Pradhan Mantri Kaushal Vikas Yojana (PMKVY) 2.0
Short-Term Training

ANALYSIS OF SECTORAL PERFORMANCE:
THE ROLE OF CANDIDATE PROFILE
Table of Contents

Introduction 1
Overview of Sectoral Performance 1
Exploring differences in candidate profile across sectors 4
  • Gender 4
  • Age 5
  • Education level 7
Conclusion 9
Pradhan Mantri Kaushal Vikas Yojana (PMKVY) 2.0 is the flagship scheme of the Ministry of Skill Development and Entrepreneurship (MSDE), being implemented by the National Skill Development Corporation (NSDC) from 2016 to 2020.

Introduction

Pradhan Mantri Kaushal Vikas Yojana (PMKVY) 2.0 is the flagship scheme of the Ministry of Skill Development and Entrepreneurship (MSDE), being implemented by the National Skill Development Corporation (NSDC) from 2016 to 2020. The objective of this skill certification scheme is to enable a large number of Indian youth to get industry-relevant skill training that will help them in securing better livelihoods. The Short-Term Training (STT) is an integral component of PMKVY which enables candidates to undertake industry designed, quality skill training for a period of three to six months, become employable and procure livelihoods.

The objective of this analysis undertaken by the Market Analytics team is to study profiles of candidates taking up courses in different sectors – that is, their age, gender and education levels – to assess whether candidate profiles drive sectoral placement rates and explain sectoral differences to some extent. Skill training courses under the PMKVY 2.0 STT programme cut across multiple sectors. While the report provides placement rate for 36 sectors in which training has taken place, the analysis has been done for 16 sectors which have >1 per cent share in training.

Overview of Sectoral Performance

According to NSDC’s Skill Database Management System (SDMS) data till 3 February 2020, 33.6 lakh candidates have been trained till that date and, of this, 15.3 lakh were reportedly placed (45.6 per cent of trained candidates).

Figure 1 shows the top 15 sectors, which together account for 91 per cent of trained candidates. The highest number of candidates has been trained in electronics and hardware, apparel, retail, logistics and telecom sectors, accounting for 59 per cent of trained candidates.
High performing sectors – defined here as those with placement rate (placed/trained*100) higher than the overall rate of 45.6 per cent – account for nearly **49 per cent of trainings** under the STT programme. Within this set of sectors, the largest are apparel, retail, telecom, beauty and wellness, accounting for nearly 38 per cent of trainings. Other sectors (with >1 per cent share) – agriculture, power, media and entertainment, tourism and hospitality – have a 8.6 per cent share.

### Table 1  High Performing Sectors

<table>
<thead>
<tr>
<th>Placement rate</th>
<th>Trained %</th>
<th>Placement rate</th>
<th>Trained %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rubber</td>
<td>70%</td>
<td>0.05%</td>
<td>Leather</td>
</tr>
<tr>
<td>Hydrocarbon</td>
<td>63%</td>
<td>0.00%</td>
<td>Beauty and Wellness</td>
</tr>
<tr>
<td>Furniture and Fittings</td>
<td>62%</td>
<td>0.26%</td>
<td>Handicrafts and Carpets</td>
</tr>
<tr>
<td>Domestic Worker</td>
<td>59%</td>
<td>0.36%</td>
<td>Power</td>
</tr>
<tr>
<td>Textiles and Handlooms</td>
<td>55%</td>
<td>0.06%</td>
<td>Telecom</td>
</tr>
<tr>
<td>Apparel</td>
<td>53%</td>
<td>15.99%</td>
<td>Retail</td>
</tr>
<tr>
<td>Food Processing</td>
<td>53%</td>
<td>0.36%</td>
<td>Green Jobs</td>
</tr>
<tr>
<td>Aerospace and Aviation</td>
<td>52%</td>
<td>0.04%</td>
<td>Media and Entertainment</td>
</tr>
<tr>
<td>Agriculture</td>
<td>51%</td>
<td>2.37%</td>
<td>Tourism and Hospitality</td>
</tr>
</tbody>
</table>

Sectors with >1 per cent share in total trained are highlighted in green

Low performing sectors – defined as those with placement rate < the overall rate of 45.6 per cent – account for over **51 per cent of trainings** under the STT programme. In this set of sectors, the largest are electronics and hardware, logistics, IT-ITeS, construction, and Banking, Financial Services and Insurance (BFSI), accounting for over 40 per cent of trainings. Other sectors (with >1 per cent share) – persons with disability, capital goods, healthcare, automotive – have a 6.5 per cent share.

### Table 2  Low Performing Sectors

<table>
<thead>
<tr>
<th>Placement rate</th>
<th>Trained %</th>
<th>Placement rate</th>
<th>Trained %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infrastructure Equipment</td>
<td>19%</td>
<td>0.03%</td>
<td>Iron and Steel</td>
</tr>
<tr>
<td>Life Sciences</td>
<td>31%</td>
<td>0.60%</td>
<td>Management</td>
</tr>
<tr>
<td>Persons with Disability</td>
<td>31%</td>
<td>1.07%</td>
<td>Healthcare</td>
</tr>
<tr>
<td>Capital Goods</td>
<td>31%</td>
<td>1.17%</td>
<td>Plumbing</td>
</tr>
<tr>
<td>Sports</td>
<td>32%</td>
<td>0.07%</td>
<td>Electronics and Hardware</td>
</tr>
<tr>
<td>Mining</td>
<td>36%</td>
<td>0.44%</td>
<td>Automotive</td>
</tr>
<tr>
<td>BFSI</td>
<td>36%</td>
<td>3.39%</td>
<td>Security</td>
</tr>
<tr>
<td>IT-ITeS</td>
<td>37%</td>
<td>6.26%</td>
<td>Construction</td>
</tr>
<tr>
<td>Gems and Jewellery</td>
<td>38%</td>
<td>0.76%</td>
<td>Logistics</td>
</tr>
</tbody>
</table>

Sectors with >1 per cent share in total trained are highlighted in green
Figure 1  Top 15 Sectors

Sectors are arranged in decreasing order of trained numbers.

- Electronics and Hardware: 43.2%
- Apparel: 53.4%
- Retail: 46.8%
- Logistics: 45.3%
- Telecom: 46.9%
- IT-ITeS: 49.6%
- Beauty and Wellness: 45.3%
- Construction: 36.5%
- BFSI: 45.8%
- Tourism & Hospitality: 42.1%
- Healthcare: 50.8%
- Agriculture: 47.4%
- Power: 46.1%
- Media and Entertainment: 44.6%
- Automotive: 40.8%
- Others: 45.8%

Placement rate (right axis)
Gender

Based on an analysis of the data, it can be observed that female candidates perform better than male candidates in many sectors and, where their share is large, their performance drives strong sectoral performance. For instance, sectors such as apparel, beauty and wellness, media and entertainment, which see high female participation (96 per cent, 98 per cent, 85 per cent, respectively), have high female placement rates (54 per cent, 50 per cent, 47 per cent, higher than the overall rate of 45.6 per cent) (Figure 2 and Figure 3).

However, there are also sectors such as power where male placement rate is high (49 per cent) and, given the large share of male candidates (85 per cent), the overall sectoral rate is pushed up. In healthcare and IT-ITeS, male candidates outperform female candidates but the latter has a larger share (72 per cent and 53 per cent, respectively), pulling down overall placement rates.

Figure 2
Share of female trainees in a sector

Figure 3
Placement rate
Electronics and hardware, construction, capital goods, automotive sectors have a high share of male candidates (72 per cent, 94 per cent, 93 per cent, 89 per cent, respectively), and placement rates are either lower than or close to the overall rate of 45.6 per cent (44 per cent vs. 41 per cent; 46 per cent vs. 37 per cent; 31 per cent for both females and males; 45 per cent vs. 41 per cent, respectively), driving sectoral rates below it.

**Age profile**

As seen in Figure 4, placement rate is higher for older age groups, rising from 33 per cent among the 14-18 year-old candidates to 50.8 per cent in the 40-plus category.

In well-performing sectors such as apparel, beauty and wellness, and agriculture, there is a greater share of older age groups.

One-fourth of candidates in the apparel sector are in the age group 31-40 years and 5.5 per cent above 40 years, compared to the overall figures of 11.3 per cent and 2.3 per cent, respectively. In the beauty and wellness sector, the figures are 18.6 per cent and 3.5 per cent, and in agriculture 19.2 per cent and 9.5 per cent. The share of 19-25 year-old candidates in these three sectors is 46.5 per cent, 54.7 per cent and 50 per cent, respectively, compared to 64.7 per cent overall (Figure 5).

---

**Figure 4**

**Age group (in years)**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Placement Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>14-18</td>
<td>33.0</td>
</tr>
<tr>
<td>19-25</td>
<td>44.8</td>
</tr>
<tr>
<td>26-30</td>
<td>47.3</td>
</tr>
<tr>
<td>31-40</td>
<td>49.3</td>
</tr>
<tr>
<td>40+</td>
<td>50.8</td>
</tr>
</tbody>
</table>

**Figure 5**

**Age group (in years) distribution in top 15 sectors**
On the other hand, other well-performing sectors such as retail, telecom, tourism and hospitality have a younger age profile of candidates, with 72.8 per cent, 75 per cent and 73 per cent, respectively, in the 19-25 age group. The power sector also has a high share of 14-18 year-old candidates (9.1 per cent).

Among the low-performing sectors, the share of candidates aged less than 25 years, who have lower placement rates, is high in the electronics and hardware, logistics, IT-ITeS, construction, healthcare, automotive sectors – ranging from 70.5 per cent in healthcare to 77.1 per cent in logistics.

On average, female candidates have an older age profile than male candidates – 38 per cent of female candidates are more than 25 years of age, compared to 27 per cent for males (Figure 6). Sectors with high female representation such as apparel and beauty and wellness therefore also have an older age profile of candidates. Retail, telecom, tourism and hospitality sectors have greater male representation and a younger age profile. Similarly, electronics and hardware, construction, automotive are all sectors that have low female representation and a younger age profile.

However, there are exceptions. Agriculture has an older candidate age profile (47.6 per cent of 25-plus years, compared to 32.1 per cent overall), even though 62 per cent of the candidates are males. Similarly, IT-ITeS and healthcare sectors have younger candidate age profiles (75.9 per cent and 70.5 per cent at 25 years or less of age, respectively), but a higher share of female candidates.

**Figure 6** Age distribution
Education level

Among the education categories with >1 per cent share in trainings, the highest placement rate is seen among candidates with education up to Classes 5-8 (50.8 per cent), followed by those with an education up to Classes 9-10, graduates and candidates with Class 11-12 education (45.9 per cent, 45.2 per cent, 44.6 per cent, respectively) (Figure 7).

In low-performing sectors such as electronics and hardware, logistics, IT-ITeS, BFSI and healthcare, only a small proportion (0.2 - 2 per cent) of the candidates taking up courses are in the Class 5-8 category, while there is a larger proportion of this category in high-performing sectors such as apparel (24 per cent), beauty and wellness (11.3 per cent), agriculture (18.6 per cent), power (6.4 per cent), media and entertainment (4.1 per cent), tourism and hospitality (3.8 per cent) (Figure 8).
The share of the category with the second highest placement rate (Classes 9-10) is larger in well-performing sectors such as apparel (36.3 per cent), retail (31.1 per cent), beauty and wellness (37.4 per cent), agriculture (37.9 per cent), power (40.2 per cent), media and entertainment (32.3 per cent), and low in sectors such as electronics and hardware (18.4 per cent) and BFSI (7.3 per cent). Additionally, the share of candidates in the category with the lowest placement rate (Classes11-12) is high in electronics and hardware, logistics, IT-ITeS and healthcare sectors (56.6 per cent-61.2 per cent), compared to 32.5 per cent in apparel, 40.6 per cent in beauty and wellness, and 33.3 per cent in agriculture.

Telecom, however, has the largest share of Classes11-12 category among all sectors (72.5 per cent), yet this has not pulled down its placement rate; it is among the high-performing sectors. In the construction sector, meanwhile, despite a comparatively higher share of Class 9 -10 category (45 per cent), the placement rate is lower than the overall rate.

**In summary**

In the apparel, beauty and wellness, media and entertainment sectors, where female candidates comprise the majority, strong sectoral performance is being driven by high female placement rates. In addition, in apparel and beauty and wellness sectors, candidates have an older age profile and fewer years of school education, and both these segments exhibit high placement rates.

Retail, telecom, tourism and hospitality, power, and agriculture are five other high-performing sectors. In agriculture, though female candidates have a low share (38 per cent), their placement rate (55 per cent) is much higher than the overall rate. Moreover, the share of candidates who are aged 26 years or older is higher (47.6 per cent, compared to 32.1 per cent overall), and this segment has a higher placement rate. Agriculture also has a high share of candidates who have studied only up to Classes 5-8, the category with the highest placement rate.

In retail, telecom, tourism and hospitality, and power sectors, the share of male candidates is high. In retail (56 per cent male share), telecom (61 per cent), and tourism and hospitality (61 per cent), male placement rates (~46-47 per cent) are slightly higher than the overall rate of 45.6 per cent. In the power sector, with 85 per cent males, the placement rate is significantly higher at 49 per cent; in the power sector, the share of Class 9t-10 educated candidates (category with the second highest placement rate) is also relatively high.

While the electronics and hardware, construction, capital goods, and automotive sectors show a high share of male candidates (72 per cent, 94 per cent, 93 per cent, 89 per cent, respectively), both female and male placement rates are either lower than or close to the overall rate of 45.6 per cent. These sectors have a young age profile – 73.5 per cent-79.1 per cent are below 26 years of age. Electronics and hardware sectors also have a high share of the Class11-12 education category, which has the lowest placement rate.

In healthcare and IT-ITeS sectors, while there is greater participation by female candidates (72 per cent and 53 per cent), their placement rates are lower than the overall rate. What seems to be pulling down placement rates in these two sectors is a greater share of young trainees and Class11-12 educated candidates.

Although the logistics sector has a high share of the Class11-12 category, this segment shows better placement rates in the sector. But logistics also has a relatively younger age profile of candidates, and it is this that seems to be pulling down its placement rate. While BFSI has a high share of graduates, they have a better placement rate than those with only school education. Candidate profiles do not seem to be an important factor in pulling down performance in this sector.
Conclusion

The above analysis explores whether differences in the profiles of candidates taking up courses in different sectors has led to sectoral differences in placement rates. Candidate gender, age and education seem to be important factors in several sectors, but to a varying degree. Moreover, they do not fully explain sectoral differences. A deeper analysis of drivers of sectoral performance is necessary to understand these differences.

It should be noted that several factors can influence sectoral performance. These could be external – such as the state of the economy, job creation, presence of industry in the region, investment scenario – all of which influence placement prospects. Constraints on matching supply of skills with its demand due to information asymmetries may affect placement rates as might misalignment of training numbers with local demand. Sectors characterised by high degrees of informal employment (for example, construction) might also demonstrate low placement rates due to challenges in provision of documentary evidence of employment.

Simultaneously, there could be factors intrinsic to programme implementation that may influence placement rates. One such factor is the distribution of training across job roles in a sector; low sectoral placement rates could be due to poor job role selection.

Figure 9 shows that, in low-performing sectors such as electronics and hardware, IT-ITeS, construction, BFSI, healthcare and automotive, at least ~50 per cent of trainings have occurred in one job role. Overall placement rates in each of these sectors are close to the placement rate in the top job role. It is therefore important to review the selection of job roles carefully, as poor performance in large job roles in a sector could be driving poor performance overall in the sector. At the same time, however, there are sectors with good sectoral placement rates, such as apparel, retail and power, where the largest job role has >50 per cent share in trainings, and placement rates are high in these job roles. This issue of job role-wise performance in a sector is an area for further study.
About National Skill Development Corporation (NSDC): National Skill Development Corporation, working under the aegis of Ministry of Skill Development & Entrepreneurship, is a unique public-private-partnership which aims to catalyse creation of quality vocational training ecosystem in India. The organisation provides funding to build scalable and profitable vocational training initiatives. Its mandate is also to enable support system which focuses on quality assurance, information systems and train-the-trainer academies either directly or through partnerships. Since establishment in 2009, NSDC has trained more than 2 crore people through its partnership with 600+ training partners, wide a robust network of 11,000+ training centres spread over 600 districts across the country. NSDC has institutionalized 37 Sector Skill Councils and is also implementing Government’s flagship skill development schemes such as Pradhan Mantri Kaushal Vikas Yojana (PMKVY), Pradhan Mantri Kaushal Kendra (PMKK), National Apprenticeship Promotion Scheme (NAPS), among others.

October 2020

CONTACT US: NSDC’s Skills Intelligence Platform at skillsip@nsdcindia.org