



# Bangladesh Public Administration Training Centre

Savar, Dhaka.

Programme & Studies Division

Evaluation Department

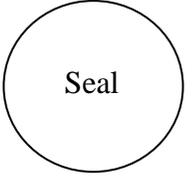
**137<sup>th</sup> Advanced Course on Administration and Development**

**Seminar Paper**

NAME OF THE MODULE: RESEARCH FOR GOVERNANCE AND POLICY ANALYSIS

MODULE NO: 05

DATE: 12.09.2022



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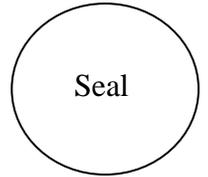
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### **Instruction to be followed**

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Name: Md. Moshiur Rahman Talukdar

Roll No: 101

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### **List of Acronyms and abbreviation**

ACAD	Advanced Course ON Administration and Development
4IR	Fourth Industrial Revolution
GEMS	Government Employee Management System
APAR	Annual Performance Appraisal Report
MoPA	Ministry of Public Administration
BPATC	Bangladesh Public Administration Training Centre
NAPD	National Academy for Planning and Development
BIAM	Bangladesh Institute od Administration and Management
G.O.	Government Order
KII	Key Informant Interviewee
FGD	Focus Group Discussion
ACR	Annual Confidential Report

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## **Abstract**

Ministry of Public Administration (MoPA) is the legitimately mandated institution in government sector to perform all the tasks related to Human Resource Management (HRM) for the Civil Service Officials of Bangladesh. In the event of Fourth Industrial Revolution embedded in Artificial intelligence (AI), advanced robotics, 3D printing, nano technology, genetic technology, synthetic biology, internet of things (IoT), big data analytics, cloud computing, additive manufacturing, cyber security and block chain etc. which are expected to redistribute the dynamics of future job pattern, economic growth, financial system, societal approach ; the strategic policy response by MoPA in effective Public Administration Management would be a huge challenging.

This study attempted to identify the gap by exploring the role of Ministry of Public Administration in Bangladesh in the era of upcoming 4IR and the level of readiness or awareness or preparedness to meet and greet the ensuing changing environment. The research has undertaken the mix of quantitative and qualitative approach. A structured questionnaire survey, in-depth interview as well as focus group discussion and observation method were conducted. The research found that MoPA and its officials are well aware of the 4IR, while the poor status of readiness for encountering the technological advancement is the reality. The study proposed some policy recommendations include training the officials ready on technologies, improving curriculum of training institutions, suggest to update the university course contents.

**Key Words:** Ministry of Public Administration, fourth industrial revolution, 4IR, focus group discussion, artificial intelligence, robotics.

# **Seminar Paper**

## **The Role and Readiness of Ministry of Public Administration for Fourth Industrial Revolution in Context of Bangladesh.**

### **1.0 Introduction:**

Ministry of Public Administration (MoPA) is the legitimately mandated institution in government sector to perform all the tasks related to Human Resource Management (HRM) for the Civil Service Officials of Bangladesh. Rules of Business 1996 (revised up to 2017) and Allocation of Business, originated from our constitution, has specified the responsibilities of all Ministries/ Divisions in Bangladesh including MoPA. This Ministry has the mission as to build up an efficient, service oriented and accountable Public Administration through appointment, training, increasing of institutional efficiency and ensuring effective use of human resources with the vision of expert and effective Public Administration in Bangladesh.

### **1.1 Background:**

Public administration in Bangladesh remains largely centralized, excessively reliant on hierarchy and multiple layers of decision-making system. Human resource planning and development is rarely existent here, although frequent changes through posting and placement occur in traditional way. There are no incentives currently in place that encourage initiative for task-oriented performance and award excellence. Moreover, the performance management system is obsolete and subjective. On the other hand, training is neither linked to career planning nor related to other dimensions of personnel management. (ADB, 2007). Therefore, the lack of appropriate HRM framework is evident even in current scenario. It is argued that the weaker human resource framework in Bangladesh, the less efficient, effective, capable, impartial and responsive is the public administration system. Furthermore, the whole world is gradually embracing and entering into the era of fourth industrial revolution. According to white paper published by the World Economic Forum,

six essential aspects that need to pay attention by the business leaders partnering their HRD (World Economic Forum, 2019) in the eventful preparation for the Fourth Industrial (4IR) revolution. These are namely, 1) Developing new leadership capabilities for the 4IR, 2) Managing the integration of Technology in the workplace, 3) Enhancing the employee experience, 4) Building an agile and personalized learning culture, 5) establishing metrics for valuing human capital, and 6) Embedding diversity and inclusion.

Therefore, the knowledge management in existing HR practice, revisiting traditional education policy for focusing more on technical and skill aspect, updated training and research development, performance based appraisal, proper policy for placement and transfer, recruiting and talent management, administering digital way of personnel administration, capacity building of the training institute, sharing global experience etc. are some important points to ponder in the era of upcoming 4IR by the policy maker and civil servant of Bangladesh. In such circumstances, Ministry of Public Administration has the dominant roles to play.

## **1.2 Problem Statement:**

In context of rapid changing global environment impulse by a number of factors including politics, diplomacy, volatile economic scenario, advanced technology; the urge for the civil servants to be equipped with befitting skill sets is the need of the hour.

The present government of Bangladesh, in line to fulfill their electoral pledges of 'Digital Bangladesh', has launched number of digital services platforms for bringing the services at door steps to the citizens end. As for example, Bangladesh National Portal, service portal, e-Passport, e-Tax, Telemedicine, e-Procurement, e-Tendering, e-Ticketing service, e-Bill payment, e-Nothi, e-mutation system etc. are some mentionable. This has reduced the service delivery time and cost incurred by the service seekers. But the upcoming fourth industrial revolution would bring much more new challenges and opportunities than just creating these digital service platforms.

Currently, prime functions of Public Administration Ministry, Bangladesh includes recruiting, training, placement, posting and promotion of civil service officials of

Bangladesh. It is undeniable that the civil service officials are the important agents of formulating appropriate government policies and implementation of that policies. The role of civil servant would be all noticeable particularly in the wake of fourth industrial revolution. If they fail to lead the country at front, the whole country is to bear the consequences. Some scholars opine that civil service officials need be enough competent to face up the challenges and craft the opportunities from any changing environment specifically due to technological advancement like industrial revolution. It is imperative to have the analytical thinking skills, leadership qualities, communication skills, decision making abilities, sound knowledge in technological aspects etc. for the civil servant to perform their assigned task efficiently more than ever before during that challenging time. Interestingly, performance of civil service depends on the effective management of public administration.

Public Administration Ministry is primarily mandated and responsible for supplying the right skilled workforce in right place depending on the demand of the whole government organizations. Sticking to the legacy of traditional approach, public sector might face several challenges in context of the increasing demand of new industrial revolution and may lag behind if the effective human resource practice is not followed. The basic function of any human resource department needs to ensure that employees are equipped with the updated knowledge and skills required. Surprisingly, most research studies discuss the technological aspect of 4IR, rather than to discuss the human resource management practices that could assist public administration to have the proper orientation to cope up the changing scenario of future work demand. Hence, this study attempted to identify the gap by exploring the role of Ministry of Public Administration in Bangladesh in the era of upcoming 4IR and the level of readiness or awareness or preparedness to meet and greet the ensuing changing environment.

### **1.3 Objectives of the Study:**

This research has the following objectives:

1. To find out the role of Ministry of Public Administration, Bangladesh to face up the challenges and tap the prospects of upcoming 4IR; and
2. To assess the readiness of the Ministry in meeting and greeting the consequences of 4IR.
3. To capture some policy recommendation.

### **1.4 Research Questions:**

This study aims to answer the following research questions:

- (i) What are the existing roles of Ministry of Public Administration?
- (ii) What are the required roles of Ministry of Public Administration to face up the challenges and tap the prospects of 4IR?
- (iii) What is the level of readiness or awareness of Ministry of Public Administration in Bangladesh?

### **1.5 Rationale of the study:**

The fourth industrial revolution is predicted to have a crucial influence on individual professional future specification in the event of transforming the basis of new work, employment environment, technological excellence and competitiveness among the companies and countries due to the associated characteristics of the revolution. One study has found that, one-third of today's employment would be outdated by 2025, because of technological advancements in artificial intelligence (Brougham & Haar, 2017).

It is believed that 4IR aims at efficient, flexible, and customized production with the help of digitally decentralized technology platforms, self-organized supply chains, and fully automated factories (Kagermann et al., 2013; Gebhardt et al., 2015). Under this purview, the workforce is able to discern the processes, connections with networks, methods of digitalization, and data collection and their utilization (Ras et al., 2017). The Fourth Industrial revolution is going to redefine global architecture and influence the developing world more intensely. Artificial intelligence (AI), advanced robotics, 3D printing, Nano technology, genetic technology, synthetic biology, internet of things (IoT), big data analytics, cloud computing, additive manufacturing, cyber security and block chain etc are the essence of drivers of 4IR that are expected to redistribute the future job pattern, international trade and also the socioeconomic and financial dynamics.

Therefore, to cope up the future demand in 4IR environment, workforce's skill set also to be aligned with the pace of technology. Inadequacy of human capital with no technological skill, the whole governance may fall into jeopardy as this would enlarge the horizon of 'digital divide' and induce inequality among the countries of the world. The advanced countries of the world is already enjoying a comparative advantage by virtue of the ownership of the state of the art technologies. Whereas, all the developing world is struggling to mitigate this gap.

Against this backdrop, civil servants of Bangladesh have no choice but must be equipped themselves with skill sets in light of the requirement of future work environment to embrace the insurmountable challenges presenting us in the coming days. And as a controlling authority, MoPA has to trigger the motivation to welcome the upcoming challenges and make its workforce ready befitting of that extremely competitive business environment. As a matter of fact, this study is unique in novelty and very significant to assess the role and readiness of MoPA to see the awareness level and thereafter sparks the fuel in response to the necessity posed by ensuing fourth industrial revolution.

## **2.0: Literature Review**

As per the Rules of Business, 1996 and Allocation of Business of the Ministry of Public Administration (MOPA), the following are the few among many prime responsibilities of MoPA :

1. Formulation of policy on regulation of civil services and determination of their terms and conditions (policy on method of recruitment, age limit, qualification, reservation of posts for certain areas and sex, medical fitness, examinations, appointment, posting, transfer, deputation, leave, travel, seniority, promotion, selection, suppression, retirement, superannuation, re-employment, appointment on contract, conditions of pensions, determination of status etc).
2. Enhancing capacity of the Bangladesh Civil Service to cope with and adapt to an ever-changing environment.
3. Developing and implementing fair, just and transparent Human Resource Management and Development.
4. Securing to all Government servants the rights and privileges conferred on them by or under the Constitution, Law, Rule, Regulation, Statutory Orders in force.
5. All matters relating to formulation of policies, composition of Cadre Services and advising other Ministries & Divisions on proper management of Cadre Services under their control.
6. Policy regarding recruitment of staff in the Ministry/Division and all matters relating thereto including their duties and responsibilities.
7. First appointment to any posts belonging to any regularly constituted Cadre Service.
8. Appointment and transfer of Officers in Upazilas, Zilas and Divisions following existing policies and orders.
9. All matters relating to Recruitment Rules for all Services and Posts under the Republic.
10. Nomination of Government servants to work as experts/consultants in projects and jobs at home and abroad.

11. Nomination of Government servants in jobs in UN system and into its various agencies as national representative.
12. Administrative Research, Management and Reforms for better and economic execution of Government business.
13. Review of organization, functions, method and procedures of Ministries, Divisions, Attached Departments and subordinate Offices.
14. Inspection and review of staff position in Ministries, Divisions, Attached Departments and subordinate offices for optimum utilization of manpower.
15. Appointment of Chairman and Managing Director who work as members of the Board of Directors or Governors of Managing Boards by whatever name they are called, of the Corporations, Boards, Authorities, Statutory Bodies etc. except Universities, Higher and Secondary Education Boards, Banks and Financing Institutions.

Scholars argue that, in order to public administration to sustain in the disruptions that are likely to be happened owing to Fourth Industrial Revolution, civil service officials should have the capacity to adjust the new technologies since the administrative structures will be subjected to efficiency and transparency to survive in global competition (Shcwab 2016; Kobayakov 2016; Jessop 2016). Surprisingly, a number of public policy institutions of various governments still endorse the primitive Second Industrial Revolution, which is a hindrance they need to tackle, to improve decision making process using modern technological devices along-side regulatory frameworks. Hence rapid changes accelerated by the 4IR challenge legislators, public officials to quickly adopt and be innovative enough to embrace new technologies

Halal and Marien (2011), stated that despite the perceived numerous benefits of the Fourth Industrial Revolution, optimum welfare of the society actually depend on the effectiveness of the upcoming new technologies, which may be disruptive and can cause unexpected sufferings to social and economic well-being of humans.

Davidow (2014) opined that due to the technological changes that would come along with 4IR, chaos is inevitable. His argument based on the fact that, 'Machine intelligence is already having a major effect on the value of work and for major segments of the

population, human value is now being set by the cost of equivalent machine intelligence'. As a result, public administration has no choice left than to respond to this reality.

Similarly, Colvin (2015) presented the idea that only those people with high capacity and empathy will benefit the organization more than the robots, as robots cannot entirely ousted human in human interaction.

Paunova (2016) acknowledges that governments are increasingly subjected to immense pressure for restructure and re-align their approaches to public engagements and policy making matters due to the Fourth Industrial Revolution. The author's argument was postulated on the notion that, the policy making function of government is slowly getting relegated due to new sources of competition in redistribution and decentralization of power enabled by the new technologies.

Prisecaru (2016) claims that, digitalization resulting from the 4IR, reaffirms existing inequalities in the world order, whereby weaker and impoverished states still struggle to pass through the existing technological platforms. In this connection, robotics and artificial intelligence, the key features of the 4IR, can contribute to dehumanization of people's socio-economic lives in many areas, as for example, in values, integrity, creativity, innovation and sensitivity, ethics and morality. Analysts warn that despite the inevitability of the technological progress, governments should be cautious when mitigating the unintended consequences of these technological advancements.

### **3.0: Methodology**

This research primarily has to employed the mixed of quantitative and qualitative approach. Quantitative data has been collected from survey of questionnaire. Qualitative data were collected by using a semi- structured questionnaire for Focus Group Discussion (FGD). In addition to that, in-depth interview or one-to-one discussion was conducted to examine the desired research questions. Furthermore, observation method to gain insight of a certain setting and behavior is expected to be used as and when necessary in assistance to explore the answers to the research questions.

### **3.1 Study Area:**

This study is exclusively aimed to assess the role and readiness level of Ministry of Public Administration, Bangladesh Secretariat, Dhaka in the wake of Fourth Industrial Revolution. Naturally, the respondents were surveyed and discussed from Ministry of Public Administration. However, respondents for this study were also included from civil servants from other Ministries or Organizations and service recipients etc. Mentionable that, other Ministry officials are also transferred and posted by MoPA and many of them has once performed their duties in MoPA.

### **3.2 Questionnaire Survey**

Questionnaire survey is a popular research instrument now a days are widely used in collecting primary data or information regarding an issue of concerned from a target audience. A questionnaire is a set of questions used to extract data from respondents about their attitudes, experiences, or opinions. Questionnaire involves careful design of mix type of open ended and closed ended questions. This study has designed a questionnaire that was targeted to collect information from civil service officials particularly of Ministry of Public Administration to assess their strength of believe in role and readiness of the Ministry against fourth industrial revolution. Here 5-point likert scale was the basis for measuring the issues.

### **3.3 Focus Group Discussion**

Parker & Tritter (2006) observed that focus group discussion is sometimes seen as synonymous with interviews, particularly the semi-structured “one-to-one” and “group interviews”. This discussion is conducted to uncover people's perceptions and values. In a one-to-one interview, the researcher performs the role of an ‘investigator’, where researcher asks questions, controls the dynamics of the discussion. On the other hand, the researchers perform the role of a facilitator or a moderator in a focus group discussion. In this setting, discussion is conducted between participants and not between the researcher and the participants.

### **3.4 Data Collection:**

For collecting data, a well-designed questionnaire was prepared and surveyed using the 5-point Likert scale among civil servants from Public Administration Ministry and also from other Ministries. In addition to that, different qualitative techniques e.g. FGD, observation method and content analysis published by reputed journals, website, policy documents etc. were employed for collecting data.

Focus Group Discussion was conducted at Ministry of Public Administration comprising of an additional secretary, 3 joint secretaries, 5 deputy secretaries etc. Due to the extreme time constraint, only one such FGD was able to be conducted. Focused questions were asked to the respondents in order to encourage discussion and unhesitating expression of differing opinions and points of view regarding their knowledge, attitude, and perception on relevant issue. Verbal discussion facilitated by written questionnaire was recorded in a transcript and key words or themes were identified. These key words or themes were input in Microsoft Excel.

### **3.5 Data Analysis**

Quantitative data collected from questionnaire survey using 5-point Likert scale, has been analyzed by statistical software SPSS and also by Microsoft Excel. Analysis of qualitative data, collected by FGD, starts with understanding the data first. Subsequently, data that were created into categories, sub-categories into key words or themes to identify the relationship between the data sets or themes with research issues. Finally, the interpretation or drawing the conclusion was based on the recorded key words or themes. Data and results have been presented using appropriate tools (Tabular, Graphical etc.).

### **4.0 Data Analysis and Findings**

Analysis of data is a crucial part of any research. Data collected either from primary source or secondary source, qualitative or quantitative needs to be carefully processed, presented and interpreted. This study used statistical software SPSS and Microsoft Excel for data analysis and presentation.

#### 4.1 Respondent Profile:

A total of 31 Ministry officials have responded to the questionnaire survey. Except the Ministry of Public Administration, other ministries were randomly chosen. The officials of MoPA were randomly selected. The reasons behind choosing other ministry officials are that, MoPA being the parent ministry, transfers these officials to all ministries; many of these officials somehow has connection with MoPA in receiving training, attending seminars or workshops etc. In this survey officials from 10 Ministries/ Divisions have participated.

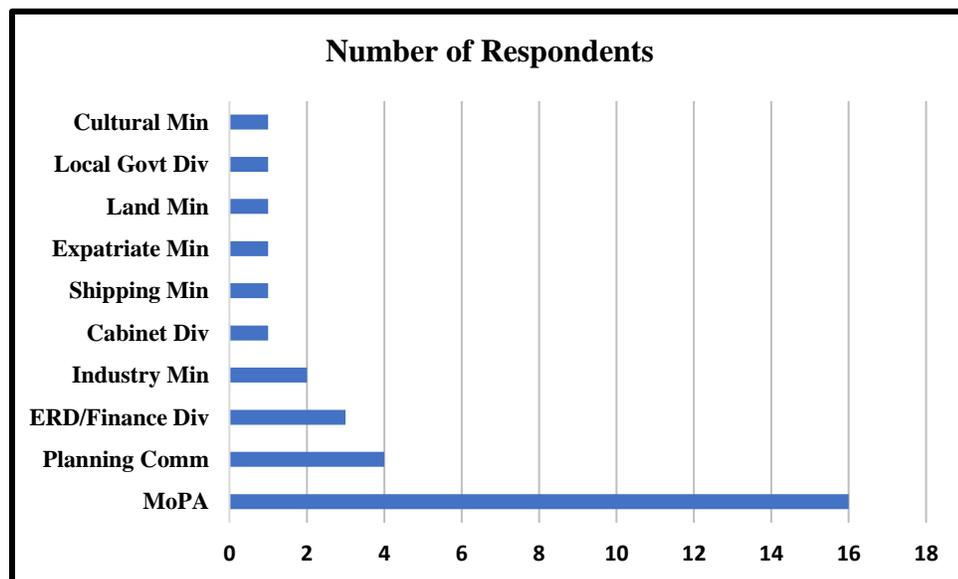


Figure 1: Number of Respondents from Different Ministries.

From Figure 1, it is seen that 16 officials of MoPA has expressed their opinions in the survey, while 4 persons from Planning Commission, 3 persons from ERD/Finance also took part in the process.

Table 1: Respondent Position

Designation	Frequency	Percent	Valid Percent	Cumulative Percent
SAS	1	3.2	3.2	3.2
DS	23	74.2	74.2	77.4
JS	7	22.6	22.6	100.0
Total	31	100.0	100.0	

Source: Extract from SPSS

Table 1 shows that, 74% of the respondents were at the rank of Deputy Secretary (DS), while 22 % were from Joint Secretary (JS) to the government of Bangladesh. These two tiers of the officers are pivotal in policy framing, monitoring and also somewhat in implementing.

Table 2: Tenure of the Respondents in Civil Service

Tenure in Civil Service	Maximum (Years)	Minimum (Years)	Average (Years)
	28	10	19

There was wide variety in terms of service length among the respondents. Some were extremely experienced and already have passed a significant portion of their service life, some were comparatively young and still have to pass a long way to their service life. As indicated by Table 2, among the respondents the maximum service length in civil service is 28 years while the minimum service was 10 years. The Figure 2 below shows the dynamics of this diversity in terms of work experience of the respondents.

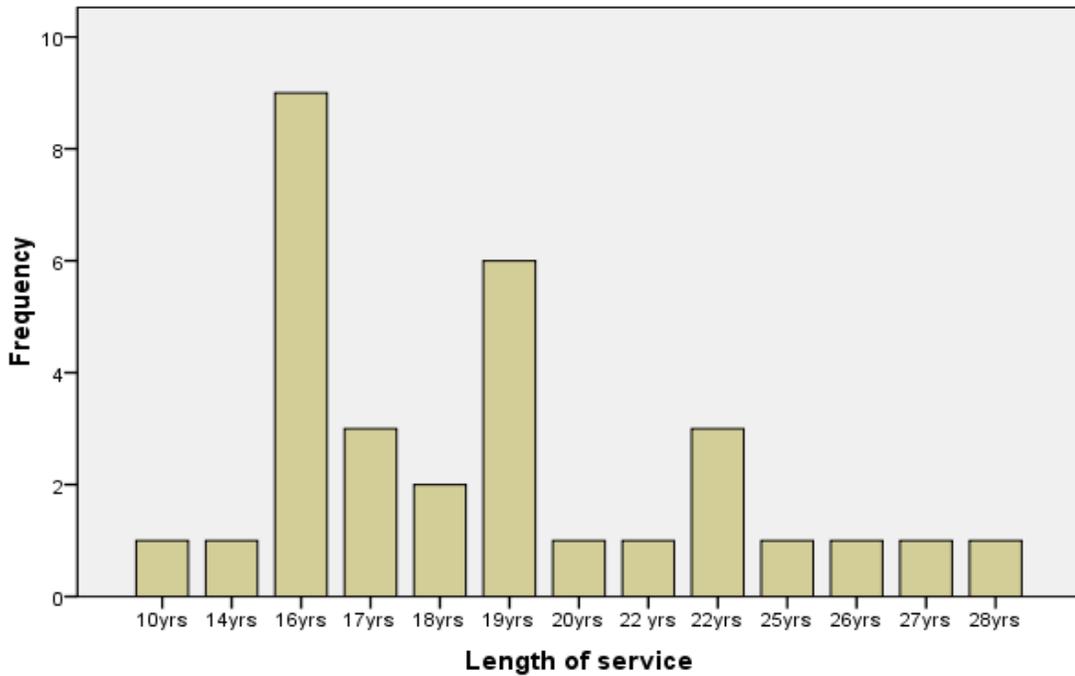


Figure 2: Service Tenure of the Respondents

#### 4.2 Existing Role of MoPA

Analyzing the data collected from respondents in the questionnaire survey five important traditional functions of MoPA as HRM of government sector includes: Appointment or recruitment, posting, promotion, training and service-related rules/policy formulation. Though MoPA has as many as 60 types of different duties or responsibilities stated in Allocation of Business. Some other important roles cited by the respondents are career planning, storing & maintaining data base of officers, post creation, disciplinary action management etc. Table 3 below shows that 25% of the respondents think that traditional role of MoPA is not effective for Human Resource Development (HRD) for civil service officials. However, of the rest 75%, only 33% supported highly while 42% were moderate in maintaining the idea that MoPA has effective role in HRD.

Table 3: Traditional Role of MoPA in HRD

Response	Frequency	Percent	Valid Percent	Cumulative Percent
Very Poor	1	3.2	3.2	3.2
Poor	7	22.6	22.6	25.8
Moderate	13	41.9	41.9	67.7
High	6	19.4	19.4	87.1
Very High	4	12.9	12.9	100.0
Total	31	100.0	100.0	

Source: Extract from SPSS

Figure 3 below depicts the outcome of the respondents regarding the belief that MoPA provides posting to the civil service officials as per their existing education and skill. Interestingly, significant portion of the respondents 53% feel that placement by MoPA is not at all as per skill and education. On the other hand, 32% think that MoPA is doing perfectly in placement of officers.

Response	Frequency	Percent
Very Poor	9	29.0
Poor	7	22.6
Moderate	5	16.1
High	9	29.0
Very High	1	3.2
Total	31	100.0

Source: Extract (Modified) from SPSS

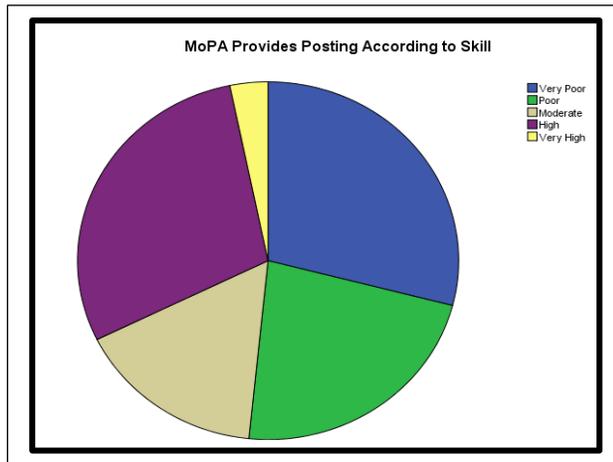


Figure 3: Placement by MoPA according to skill and knowledge

### 4.3 Awareness Level of Officials for 4IR:

In assessing the awareness level of the Ministry officials for the Fourth Industrial Revolution, the questionnaire was designed in such a way that officials were asked to rate his level or strength of believe about 4IR concept itself and then the some important features like artificial intelligence, genetic and synthetic biology, block chain technology, advanced robotics, cloud computing, big data analytic software, internet of things, 3D printer etc. of 4IR. Table 4 shows that officials are well aware of the 4IR and its features.

Table 4: Personal Awareness Level of Ministry Officials

Item	N	Minimum	Maximum	Mean	Std. Deviation
Aware of 4IR	31	3	5	4.00	.775
Aware AI	31	2	5	3.97	.795
Aware Genetic Tech & Synthetic Biology	31	1	5	3.23	.956
Aware Block Chain Tech	31	1	5	3.26	.965
Aware Advanced Robotics	31	1	5	3.35	.985
Aware Cloud Computing	31	1	5	3.45	.995
Aware Big Data Analytics	31	1	5	3.03	1.016
Aware Internet of Things	31	1	5	3.48	.962
Aware 3D Printers	31	1	5	3.19	1.014

Source: Extract from SPSS

### 4.4 Awareness of MoPA for 4IR

MoPA as an institution, is found moderately aware (seriousness) of the upcoming technology. Even though MoPA arranges seminars/workshops, uses digital platforms for service delivery, use ICT in decision making process, gradually is trying to provide training on technology to home and abroad. Table 5 is a summary of the level of awareness of MoPA.

Table 5: Awareness Level of MoPA

Items	N	Minimum	Maximum	Mean	Std. Deviation
MoPA as Institution Aware 4IR	31	1	5	2.87	.957
MoPA Arranges Seminars, workshops on 4IR	31	1	5	3.48	1.262
MoPA uses Digital Platforms in Service Delivery	31	1	5	3.61	1.174
MoPA uses ICT in Decision Process	31	1	5	3.29	1.101
MoPA Provides Training on Technologies	31	1	5	2.94	1.124

Source: Extract from SPSS

### **In-dept Interview:**

In one-to-one discussion with some key officials of MoPA, it is revealed from their verbal opinion that the nature, breadth and scope of 4IR defines two or three Ministries ought to perform as Lead Ministries in facing and tapping the potentials of 4IR. In their view, ICT Ministry, Industry Ministry or Ministry of Labor Employment, by nature of the challenges assumed to impose by 4IR, supposed to perform the role of Lead Ministries. However, they admitted that MoPA's role is decisive factor as it performs all works of HRM for government officials and must have to take the responsibilities of coordination among the ministries or divisions starting from formulating appropriate policy for innovation and technology to equip the officials through technology related training and placement of those officers. Currently, MoPA is aware of this technological upheaval happened to be in near future and its awareness reflects through promoting digital services, uses of ICT, innovation showcasing, arranging seminars on 4IR, developing modern employee management called GEMS (Government Employee Management System), introducing automated and impartial appraisal system like APAR (Annual Performance Appraisal Report) etc.

#### 4.5 Readiness Level of MoPA for 4IR

Ministry of Public Administration is aware of the situation for 4IR, but then comes the important question of what is the level of its readiness in present scenario. Table 6 shows the results of the respondent's assessment about the readiness depth of the Ministry. In their view, MoPA is moderately ready as preparatory home work. Although MoPA is keenly willing to become the change agent of 4IR and wants to promote technology-based innovation, digital devices in workplace. But the other factors like planning to formulate a comprehensive policy for addressing the challenges of 4IR and updating the curriculum of its training institutions and incorporating technology related issues are still a far cry and reflects MoPA's poor status of readiness.

Table 6: Existing Readiness Level of MoPA

Items	N	Minimum	Maximum	Mean	Std. Deviation
MoPA Promotes Tech Based Innovation	31	1	5	3.13	1.088
MoPA Encourages Use of Digital Devices in Work Place	31	2	5	3.74	1.125
MoPA is considering to Formulate Plan/Policy on 4IR	31	1	5	2.87	1.310
MoPA Updates Training Curriculum of its Training Inst. needed for 4IR	31	1	5	3.19	1.138

Source: Extract from SPSS

**FGD Outcomes:**

From the FGD the following thematic areas were identified.

**HRM:**

From Focus Group Discussion (FGD), participants emphasized that traditional role of MoPA should not be the same in the wake of 4IR as technological advancement would usher global competitiveness severely, so to survive it is must to increase the capacity of the civil service officials.

**Governance & Technological:**

MoPA is aware of 4IR and contemplating to aware its officers by arranging seminars, workshops and promoting, encouraging and facilitating the use of digital platforms in service delivery and decision-making process.

**Preparedness:**

In response, MoPA is developing a comprehensive HRM software like GEMS, APAR, sending officials to foreign countries for higher education etc. are some sort of reflections of MoPA's readiness. However, it also came out in the discussion that, this readiness level is not enough for desired outcome expected for 4IR.

**5.0 Conclusion**

It is a time driven compelling issue that both government and the private sector plan ahead adequately to gain benefit from the challenges of 4IR. From government side, the role of MoPA is tremendously crucial in preparing the civil servant to the requirement of the 4IR and equipped them with updated knowledge, competencies, technology conversant that are needed for future revolution. MoPA has to perform in line with strategic human resource management framework for the changing environment awaiting for us.

## **6.0 Recommendation**

Despite tremendous success in transforming digital Bangladesh, a long way still to go, particularly in the era of 4IR approaching fast in the world. This aggression from the technology is soon reshaping governance, business, economy, society and also overall production landscape of industrial sector. Artificial Intelligence, robotics, internet of things, block chain, big data analytics, automation and so on, will not spare any of our spheres for radical change. It is better to accept this challenge sooner and be ready to adopt these technologies. Civil service officials being the hands and eyes of the government, need to enhance the capacities at par the demand of these 4IR. In this connection, it may be reasonable to propose following recommendations to consider:

### **6.1 MoPA needs to Coordinate among the Ministries**

Some two or three ministries will have to take the ‘Lead Role’ due to the nature of their jobs aligned more with the features of 4IR technology. For example, ICT Ministry, Industry Ministry, Labor Ministry, Expatriate Ministry. But MoPa and Cabinet Division has to perform the critical role of coordinating all these ministries and provide all sorts of supporting environments.

### **6.2 Extensive Training on Advanced Technologies**

Ministry of Public Administration, as being the provider of all officers to all Ministries/ Divisions, can groom up by providing appropriate training on advanced technologies that are to be encountered. MoPA needs to invest heavily on building and enhancing the capacity of human capital in this regard, perhaps by taking a special project.

### **6.3 Curriculum of the Training Institutions to be adapted for 4IR**

Training institutions under the purview of MoPA, like BPATC, Administration Academy, NAPD, BIAM can be directed to adjust their training curriculum to include these technology related contents so that the civil servants can get the platform of knowledge to improve their personal capacities.

#### **6.4 Transfer, Posting and Promotion Policy to be Readjusted**

Ministry of Public Administration has to be little bit extra judicious in making decision regarding transfer, posting and promotion. The decision must be based on the match between job skills required for the post and officer's knowledge and skill sets. Priorities should always be given to the technologically solvent officers in promotion to higher ranks.

#### **6.5 Recommend Universities/ Engineering Universities to update the Course Contents.**

Although this issue is not directly related with the jurisdiction of MoPA, it is undeniable that if the universities cannot supply the graduates from disciplines conforming new and newer technologies, both the government and private sector will be the sufferer.

#### **Action Plan for Implementing recommendations:**

No.	Action Required	People/ Organizations involved	Time line (Tentative)
6.1	1. Formulate 4IR master plan 2. Arrange seminars, workshops, meetings.	All Ministry/ Divisions	1-2 year
6.2	1. Develop DPP or TA project 2. Provide Training Home and Abroad.	Career Planning & Training Wing of MoPA	1-2 year
6.3	1. Revise Training Curriculum	Career Planning & Training Wing of MoPA	1-2 year
6.4	1. Formulate new Policy of Transfer, Promotion, Deputation	APD Wing of MoPA	Continuous Process
6.5	1. Exchange of Views 2. Sign MOUs with Universities	Career Planning & Training Wing of MoPA	1-3 years

## 7.0 References

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