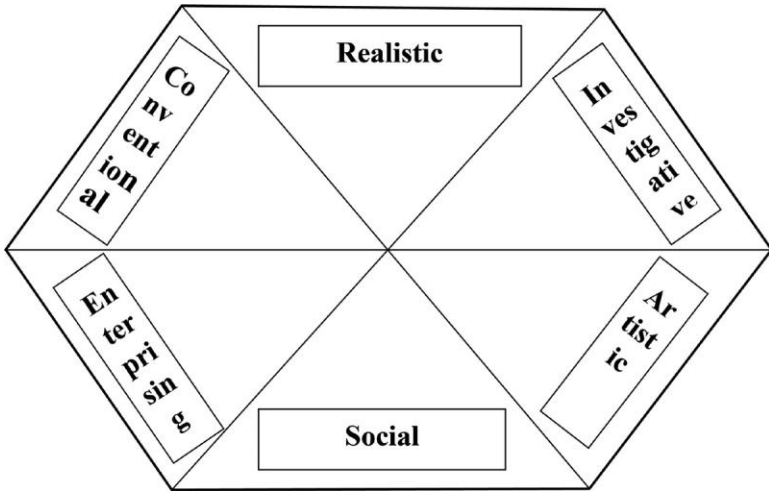
Figure 1: **John Holland's Hexagonal RIASEC Model of Occupational Personality**

i) *Realistic (R):* People with this trait like tasks that involve physical labor, motor coordination, skills, and other activities that are traditionally associated with men. They are not particularly social and value money, prestige, and power (Holland, 1997). Individuals who are realistic normally desire to learn in a task-oriented and practical context rather than sitting in a classroom for long periods. Realistic people speak straightforwardly and directly. They are proficient in mechanical pursuits but are not comfortable in interpersonal relationships.

ii) *Investigative (I):* Investigative individuals are not particularly gregarious and prefer to participate in tasks that require thoughtfulness, organization, reasoning, abstract thinking, and comprehension. In investigative environments, they use math and science to solve problems (Bastien, 2014). They like ambiguous tasks and may suffocate in structured settings. This type of person appreciates reasoning and resolving abstract and complicated problems. They frequently operate independently and do not pursue leadership responsibilities since they are attentive to solving innovative problems. They love science and consider themselves intellectually and scientifically capable.

iii) *Artistic (A):* Artistic people express themselves in many creative ways and use these ways to interact with others. These types of people

are creative, spontaneous, and novel and love ingenious activities such as writing, painting, acting in or directing stage productions, and composing songs. They are emotional, introverted, and feminine. This type seeks chances to express them through artistic conception. They have a preference for ambiguity and flexibility. The artistic surroundings are open and creative.

iv) ***Social (S):***Individuals with this trait are accountable, human-centered, optimistic and worried about the well-being of other persons. People with social inclinations like working with others but dislike intellectual or physically demanding tasks. This type, unlike realistic and investigative types, prefers close relationships. They prefer to participate in training, counseling, healing, and counseling others. They are concerned with resolving interpersonal conflict, love interpersonal relations, and enjoy social activities. This type prefers tasks that require them to perform as a part of a team, and resolve issues via interpersonal communication. They generally dislike tasks that require them to utilize machinery or equipment methodically.

v) ***Enterprising (E):*** People with this trait are energetic, ambitious, adventurous, dominating, manipulating, socially adept, and self-confident. Risk and power play are part of the entrepreneurial environment. Although they are normally good at verbal skills, they are inclined to utilize these skills for personal benefits rather than to assist other people. They exercise interpersonal, leadership, and persuasion skills to achieve organizational or financial goals, yet they may avoid routine or methodical work. They like public speaking, love actions that need to influence other people and seek out leadership positions.

vi) ***Conventional (C):*** People with a conventional mindset are conformists, well-organized, cautious, careful, and efficient. This type of person is preoccupied with rules and regulations as well as power and position. They prefer order and structure and so desire a structured work environment. They are adept at keeping and processing data, handling machinery, and preparing schedules. Conventional personalities pride themselves on being responsible, organized, and efficient, and they excel in administrative, clerical, and mathematical capabilities. These people perceive themselves as being deficient in creativity and imagination.

What is a Career?

A career is a person's lifelong collection of work-related and other relevant experiences, both inside and outside the organizations that establish a distinct pattern (Sullivan and Baruch, 2009). This definition includes perceptions of career events, options, and results. A career does not develop in a vacuum. Many contextual and personal elements impact a career path. For many individuals, a career is the part of life that involves work. From a professional viewpoint, it refers to the total of all jobs you may hold during your lifetime. These definitions, however, fall short of capturing the meaning of a career properly. In a broader and life-encompassing way, a career is the culmination of decisions that have an impact on social, educational, political, economic, and spiritual aspirations as well as life values and personality traits (Phifer, 2003). A person's career is a collection of individual perceived attitudes and behaviors. It is an integrated work-related activity during a lifetime. An individual's career is a series of employment-related positions, activities, duties, and experiences (Newton et al., 2003). According to Cetzee and Schreuder (2002), a career is a series of occupational experiences and duties that make up the working life of individuals.

Career Choice

The decision to pursue a career is a significant event in an individual's life. Success, commitment, and happiness depend on how well a person chooses his career. Wrong career choices or frequent career changes are detrimental to mental health. The right career choice depends on individual values. They are used to assess our own and others' behavior and attitudes. Values differ from one person to the next. Long-term beliefs create social and personal preferences that lead to a specific way of living and behaving or vice versa. It also enables us to distinguish between right and wrong. Good or bad, right or wrong, are all value judgments that differ from one person to another (Onoyase et al., 2009). Income, job satisfaction, security, respect, and achievement depend on the right career choice. Therefore, it has a significant impact on directing and shaping an individual's life. Different situational and organizational circumstances influence individual career choices. So, career choice is an essential component of an organization's recruitment, selection, and retention strategy (Edwards and Quinter, 2011).

- *Managers/Executives:* To manage or execute things properly requires good social interaction abilities. It also requires an outlook prepared

to accept modifications to the external setting. Getting things done efficiently and effectively necessitates socially dominant behavior. People who can keep control over their activities and accomplish their tasks under time constraints can handle their schedule according to their own mental contentment (Ackerman and Margaret, 2003). They tend to be more social and need to interact and negotiate with others to get things done.

In many situations, managers have to make decisions based on money, time, and supplementary resources constraints that make them fearful and emotionally unstable. As a result, emotional strength and the capacity to cope with certain circumstances realistically are required (Judge et al., 1999). They need to articulate and clarify their viewpoint to engage in effective negotiations. So, they need to be average extroverts to succeed in their life and work environment (Barrick and Mount, 1991).Executives with average extraversion and an openness to experience will perform better than others (Hussain et al., 2012).

- *Technical Experts:* People who select technical competence describe career success as gaining expert status in their chosen field. Technical experts place great importance on doing the job right and increasing their skills in a chosen field. They are not interested in managing but would like to take on a mentorship position, which would allow them to pass on their skills to others. Besides this, they prefer a functional management post that permits them to stay in their area of expertise. These people value learning and development opportunities at work because they want to improve their skills. Their sense of identity is strongly related to their job and any affiliated professional organizations. These people also value the opportunity to attend professional conferences and activities (Alkhelil, 2016).

- *Entrepreneurship:* People who want to be an entrepreneur require a risk-taking mentality and the personal ability to take initiatives to reach the pinnacle of success. Starting a new enterprise demands openness to experience and practical knowledge. Individuals who profit from new enterprises must have a propensity for dominance in their actions and strong social connections. They must be vigilant and creative in their activities to achieve an optimal result.

Entrepreneurs with high openness to experience are necessary to start and expand ventures in a competitive environment. This trait helps them learn and adjust to new changes in their environment.

For the proper operation of their business, they must be compact and manageable in their actions. As a result, having a highly conscientious personality trait allows individuals to be cautious and meticulous planners. (Zhao and Seibert, 2006). An emotionally stable individual can accomplish the best outcomes in the worst of situations.

- *Social/Nonprofit Making Professions:* Those who choose non-profit and social occupations must have strong empathy for others and be willing to sacrifice their rest, tranquility, and time to serve others. There must also be a willingness to rely on other people and engage with them. Working for others' well-being and empathy need agreeable personality traits. These people are constantly willing to accommodate and aid others at the expense of their resources. Low neuroticism personality traits are inept at feeling for others and having no care (Cattell and Alan, 2008). Extraverts achieve personal fulfillment by selecting and succeeding in these social services (Ackerman and Margaret, 2003).

- *Public Sector Professions:* To be successful in the public sector, people must have self-discipline, self-control, management skills, and conscientiousness at all times. The primary emblems of public-sector organizations are punctuality and pragmatism. Emotionally capable people can perform their tasks in time-constrained and stressful situations (Cattell and Alan, 2008).

  People who are calmer, relaxed, and emotionally stable have a better chance of succeeding in the public sector. People with a high level of neuroticism are not preferred for this capability because they are less likely to work within the time, rules, and attitude constraints. These issues are critical in the public sector (Mount et al., 2011). Conscientiousness is a personality trait that can assist people in achieving success in these fields (Ackerman and Margaret, 2003). Conscientious individuals can complete time-bound assignments (Cattell and Alan, 2008).

- *Engineers and Researchers/Scientists:* Engineers and scientists deal with many challenges and obstacles that require thinking from a different point of view. Therefore, they must be highly experienced, sensitive, and open to learning and recognizing new things (Cattell and Mead, 2008). The more an individual can explore their surroundings, the more capable s/he will beat dealing with all the facets of a single situation. As a result, he/she is more likely to contribute novel

approaches to a particular problematic situation (Ackerman and Margaret, 2003; Capretz, 2003). People who have a high openness to experience score are more likely to succeed in engineering, science, and research. Individuals who have a highly introverted personality are more likely to succeed in engineering, science, and research (Hussain et al., 2012).

Career and Personality Matching

This chapter's goal was to examine the link between personality and career choice. The findings agree that personal traits can influence an individual's career choice (Hossain and Siddique, 2012). Most people have selected managerial careers without being open to new experiences, because managing things necessitates social interaction skills in individuals and a mindset that is willing to accept ups and downs in external settings. It necessitates publicly leading attitudes to promptly adjust to these fluctuations to get things done effectively and efficiently. Individuals who have a high openness to new experiences are more likely to pursue careers in science and research. Individuals with a high extraversion score are more inclined to pursue technical careers. Conscientious and agreeable individuals choose management and executive positions. Individuals with a high level of neuroticism are required for technical and managerial positions (Alkhelil, 2016).

Kabir and Sajib (2014) explore that individuals who want to work for a renowned foreign or local leasing and financing institution are highly agreeable, open to new experiences, moderately extrovert, conscientious, and have low neurotic personality traits. People who like to work for national or multinational consumer goods companies are somewhat agreeable, open to new experiences, moderately extroverted, conscientious, and have a low neurotic disposition. Individuals who are moderately agreeable with low openness to experience, high conscientiousness, low extroversion, and low neurotic personality traits are eligible for government jobs through the Bangladesh Public Service Commission (BPSC). Those who choose to start new enterprises or other services have a high level of agreeability, a high level of openness to experience, a low level of conscientiousness, highly extroverted personality traits, and a high level of neurotic personality characteristics. These findings are summarized in *Table 2*.

Table 2: Career Preferences at Different Levels in Each Personality Trait

Career Preferences	Levels in each Personality Trait				
	Agree-ableness	Open-ness to Experi-ence	Conscien-tiousness	Extra-version	Neurot-icism
Renowned foreign or local leasing and financing institu-tions	High	High	High	Moder-ate	Low
National or multi-national firms pro-ducing consumer products	Moderate	High	High	Moder-ate	Low
Government jobs and services under Bangladesh Public Service Commis-sion (BPSC)	Moderate	Low	High	Low	Low
Entrepreneurship or other services	High	High	Low	High	High

Source: Do personality traits influence career decisions in Bangladesh? – A study on undergraduate business students of different public and private universities. Kabir, T., and Sajib, M. R. H. (2014). ASA University Review, 8(1), pp. 121.

Although John Holland's theory of occupational choice is more than sixty years old, it is still one of the most applied and most quoted occupational theories (Kennelly, Sargent, and Reardon, 2018). It concludes that individuals should pursue job environments that fit their vocational interests to be successful and satisfied (Hartmann, Heine, and Ertl, 2021). Holland's theory proposes that people express their personalities while choosing a career. Compatibility between personal traits and work environments determines occupational stability (Greenhaus, Callanan, and Godshalk, 2019). The match between Holland's personality traits and career decisions, explored by Ahmed, Ahmed, and Salahuddin (2019), Holland (1985), Kidd (2006), Rounds, McKenna, Hubert, and Day (2000), is present in *Table 3*:

Table 3: **Holland's Typology of Personality and Career Choice**

Construct	Career Choice
Realistic	Agriculture, carpentry, housework, mathematics, science, protective services, waiter/waitress, dry cleaner, army, navy, and air force.
Investigative	Researcher, scientist, engineer, medicine, computer programmer and professor.
Artistic	Musician, composer, stage director, writer, actor/actress, interior decorator, fashion designer, and photographer.
Social	Teacher, clinical psychologist, nurse, social worker,counselor, travel agent, airhostess, and receptionist.
Enterprising	Insurance agent, real estate, politician, salesperson, manager, business executive, and car dealer.
Conventional	Court reporter, bookkeeper, financial analyst, government officials, cost estimator, auditor, banker, and tax expert.

Conclusion

Is it necessary to have a definite personality when choosing a career? The Big Five Model and the RIASEC Model of personality traits were used to investigate the answer to this question. Selecting a profession early in life can help people build their careers efficiently. Future employment success depends on a career choice that matches one's personality. It facilitates individuals' success in their careers and assists in achieving organizational success. So, companies must recruit and select personnel based on appropriate personality attributes for performing the task to ensure superior quality and interruption-free productivity. Individuals should first identify the personality type they belong to, along with a thorough understanding of the constructs that comprise that personality, and then choose the most suited job to prevent work-related frustrations, dissatisfactions, and other negative results. The fit of the incumbents' traits with the job requirements is critical to their career success. Aligning personalities with careers can produce optimal results.

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Role of Big Data in Achieving Competitive Advantage

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Introduction

The scope and area of Big Data have gained significant momentum from the tandem of academics and business parlance over the last couple of decades. It assists organizationsin gaining business insights, fostering a competitive edge, and transforming whole business processes (Dahiya et al., 2021; Shah, 2022; Talwar et al., 2021; Wamba & Mishra, 2017). According to McKinsey (2011), Big Data would be a unique sourceofimproving the productivity, competitiveness, and innovation of the business organization. Similarly, McAfee et al. (2012) argued that Big Datacan enhance the entire decision-making function of a firm.According to Brown et al. (2011), the reasoning behind this transformation ofthe entire decision-making function of a firm liesin the caliber of Big Data to change the footprint of competitiveness by fostering innovation, shifting business ecosystems, and revamping business processes.

Therefore, it is significant to study Big Data due to its enormous capability of transforming entire business processes. Scholars have argued that competitive advantage in this era comprehensively depends on the firm's ability to work with Big Data, enabling firms to obtain business insights and surpasstheir rivals (Oh et al., 2012; Wong, 2012). In this case, McKinsey &Company argued that Big Data wouldundoubtedly add value for the global economy while improving the competitiveness and productivity of the firms and eventually leveraging an ample surplus for the customers (Manyika et al., 2011).

Concept of Big Data

Although Big Data is generating tremendous attention worldwide these days, its genesis can be traced back to the mid-1990s. Diebold (2012) pointed out that in the mid-1990s,during the lunch-table discussion at Silicon Graphics Inc., Big Data was most likely originated with the hand of John Mashey. However, the increasing prominence of Big Data can be linked to the reality that the term Big Data was google-searched about

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0.252 million times in November 2011 (Flory, 2012) and later achieved the remarkable figure of 801 million hits in October 2015 (Mishra et al., 2017). The phenomena are predominantly driven by the increasing usage and widespread diffusion of mobile phones as well as social networking sites, i.e., Facebook, YouTube, WhatsApp, Twitter, and the Internet of Things (IoT) related concepts (Wamba et al., 2017).

According to some researchers and practitioners, Big Data refers to data collected through a wide variety of sources, including satellites, sensors, social media feeds, photographs, video, mobile phone, and Global Positioning System signals – the amount of data generated each day is around 2.5 quintillion bytes (Brown et al., 2011; Jones, 2012; McAfee et al., 2012). Researchers have attempted to define Big Data from several viewpoints in the past literature. One of the most simple and straightforward definitions of Big Data is the *"datasets whose size is beyond the ability of typical database software tools to capture, store, manage, and analyze"*(Manyika et al., 2011, p. 1). This definition reflects the vast volume and variety of data that is impossible to deal with typical tools and software that companies usually use. While focusing on the attributes of Big Data, Beyer & Laney (2012, p. 1) defined that *"Big data are high volume, high velocity, and/or high variety information assets that require new forms of processing to enable enhanced decision making, insight discovery, and process optimization"*. Considering the massive volume, variety, and velocity of information, the preceding definitions emphasize the utilization of Big Data.

Big Data, howbeit, is data that is massive in volume, velocity, and variety that continues to increase drastically over time. It is a data set that is so huge and complicated that no typical data management technologies can effectively store or process it.

Characteristics of Big Data

Some scholars and practitioners have identified 3V's while characterizing Big Data – volume, variety, and velocity (Beyer & Laney, 2012; Kwon & Sim, 2013; McAfee et al., 2012). First, the volume of data shows the tremendous amount of information available, which has expanded dramatically in recent years. There is a broad range of sizes for Big Data, ranging from many terabytes to petabytes. Volume may be defined as "a large amount of data that either consumes huge storage or entails a large number of records"(Wamba et al., 2015, p. 3). Because of the significant rise in the quantity of data passing over the internet every second, businesses

now can deal with several petabytes of data in a single dataset (Mishra et al., 2017). For example, approximately 1.5 billion new data points are added to Tesco's database every month. More than 2.5 petabytes of data are stored in the data warehouse of Wal-Mart (Manyika et al., 2011). Second, *variety* reflects the reality that data is generated after a broader range of formats, sources, and multidimensional data fields that include both organized and unorganized data. (Russom, 2011). For example, Procter & Gamble established a group of about 100 analysts from several departments, including marketing & consumer research, production &operations, supply chain, research & development, and human resource, to improve company performance by evaluating interrelatedness within firm's domains (Davenport, 2006). Third, "the frequency or pace at which data is generated and/or delivered is referred to as *velocity* "(Russom, 2011, p. 7). For instance, Amazon maintains a continuous stream of customers, suppliers, and new products to its ever-growing list of items, and the company maintains its commitment to on-time deliveries (Davenport, 2006).

In addition to these 3Vs, researchers (Gantz & Reinsel, 2012; Gogia, 2012; Oracle, 2012)have incorporated an additional 'V' – Value focusing on the needs of reaping economic advantages from Big Data. The fourth V, *value,* reveals the economic advantages of Big Data. Businesses must recognize the vast quantity of data available and extract what is valuable from that data to do additional analysis (Gogia, 2012; Oracle, 2012). For example, Premier Healthcare Alliance employed improved data analytics and exchange to enhance patient well-being while simultaneously cutting costs by approximately US$2.85 billion (IBM, 2012).Some scholars (Gandomi & Haider, 2015; White, 2012) have recommended the fifth dimension of 'V' – *veracity* to identify the "unreliability inherent in some sources of data" (Gandomi & Haider, 2015, p. 139). It refers to the quality and significance of data and the degree of confidence placed on the data source (White, 2012).For example, because it has between 20-50 times variations of the same data distributed across its many data marts, eBay Inc. was confronted with a massive data replication issue. Later on, eBay established a data hub (internal website) that allows managers to filter out data duplication and other information (Davenport et al., 2012). Finally, Gandomi &Haider (2015) identified the sixth component of 'V' – *variability* to refer to the irregular pace and varying data flow rates from many sources. Complexity emerges owing to the fact that Big Data is derived from many sources. For instance, to make sense of the data, the organization must first comprehend and then clean it (to deal with

variability) (Mishra et al., 2018).

To sum up, altogether, these six characteristics, i.e., volume, variety, velocity, value, veracity, and variability, can make a fine-tuning illustration of Big Data that creates a probability for firms to achieve competitive advantage.

Sources of Competitive Advantage

Competitive advantage, as popularized by Michael Porter in the 1980s, indicates a company's capacity to generate more profit than its rivals (Porter, 1985). Such a more profit-generating ability is evaluated by a company's stance in its industry and its capacity to maintain that stance despite challenges of new entrants, existing rivals, suppliers, and even shifts in consumer preferences. Companies' strategy is targeted to control every area of business activity and even planned to guarantee that the industry is protected against new entrants. Exclusive contracts with suppliers, intense advertising to orient customer preferences, clandestine price-fixing, and extensive capital investments are just a few moves directed by companies to play in the competition chest board (Morabito, 2015).

Some other scholars have claimed that the competitive advantage could be attained through efficient utilization of firm's resources, comprising nurturing companies own talents – employees, condensing the transaction costs in the value chain, and increasing competencies (David et al., 2013; Hill et al., 2014). Scholars who claim that competence is a springof competitive advantage emphasize that companies concentrate on building their crucial capabilities, "a set of valuable, rare, imperfectly imitable, non-substitutable resources" that can boost a business towards competitive advantage (Bartosik-Purgat & Ratajczak-Mrożek, 2018; Wu, 2013).

However, with the growth of e-commerce and the 'maverick' entrepreneur, the firm's mentality toward control versus openness has shifted, and flexibility as a reservoir of competitive advantage became more prominent (Lestari et al., 2020). Companies with a high level of operational and managerial flexibility can respond swiftly to the challenges that emerge from changing preferences of the customer, new entrants' changes in industry conventions, and unexpected rival manoeuvres (Dubey et al., 2018; Rialti et al., 2020; Rukanova et al., 2019).

As a result, the strategic game has evolved from a deliberate and slow stationing on the chessboard of competition to a fast-paced game in which tempo is critical, and Big Data-driven business strategies accelerate the

tendency to achieve more operational and managerial flexibility along with the effective utilization of organizational resources. For example, with the help of real-time and location-based offerings powered by Big Data have already mushroomed these trends and become a part of most inner-city inhabitants' daily lives with the hand of Rokomari.com, Khaas food, Foodpanda, Pathao, Bongo, and so on.

The Role of Big Data Achieving Competitive Advantage

Because of its enormous operational and strategic potential, Big Data is now widely seen as a game-changer, allowing increased corporate efficiency and effectiveness via enhanced decision-making (Wamba et al., 2017).To fully benefit from the disruptive potential of Big Data, companies must align it at their strategic level. However, how businesses integrate this technological trendinto their existing strategy will indeed depend on the degree of their business orientation. Nevertheless, several scholars have argued that Big Data has a favorable impact across strategy, operation, and hence to achieve competitive advantage(Akter et al., 2016; Woerner & Wixom, 2015).

First, Big Data has immense potential to transform how organizations identify and connect with their consumers. Businesses may undoubtedly improve their existing marketing strategies by using Big Data technologies. Companies craft market penetration strategies while capitalizingon the power and vigor of Big Data to retain the current customers by performing repetitive sales. In addition, new customer acquisition strategies can also be tailored with the help of Big Data (Paharia, 2013). For instance, cross-selling uses a firm's familiarity and expertise with its market to sella variety of products and services to the same customers. Banks, in particular, have practiced analyzing large volumes of their clients' transactions in connection to social networking sites to recognize their preferences better and develop new service offerings to their clients (Rahman & Aldhaban, 2015).Furthermore, identifying a new market niche is now the actual strength of Big Data. The need to approach the market in broad demographic chunks is no longer necessary for businesses. Instead, they may employ emerging analytics to uncover potential niches or even partition current target markets into more cohesive and smaller sects to maximize profitability (Nemati & Khajeheian, 2018).

Second, combining Big Data with other emerging technologies, i.e., Hadoop Ecosystem, Artificial Intelligence, NoSQL Database, TensorFlow, Beam, Blockchain, and Docker, may spur design-driven innovations.

These innovations are crunch-point of competition because they bring advanced features that customers did not assume, but eventually, they love (Trabucchi & Buganza, 2019). For instance, Apple did not alter the way we make phone calls from our mobile devices, but rather the things we do with our mobile and the way we think about it; there is now an app for anything we want to do, from selecting color combinations for our baby's room to time passing by playing angry birds to reading the news to enjoying a movie stream to calculating the measurements of our rooms, and everything. When it comes to iPhones, it is no longer just a phone anymore, it is a multitasking device, and Apple is not solely a phone-manufacturing company; it's the company that has revolutionized our regular lives, and the majority of folks enjoy it.

Third, Big Data may change not just how we approach the market with a product or service, but also how we create the product or service from the very beginning. Open innovation is typically based on the notion that businesses should not confine themselves to harnessing ideas from inside the organization only; instead, useful ideas might also arise outside the organization. Big Data brings this concept to a new height (Del Vecchio et al., 2018). The vast volume and variety of data outside the organization can be a great source of innovative product design. Further, recognizing the product requirements, social networking sites canalso be a powerful source for addressing customer complaints and preparing product-centric feature lists. It helps organizations get better insights into the market and even respond accordingly (Fortunato et al., 2017).

Apart from these, according to McKinsey (2011), Big Data can add value to businesses utilizing some different ways: first, it enables firms to make experiments, i.e., experiments to change or modify a process that companies may generate and analyze vast volumes of data from these experiments to uncover potential performance improvements. Second, more specific customer segmentation would be created via Big Data, which can then be utilized to tailor particular offerings for customers. Third, new business models, products, and services may be created or improved using data. Big Data can also help enhance existing ones while addressing current problems to enhance future versions of the product or service.

Due to its substantial strategic and operational potential, Big Data has been seen as one of the robust weapons for achieving competitive advantage. Big Data changes how organizations identify and maintain their relationship with customers. Further, from experiments to modify the existing features and even new offerings, any firm may utilize the potential

of Big Data to accelerate design-driven innovations. Thus, improving offerings based on customer data would be indispensable for staying in the swirling competitive game, and Big Data will indeed become the game changer paradigm of competitive advantage in the decades ahead.

Conclusion

The idea and application of Big Data have been gaining significant momentum in recent years. It reflects the vast amount of data dominantly unstructured, and some are semi-structured, which come from a wide variety of sources, including social media platforms. Due to its immense operational and strategic potential, Big Data is now widely seen as a game-changer, allowing increased corporate efficiency and effectiveness via enhanced decision-making. Big Data enables businesses to bring higher transparency of information, facilitates accurate and deeper insights, and eventually improves decision-making in all departments of organizations. It helps companies tailor offerings to specific target markets, fosters design-driven innovation, champions cloud innovation, and finally achieve overarching competitive advantage.

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Robotic Process Automation

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1. Introduction

Today's businesses are undergoing a massive transition from old, outdated technology to new ones. The new ones are very rapidly forming, and businesses that are going to be successful must adapt to this shift. Robotic Process Automation (RPA) uses robotic technology to automate various repetitive tasks in business. RPA is gaining popularity due to its ability to decrease costs, streamline processes, and improve customer experiences. Another benefit of RPA software is that it may be implemented without the need for business units to learn new tools or seek information technology (IT) help, as well as without modifying the underlying IT architecture of a company. As the popularity of RPA increases, enterprises will need to integrate RPA process automation into their IT platforms. Although RPA automatics can accelerate a previously managed business process substantially, it may be unacceptable if applications or processes change.

2. Definition of RPA in the Human Resource Department (HRD)

Businesses utilize robotic technology to automate numerous repetitive activities via RPA. The RPA-simplified HR operational procedures include employee interactions, recruitment, selection, training and development, benefits and remuneration and general HR tasks. RPA in HRM decreases the amount of time workers spend on these activities, allowing them to focus on other important responsibilities like as talent development, retention, and policy execution. As a consequence, productivity and efficiency are enhanced in the HR Department's varied tasks. RPA employs a number of robots to do various tasks in order to be more precise and efficient. By utilizing RPA a firm can use a totally virtual workforce. RPA is defined as a relatively new technique for process automation based on software and algorithms that attempt to imitate human work and execute manual tasks by interacting with information systems via current user interfaces (Gejke, Mendling, &Ratia, 2018). Van Belkum et al. (2018) observed that most RPA is used to gather and analyze existing processing applications, to modify data, to trigger reactions, and to engage from a commercial point

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of view with other digital systems. As a result, it is regarded as "suitable for large volume, repetitive, boring, well-structured, and standardized activities that do not need subjective judgment, originality, or interpretation skills." Aguirre (2017) claimed that RPA solutions are minimally intrusive, simple to use, affordable, and straightforward to install since RPA rests on top of current information systems, does not store transactional data and does not require a database. Aguirre et al. (2017), Kirchmer (2017) and Hallikainen et al. (2018) indicate that the perceived value of RPA is mostly connected with improving organizational performance and lowering costs by eliminating human labor in normal business operations while simultaneously improving work quality.

The notion of RPA is lately broadened to incorporate artificial intelligence (AI) and cognitive computing. With the advent of improved digital technology, RPA may be redirected from completing repetitive and error-prone routines in corporate processes to more complicated knowledge-intensive and value-adding activities (Anagnoste, Gejke & Tsaih, 2018). The bulk of the 400 businesses examined by Deloitte (2017)have begun their RPA journey with over a quarter planning to do so within the next two years. They indicate that payback times are around one year on an average and that they fulfill or surpass their objectives of reduced costs, accuracy, timeliness, flexibility and increased compliance (Deloitte,2017). According to Forrester (2019), over 4 million robots will be employed to do routine tasks but the focus will shift to AI integrations and RPA analytics enhancements. Likewise, Everest Group,(2018) alludes to the need for enhancing analytics and cognitive skills, while most purchasers have RPA solutions. Despite the significant advantages of RPA, only 5% of the firms are researching RPA (Deloitte,2017).The success of RPA initiatives depends on organizational competence and knowledge of the business goals of RPA deployment. According to Suri (2017), the major difficulties for automating procedures are highlighted via incomprehension of what and where the RPA implies, a lack of management support and a concern that the workforce would loss jobs. An organizational transformation strategy, a change of corporate culture and a change of thinking might assist bridging the gap between IT and business RPA (Deloitte, Suri 2017&Lacity 2016). Alternatively, participants from the Everest Group (2018) regarded strong customer support, training and educational resources as significant drivers of RPA adoption as well as RPA maintenance services and a solid RPA vendor ecosystem for further technologies. Furthermore, the introduction of new technology raises concerns regarding the administration of robots, their central control, and governance (Forrester, 2017).

3. Why do HR operations need to be modernized?

The managers of human resources are under continual pressure to recruit and maintain excellent personnel. To guarantee that the company's operations and growth go smoothly, they must establish a favorable work environment for workers and good relationship with a number of departments. HR managers are faced with a variety of quantitative and qualitative responsibilities on a daily basis. Processing employee salary issuance is an example of a quantitative task. It is a qualitative task to discuss with an employee about his or her perspective of the firm.

The challenge for HR managers as the firm expands is to strike a balance between quantitative and qualitative duties. HR managers tend to focus more on quantitative tasks since they are easier to document and report. However, if the emphasis on qualitative activities fades, it will result in greater problems in the long run.

Quantitative tasks need a significant amount of time to accomplish, are repetitious, need a lot of paperwork, and are, above all, tedious. In that cases, the robotic process automation may help. RPA adoption leads in 10-20% savings on HR procedures and, more generally, on total company processes, according to Deloitte research.

4. Applications of RPA

Some of the top applications of RPA include the following:

➢ **Excellent customer service**: RPA supports companies to provide improved customer service through the automation of contact center tasks like as e-signatures validation, scanned documents and automatic approval/rejection verifying information.

➢ **Accounting:** Accounting for operational activities, general accounting, reporting on financial transactions and budgeting are all areas where RPA is used.

➢ **Banking and financial services:** RPA is utilized to automate payments of foreign currencies, openings and closings of account, requests for audits and the processing of insurance claims in the financial services industry

➢ **Healthcare:** Patient records, claims, customer service, account administration, invoicing, reporting, and analytics are all handled using RPA in medical companies.

➢ **Human capital:** HR operations like as onboarding and off boarding, updating employee information, and time sheet submission may all be automated with RPA.

➢ **Managing the supply chain:** RPA may be utilized in procurement supply chain management, order and payment automation, inventory monitoring and shipment tracking.

5. Used Cases for Robotic Process Automation in HR

These are supported by numerous blogs, editorial columns, and articles.

➢ **Screening of resumes and short listing of candidates**

Today, employees do not have to take a lot of time to go through a number of resumes and application forms for available employment. Software robots can quickly collect all of the data and compare the information to the job requirements list. These standards might be considered as pre-determined guidelines for the selecting process. The top applicants will be contacted and invited to interviews, while those who do not meet the requirements may be rejected.

➢ **Administration of offer letters**

The content of offer letters must adhere to different sets of rules depending on the applicant being considered. These laws are often kept in a variety of systems and databases, making manual verification and cross-checking time-consuming and error-prone.Software robots, on the other hand, can swiftly gather all of the necessary data, write the offer letter, send it, and track the suitability of returned papers.

➢ **Orienting new employees**

When a new colleague joins the team, data from several systems must be synchronized in order to generate a new user account, email address, application access permissions, and IT equipment access rights, among other things. In order to discover agreement between the employee's profile and preferences and standard corporate practices, data integration capability is required.The user account may automatically activate a specific template for the onboarding procedure using robotic process automation, which streamlines the whole procedure. The Bots,an autonomous program on the internet may then make rule-based judgments about which credentials to assign, which onboarding papers to provide, and so forth.

➢ **Bottom of Form**

➢ **Management of Travel and Expenses**

Manual processing may result in difficulties such as late expense submissions, missing receipts, ambiguous expenditure explanations, and so on, all of which have a detrimental impact on compliance and employee satisfaction. Individual costs may be checked against both corporate laws and external expenditure criteria by software robots, making the process more efficient.

➢ **Data Management for Employees**

Current and former workers, applicants, contractors, and new recruits are all referred to as "employees." The term 'data' refers to corporate policies, payroll, and benefits. These requirements are intended to stress that managing employee data necessitates coordinated, consistent operations across many databases and data types.This is readily handled through robotic process automation, which reduces the risk of erroneous data entry. It guarantees data consistency across various databases by performing data cleaning activities on a regular basis.

➢ **Keeping Tack of Attendance**

Something like "learned carelessness" might get in the way of employees using the absence management system properly. At this point, size does matter, in the sense that the larger the firm, the more difficult it is to analyze time records correctly.

Self-reports may be cross-checked against time documented in the corporate record, and discrepancies can be reported to HR.

➢ **Reporting and Compliance**

Given the necessity to adapt to changing circumstances in the workforce's socioeconomic position and to provide workers with acceptable health, safety, and welfare circumstances, labor laws are among the most often modified. By integrating data from different systems and utilizing robotic process automation in HR, organizations can better comply with continuously changing compliance laws and prepare reliable reports.

6. Bangladesh and Robotic Process Automation

This is supported by the findings of the research (Anagnoste, 2017; Aguirre &Rodriguez, 2017;Suri, 2017;Deloitte& Forrester, 2017).

➢ **Robots in industrial plants**

Robots are employed in industrial operations. Robots in most industrial

facilities are made up of a single hand (multi-linked manipulator) connected to a fixed surface. One of the most common types of producers is the gripper assembly. Despite its status as a developing country, Digital Bangladesh is presently assuring robotics automation in a variety of areas. The usage of robotics to open restaurant doors is becoming increasingly popular in Bangladesh. Many artificial intelligence experts believe that in the not-too-distant future, robots will serve as waiters. The use of robots in different production management, raw material collecting, and garment processing is projected to grow day by day.

➢ **Service Robot**

The most prevalent robots in businesses are robot weapons and manipulators, and they are mostly employed for manufacturing and distribution. The phrase "support robot" has no official definition. According to, International Federation of Robotics (IFR), service robot is a semi-autonomous or completely autonomous organization and is designed for people's convenience. Bangladesh is not trailing behind the rest of the globe when it comes to the usage of robot automation in different services. Auto robotics is being used in different web-based services in Bangladesh, in addition to its application in real life. The web-based robot, however, is not a real-life robot, such as Chatbots robot. Robots are also being studied for their usage in e-commerce sites and medical services. In Bangladesh, it is anticipated that the service would have a better start.

➢ **Robots in the education**

Bangladesh faces a difficult problem in ensuring the usage of robots in education. Various institutions around the country, nevertheless, have been doing robotics research, and as a consequence, they are verifying the use of automated robots in various locations. For example, in agricultural, auto robots are being used. Various essential chemicals, including hazardous pesticides, can be applied to field crops using this method. Furthermore, based on the water level in the ground, the robot will activate the automated water pump. In robotics, such outcomes can be discovered. In Bangladesh, however, there is no automatic usage of robots in teaching.

➢ **Military robots**

Military robots include SWORDS (Special Weapons Observation Remote recon Direct action Systems) robots, which are now utilized in ground-based warfare. It has been granted the capacity to employ a variety of weaponry as well as certain automated battlefield monitoring capabilities. Around the world, military robots are rapidly being employed in fighting

and defensive systems. But at the other side, Bangladesh is far behind. Then, in recent years, modest modifications have been observed in several military locations in Bangladesh. Bangladesh Army also guaranteeing that various forms of automated robots, such as drones, are used to carry out various tasks. Although it has not been widely implemented, there is evidence of the employment of various robots to put out fires in the fire department.

➢ **Messy, hazardous, boring, or inaccessible work**

Many tasks can be assigned to robots rather than people in the future. Some tasks, such as cleaning the home, are boring, while others, such as visiting a volcano, are dangerous. Other tasks are physically difficult for individuals to do, such as exploring another universe, cleaning within a lengthy pipe, or conducting laparoscopic surgery. Auto robots of current technology can play a far greater function in locations where humans cannot readily access or create hazardous gases from trash, or where there is a risk of damage when people come. As a trial project, road cleaning with auto robots has begun in a few Bangladeshi districts.

➢ **Robotic mining**

For millennia, people have been collecting natural resources from mines. And individuals have been excavating the dirt for many years to accomplish this difficult task. Trains were used to provide easy access to mine raw resources. However, owing to the shift in trains, the employment of robots in mining operations is rising, and the danger is lower in this job. The employment of robots in the production of different mineral resources in Bangladesh, such as coal from Dinajpur or stone from the Sylhet River's bottom, is likely to begin at some time.

➢ **Healthcare**

 Bangladesh has changed over time, as has the medicine profession. Robots are currently being used in a variety of surgical procedures in Bangladesh. Open heart surgery is being conducted using a tiny robot, which greatly reduces the danger of the procedure. Experiments like as endoscopy and colonoscopy, which provide images from within the body for the treatment of robots, are also highly beneficial. Robots will not be utilized in future testing such as ECGs, ultrasonography, or X-rays. It is believed that by scanning the skin, robots would be able to determine the amount of blood components and diagnose the condition.

➢ **Tiny Robot**

Nanotechnology is being used in research projects all around the world. It is fairly hardened, despite the fact that it is considerably smaller in size since it is formed of molecules. In many research projects, small robots as thin as hair are highly popular. BRAC the only University of Bangladesh has handed over the robot to NASA in preparation for the launch of Chandrobot-2 into space. That was a high level of nanotechnology.

➢ **Telecom Sectors**

Banglalink Digital has chosen Genex Infosys Limited, a publicly traded Information Communication business in the nation, as a key partner to deliver robotic process automation (RPA) services. It says that Genex Infosys Limited was one of the first companies in Ban- gladesh to work with RPA, with a top-notch dedicated staff to col- laborate with IT heavyweights like UI Path. Grameenphone is the only telecom operator from Bangladesh to be recognized for RPA integration in internal operations, as determined by an experienced team of worldwide adjudicators.

7. Difference between RPA and AI

In most situations, the confusion between artificial intelligence and robotic process automation has been seen. But two are very different in actual terms.

RPA	AI
RPA stands for Robotic Process Automation	Al stands for Artificial Intelligence
RPA (robotic process automation) is a kind of automation technology for business operations that seeks to automate manual and repeat procedures.	Al refers to the simulation of intelligent behavior in machines, in which machines are designed to learn and adapt to their surroundings.
It is a technology that enhances commercial values through process simplification and increased company efficiency.	Al is intelligence shown by machines that exhibit at least some of the same behaviors as humans.
The objective is to concentrate on tedious, repetitive chores that are a complete waste of time and effort.	The goal is to build technology that enables machines to think as do people.

Source: www.differencebetween.net

8. Benefits of Implementing RPA Technology

RPA is presented in current literature as the future of automation for all corporate enterprises. The following are the benefits and pitfalls of this technique mentioned in existing research. This is supported by the findings of the research (Anagnoste, 2017;Aguirre &Rodriguez, 2017;Suri, 2017;Deloitte& Forrester, 2017).

➢ **Low risk and easily integrated:** RPA is a non-invasive low-risk technology easily integrated with a current system that allows the HR team to build a platform, continuously expanding with new algorithms and machine learning tools.

➢ **Increased productivity:** RPA may free up workers to focus on high-value jobs like employee engagement and retention, which di- rectly contribute to the company's overall strategic goals, therefore improving overall productivity.

➢ **Scalability:** When used on a broad scale and scaled up or down according to the system's demands, RPA has a negligible cost per effort, resulting in zero or no wasted effort for the system as a whole.

➢ **Accuracy:** Its computational superiority, which vastly exceeds its human equivalents, allows it to provide exact output and make judgments quickly when it comes to data analytics.

➢ **Duration:** RPA programs last 9-12 months, with a 30 % to 200 % return on investment in the first year.

➢ **Consistency:** It is designed to provide flawless replication and error-free performance as well as to eliminate output fluctuation over the course of an operating period.

➢ **Reliability:** They can work 24 hours a day, seven days a week and do not require any sick days.

➢ **Flexibility:** Regardless of the deployment environment, RPA is an industry-agnostic technology that follows a well-programmed method.

9.Shortcomings of RPA

RPA is not without shortcomings. The main shortcomings identified by the experts are as follows:

a) **Turnover:** RPA robots do not usually replace workers, although it is a possibility. Furthermore, companies may utilize bots to manage in-

creased workloads; they won't need to hire extra humans who would have handled the job otherwise.

b) **Massive Technology:** As more robots are introduced to accomplish more duties, organizations are at risk to face difficulties in managing and maintaining them.

c) **Increased Complication:** When RPA is not properly documented, controlled, and governed, it might result in layers upon layers of software. It increases the complexity and makes it more difficult to execute business changes.

d) **Exaggeration of Troublesome procedures:** Experts say that businesses that automate processes without first reviewing and, if required, reengineering and optimizing them, automating problematic processes may arise. This entails magnifying inefficiencies, and mistakes with the process.

e) **Thwarted transformation:** Management of the enterprise aiming to support RPA to accomplish its digitalization goals, needs a comprehensive strategy to prioritize automation activities and a clear knowledge of how these projects fit within their broader strategic objectives.

10. Conclusion

Even with the introduction of robots, a firm is only as good as its workers. Robots will assist organizations in streamlining their processes and distinguishing between individuals who require their unscheduled time. RPA is a relatively recent technology, enabling people to replace and automate repetitive activities and therefore, engage in more difficult tasks which may provide value for the company. RPA is a disruptive technology that is still in its early stages with already valuable results according to reports from consulting businesses found byDeloitte& Forrester (2017). It has the ability to collect and condense data quickly. It can also help an organization to save a lot of money. It also allows HR to concentrate on responsibilities such as resolving employee concerns. As a result, their work satisfaction will rise, and they will be able to concentrate better on organization success. Assigning monotonous daily duties to a robot, therefore, provides a significant benefit.

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Authentic Leadership: A Critical Review

Nuray Akter[1]

Introduction

The world is passing with serious crisis moments at different issues in different sectors of development and peacefulness. Most importantly, the educational sector, industrial sector, and service sector are priorly considerable. And authentic leadership (AL) is an emergent argument to develop and peaceful living of a nation with the right directions of organizational leaders of different sectors. Because, the authenticity of a leader must be the best way of identifying and resolving such type of crisis in a complex & competitive working environment (Kempster, Iszatt-White, & Brown, 2018; Fries-Britt, & Snider,2015).

As authentic leadership (AL) is implicated with leadership; thus, first of all, an overview of leadership and then authentic leadership (AL) and its dimensions, are reviewed subsequently:

1. Leadership in General Perspectives

In the 20th century, the scientific studies of leadership started and a maximum of the researchers or scholars have suggested more than 400 (four hundred) interpretations of leadership (Rost, 1993).

Theassessmentsofleadershipwerestudiedforafewdecadesandhavealongnumberof relationships with employee commitment, the performance of the workplace, cultures, and well-being of workers (Calderón-Mafud, Moreno, & Colunga-Rodríguez,2018) that concerned with a process of influencing individuals to support and achieve worthwhile results while acting with respect, care and fairness for the well-being of all involved (Acar, 2012; Gatling, Kang, & Kim, 2016; Blanchard,2018).

"Leadership has been approached as a feature, which shows the ability to influence based on

the charisma and motivation to make the followers get act beyond their own expectations of work generating a high performance and making collective efforts to achieve shared goals" (Yukl, 2009; Avolio, Walumbwa,

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&Weber, 2009; Gil, Alcover, Rico, & Sánchez-Manzanares,2011). And in the educational sector, leadership necessity depends on sharing the work environment, employees' affordability, ethical-commitment, and authentic contribution by all of the concerned individuals with proper duties and responsibilities of leadership functioning (Salahuddin, 2012; Sperandio, 2005).

Again, the conceptualization of leadership is concerned with a procedure by which an individual attracted a team of persons or employees to reach a pre-selected objective and explained various theories, approaches, and areas of leadership where authentic leadership is one of them (Northouse, 2018; Calderón-Mafud, Moreno, & Colunga-Rodríguez, 2018).

Hence, leadership concepts are concerned with numerous ideas, theories, approaches, styles, issues, and features. And authentic leadership is one of the most-recent approaches or areas or styles of leadership.

Notion of Authentic Leadership

One of the most modern ideas of leadership is authentic leadership which is necessarily applicable in today's complex world. It is an approach to the authenticity of a leader, encouraging or stimulating the subordinates or followers to be more open; appreciating individual and team performance and their thinking-ability expansion, appreciation of creativity, and committed working environment (Iszatt-White, Carroll, Gardiner, & Kempster, 2019).

A positive, genuine, transparent, ethical form of leadership is known as authentic leadership. Presently, it is introduced as a positive assumption for leading various organizations in facing recent challenges (Avolio & Gardner, 2005; Walumbwa, Avolio, Gardner, Wernsing, & Peterson, 2008).

Authentic leadership (AL) is one of the most interesting leadership approaches that developed to serve people with authenticity, ethicality, and trust, and be useful to others through the appropriate position that a leader has; thus, the way of leader-member or follower behaves, values, beliefs to reach organization's combine purposes, must have to deeply understand by an authentic leader (Calderon-Mafud, & Pando-Moreno, 2018; Kempster, Iszatt -White, & Brown, 2018).

Reviews for Authentic Leadership (AL)

At the end of the twentieth century, one of the newest leadership forms/ concepts has arisen and it is the authentic leadership construct that has a

focal point on an individual's ethical and authentic activities, trustiness of self, and followers' functionings. Authentic leadership basically depends on the authenticity of a leader where "authenticity means owning one's personal experience, thoughts, emotions, needs, preferences, or beliefs, a process captured by the injunction to oneself behaving in accordance with the true self" (Avolio & Gardner, 2005; Miniotaite & Buciunience,2013).

Thereareanumberofresearchstudiesonimpactidentificationandrelationshipassessmentof authentic leadership, firms or employee commitment, and outcome of work activities at different levels of individual employees, while other researchers conducted the empirical study at the group or team level in China, the UK, Europe or USA on each of the dimension of authentic leadership (SA, IMP, BP, and RT). Team or group performance, self/group efficacy, and working commitment have been significantly affected by the authentic leadership in many organizations, and sometimes, links between authentic leadership and collective eligibility, team activities, and committed performance showed a significant mediated role in the different organization (Emuwa, & Fields, 2017; Semedo, et al.,2016).

Authentic Leadership Behaviors

Due to the opinions, observations, and experiments of many prominent scholars, researchers, authors, and academicians such as; Calderón-Mafud, Moreno, & Colunga-Rodríguez, (2018); Marinakou & Nikolic (2016); Kempster, Iszatt-White, & Brown, (2018); Walumbwa *et al.,* (2008; 2012); Leroy, Polanski, & Simons (2012; 2015), Emuwa, (2013); Emuwa, & Fields, (2017); Semedo, Coelho, & Ribeiro, (2016); Gatling, Kang, & Kim, (2016) and some other prominent scholars' Authentic Leadership (AL) behaviors' have been identified and explained by the four dimensions and these are; Self-awareness (SA), Internalized Moral Perspective (IMP), Balanced Processing (BP), and Relational Transparency (RT). So, this study give importance on the behaviors of authenticity in leadership with the composition of these four dimensions/components or elements.

Fundamental Definitions of Authentic Leadership's Components

The distinguished dimensions of Authentic Leadership are associated with authentic self- regulation processes, including internalized regulation, balanced processing of information, relational transparency, and authentic behavior. And the identified and validated four components (SA, IMP, BP, and RT) of authentic leadership to demonstrate:

When leaders are aware of self-needs, wants, stimulations, and prefer-

ences, it's prescribed the behavior of Self-Awareness (SA); Again, when self-regulations adjusted by internal moral values and standards, outcomes of behaviors, and all of the decisions concerned with internalized beliefs-then it's treated as Internalized Moral Perspective (IMP); Leadership is concerned with the views of opposition as well as roller's opinions and when a leader didn't scare of opposites views from followers or subordinates and believes to take a proper decision with relevant data, it's referred to as balanced processing (BP); lastly, when a leader realizes the true feelings and thoughts of followers and subordinates, then it's referred to as (RT) Relational Transparency (Walumbwa *et al.,* 2008, 2010, 2011; Leroy, Palanski, & Simons, 2012; Marinakou, & Nikolic,2016).

The above four dimensions have been assessed from are search paper developed by Kernis and Goldmen (2006).The definition he derived is the functioning of authentic leadership as "one's true, or core, self in one's everyday workplace unobstructed operations or services," or from the other perspective, the degree (extent) to which a leader becomes true to his/ herself (Kernis, 2003). The four dimensions or components of authentic leadership are briefly implied accordingly:

The 1st component of Authentic Leadership (AL) is Self-Awareness (SA). It is referred as to feeling, assessing accurately, realizing and accepting other's weaknesses and strengths, working for feedback, and intention to develop self and others' interactions in society;

The 2nd component is Internalized Moral Perspective (IMP) which explains the functioning of one, due to his/her ability, and describes' not to allow work-activities by the pressure of others;

The 3rd component is Balanced Processing (BP), concerned with seeking proper information from the individuals, and listen to everyone's positive and negative views, and never force on one at the expense of the other;

The 4th component is Relational Transparency (RT) which focuses on easy sharing of one's realization, truly understanding others, and if any error happens, confessing and correcting the mistakes (Avolio & Gardner, 2005; Gardner, Avolio, Luthans, May, &Walumbwa, 2005; Ilies, et al.,2005).

Moreover, Authentic Leadership (AL) has been featured `by the awareness of own's of a leader, perspective of internal moral values, classify behaviors in open manners, transfer important views, and opinions to trusted subordinates. The characteristics of AL relevantly developing and

implementing proper decisions; assessing and accepting other views, perceptions, values, purposes, sentiments, and trustiness of the followers or members or subordinates. Accurate balancing of necessary characteristics of authenticity builds a leader to depict the competency, internal consistency, and moral values for managing challenges (Wang, Sui, Luthans, Wang, & Wu, 2014; Semedo, Coelho, & Ribeiro,2016).

3.3 Background Experiments of Authentic Leadership Dimensions

Authentic Leadership (AL) assumption is identified for managing financial complexity and ensuring the ways to get out of the critical issues of business (Stewart, et al., 2017). Again, authentic leadership views are composed of a simple theory with four distinct components (Riggio, 2014) and these are:

"Know Thyself" is concerned with Self-Awareness (SA);

"Be Genuine" is involved with Internalized Moral Perspective (IMP); "Be Fair-Minded" is related to Balanced Processing (BP);

"Do the right thing" is linked with Relational Transparency (RT).

The four major dimensions of authentic leadership such as SA, IMP, BP, and RT make true and cooperative surroundings of the workplace in the educational, industrial, and service sectors. Among the four components, BP indicates a whole process of analyzing purposes or goals including conflicting and non-conflicting opinions too; IMP involved an approach of advised functioning where the internal-core value of morality and works-standards couldn't initiate by the pressure of external one; RT is concerned with individual's (personal) exposures, the share of information openly, and presenting real objectives and thoughts, while; SA revealed the external and internal knowledge of a leader (included mentality, self-image, perceptions, and intention to perform) in any dynamic situations (Gardner et al. 2005;

Walumbwaetal.,2010;Emuwa,2013).Thecombinationofallrelevantactivitiesoftheseone- by-one dimensions must be considered to be an authentic leader.

Finally, a leader who wants to build self as an authentic must convey some key-rolled features of different dimensions or components of AL. And the key features are self-knowledge, image, perceptions, and trustiness from SA; actions, in-depth moral values, works-standards not forced by others from IMP; unbiased activities, clear objectives, relevant information

for taking a decision from BP, and; disclosures of self, information sharing, motives, and true thoughts from RT (Walumbwa et al. 2008; Wong & Laschinger, 2013; Semedo et al., 2016). For conducting an organization, there may be some limitations with strengths and weaknesses but all of the characteristics of the prescribed dimensions of AL, need to follow for managing subordinates properly.

Significance of Authentic Leadership Reviews

This kind of background review provides an opportunity to study a new field to gather more knowledge about authentic leadership (AL). The current reviewed study is most relevant, logical, and acceptable to researchers, academics, practitioners, entrepreneurs, and business leaders of different organizational sectors by which a nationalist or a head of state can conduct or direct a nation in the right way too. Because the reviews may help to identify the ways to improve the applicable parts of authentic leadership to assure vast awareness, self-efficacy, commitment, performance, self-service, teamwork, generosity, and dedication of human beings in each activity locally as well as internationally.

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Soft Skills -- The Key to Career Success

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Abstract

Today's working environment is highly competitive all over the world. People may not get success in their working place using only hard skills. So, this paper attempts to explore the necessities of soft skills for the people to make their career successful in the organizations. As it is a chapter review paper, the authors have used descriptive analysis techniques to interpret the data/information effectively and efficiently. The review findings show that soft skills are highly essential for people to get success in the workplace. The review findings also show that there is a close relationship between soft skills and personality development of the people. Thus, the authors have provided some recommendations to strengthen the soft skills of the people and make their career shine in the highly competitive working environment.

Keywords: Soft Skills, Job Market, Competitive Environment, Career Success.

Introduction

Business today doesn't have national boundaries, it reaches around the world. So, the competition among the job applicants is not located within the particular nation/country. As a result, the current human resources must obtain various types of skills. Otherwise they can't compete with various types of competitors successfully to get the job in the competitive environment. In addition to that, the business world is now changing drastically due to the influence of sophisticated technology. Technology is creating a major impact on the performance of the human resources and it gives instant access to all information. In this case, the human resources must be bound to upgrade their skills. Rahim (2017) identified that skill is the ability to perform the assigned tasks and duties effectively and efficiently.

The world has now undergone COVID-19 problem. The whole world has been changed due to it. At present, we have to work

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from home through the soft and hard skills. Akkas (2019) said that softskillsincludeleadershiptraits,attitudes,character,behaviours,technical–knowhow,etc.But Robles (2012) identified that soft skills are a combination of character traits, attitudes, and behaviours rather than technical aptitude or knowledge. Kaipa & Milus (2005) explored that soft skills help the people tremendously to achieve success in the job market. They also explored that soft skills facilitate the employees to enhance their qualifications including leadership, presentation skills, commitment, cooperation, decision making, conflict resolution, communication, creativity, humanity and self-confidence, intelligence, emotional and integrity.

Everyone must understand the meaning of soft skill. The reason behind this is that one can take the proper initiative to enhance his/her soft skills without knowing the meaning properly. Kacamakovic&Lokaj2021) explored that soft skills encompass personal traits, attitudes, habits, common sense etc. that make someone more valuable in the company/society. Collins English Dictionary (2021) pointed out that soft skills are desirable qualities for certain forms of employment that do not depend on acquired knowledge: it includes common sense, the ability to deal with people, and a positive flexible attitude. Pratt (2019) mentioned that soft skill is a personal attribute that supports situational awareness and enhances an individual's ability to get a job done.

If a person wants to employ himself/herself in the job market properly and quickly, then he/she must develop soft skills. Vasanthakumari (2019) said that soft skills help the job incumbents to get the jobs quickly and rightly in the competitive job market. Soft skills not only help the incumbents to employ themselves in the job market easily and properly but also it helps them to perform their jobs smartly and contribute a lot to make the company successful (Lahope, Wrong & Gunawan (2020). In this regard, they have suggested the authority of the companies to provide soft skills training to their employees so that they can accomplish their assigned tasks and duties effectively and efficiently. They explored that there is a significant relationship between the soft skills training and th eperformance of the company. They also explored that if an employee wants to get success in his/her career, then he/she must develop the soft skills. Otherwise it is not possible for him/her to reach the top-level position in the organization.

Types of Soft Skills

Vasanthakumari (2019) identified the following types of soft skills which must be obtained by the employees if they want to get success in their career:

i)   Communication skill

ii)   Teamwork

iii) Professional ethics

iv)   Interpersonal skills

v)   Time management

vi)   Leadership

vii) Critical thinking

viii) Creativity

ix)   Conflict resolution

x)   Negotiation

xi)   Decision making

xii) Self-motivation

xiii) Self-confidence

xiv) Self-awareness

xv)   Emotional intelligence

Necessities of Soft Skill

Soft skill is highly essential for every job applicant. The reason behind is that employers emphasize soft skills during the hiring of the new employees. So, the job applicant must mention their soft skills at the top of the job applications very clearly. In addition to that, soft skills help the employees to work with diversified people in the workplace. When an employee successfully could apply his/her job skills in organization, then he/she gets success in his/her job. Rahim (2017) explored the following reasons for importance of soft skills for the employees when finding jobs and growing careers in the organizations:

i)   To work long-time in the company

ii)   To measure team work properly

iii) To maintain a good relationship with colleagues

iv)   To grow an effective network

v)   To facilitate the growth of the employees

vi)   To stay organized in the workplace

vii) To prove initiative the organization

viii) To develop sustainable leadership in the company

ix)   To gain confidence

x)   To establish a good reputation in the organization

Process of Soft Skills Training

All people are not the same. Every person is different with regard to culture, customs, norms, values, beliefs, choice, fashion, style etc. In an organization, many people are working. They are responsible to perform their assigned tasks and duties effectively and efficiently. Someone

can   do   theirjobsuptothelevelandsomeonecannotdotheirjobsproperly. Butanorganization'ssuccess depends on the collective performance   of the employees. In this regard, the management   of   the   organizations may arrange the soft skills training for their employees by following a systematic process which is shown below:

Figure 1: Process of Soft Skill Training

Source: Authors' Calculation

At the first step, the HR manager should conduct the soft skill training needs assessment program to find out the actual necessity of this training for the employees. In this case, he/she may use observation method, ques-tionnaire method, performance analysis, and contents analysis techniques for successfully accomplishing the soft skill training needs assessment program. At the second step, the HR manager should set the soft skill training objective considering the employees and organization objective. At the third step, the HR manager should set the appropriate method to provide the soft skill training to the employees properly. In this regard, he/she may use coaching/ mentoring, live interactive workshops, peer (social) learning, online learning,   and   AR/VR methods. At the final step, the HR manager of the organization should conduct the evaluation program for assessing the outcomes of the soft skill training program. In this case, he/she may use reaction, learning, behaviour and results measurement techniques to find out the actual outcomes of a soft skill training program.

Soft Skills Vs. Hard Skills

Soft skills refer to the personal habits and traits that shape the work of the employees, how they work on their own and with others in the organization. It is essential for the employees to successfully build up their career in the company. It also helps the job applicants to find out the right jobs quickly. Since the soft skills are highly essential to search for a proper job and build up the career successfully, the incumbents must carefully highlight their soft skills in front of the employers in the interview board. In this case, they may follow the following systematic process:

i) Coming to the interview board within the specified time

ii) Showing punctuality

iii) Avoiding dependability

iv) Showing to be active listener and maintaining eye contact

v) Speaking correctly and clearly

vi) Avoiding local language

vii) Explaining information honestly which the incumbents mentioned in their CV

viii) Maintaining integrity

ix) Understanding the follow-up questions

Hard skills refer to the technical knowledge or training that the employees have gained through life experience, including in their career or education. Every job requires certain hard skills. That is why, the people must obtain essential hard skills. Otherwise they may not be suitable for their jobs and they also may not be able to establish their career successfully in the organization. Since the hard skills are required to get the jobs and it is also required to get success in the job of the company, the incumbents may highlight their hard skills in the CV through a systematic process which is shown below:

i. Explaining the training and experiences clearly

ii. Mentioning an attractive portfolio

iii. Elaborating technical knowledge and competency

iv. Understanding the follow-up questions related to job

v. Effectively working through skills tests, if required at the interview

Patacsil & Tablatin (2017) said that both soft and hard skills are required

to the employees to get success in the organizations. So, they must give emphasis on the development of their soft and hard skills.

Relationship between Soft Skills and Personality

Every person needs to obtain a certain level of soft skills. The reason behind this is that there is a relationship between soft skills and personality. If a person wants to develop a strong personality, then he /she must earn various types of soft skills. Hamid, M.B.B, Mohamed, R.K. M..H., Devarajoo, A.R., Mani, R.&Lazim, C.S.L.M.(2020) explored that soft skills are highly associated with individual personality traits. Soft skills help the incumbent to enhance their networking capability, individual interaction with others, job performance, career prospects, negotiation capability etc. An employee needs to develop soft skills to get and keep going with the job in the company. When several people with similar technical expertise do make competition for a position or a promotion in the organization, then the people need soft skills to get success in this case.

A person's personality may indicate what job he/she likes to do but his/her soft skills define how good he/she is at it. Soft skills are the transferable professional skills that the employees need for problem solving in their roles or professions. The better they get at these, the more complex problems they can solve. It comprises pleasant and appealing personality traits and it helps the people to develop their self-confidence, positive attitude, emotional intelligence, social grace, flexibility, friendliness, effective communication and motivational power. A study found that the people who have more soft skills, their personalities are stronger. It is related to the people's personal attributes that influence how well they can work with others in the organization/society. By using these skills, they can easily maintain good relationships with other people, create trust and dependability, and lead teams successfully.

Soft Skills and Career Success

Soft skills are really very crucial for the career success of every employee. Today's jobs are very challenging which require more soft skills to be successful. In the present diversified workplace, most jobs require teamwork. If a manager wants to manage the teams effectively and efficiently, he/she needs to obtain more soft skills. Otherwise it is not possible to manage the teams properly and reach the target destination. Soft skills facilitate an employee to build good relationships and solve problems to use his/her hard skills to the full extent. So, the incumbents should list their soft skills on the resume clearly which will demonstrate them in the interview and

develop them quickly in the workplace. It also provides strong support to their career and opens them new-new opportunities in the organization. Practically, we have seen that the people who have outstanding soft skills, they can easily establish themselves in the competitive environment. In the teaching profession, we are frequently observing the students who have outstanding academic results but they may not be good teachers. On the other hand, the students who have poor academic results but they strongly established themselves in the profession. It is only possible because they have earned various soft skills and by using these skills they can easily manage all stakeholders properly.Notonlyintheteachingprofessionbutalso-softskillsarehighlyessentialtogetsuccess in other professions.

Ways to Improve Soft Skills

There is no alternative way to enhance soft skills. Development of soft skills for every person isa must in the organization. In this regard, the people may use the following techniques to improve their softskills:

i.   To collect feedback regularly

ii.   To communicate with others frequently

iii. To emphasize on teamwork

iv.   To build positive and friendly relationships with others

v.   To step outside of the comfort zone

vi.   To get ready to learn new things

vii. To observe others carefully

viii. To manage emotion properly

Soft skills are remarkably powerful and it can definitely play a vital role in the career development of the employees. It not only affects their careers, they can also impact their ability to successfully navigate through life. So, every employee must develop his/her soft skills on a regular basis.

Conclusions

The U.S. Army developed the term 'Soft Skills' in the late 1960s. They realized that soft skills help them to lead groups, motivate soldiers and manage their work properly which will bring success in the wars. The present job market of the world is more than a battlefield. It requires more skills, specifically soft skills. That's why people need to obtain various soft skills to get the jobs and also to successfully perform the jobs in the company.

The present study has explored that the soft skills are highly essential for the people to employ themselves and also to establish their career quickly in the highly competitive job market. The study has also explored that there is a close relationship between soft skills and personality development of the people. Thus, it is recommended that the people should attend the training programs to enhance their soft skills. It is also recommended that the management of the organizations should arrange various training programs so that the people may get the opportunity to upgrade their soft skills. As a result, they can contribute a lot to the continuous growth and development of the organization.

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Management Education to Meet the Future Challenges

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With the support of the Ministry of Education (MoE), the Government of the People's Republic of Bangladesh, the University of Dhaka has taken the initiative to provide research grants to strengthen the research environment in the University at the start of the centennial celebration event in 2021.University of Dhaka hopes that this initiative will help to develop some policy actions that will guide the university in its pursuit of becoming a center of excellence in quality research and education by revisiting its vision, mission, strategic goals, and road-maps through enhancing academic environment and boosting its reputation in the international arena.

The Centennial Celebration Committee of the University of Dhaka invites book proposals and manuscripts for the "University of Dhaka Centennial Book Series Project."Book proposals and manuscripts are invited from Departments, Institutes, and Research Centers. The proposed book must be written/edited in the Department, Institute, or Centre's name. Departments, institutes, or centers in related fields may collaborate and publish books together.

The overarching goal of the "Centennial Book Series Project of the University of Dhaka" is to glorify the university's history, culture, and contributions while also promoting research and academic activities that are critical to Bangladesh's development journey.This initiative will also allow our faculty members to share their expert opinions, views, insights, analysis, and recommendations on a variety of current issues as well as on forecasting future academic and research route-map with relevant policymakers, industries, and other key stakeholders on a national and international scale.

Proposal for Books and Manuscripts can cover, however not limited to, the following areas:

- Progressive development aligned to the nation building processes, and groundbreaking or notable outputs and outcomes of the entities

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(Departments, Institutes or Centres) achieved so far.

- Explaining and describing the contribution of the entities to achieve national and international goals and targets.

- Future goals and trends of education and research in the relevant subject area.

- Building and strengthening with NGO (non government organization), International Organizations andindustry-university or university-university relationships for research and development in home and abroad.

- Route-map, strategic analysis, and action-oriented initiatives and activities for the next 10 years based on global trends and the country's needs targeted towards improving research and academic excellence.

- Contemporary issues and challenges connected to the vision and objectives of the Departments/Institutes/Centres.

- Any issues/themes considered significant by the Academic Committee/BGof the entity, can be accepted.

In align with the objectives of the "Centennial Book Series Project of the University of Dhaka", the department of Management has worked hard to publish a special book on "Sustainability" theme. In this book the authors have contributed their research findings on sustainability issues and extended the knowledge base of this particular area. The book not only incorporates the wider objectives of the University of Dhaka but also addresses the sustainability development goals (SDGs) of the Government of Bangladesh following SDGs of United Nations (UN).

The United Nations (UN) adopted the Sustainable Development Goals (SDGs) at the end of 2015, immediately following the achievement of the Millennium Development Goals (MDGs).The SDG Agenda was adopted following extensive consultations with governments, civil society, business, and development partners to agree on a new and inspiring global development agenda. The SDGs connect people, the planet, and prosperity, and they provide a framework for all countries, developed and developing alike, to pursue better development paths.

The United Nations General Assembly adopted the 2030 Agenda for Sustainable Development, which was developed following the United Nations Conference on Sustainable Development in Rio de Janeiro, Brazil, in June 2012. Among the 17 SDGs at the core of the 2030 Agenda few are:

1. No Poverty - End poverty in all its forms everywhere

2. Zero Hunger - End hunger, achieve food security and improved nutrition and promote sustainable agriculture

3. Good Health and Well-Being - Ensure healthy lives and promote well-being for all at all ages

4. Quality Education - Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

5. Gender Equality - Achieve gender equality and empower all women and girls

6. Clean Water and Sanitation - Ensure availability and sustainable management of water and sanitation for all

The timeframes for achieving these objectives have been set from 2015 to 2030. SDGs are primarily formulated through interactions with social, economic, and environmental factors, which can be summarized by the three Ps: people, planet, and profit. It goes without saying that people are the most important factor in achieving the SDGs. There is no alternative system for achieving the SDGs than democratic government, as demonstrated by Abraham Lincoln's iconic quote, as a system of government "of the people, by the people, and for the people." To supplement government efforts, the private sector's involvement in achieving the SDGs has been emphasized.

Bangladesh has incorporated global goals and targets into its national five-year plan, resulting in an effective push for SDG implementation by involving all government ministries, the private sector, civil society organizations, non-governmental organizations (NGOs), development partners, and other stakeholders, named the "whole of society approach." Bangladesh already has a strong position in eight of the 17 targets. Poverty, hunger and nutrition, education, gender equality, water and sanitation, energy, climate change, and global partnership are examples of these. Within the next five years, the country hopes to advance infrastructure, inclusive growth, employment, industrialization, and innovation.