Original article

Features of contemporary State upskilling policies of India

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Abstract

Purpose: is to reveal features of contemporary State's upskilling policies of India that are focused on improving the competitiveness of Indian labour.

Methods: the article uses the methods of multiple comparative analysis, generalization, comparison and SWOT analysis of upskilling policies adopted by the government to upgrade the skills of the future workforce of India.

Results: the article examines the major government policies on skill development in India, provides a comparative analysis of their role, importance and effectiveness, and conducts a SWOT analysis to better understand these policies. It summarizes the properties, features and functions of the contemporary Government policies on skill development to highlight the relevance and importance of developing new tools to enhance their effectiveness. The comparative analysis of various factors has shown that the current Government policies on skill development in India require a holistic and realistic approach to revise the objectives of the Government strategy in this area and set reasonable targets.

Conclusions and Relevance: contemporary State upskilling policies such as Pradhan Mantri Kaushal Vikas Yojana, skill India etc. didn't reach set target. Not so many young labor force is enrolling in the courses provided by the State due to lack of promotion activities and reach to the target audience. The Government has less statistics of the Indian labor market which could clearly define the on-time status of all the State initiatives. There is a need to develop an online platform of staffing to have clear and actual data of the labor market. The online platform of staffing can connect all the stakeholders of the labor market which would help the government to use the holistic approach for developing the Indian labor market together with the stakeholder of the market.

Keywords: human resources, labor market, professional development, competitiveness of the labor force, State personnel policy of India

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Научная статья

Особенности современной государственной политики Индии в области повышения квалификации

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Аннотация

Цель статьи – раскрытие особенностей современной государственной политики повышения квалификации в Индии, направленной на рост конкурентоспособности индийской рабочей силы.

Методы. В статье использованы методы множественного сравнительного анализа, обобщения, сравнения и SWOT-анализа политики повышения квалификации, принятой правительством для совершенствования навыков будущей рабочей силы Индии.

Результаты работы. В статье исследованы основные государственные стратегии повышения квалификации в Индии, проведен сравнительный анализ их роли, важности и эффективности. Осуществлен SWOT-анализ для лучшего понимания этих стратегий. В нем обобщаются свойства, особенности и функции современной государственной политики в области повышения квалификации, чтобы подчеркнуть актуальность и важность разработки новых инструментов для повышения их эффективности. Выполненный сравнительный анализ различных факторов показал, что текущая государственная политика в области повышения квалификации в Индии требует целостного и реалистичного подхода для пересмотра целей государственной стратегии в этой сфере и постановки разумных задач.

Выводы. Современные государственные программы повышения квалификации, такие как «Прадхан Мантри Каушал Викас Йоджана», «Навыки Индии» и т.д., не достигли поставленной цели. Не так много молодых специалистов записывается на курсы, предоставляемые государством, из-за отсутствия мероприятий по продвижению и охвату целевой аудитории. Также у правительства меньше статистики индийского рынка труда, которая могла бы четко определить своевременный статус всех государственных инициатив. Необходимо разработать онлайн-платформу кадрового обеспечения, чтобы иметь четкие и актуальные данные о рынке труда. Такая онлайн-платформа может объединить всех заинтересованных лиц, что поможет правительству использовать целостный подход к развитию индийского рынка труда.

Ключевые слова: человеческие ресурсы, рынок труда, повышение квалификации, конкурентоспособность рабочей силы, государственная кадровая политика Индии

Introduction

Upskilling policies are crucial for the country's workforce to remain competitive in a rapidly evolving job market. Upskilling policies are essential for maintaining global competitiveness, adapting to technological changes, reducing unemployment, fostering innovation, addressing skills gaps, and supporting economic growth. These policies can include funding for educational programs, vocational training, subsidies for companies investing in employee training, and incentives for individuals to pursue further education or training. India has transformed its economy in 1990's to divert its economy to the way of capitalism and started receiving FDI as well as workplaces. India had to upgrade its workforce to contend with international competitors. India's economy is one of the fastest developing in the world with average rate of 7%. According to the latest report of Kearney Foreign Direct Investment Confidence Index, India is in the 2nd place after Hong Kong

China in emerging nations [1]. Many developed and developing nations are highly interested in working closely with India as nation has capability and ability of serving all sort of developing high tech, complex goods, and services to the world. Prime Minister of India, Narendra Modi has come to the administration in 2014 and since then he came with several reforms to skill Indian labor force for making India a hub of manufacturing. The Government has also paid high attention on the development of female workforce by supporting them socially and economically to close the employment gap between men and women in India's GDP by 2050 [2]. India is about to surpass the Chinese population soon and it could even have double the population of China by the end of this century according to UN World population prospects 2022. More than half of India's population is under 30, which makes India the youthful nation. Prime minister of India Narendra Modi's office together with the Ministry of Labor and Employment, Ministry of Education, National Skill Development Corporation, Ministry of Skill Development and Entrepreneurship and many other central and the State bodies have launched several programs to skill India and create workplaces on national and the State level such as Pradhan Mantri Kaushal Vikas Yojana, Make in India, Digital India, Startup India, Skill India. Some programs have shown tremendous results, and some were flops.

Literature Review

Upskilling and reskilling are usually considered as similar terms but there is a difference that upskilling means acquiring or developing new or existing skills whereas reskilling is developing absolutely new skills which would help to work in the new industries or projects [1]. Adam Smith emphasised its importance as an economic concept and argued that capital is not just machines and real estate, but also "the acquired and useful abilities of all the inhabitants or members of the society" [2].

The modern workforce specialising in technical works need regular training to become highly competent as new technologies are developed each day, otherwise some highly competent young specialist would replace the old one [3]. High tech companies need more highly skilled labour to ease our daily lifestyle, that's why AI developers get training not only in-house as well as in professional institutes [4]. AI has also revolutionised the medical and healthcare sector as more and more doctors and medical specialists are getting hands-on training [3] which creates more opportunities not only for them but also improves patient care [5]. Fintech is highly popular among youngsters, contributing 14% in the global economy [6].

The Prime Minister of India Shri Narendra Modi has a vision of transforming India into a developed country by 2047, the Government needs to invest more in the young labour force to realise the vision [7].

In Indian economy, where informal sector remains dominant (over 80% of the workforce), wages are largely subsistence, agrarian reforms have not succeeded in reducing social and economic inequalities, and industrial growth and urbanisation have not translated into major formal employment gains [8–10], upskilling of human resources becomes an inevitable endeavour of the Government of India A survey by Aspiring Minds in 2019 discovered that 80% of the Indian engineers were not fit for any job in the knowledge economy [10]. India has been growing rapidly but still it has not increased the demand of Indian labour [11]. The Indian labour market is highly popular for IT specialists who are facing ageism as the IT sector has been growing rapidly and young sharp minds are replacing them [12]. India receives the most remuneration in the world by exporting skilled and highly skilled labour. It has a huge contribution in the economy of India [13] but still it is also a big issue as labour gets education in India and establish their career in developed countries due to low wages [14].

According to the India Skills Report 2022 [15] creativity and social intelligence are likely to be essential skills for most new jobs created between now and 2030.

Geng Wang maintained in the article that the Government should start working on upskilling from tertiary level as the students can gain extras skills required in the market [16]. Developing new technologies need a new set of skills which should be upgraded from time to time [17].

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[1] Cautious optimism: FDI Confidence Index. Kearney Global Business Policy Council. 2023. 24 p. URL: https://www.kearney.com/documents/3677458/295856836/Cautious+optimism-2023+FDI+Confidence+Index.pdf/0e8f7145-6296-b236-d453-1f3254b3c281?t=1680272309000 (accessed 15.01.2024)

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The global skill report 2023 [4] suggests that economic growth is tied to skill proficiency. Statistics also prove that people with higher education have better potential of earning better and more capable of improving the quality of their lives [2]. Many teachers and educational professionals do not have enough hands-on qualification and knowledge needed in the market, that's why the Government has to upskill and reskill not only the workforce but also educational professionals [18]. There are less highly skilled courses available for non-IT professionals, which should also be undertaken by the Government.

India should work on long term and sustainable development policies which would address socio-economic challengers redistricting people developing new skills [19]. The Government of India is planning to launch a New Education Policy which would attract the more students and professionals to gain vocational training from time to time [20].

India needs to pay more attention to digitisation and digital education to reach all the corners of India as upskilling and reskilling are not very popular as people are less aware of the opportunities created by regular upskilling and reskilling [21]. The AI revolution has not only enhanced labour market but also raised unemployment as many young workforces do not have enough skills to compete nationally and internationally [22].

Material and methods

Theoretical analysis has been done by undertaking Indian and foreign researchers, which cover the numerous aspects of upskilling concepts and analysis of programs adopted by the Indian government to develop the Indian labour market. The article covers the conceptual foundation of upskilling programs by the covering information via official statistics of the government sources and research to identify and highlight the pros and cons of all the programs to understand the distant perspective.

The Global Skills Report suggests that the Indian workforce has only limited skill proficiency. Presently, in India 62 per cent of the population is of working age. By 2050, it will grow further by 183 million people. In such a scenario, a UNICEF study says that over 50 per cent of India's youth will lack the requisite skills for employment by 2030. The UNESCO Science Report of 2021 says that India's average gross domestic expenditure on R&D has been just 0.75 percent of its GDP in the past two decades, the lowest among the BRICS nations. The World Bank Human Capital Index (HCI) in October 2018 highlighted that in India, the productivity as a future worker of a child born today in the richest 20 percent of households is 61 percent while it is 44 percent for a child born in the poorest 20 percent [5]. This gap is larger than the average gap across the 50 countries in the world.

Akansha Jaiswal and others did a comprehensive study of the skills required in complex, higher order jobs and concluded that complex cognitive, decision-making, and continuous learning will be as important as data analysis and digital skills. Leadership, interpersonal and communications skills will stay important but will not require the same degree of upskilling as technological and cognitive skills [6]. The McKinsey and Company (2022) report suggests that digital proficiency seems to be particularly associated with higher incomes among all distinct elements of talent. White paper published by Quest Alliance and Tandem Research, predicted that foundational knowledge skills (language, mathematics, science, social science, etc.) and meta-skills (verbal and non-verbal communication) will continue to be relevant, particularly to facilitate learning ability (synthesis, analysis, and application) [7]. A survey of almost 300 academic, corporate-recruiting and emerging education leaders in India by IBM Institute for Business Value (IBV) in 2017 revealed that a dynamic, responsive higher education system is crucial for India to redress current skills challenges and realise its full economic potential. That is the reason skill development emerged as an important constituent of the UN's Sustainable Development Goals (SDGs), a set of global initiatives launched in 2016 to end poverty, protect the planet and ensure peace and prosperity for all.

In order to upgrade the skills of the Indian workforce effectively in the correct direction, the Government of India should draw attention to the ILO about the desirable employment skills for the future. ILO classified desirable employment skills for the future as: (i) Technical skills that

[4] Global Skills Report 2023. Corseara. 81 p. URL: https://downloads.ctfassets.net/2pudprfttvy6/3hsWnXlMBMffv3E8UiBrzC/fbe6c4a0a0dc3726e0825405c005f224/Coursera_Global_Skills_Report_2023.pdf (accessed 25.02.2024)

[5] Cautious optimism: The FDI Confidence Index. Kearney Global Business Policy Council. 2023. 24 p. URL: https://www.kearney.com/documents/3677458/295856836/Cautious+optimism-2023+FDI+Confidence+Index.pdf/0e8f7145-6296-b236-d453-1f3254b3c281?t=1680272309000 (accessed 25.02.2024)

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[7] Skills for future jobs: Technology & the future of work in India. Quest Alliance. 2017. 54 p. URL: https://www.questalliance.net/wp-content/uploads/2018/03/Skills_For_Future_Jobs_Quest_Alliance.pdf (accessed 25.02.2024)

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are globally in demand and transferable across sectors; (ii) Specific technical skills required to grow and align to the new environment; (iii) Core employability skills that are useful across sectors, industries, and occupations (such as communication, critical thinking, literacy, and numeracy) and (iv) resilience skills (stress resistance, time management, flexibility, and adaptability). The authors have conducted SWOT analysis in the paper to understand the current situation of programs initiated by the government and generalised the features of contemporary upskilling policies of India. Applied methods of abstraction were designed to showcase the upskilling programs using a systems approach, logical data analysis, and data visualization, in order to summarize and present the results achieved.

Results

The State staffing policies can significantly impact the economy of India by influencing factors such as productivity, labor market dynamics, and overall economic growth, such as:

• Efficiency and Productivity: Improved staffing policies can lead to a more efficient and productive workforce, positively impacting economic output and growth.

• Employment Opportunities: Favorable staffing policies can create more job opportunities, reducing unemployment rates and boosting consumer spending, which in turn can stimulate economic growth.

• Skill Development: Policies that focus on skill development and training can enhance the quality of the workforce, making it more competitive globally and potentially attracting foreign investments.

• Inequality and Labor Market Dynamics: Staffing policies can also impact income inequality levels and labor market dynamics, influencing consumer spending patterns and overall economic stability.

• Regulatory Environment: The State staffing policies can shape the regulatory environment for businesses, affecting their ease of operations, compliance costs, and overall competitiveness.

The Government of India has launched a mission "Self-reliant India (Atmanirbhar Bharat Abhiyan)" to make India independent in the global supply chain and promote Indian goods and services on the national and international markets. The Government has announced 268.74 billion US dollars to help all the sectors of the economy, which has reduced the 8.4 billion US dollars trade deficit of India with China, but this is not enough as India has high reliability on China. To become Self-reliant, India has to improve the quality of its labours to transform them from low to semi and to high skilled labours. To achieve these changes the Government of India has launched

various programs to generate employment, promote upskilling courses for skilled and highly skilled labourers, and improve the quality and productivity of the labour market.

Pradhan Mantri Kaushal Vikas Yojana (PMKVY) scheme or Prime Minister Youth Training Program.

It is a skill development program launched by the government of India under Skill Development and Entrepreneurship in 2015 for recognition and standardisation of skills of Indian labor force [23]. PMKVY courses divided in 3 categories:

a) Short Term Training (STT): There are many courses provided under STT such as soft skills, entrepreneurship, digital literacy and so on to unemployed youths or dropout students (aged 15–45) for 150–300 hours.

b) Recognition of Prior training: Under this course, skills, knowledge, experience, or any kind of formal and informal learning are acknowledged through certain assessment process designed by the National Skills Qualification Framework (NSQE) to certify the prior learnings, experiences, and skills.

c) Special Projects: It is a next level project which would upgrade new skills to create opportunities for workforce to establish themselves in innovative, critical and practical field in order to support the current demand of labor market and high-tech sectors.

The objectivity of this program is designed:

• to upgrade skills of young people for creating better opportunities,

• to escalate the capacity, potential and productivity of Indian labor force,

• to affiliate and certificate the skills of unorganized labor force by creating a National Skills Registry which would survey the potential, abilities and the future of workforce employability.

Pradhan Mantri Kaushal Vikas Yojana (PMKVY) was divided in 4 phases from 2015 to 2026

i. PMKVY 1.0 (2015–2016): Under the Ministry of Skills Development and Entrepreneurship India with the National Skills Development Corporation (NSDC) approx. 2 million candidates were upskilled.

ii. PMKVY 2.0 (2016–2020): Ministry decided to allocate 1.6 billion dollars budget and successfully trained approx. 9 million candidates. Government has also decided to align this phase to support many sectors, regions, and government missions such as Swachh Bharat, Made in India, Digital India and so on.

iii. PMKVY 3.0 (2020–2022): On behalf of previous efforts and gained experience from phase PMKVY

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1.0 and 2.0, this ecosystem of upskilling has been interrupted by COVID 19 pandemic. By 2021 only approx. 278 thousand candidates have been upskilled and certificated.

iv. PMKVY 4.0 (2022–2026): Due to the effect of pandemic the government has decided to split phase 3.0 in 2 stages and named PMKVY 4.0 the second stage is set from 2022 to 2026.

Overall, approx. only 14 million candidates have been educated under PMKVY scheme [8].

Skill India

The Government of India has launched Atmanirbhar Bharat (self-reliant India) mission. To help this mission, Skill India mission was launched by the Government of India in 2015 under the supervision of Prime Minister of India Narendra Modi. This basis objective of this mission is to bridge the gap between high demand and requirement of the labor market of skilled and high skilled labor in all sectors of the Indian economy by providing comprehensive skill and development training programs. The Government planned to train 400 million candidates in various programs by 2022 [24]. With the incorporation of the Ministry of Skill Development and Entrepreneurship, National Skill Development Corporation, and the Sector Skill Councils, 3 major programs are designed to enhance skills of youth such as:

a) Apprenticeship training – it is designed to provide post education job training to degree and diploma holder graduates to enhance better opportunities.

b) Technical Intern Training Program – this program provides training with the corporation of international institutions and industrial societies to facilitates the transfer of skills, expertise and technology to the Indian workforce, for example, some students can receive professional development courses in Japan for 3 to 5 years.

c) Online Skilling – this program is realized under the e-skill portal through which youth could have possibility and opportunity to get better online integrated digital learning program through various Indian and international institutions [9].

The Government is seriously concerned over Skill India mission, therefore, $379.06 million US has been allocated for the fulfillment and the favorable outcome in the Union Budget 2021–2022. There is an opinion, and it is also expected that India can become the global skill capital [10].

PM e-VIDYA

This is an initiative which is taken by the Ministry of Human Resource Development (MHRD) in May 2020 to promote digital education, e-learning and multi-mode access to digital educational content feasible for the students and teachers who may not have stable internet connection in the country. PM e-VIDYA is also known as One Nation One Digital Platform (ONODP) [11]. Under e-VIDYA, the Government has launched several platforms for students with the collaboration on national and the State level of schools, top hundred Indian universities, educational bodies such as NCERT, CBSE, UGC and so on, to drive Indian education digitally so to fight against possible encounter of future pandemics and disasters. Following platforms under e-VIDYA are:

a) Diksha platform (Digital Infrastructure for knowledge sharing) for the school students: it consists of e-content and QR coded valuable textbooks for all States and union territories schools of India. The platform, app, books, and other content are also available in regional languages, i.e., Hindi, English, Bengali, Gujarati and so on.

b) SWAYAM portal (Study Webs of Active learning for Youth Aspiring Minds): This platform provides the best teaching and learning resources by the top universities and schools online free of cost to the students who are interested in online learning.

c) SWAYAM Prabha TV Channels: it is DTH channels platform which can be accessed through DD, Dish TV and Jio TV app in Indian available for the students from class 1 to 12. DTH channels provide quality education program 24/7 using GSAT 15 satellite where content is repeated 5 times a day so that students could choose the right time to learn and revise their topics.

d) Extensive use of radio, community radio and podcasts: the Government organizes special web radio educational streaming and radio podcasts through Mukta Vidya Vani and Shiksha Vani Podcast to upgrade and upskills students who don't have access to the internet or digital resources so that students could not only study in the urban but also in the rural areas. On the way to school, back to home,

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[8] Pradhan Mantri Kaushal Vikas Yojana (PMKVY). IBEF. URL: https://www.ibef.org/government-schemes/pradhan-mantri-kaushal-vikas-yojana (accessed 16.01.2024)

[9] Skill India. IBEF. URL: https://www.ibef.org/government-schemes/skill-india (accessed 17.01.2024)

[10] Union budget, Ministry of Finance, Government of India. URL: https://www.indiabudget.gov.in/ (accessed 17.01.2024)

[11] PM e-VIDYA. Ministry of Education. Government of India. URL: https://pmevidya.education.gov.in/index.html (accessed 17.01.2024)

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or spending leisure time, a student has possibility to study anytime, anywhere.

e) Special e-content for children with special needs: study materials, applications, keyboard, display, alternate description for images and audio/video, content readability and structure should be designed for visually and hearing-impaired students, for example, the National Institute of open schooling would design its website accessible to disabled students which would make easier to browse.

f) Online coaching for competitive exams: Ministry of Education together with the Department of Higher Education have developed an e-learning platform for the students willing to attempt competitive exams can prepare themselves without leaving the homes and cities. The competitive exam courses are prepared by the IITPAL, E-Abhayas or IIT (Indian Institute of technology) professors to crack the entrance exams like Joint Entrance Exam (JEE) and so on [12]. Currently there are approximately 193 physics, 218 math's, 146 chemistry, 120 biology lessons are available. Even Channel number 22 has been aired on Swayam Prabha Channels, so that students could also have live classes.

Institutes of Eminence (IoE)

With the aim of empowering Higher Educational Institutions "to become world class teaching and research institutions" the Institute of Eminence (IoE) scheme was announced in the 2016. The aim was to develop the capacity of the Indian students and the researchers to become fit for competing in the global tertiary education marketplace through the acquisition of advanced knowledge in areas of specialization. Special focus was on teaching and research in interdisciplinary areas, which are regarded as important for strategic needs of the country . Further in 2017, the University Grants Commission set the regulations and guidelines for IoE and set up an Empowered Expert Committee (EEC) to select and monitor these institutes.

The expectations from IoE included:

• Highly qualified faculty, with a good proportion of foreign or foreign qualified faculty.

• Existence of academic, administrative, and financial autonomy.

• Excellence in teaching and research.

• Facility of financial assistance to meritorious students.

• Selection of the students through a transparent system.

• A good mix of the Indian and foreign students.

• Well-equipped facilities for teaching, research, administration, and student life.

• Inter-disciplinary courses, in areas of emerging technology and interest.

• Tangible and intangible contribution to the society.

If the institutions qualify as Institutes of Eminence in either category, they are granted more administrative and academic autonomy and better opportunities for collaboration with global universities. They are even free to open offshore campuses. In addition, there is a provision of grant for up to ₹1,000 crore for public institutions only [13]. The only issues are lack of awareness among the students about the government schemes and initiatives as well as lack of funding for developing infrastructure such as modern schools, colleges, institutes and universities. The program can be useful but there is no data available after 2016 on the official website of Institutes of Eminence, which raises questions on the future of this program, as the progress can't be evaluated.

Aatamanirbhar Skilled Employee Employer Mapping (ASEEM)

A further step to help skilled workforce find sustainable employment opportunities was taken by the Ministry of Skill Development and Entrepreneurship (MSDE) when it launched the Aatmanirbhar Skilled Employee Employer Mapping (ASEEM) portal in 2020. The aim was for ASEEM to serve as the central repository of trained workers where potential employers could access them. It would also help in analyzing and predicting trends by mapping the demand and supply sides of skilled workforce, consequently assisting to plan strategies of filling the skill gap [14].

The portal consists of three IT based interfaces:

• Employer Portal: Employer onboarding, demand aggregation, candidate selection.

• Dashboard: Reports, trends, analytics, and highlight gaps.

• Candidate Application: Creating and tracking candidate profile, sharing job suggestions [15].

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Candidate data available on the different State portals and the other workforce portals is all integrated-on ASEEM. Migrant workers (overseas citizens) who returned to India during the coronavirus epidemic were organized under the SWADES – Skilled Workers Arrival Database for Employment Support skill cards, were also integrated with the ASEEM portal. This helped them to find relevant jobs in India according to their qualifications.

Study in India (SII)

"Study in India" program, a flagship project introduced by the Ministry of Education (MoE) was launched by the Government of India to provide easy access to the international students to study in the best institutions of India. Introduced in 2018 the program aims to make India a global provider of education by improving quality of education. Under the program, premier educational institutions of India offer more than 15000 seats for the eligible foreign students in various disciplines. The participating institute needs to hold National Assessment and Accreditation Council (NAAC) accreditation of 3.01 or above, rank among the top 100 in any category (except medical) by the National Institutional Ranking Framework (NIRF) or hold the status of Institute of National Importance (INI) or Institute of Eminence (IOE) to be able to invite the foreign students. This ensures high quality of education to the international students. The centralized admission portal www.studyinindia.gov.in was launched for the foreign students to apply and be considered for admission in the best educational institutions. Applying for the study is free of cost. Moreover, a fee waiver depending on the merit and preference of the students is provided to more than half of the students through various scholarship schemes. The waiver can vary from 25 percent to 100 percent. The "Study in India" program would not only raise the status and commercialisation of the Indian education institutions but also, it would bring young and dynamic labour trained by the Indian education institutions or partly by the foreign education institutions who would bring competitiveness in the Indian labour market and more and more young Indians would grab upskilling courses to compete better shoulder to shoulder with foreigners. In both scenarios, the Indian labour market would gain prosperity.

Authors note that, unfortunately, many programs discussed above did not reach goals set, for example, the Government had a target to upskill 400 million candidates but reached only 25 million under the program Skill India. It shows that the Government doesn't set achievable goals. There is a humongous difference in the set target and reached number. Pradhan Mantri Kaushal Vikas Yojana (PMKVY) delivered only 14 million candidates in the market. Currently, there is no official data available on the official website of PM e-VIDYA and Institutes of Eminence about the progress and the development of these programs.
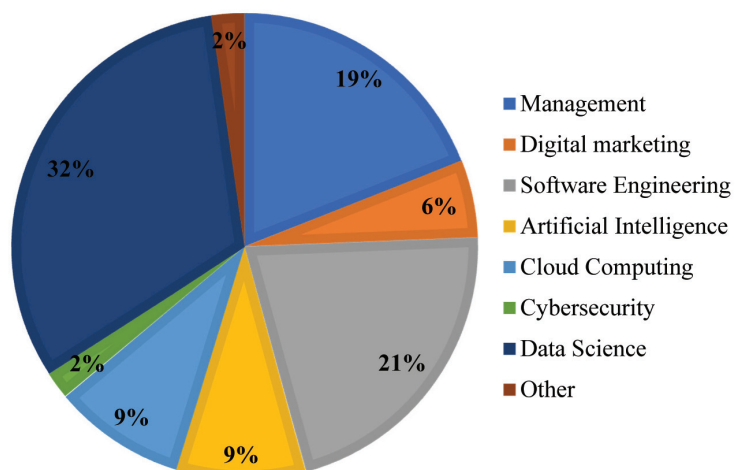
India ranks the 2nd in the world of supplying STEM graduates annually, but at the same time the gap in demand and supply is at 21.1% among top tech locations as the UK, China, and the US. According to Upskilling Trends Report 2023, 83% Indians are planning to upskill their professional skills and competencies by having formal, technical, tactical, or high-tech courses or programs in 2023. This would upgrade the value, capacity, and potential of Indian workforce in national or international arenas. It is expected that majority of Indian workforce would upskill in IT and Tech together with BFSI sectors followed by manufacturing, education, and automobile industry in 2024.

It is visible that data science courses are highly in demand for upskilling along with software engineering and management courses. It shows that the Indian professionals are highly interested in up-skilling themselves to high-tech and widely in-demand sectors in the 21st century. As per the report fig.1, professionals having more than 8 years' experience have acquired artificial intelligence and cloud computing courses in 2022. Those who were fresher, preferred to have management, software engineering and data science courses.

The proportion of professionals per gender enrolled in upskilling programs are shown in below fig. 2 and fig. 3 on behalf of experience more or less than 8 years. As we see, high-sky gender gap has been shown at higher level based on experience. On the other hand, gender gap is lower among less experienced professionals but there is high expectation on the other hand that female would have major contribution in the labor market and would acquire more upskill courses in the future.

The conducted SWOT analysis of the State policy of staffing allowed us to formulate some open questions that require urgent solutions at the State level, namely:

a. increasing the efficiency and degree of implementation of the government programs initiated to implement the personnel policy;

b. development of tools and provision of the information base (database) for forecasting personnel needs in high technology industries;

c. ensuring compliance with the demands of high-tech industries and the capabilities of the education system; strengthening interaction between high-tech enterprises and educational institutions;

d. creation of a flexible system of training and retraining of personnel;

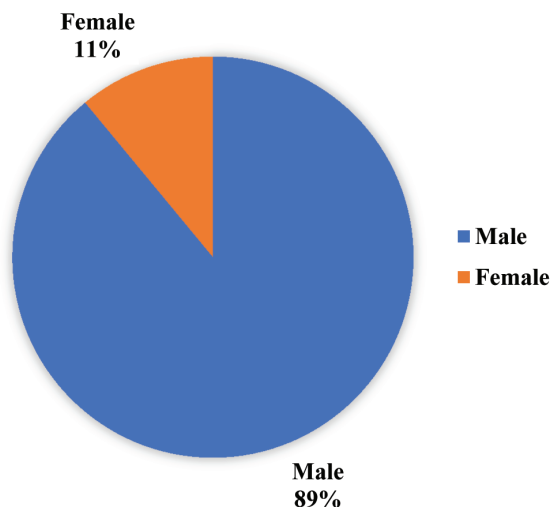e. increasing the accessibility and quality of education for the Indian population.

Fig. 1. Demand of profession's upskilling courses in percentage in 2022

Рис. 1. Спрос на курсы повышения квалификации в 2022 г., %

Fig. 2. Professional more than 8 years' experience in percentage in 2022

Рис. 2. Профессиональный стаж более 8-ми лет в 2022 г., %
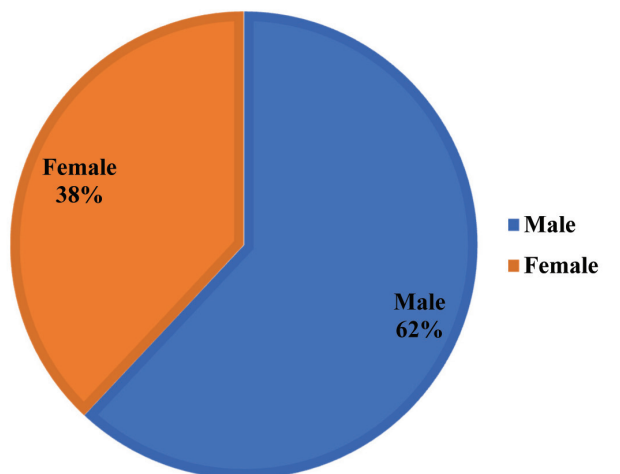
Compiled by the authors based on materials: Report: Upskilling Trends in India for 2023. Great Learning. URL: https://www.mygreatlearning.com/blog/upskilling-trends-in-india/ (accessed 25.02.2024)

Fig. 3. Professional less than 8 years' experience in percentage in 2022

Составлено авторами по материалам: Report: Upskilling Trends in India for 2023 // Great Learning. URL: https://www.mygreatlearning.com/blog/upskilling-trends-in-india/ (дата обращения: 25.02.2024)

Рис. 3. Профессиональный стаж менее 8-ми лет в 2022 г., %

Table 1

SWOT analysis of State upskilling policies of India

Таблица 1

SWOT-анализ государственной политики повышения квалификации в Индии

Strengths	Weaknesses
− Development of regulatory legislative and regulatory framework developed by the Ministries and Department of the Government of India. − The Government is stimulating employment, developing professional skills and competencies, including among young people on national and the State level. − The Government has established infrastructure to unite all the stakeholders to interact with leading companies and educational institutions, including through international cooperation. − Implementation of support to companies in the field of staffing.	− Formality, insufficient degree of implementation of the Government programs. − The insufficient level and quality of education on central and the State levels. − Inconsistency between the level of education and the needs of high-tech industries, skills shortages − Insufficient degree of integration between the spheres of the production and education − Lack of reliable data to analyze trends in the labor market and forecast staffing needs − Lack of data available of the programs on the official websites. − Many programs have not reached goals set. − Lack of promotion of the programs and unable reaching the target audience.
Opportunities	Threats
− Creation of new jobs. - Improving the quality of professional human resources. − Protecting the interests of professionals. − Creation of research infrastructure. − Strengthening international cooperation in the field of education and exchange of experience.	− Lack of demand and ineffectiveness of the government programs. − Outflow of qualified personnel and young specialists. − Deterioration of social infrastructure − Rising unemployment rate.

Compiled by the authors.

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Conclusion and Relevance

Upskilling is the vital stage of every professional upgrading and for creating long term sustainability and relevance in any sector or industry. Each day modern technology are introduced in the market. Therefore, it is important to have inter-sectoral knowledge and skills to become more potential and productive personnel. The Government of India has introduced several upskilling programs such as Skill India, PMKVY and ASEEM for employees, PM e-VIDYA and SII for secondary and the higher education students which proofs that the Indian Government is empowering and strengthening the roots from school level 'passive labor' to post graduate active labor so to make Indian workforce highly competitive in the international market.

The Government's efforts are highly appreciated but the on-ground statistics disappoint. Majority of the programs did not bring expected results. The Skill India program reached 25 million people but expected 400 million. According to the research, the Government is less successful due to following reasons:

• lack of awareness of the programs in the society;

• lack of private institutions participation in the programs to reach target audience;

• the Government's advertising campaigns failed to connect underprivileged youth with the programs launched;

• lack of data available on the official website of these programs, for example, there is no data listed about the progress, success and any short term plans on the website of Institutes of Eminence since 2016 of its launch;

• lack of public and private collaboration which leads to a huge gap in the results as not so many people can enroll in the Government institutions due to lack of seats.

The Government of India needs a holistic approach to develop a mechanism to unite all the stakeholders on a single digital platform of upskilling and staffing such as authorized Ministries and Department of the State policies and programs, public and private education institutes, public and private organization and companies, applicants and students, unemployed and active and passive labor. It would not help to promote the State policies, schemes and programs to the target audience but also spread awareness among youth to constantly gain new skills for becoming a better competitor and survivor in the labor market. If the Government has the latest date of relevant programs, it should be on their official website otherwise the digital platform of upskilling and staffing can help to get on time data from the platform which would be in public domain. The crucial part of reaching the right audience is that the Government of India should develop a culture and trend among youth for acquiring new skills with the support of education institutions and companies. The higher education system needs to better align with industry imperatives. The traditional educational models need to address key challenges in filling the skills gap by embracing applied educational experiences, emergent technologies, and industry and government partnerships to keep up with today's ever-changing skills requirements.

India has great potential as more than 50% of the population is below 50, which can transform the entire Indian economy to the well-developed society. The young Indians deserve high quality education to become multi-tasking, multi functioning as well as specialists in their own field. India needs more highly skilled engineers in different spheres, professional and competent doctors, young scientists, that would be possible, if India invested more money in education and infrastructure to hold young Indians in the country. If India needs to realize itself as the "skill capital of the world", implementation of these Government initiatives holds the key.

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