Skill Development Programmes in Maharashtra and Bridging the Skill Gap through Behavioural Economics

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ARTICLE INFO	ABSTRACT
	In the recent years India has laid a lot of emphasis on upskilling and knowledge development and in creating a knowledge pool. In the National Education Policy 2020 also, a special emphasis is given on introducing new upskilling courses. However, we see a mismatch or a skill gap between what is being imparted in the form of education and what skills are being demanded by the industry. We find a focus on new practices and development of new education systems and learning methods, where we see a shift from single line of expertise to various line of options that could be selected and a shift from importance given to degree courses to upskilling courses. The aim of this shift is to improve the employability by building on competitive skills to face the aggressive global market. Moreover, the competencies gap on the economic surroundings amongst the corporate and industry expectations need to be mapped with the education outputs. The gap between actual and required has to be closed or reduced to achieve the desired results.
	This research paper is based on the insightful feedbacks from industry experts and trainees in Maharashtra in BFSI, IT-ITeS, Retail and Textile Sector, who could bring about the nuances as to how much is the job fit criteria relevant and is there a need for fresh skills set in the technological and AI driven world. A primary data collection based on some principles of Behavioral Economics is carried out in the research.
	Keywords: Upskilling, Skill gap analysis, BFSI, IT-ITes, Retail, Textile, Behavioral economics

Introduction:

The current era is of the globe striving for Sustainable Development all over the world. The 2030 Agenda for Sustainable Development Goals by the United Nations focuses on Quality Education in the SDG 4. Target 4.3 discusses ensuring the equal access to affordable and quality technical, vocational and tertiary education without any gender discrimination. Moreover, Target 4.4 focuses on relevant skills for employment, decent jobs and entrepreneurship which include again the technical and vocational skills. As per the United Nations (2024), worldwide scenario 2017 onwards show that in formal and non-formal education and training, approximately 16% of working population (15 to 64 years of age) were actively engaged.

Nevertheless, in India, we find that the National Skill Development Corporation was established in 2009 in order to provide vocational training to young people to improve their employability and meet the demands of the Indian economy. The vision of Skill India or Skill Development Mission, launched in 2015, is to create an empowered workforce by 2022 with the help of various schemes and training courses. Trainers' training is also carried out as a part of this mission. Other schemes like Digital India also provide the skill training and help in the empowerment of the society and knowledge economy. Sector Skill Councils are established for the

skill development and training in several sectors across different regions in the country. 37 such Councils serve the purpose of guiding Skill Development Programs at regional levels. In the next section, we will have an overview of a few initiatives undertaken by the Government of India for skill development in the country.

Why skill development is important?

Skill sets of individuals of a country help in shaping the country's economic and social sustainable development. Countries with better skills and knowledge are able to adapt more quickly with the changing environments, challenges and possibilities.

India is expected to become one of the most populous countries with 64% of its population being a part of the working population with an age group between 15 years and 59 years of age by the year 2026. Thus, such a high percentage of the working population of India would help in contributing to the Gross Domestic Product (GDP) immensely as well. At the same time, the population of China and USA would have an average population of 37 years of age and that of Western Europe would be of 45 years of age. Thus, we observe that India shall be surpassing these developed countries in working population and thus India has a great opportunity in improving its labour productivity to boost production, upskill and use the latest technology. (Sharma & Sethi, 2015)

As per the NSDC's Human Resource and Skill Requirements in the Banking & Financial Services Industry's Interim Report 2022, we observe an incremental human resource requirement of around 4.2 million between 2008 and 2022. As per the NSDC's report (2017-2022), the Indian IT-ITeS sector employs about 3 million individuals directly and about 9 million indirectly. Also, this sector is expected to employ about 5.1 million professionals by 2022. According to the NSDC's Report on Skill Development for Textile Industry (2017-2022), in the year 2014 India was the second largest national exporter of textiles and clothing in the world with a market share of more than 8%. Also, this industry aims to employ more than 21.54 million individuals. As per the NSDC's Report on Retail Industry, this sector is expected to generate employment for almost 56 million people by 2022. However, shortage of trained manpower and lack of retail skilling institutes, the skill gap continues to exist and increase.

Moreover, despite the increase in demand for employment across the BFSI, IT- ITeS, Retail and Textile Sectors in India, we observe as per that only 4% of our population is skilled (Madhusudan Narayan, 2021). Also, as per his report, the industrialised population of the world is predicted to shrink by 4% over the next 20 years, however, a 32% increase has been predicted for the Indian labour force. Nevertheless, the constraint India faces today is the population consisting of employable skills which is required to reap the benefits of this demographic dividend that has been predicted. Thus, we can say that skill development is one of the essential elements for India's future economic growth. Our working age population i.e. between 15 years to 59 years of age is expected to increase to 899.7 million in 2026 as compared to 810.6 million in 2016. However, out of this huge number only 10 million are expected to join the workforce. (Srivastava & Hasan, 2016). As per the International Labour Organisation (ILO), India would have a skill shortage of 29 million people by 2030 and as per the Accenture company, if the issue of skill gap is not addressed it would cause a loss of approximately $1.97 trillion in Gross Domestic Product.

In this research we have reviewed few emerging literature on behavioural economics of education, given the field's key interest in long- run decision making as well as the propensity of youth making poor decisions. We shall evaluate the behavioural barriers preventing students from enrolling for educational courses, completing the courses and the skill gap that exists between the course contents and employability.

We observe that various reports, journals, and papers help us understand the issue of lack of skilled population and the skill gap, however, in this paper we would analyse the causes behind the same by applying the nuances of Behavioural Economics and would suggest policies which embed the concepts of Behavioural Economics thus making the policies more attractive and executable.

Government initiatives for the skill development

Pradhan Mantri Kaushal Vikas Yojana was launched as a pilot scheme in 2015. The aim was to skill individuals hailing from school dropouts, college dropouts and unemployed youth of this country through short courses of 200 hours to 500 hours. This scheme was launched and implemented by the Centre along with the States. This scheme aims implement the policy in 3 elements:

1. First Element of Recognition: This is a type of prior learning where skills and training are being provided to those who have already attained prior trainings and thus already possess skill sets prior to these upskilling trainings.
2. Second Element of Short-term Training: This type of training aims to cater to those students who are unwilling to spend much of their time on acquiring a formal type of training either due to personal or financial constraints.
3. The third element: It focuses on imparting training to help create innovative, critical, creative and practical projects. Thus, it purely aims to provide upskilling to those who are currently under employment.
(CEPR, 2023)

National Education Policy 2020 proposes an integration of vocational training in school and higher education system in order to meet industry expectations in 21st century. (Pathak R. K., 2022)

The National Education Policy (NEP), 2020 emphasis on educational training that equips the students with a combination of technical, problem solving and creative skill sets. This policy aims to develop critical thinking amongst trainees and students and is more learner centric in nature. It tries to address the issue of rapid changing and emerging technologies such as Artificial Intelligence (AI), Robotic Analysis and more where these new technologies are acting as a replacement of human resource and proving to be more efficient as well. Thus, it focuses on upskilling as well as reskilling through an updated and a new age curriculum. Future of Work (FoW), encompasses technological advancement along with development of skills that foster sustainability, diversity and social responsibility. (Saxena & Kumar, n.d.) (ABSS, 2023).

About the skill gap
In the literature, we find three types of mismatch in the skills supplied and the skills demanded by the various industries:
Type 1: Over Education
Type 2: Mismatch in Technical Education
Type 3: Quality Skill Gap
(Unni, 2016)
For this research paper our prima facie focus has been on type 3 mismatch of skill, where for a particular kind of job the skills required are not sufficient despite of individuals having gained higher tertiary education. Thus, employers have to incur an extra cost for on-the-job training or upskilling to bridge this gap.
Moreover, the reasons behind the skill gaps can also be identified, pertaining to the higher education system and the skilling programmes and the congruence between them and industries. Students are also unaware of what is demanded at an industry level on joining the workforce, thus, this movement from being a college student to entering the workforce is not a smooth transition in terms of knowledge and skill requirement. This causes a low employability ratio. Thus, the gap exists between the perception and skills acquired by the students and the employer's expectations. To bridge the gap or to close the gap, higher education institutes can act as the bridge. (Sarin, 2019)

Applying Behavioral Economics to identify the gaps
The emerging field of behavioral economics aims to integrate research from psychology, neuroscience and sociology in order to better understand individual decision making and to develop policies that address the shortcomings in our decision making. This field acknowledges the deviations from time- consistent preferences due to cognitive and perpetual aspects of our brain's architecture that may lead to suboptimal decision making. Education outcomes range from performance on standardised tests to high school and post-secondary attainment and are determined by various factors such as parental inputs, school and college inputs and environmental factors. Thus, investment into this field by an individual is taken at an early stage and are cumulative in nature and thus the same is needed to be analysed and implemented into policy making such that individuals feel motivated to enroll for skill courses and enhance their education. (NBER Working Papers, October 2014).
For this study, we have focused on certain regions of Maharashtra and certain sectors such as Banking, Financial Services & Insurance and Retail sector, IT- ITeS and Textile sectors.
The reason for choosing the BFSI sector was because we hail from the commerce background and the demand in this sector for skilled labour has risen in recent times such that 4.2 million more labour would be required by 2022 itself. Choosing the IT- ITeS sector was because this sector being a booming industry and the future lies in artificial intelligence and technology, thus upskilling individuals in the sector is the need of the hour. Textile industry is an industry where skilling of the unskilled labour and absorption of the same is possible. The Indian Retail Sector is regarded as the fifth largest global destination in the retail space. Also, this sector is one of the most dynamic and fast paced industry which contributes over 10% to the GDP of India. Thus, we have selected this sector for our research paper.
Table 1 emphasises the need of Incremental Human Resource in various sectors in the country in 2017-22. The highlighted data shows the requirements in the selected sectors for given study.

Table 1: Incremental Human Resource Requirement in several sectors in India (2017-22)
(Numbers in millions)

Sr No.	Sector	Human Resource Requirement Estimates		Incremental Human Resource Requirement (2017 - 2022)
		2017	2022	
3	Retail	45.3	56	10.7
5	Textile and Clothing	18.3	25	6.7
20	IT & ITeS	3.8	5.3	1.5
21	BFSI	3.2	4.4	1.2
	Total	510.8	614.2	103.4

Source: Ministry of Skill Development and Entrepreneurship, 2022

About the selected sectors

We observe the following changes to the incremental demand of human resource across various sectors between 2013 and 2022:

1) Retail Sector: We observe an increase in demand for skilled labour of 22.3%

Employment base of the industry expected to reach ~56 million by 2022 across conventional and specialized Retail segments. Challenges Associated with Skill Training Institutes in Retail Sector -

1.　Little or No Premium Attached to Skills and Training: Untrained and trained people are paid at par, and it has been observed that some people do not pick trained people in this sector to save on costs which are 8 to 10 % charged by the consultants. This lacks students to train for this sector.

2.　Lack of standardised certificates: Due to lack of any accreditation agency, a standard certification has not yet emerged. Especially, for 2nd, 3rd and 4th tier cities, industries may have to adopt more organized channels of recruitment such as staffing and training companies as these companies have low skilled level employees.

3.　Lack of awareness about expectations from the Job: Mismatch in aspirations and reality.

Organised retail penetration in countries such as Malaysia, Thailand, Indonesia and China is ahead of India. However, in terms of talent India ranks amongst the top countries globally with low cost emerging as a key advantage. Significant opportunities exist to improve talent supply by investing in skill training infrastructure for the sector. (NSDC's Retail Sector 2022 Interim Report).

2) Textile: In this sector, a booming increase in demand of 41.4% is observed over the years from 2013 to 2022. (Saxena & Kumar, n.d.)

3) BFSI sector

As per the the NSDC report of District Wise Skill Gap Study, 2017 to 2022, the Banking, Finance and Service Industry (BFSI) does not observe a high skill gap. The reason observed for the same is recruitment of qualified individuals who possess the skill sets required by this sector. However, in the Insurance Sector, knowledge of structuring products as per various and diverse customer needs seems inadequate. Overall, the only skill set not satisfied was in terms of good communication among the sales staff and other semi- skilled staff within this sector.

However, as per our research based on primary source, shortage of skill set in this sector in the field of emerging technologies, such as, fintech, blockchain, artificial intelligence and robotics analysis was poor and deficient. The development of this skill set has become increasingly demanding as well as is the need of the hour as India along with the rest of the world is moving to an era where new and rapid changes in technology and adoption and integration of such technology within different processes would be needed to compete, increase efficiency and productivity.

1. The focus shifts towards customer-centric facing and sales profile, the industry has witnessed a surge in entry level hiring which is expected to sustain growth.

2. Back office and transaction processing profiles constitute many of the existing roles.

3. Considering low levels of banking penetration, expansion through branches and business correspondence is likely to generate significant employment opportunities in this sector.

4. Trained people are required to handle several mainstream banking activities such as cash collection, transaction-based services, customer care, and payment system related services that are bundled and outsourced.

4) IT and ITeS sector:

In the times of digital skill initiative and increasing importance and application of Artificial Intelligence and Machine Learning in all the sectors, it is important for the employees to be upgraded and updated with required upskilling for future-proofing jobs. (G. Lang, 2022)

Assumptions

For this study, the following assumptions are made:

1. National and State level data estimates can be applied to derive local level estimates.

2. Employment availability in the chosen sectors i.e., BFSI, IT-ITeS, Retail and Textile, is present.

3. An individual enrolls for skill-development programs with the objective of being able to be recruited by the industry in the future.

4. Our sample results and conclusions represent the population's behaviour.

5. Our sample represents rational and irrational conduct of individuals.

Research Objectives

1. To analyse initiatives undertaken by the Government to promote the skill development in India.

2. To identify the skills required by the industry experts and the employers in BFSI, IT-ITeS, Retail and Textile sectors.

3. To understand the know-how and the aspirations by the students/ probable trainees.

4. To analyse the gap between the skills acquired by the trainees at Skill Development Programmes and the skills required by the industry in BFSI, IT-ITeS, Retail and Textile sectors.

5. To make policy recommendations to bridge the skill gap in BFSI, IT-ITeS, Retail and Textile Sectors.

Scope of the study
This study would be limited to certain regions and certain sectors as mentioned below: -
1. For this Research, primary data collection and analysis would be carried out for selected regions in Maharashtra State and secondary data collection and analysis would be limited to India.
2. Our study would pertain to the BFSI Sector, IT- ITeS, Retail and the Textile Sector.
3. Additionally, within the framework of our research, insights of Behavioural Economics would be applied to gauge a general understanding of the rationale behind decision making.

Research Methodology
The methodology used for this research is primary data analysis as well as secondary data analysis, mostly qualitative one.
In case of research objective 1, mainly secondary data through official Government Ministerial reports is collected and analysed.
In order to meet objectives 2, 3 and 4, mainly primary data was collected. For this, data collection is carried out based on the surveys.
1) Case-study of employers and industry-experts- for this, mainly qualitative analysis is carried out by using a tailor-made questionnaire. Sample-size 8.
2)A survey of students and trainees- for this also, mainly qualitative analysis is carried out by using a tailor-made questionnaire. Sample size- 25.
For carrying out this analysis, qualitative analysis tools as thematic analysis and quantitative tools like data descriptives are carried out.

Results and Discussion
From our surveys of the trainees and students as well as a few case-studies of the employers and industry-experts, several insights about the skill-gaps were obtained. In this section, we take an overview of those insights.

(1) Skills required for the job according to the industry experts
• Responses by the employers/ industry experts regarding the skill-set required for their respective fields-
Technical skills, Communication skills, Problem solving, Analytical skills, Financial Knowledge, Collaboration/ team building/ Leadership skills, Time management, Flexibility and adaptability. Though, requirement of technical skills is not mentioned by all the respondents, their responses differ by the sectors. BFSI and IT-ITeS sectors definitely require technological skills according to our respondents.
• Responses by the students/ trainees-
The respondents have different opinions about the required skill-set from the above skills. However, almost one-fourth of the respondents opt for communication skills and flexibility and adaptability.
(2) Preference with reference to employability skills for formal education or skill-training courses; Job-preparedness of the students
• Responses by the employers/ industry experts-
All the respondents recognize the need of skill-training courses, while 25% of them are ambiguous whether the degree courses are sufficient in order to have job-preparedness.
• Responses by the students/ trainees-
All the students believe that their employability will be increased by securing the skill set, irrespective of formal training.
(3) Need of upgrading to cope with market developments
• Responses by the employers/ industry experts-
The respondents replied that they are prepared upto 50-70% in coping with the changing technology/ market scenario in their respective fields. Even for the trainees and employees, these industry experts believe that upgrading skills will help upto 87.5%. 12.5% of the respondents were notcertain about such need.
• Responses by the students/ trainees-
88% of the respondents uprighly answered yes to the question, where as 12% thought that their existing skill-set is sufficient for them in changing market trends.
(4) Avenues to upgrade in changing market trends
• Responses by the employers/ industry experts
87.5% of the respondents preferred learning through short- term
upskilling courses for upgrading in changing market trends in their respective fields, over the learning through formal degree training in the university.
• Responses by the students/ trainees-
In order to upgrade the skills in changing market trends, 60% of students prefer short-term courses, while almost 52% would also go for formal degree courses. Almost 36% of the respondents would also prefer to pursue short-term or long-term courses from outside India.

(5) Frequency of upgrading the skills to retain in the job
• Responses by the employers/ industry experts-
87.5% yes, 12.5% may be
• Responses by the students/ trainees-
88% yes, 12% may be.

(6) Upskilling for pay-rise
• Responses by the employers/ industry experts-
100%- yes

(7) Other recommendations in surveys
• Free of charge courses would be preferred b 92% of the student respondents and even when they offer placement/ internships.
• The student/ trainee respondents say that the short-term skill-training courses are easily accessible, have cheap expenses, lead to good skill enhancement, help in improving employability, have qualified trainers, provide internships or placement opportunities, and help in confidence-building.
• Some of the students/ trainees have mentioned that they would like to have a few advanced techniques in the courses offered like Tally, company valuation, financial analysis and modelling.
• Employers and industry experts recommended that the skill-development courses can be improved by focusing more on practical training, even using Artificial Intelligence.
• 62.5% of the respondents preferred the trained people who may or may not have degrees but have completed upskilling courses as new employees; however, for the existing employees, the engagement in the short-term upskilling courses which helps them upgrade their knowledge is recommended by all the employers.
On the basis of above results obtained from the surveys carried out by the researchers in the BFSI, IT-ITeS, Retail and Textile sectors; we make few suggestions for further improvement in the existing Skill Development Programmes, discussed in the next section.

Policy Recommendation
India being a highly populated country, the need for increasing training capacities for relevant and high-quality skills along with adapting to the rapidly changing needs of the market. Thus, the updating of the courses would have to be more frequent and as per the new emerging trends.
Focus on speeding up the Prior Learning Element would help reduce the skill gap by being able to match the current skills of the trainees/ employees and the skills set required by the industry.
There is a need for a transformation by the industries in identifying, accepting and placing more emphasis on the skill sets acquired by the individuals rather than the certificates obtained through formal and other trainings.
These skill courses should be short-term, rather than long-term in order to improve the enrolment as well as usefulness of the courses at the jobs in the selected sectors.
From the literature review and the primary data analysis, we conclude that the policies on supporting the industries as well as other key stakeholders to take initiatives in designing the skill courses is one of the ways to bridge the skill gap.

A way forward
The research carried out can be further expanded to large sample size and larger region than mere Maharashtra. Also, few more sectors can also be considered for skill gap analysis. This bridging of skill gaps would definitely lead to an increased employment in the country!

Acknowledgement

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