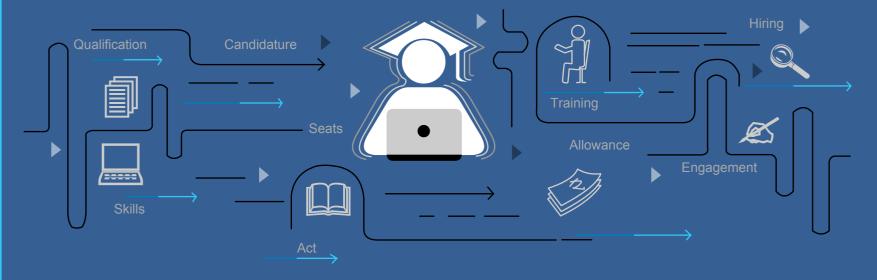
# The Apprenticeship Outlook and Index



6-month forecast for apprentice hiring based on employer sentiment Forecast for CY-2: July 2019 – December 2019



About - The Apprenticeship Outlook		1
: : : :		
: Definitions		3
Key Findings		4
The Apprentice Outlook		8
More insights		15
Employer Expectations		23
Trends in apprentice engagement		32
	L	
The Apprenticeship Index		37
The Application index	L	
Annexure		40

# **About** - The Apprenticeship Outlook

The Apprenticeship Outlook report contains insights on the current levels of hiring of apprentices and employer sentiment about apprentice hiring for the next 6 months [CY-2: July 2019 – December 2019]. Analysis is based on the historical data of apprentice hiring and findings from a survey of 502 employers across 12 sectors and four regions (South, North, East and West).

# The objective of this report is to

Gauge employer sentiment about hiring apprentices over the next 6 months, by sector and by region.

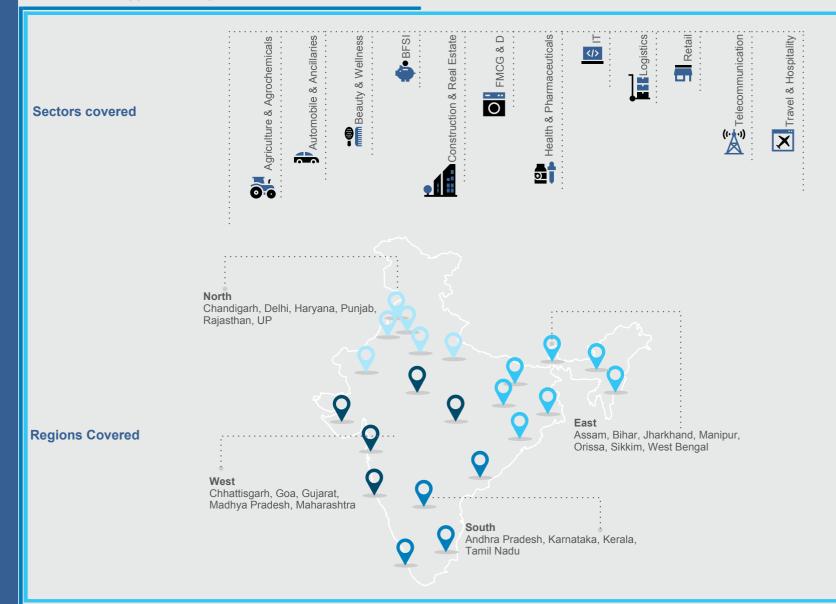
Identify the functional areas, category and job profiles employers plan to hired over the next 6 months.

Analyze the trends in stipend payouts.

Analyze current apprenticeship hiring under NAPS (National Apprenticeship Promotion Scheme) and NATS (National Apprenticeship Training Scheme), by city and by sector (data and information mainly from secondary sources).

# Reporting convention: how to interpret outlook statistics

The Apprenticeship Outlook is based on the responses from the survey respondents. The Outlook is expressed as a percentage of the total number of respondents.



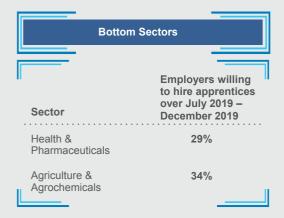
Apprentice	An apprentice is a person who is undergoing apprenticeship training.
Apprentice Hiring	Identifying and hiring an apprentice for a specified tenure and a specified stipend.
Apprenticeship Training	Apprenticeship training refers to a course of training in any industry or establishment. Apprenticeship training consists of basic training (theoretical instructions) and practical on the job training at actual work place.
Engagement of Apprentices	Employers engaging or training the apprentices in their establishment.
Trade Apprentice	A person undergoing apprenticeship training in any designated trade. Candidates should be 8th, 10th, 12th & ITI pass outs for trade apprenticeship training.
Graduate Apprentice	A person who holds a degree in engineering/non-engineering and undergoing apprenticeship training in designated trade
Technician Apprentice	A person who holds a diploma in engineering / non-engineering and undergoing apprenticeship training in designated trade.
Technician (vocational) apprentice	A person who holds certificate in vocational course after the completion of the secondary stage of school education recognised by the All-India Council
Apprentice Act 1961	The Apprentices Act was enacted in 1961. It regulates the programme of training of apprentices in the industry so as to conform to the syllabi, period of training etc. as laid down by the Central Apprenticeship Council and to utilise fully the facilities available in industry for imparting practical training with a view to meeting the requirements of skilled manpower for industry.
Applicants	Candidates who have applied for apprenticeship training.
Seats allocated	Seats reserved for apprentices in the organization
Seats Utilized	Seats reserved for apprentices being filled.
NAPS (National Apprenticeship Promotion Scheme)	NAPS is a Scheme launched by Ministry of Skill Development and Entrepreneurship to provide skill training to ITI students/ Freshers /MES Pass-outs/PMKVY candidates.
NATS (National Apprenticeship Training Scheme)	National Apprenticeship Training Scheme(NATS) is instituted by Board of Apprenticeship Training/Practical Training, Ministry of Human Resource Development, Government of India. It is a National Scheme for providing skill training to Fresh Graduates, Diploma Holders in Engineering and Technology and +2 Vocational pass outs.

# **Key Findings**

Summary of insights from the employer survey on apprentice hiring

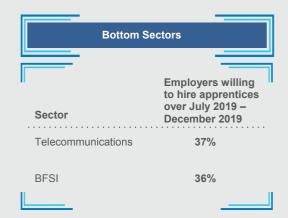
**Manufacturing:** 40% employers willing to hire apprentices over July 2019 – December 2019





**Services:** 42% employers willing to hire apprentices over July 2019 – December 2019

Тој	o Sectors
	Employers willing to hire apprentices
Sector	over July 2019 – December 2019
Retail	45%
Travel & Hospitality	44%



# **Key Findings**

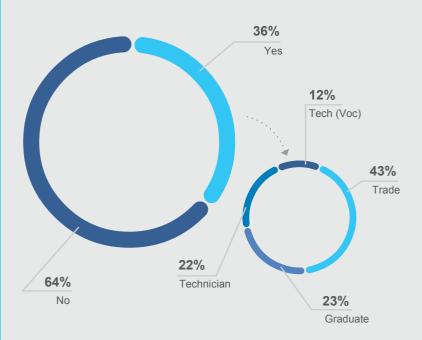
17% more respondents are willing to hire apprentices in future and a significant 5% more employers are willing to hire apprentices over the next 6 months [CY-2: July 2019 - December 2019]. Current levels: 36% | Forecast: 41% 40% of the employers in the Manufacturing sectors and 42% of the employers in the Services sector are willing to hire apprentices over July 2019 – December 2019 ■ Top Sectors (Manufacturing): FMCG & D (45%) and Automobile & Ancillaries (42%). ■ Top Sectors (Services): Retail (45%) and Travel & Hospitality (44%) □ Bottom Sectors (Manufacturing): Health & Pharmaceuticals (39%) and Agriculture & Agrochemicals (34%) ■ Bottom Sectors (Services): Telecommunications (37%) and BFSI (36%) 41% of employers are likely to hire apprentices over the next 6 months and 22% are less likely to engage apprentices Trade apprentices (36%) are likely to be hired most, followed by Graduates and Diploma Technicians. Under the Trade category, Mechanics(31%) and Electricians(30%) are likely to be hired by most of the employers in the next 6 months. Under the Graduate and Diploma categories, the demand is for Apprentice Mechanical Engineer /Technician(21%), Apprentice Electrical & Electronics Technician(18%). Under the Vocational technician category, Mechanical Technician(20%), Electrical Technician(20%) and Lab Technician(17%) will be likely hired by most of the employers. Functional areas like Production & Engineering(23%), Sales and Marketing(18%) and IT(17%) are likely to see more hiring. Technical Knowledge (24%) and Communication skills(23%) are the major skill requirements cited by employers. Most employers prefer male candidates for reasons ranging from physical strength(37%), better performance(28%) and safety and security(25%). Majority of employers (72%) pay stipends below Rs. 12000 per month with no plans to increase over the next 6 months. Government apprenticeship portals(31%) and Job portals(27%) are the preferred sources of hiring of apprentices.

Engagement of apprentices	•·····	Engagement forecast – Growth in the engagement – Growth in engagement in all regions except Eastern region	41% (36% currently) 5% 30-40%
Region wise growth in engagement	•	Eastern Western Northern Southern	-14% 32% 35% 31%
Profiles in demand	•	Trade Apprentices  Mechanic Electrician Welder  Graduate / Diploma apprentices  Apprentice Mechanical Engineer /Technician Apprentice Electrical & Electronics Technician Apprentice Automobile Engineer  Vocational Technicians Mechanical Technician Electrical Technician Lab Technician	31% 30% 20% 21% 18% 17% 20% 20% 17%
Functional Areas	•	Production & Engineering Sales & Marketing Information Technology	23% 18% 17%
Stipend	•	<8000 8001 – 12000 12000 – 15000	34% 38% 15%

Topline Measures from the employer survey on apprentice hiring

Now and in the next 6 months [forecast for CY-2: July 2019 – December 2019]

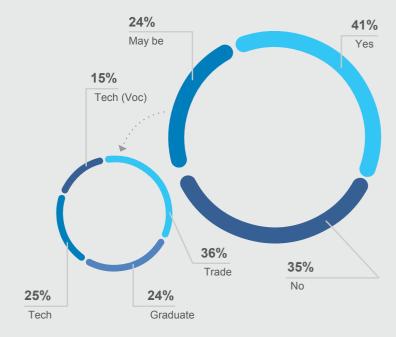
# Are apprentices being hired now?



36% of the 502 respondents hired apprentices, of which 43% hired Trade apprentices and 23% hired Graduate apprentices.

	Yes	No	May Hire
Existing Employers	137(76%)	18(10%)	25(14%)
New Employers (new engagements)	68(21%)	158(49%)	96(30%)

### Will companies hire apprentices over the next 6 months?



41% of the 502 respondents will hire apprentices in the next 6 months, 61% hiring Trade apprentices and Technician apprentices.

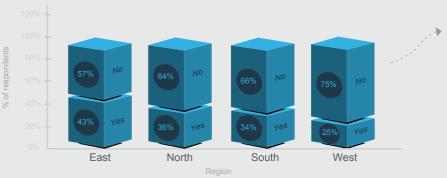
17% more respondents are willing to hire apprentices in future; and 5% more respondents are willing to hire apprentices over the next 6 months, compared with the current levels of 36%. Up to 90% of the existing employers are likely to rehire over the next 6 months.

Source: Valuvox Survey of Apprenticeship Hiring Trends ,Apr-May, 2019 | Total number of respondents: 502

Sample Size: 502

# by Region [forecast for CY-2: July 2019 – December 2019]

# Are apprentices being hired now?



# Will companies hire apprentices over the next 6 months?



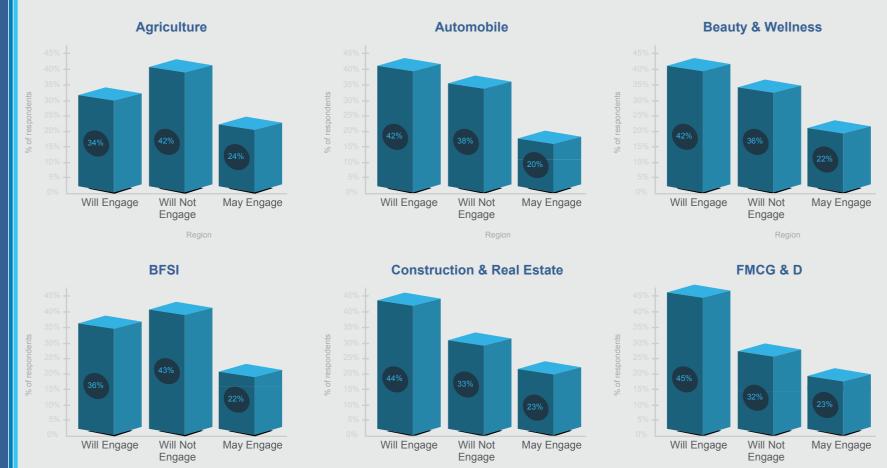
Region	Yes	No
East	43%	57%
North	36%	64%
South	34%	66%
West	25%	75%

Region	Yes	No	May Engage
East	37%	42%	21%
North	42%	40%	18%
South	38%	35%	27%
West	33%	44%	23%

Western region exhibits the biggest growth in employers' intention to hire apprentices over the next 6 months, followed by the Northern region

Source: Valuvox Survey of Apprenticeship Hiring Trends ,Apr-May, 2019 | Total number of respondents: 502

by Sector and Region [forecast for CY-2: July 2019 – December 2019]

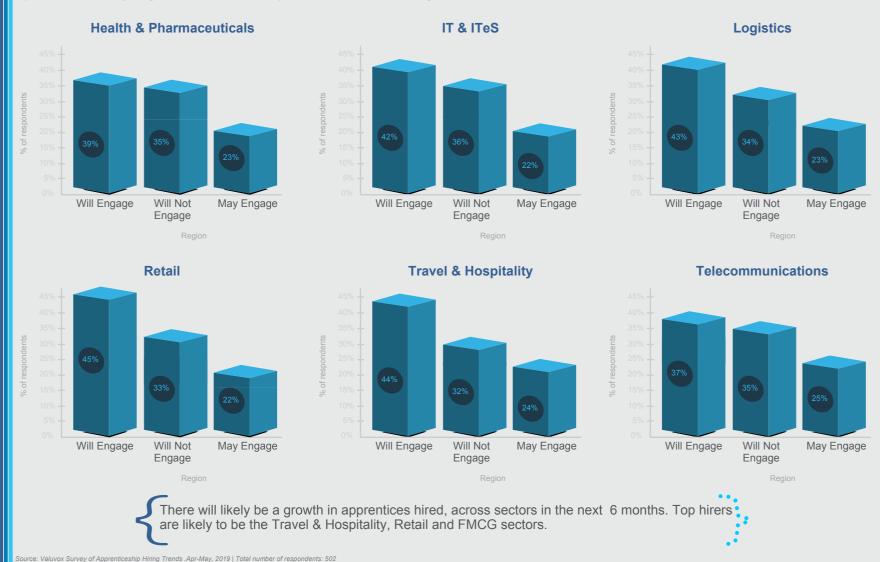


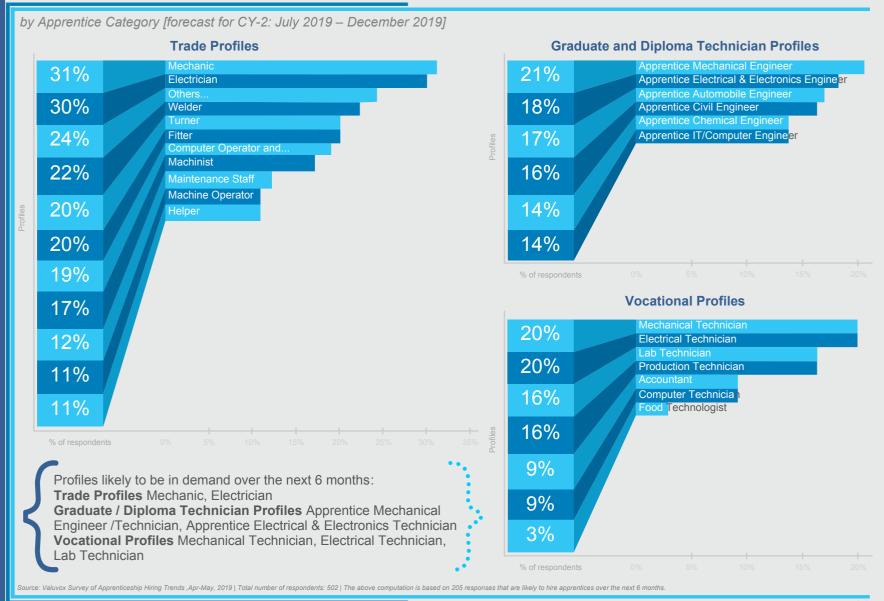
Region

Source: Valuvox Survey of Apprenticeship Hiring Trends ,Apr-May, 2019 | Total number of respondents: 502

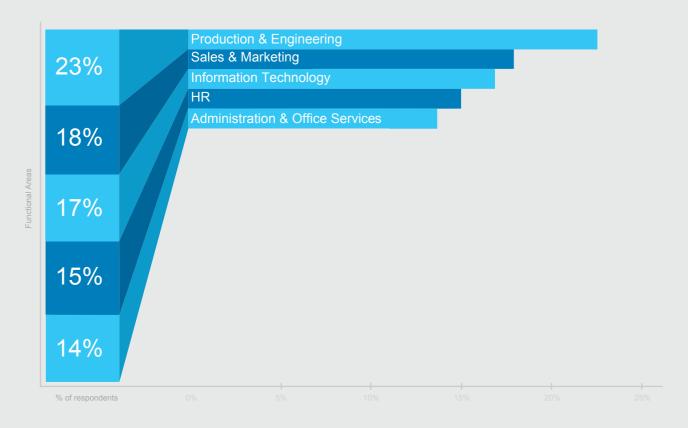
Region

by Sector and Region [forecast for CY-2: July 2019 – December 2019]





by Functional Area [forecast for CY-2: July 2019 – December 2019]

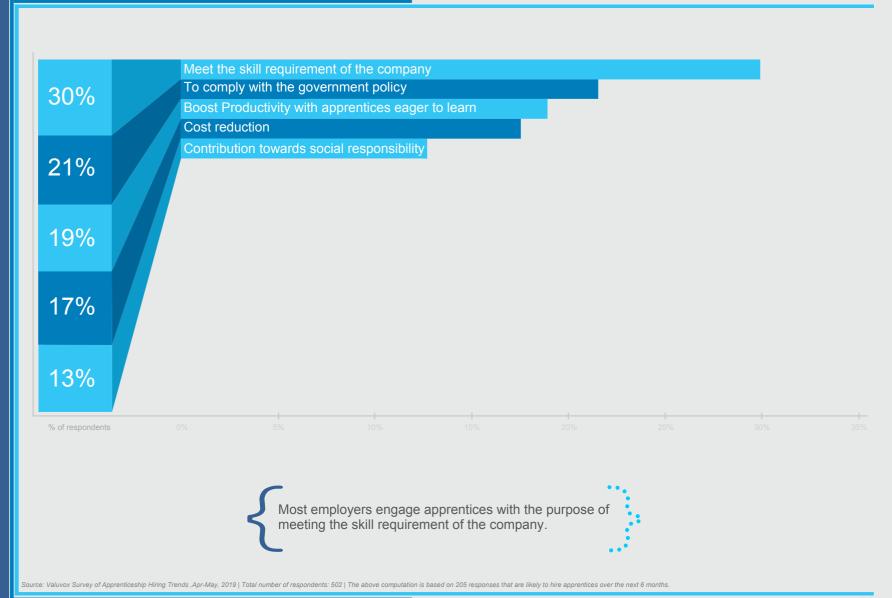


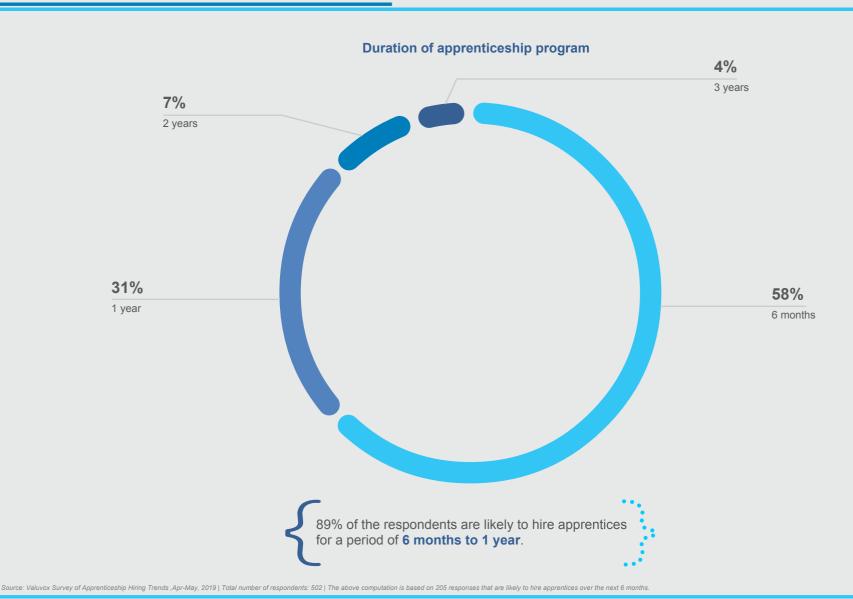
Production & Engineering, Sales & Marketing and IT are the functional areas where hiring sentiment is strong for the next 6 months

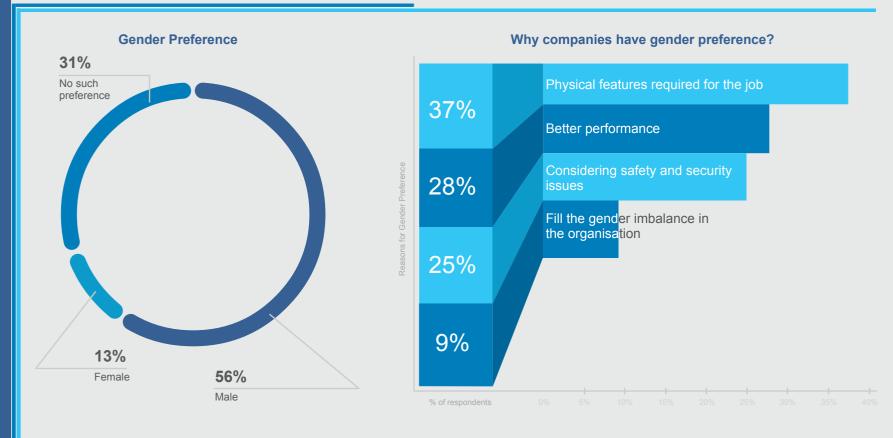
Source: Valuvox Survey of Apprenticeship Hiring Trends ,Apr-May, 2019 | Total number of respondents: 502 | The above computation is based on 205 responses that are likely to hire apprentices over the next 6 months.

# More insights

Employer survey on apprentice hiring

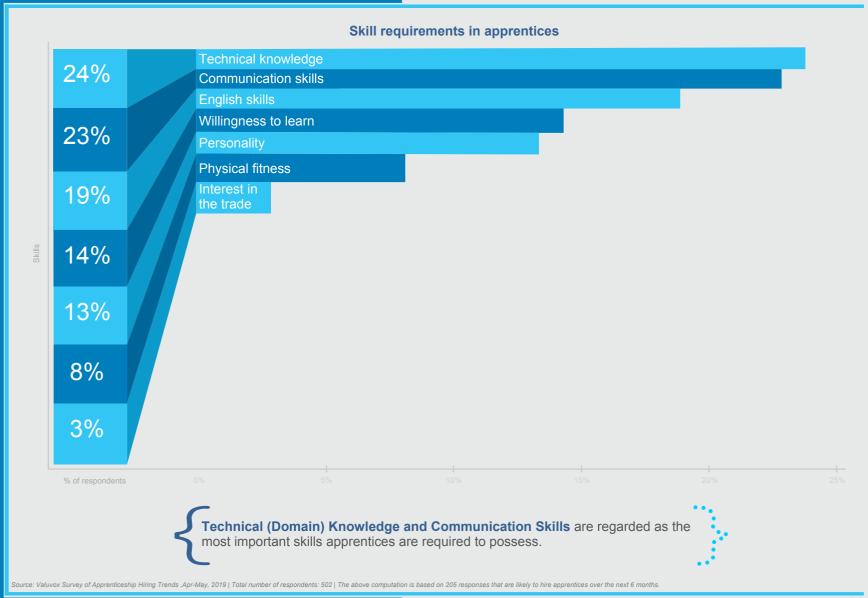


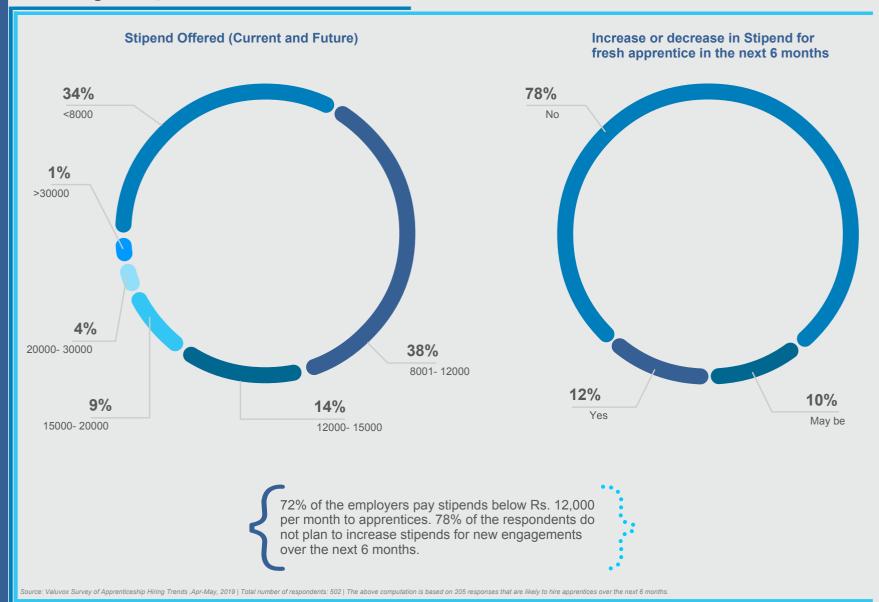




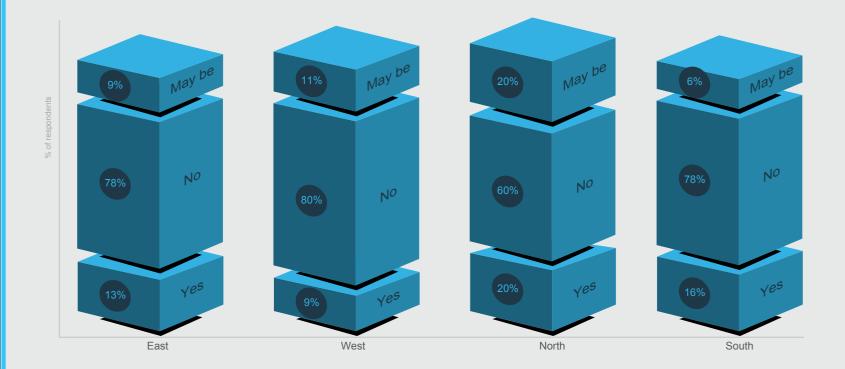
Most employers prefer **male candidates** for reasons ranging from physical strength, better performance and safety and security. On the other hand, 31% of the employers do not discriminate between the genders.

Source: Valuvox Survey of Apprenticeship Hirring Trends ,Apr-May, 2019 | Total number of respondents: 502 | The above computation is based on 205 responses that are likely to hire apprentices over the next 6 months.



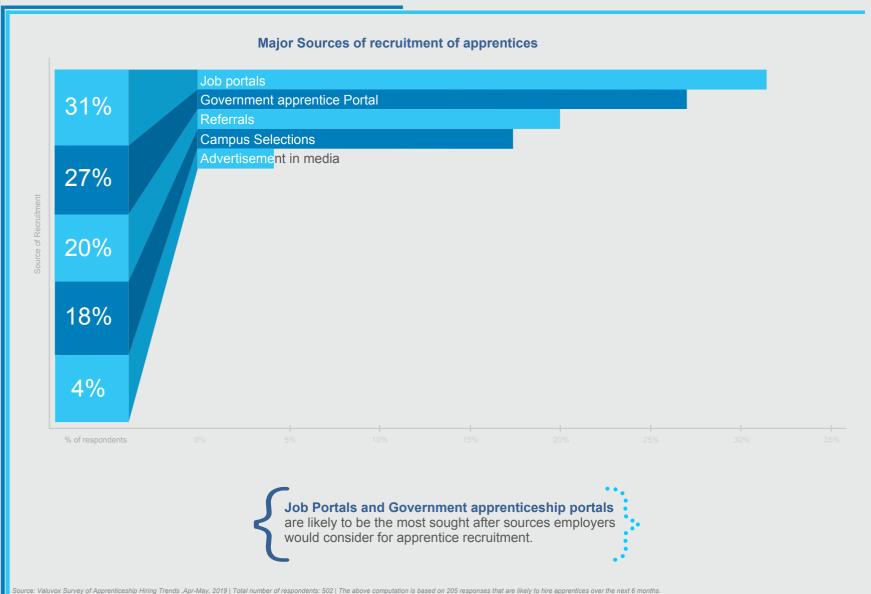


# by Region



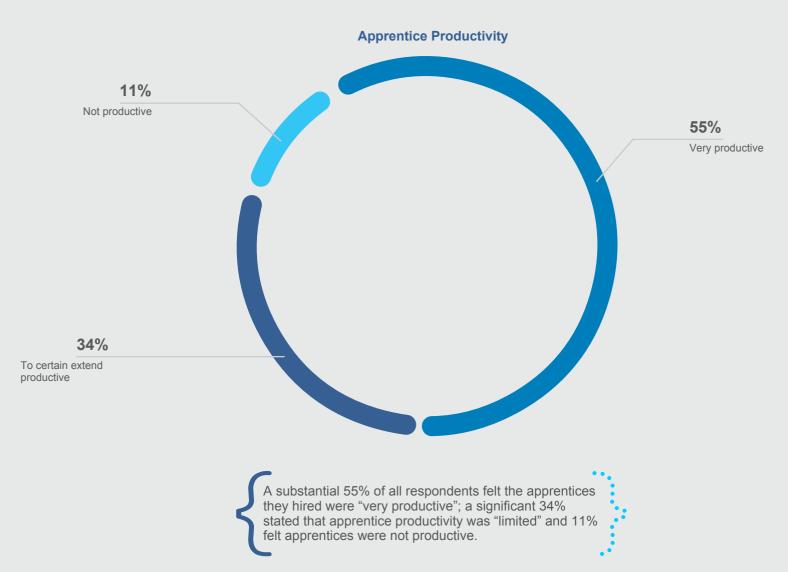
A majority of respondents, across regions, are not likely to increase stipends over the next 6 months.

Source: Valuvox Survey of Apprenticeship Hiring Trends ,Apr-May, 2019 | Total number of respondents: 502 | The above computation is based on 205 responses that are likely to hire apprentices over the next 6 months.



# **Employer Expectations**

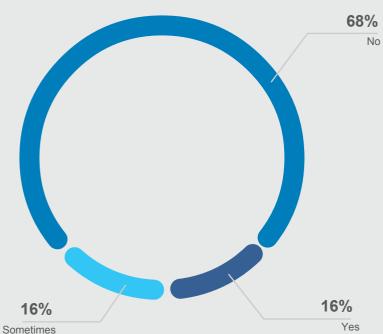
from the employer survey on apprentice hiring



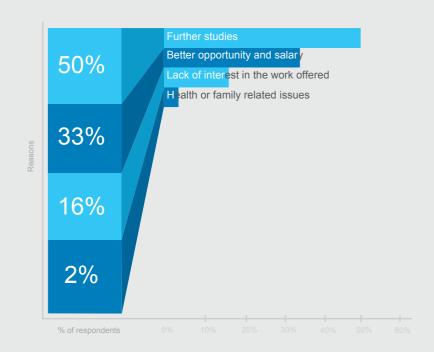
Source: Valuvox Survey of Apprenticeship Hiring Trends ,Apr-May, 2019 | Total number of respondents: 502 | The above computation is based on 205 responses that are likely to hire apprentices over the next 6 months.

Do apprentices quit before the tenure ends?





# Why apprentices quit before the tenure ends?



A majority of the apprentices complete their tenures. Attrition (prior tenure completion) is mainly due to – **the need to pursue higher studies or securing a better paying job** / **apprenticeship opportunity.** 

Source: Valuvox Survey of Apprenticeship Hiring Trends ,Apr-May, 2019 | Total number of respondents: 502 | The above computation is based on 205 responses that are likely to hire apprentices over the next 6 months.

Establishments with a workforce (regular and contract employees) of 40 or more are mandated to undertake Apprenticeship Programmes and commit 2.5% -10% of their workforce every year to apprentices.

Government to reimburse 25% of the stipend paid by employers to apprentices. Reimbursement of basic training: up to Rs. 7,500/month per apprentice.

Mandatory engagement of apprentices

Financial support from government

128 million skilled workers required between 2017 and 2022 across 34 sectors

With less than 5% of the Indian workforce having undergone formal skill training, 80% of the workforce entrants do not have the opportunity for skill training.

Service sector brought under Apprenticeship Programme

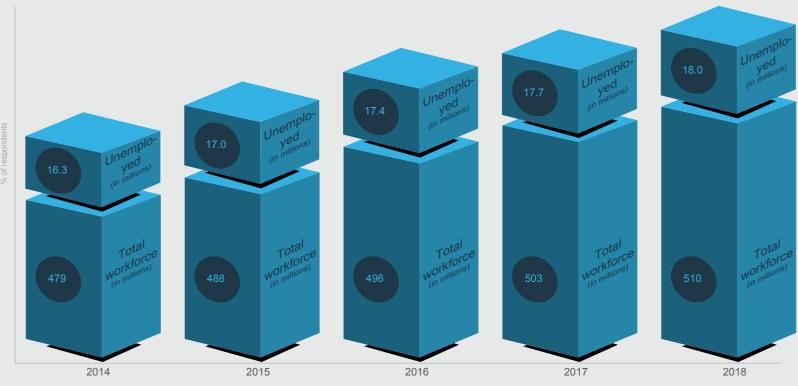
Deployment of apprentices in the service sector has also been made compulsory now. This has fuelled the demand for apprentices in the Service sector.

The recent amendments to the Apprentice Act 1961 have had a major positive impact on the hiring of apprentices across both the manufacturing and the service sectors.

Source: Source: Annual Report, 2016-17, Ministry of Skill Development and Entrepreneurship Amendment of Apprenticeship Act 2014, Apprentice Portal

# Demand-Supply Gap

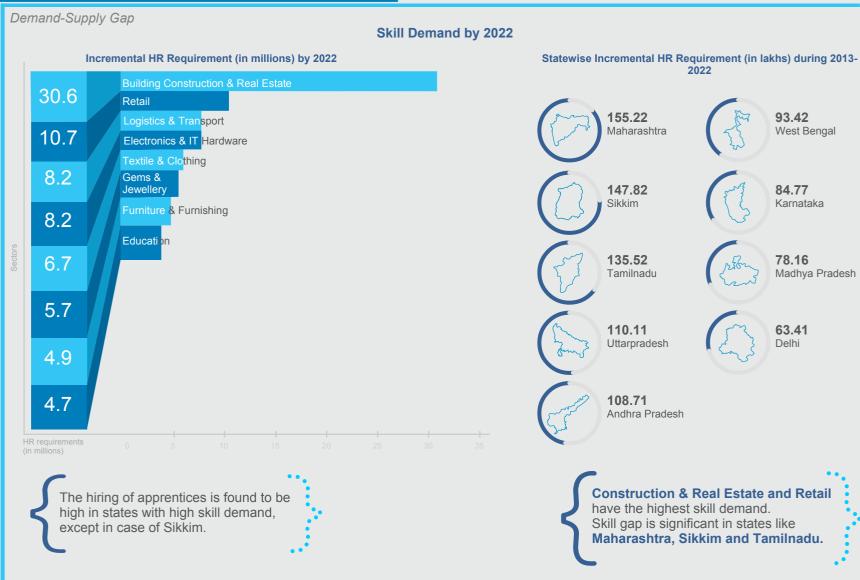




The drivers of the trend to hire more apprentices are – lack of skill based education and lack of basic employability skills (even among graduates).

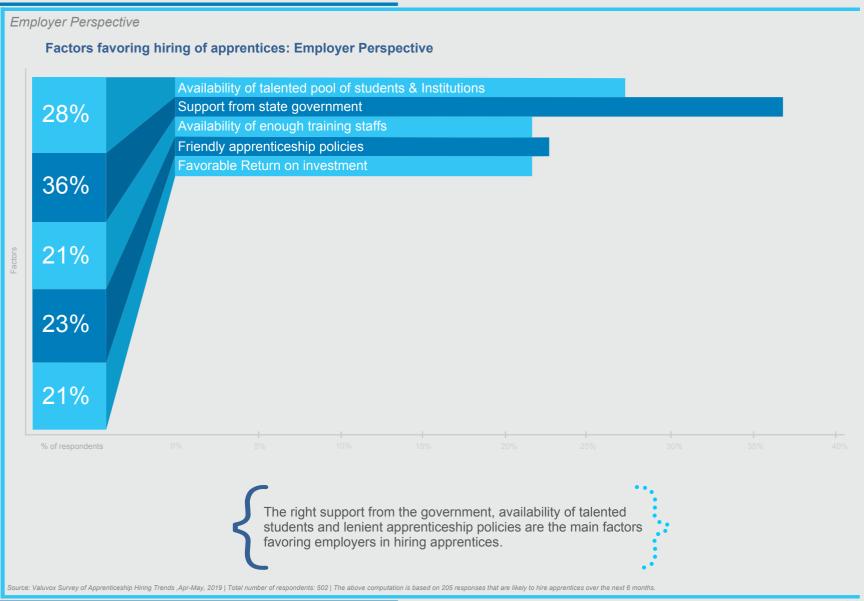
The unemployed component of the workforce has increased from 16.3 million in 2014 to 18 million in 2018

Source: The World Bank Data, April 2019



Source: Annual Report, 2016-17, Ministry of Skill Development and Entrepreneurship

# **Employer Expectations** - Factors favoring hiring of Apprentices



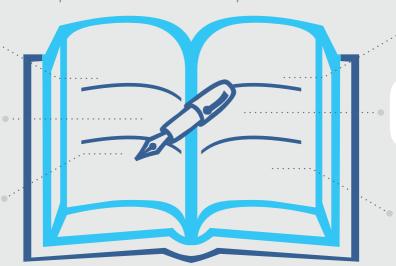
# **Employer Expectations** - The Apprenticeship Landscape

how the amendments in 2014 to the Apprenticeship Act transformed the landscape

Employers can engage upto 10% of workforce as apprentices.

Duration of training revised and the apprentice can work between 6 months and 3 years based on the trade.

An apprenticeship portal (launched by the PM) where employers are required to publish trade-wise requirement of apprentices.



Fine (and not imprisonment) if the company violates the regulations of Apprentices Act.

The revised stipend would be 70% of the minimum wages in the first year, followed by 80% and 90% in the second and third years, respectively

In addition to designated trade, employers can also engage apprentices in an 'optional trade' i.e. a trade or a field which has not already been 'designated'.

# Recent Amendments of Apprentice Act

14% growth in apprentice hiring, in 2016-17 compared to 2014-15 8% growth in Trade apprentice hiring and

24% growth in Graduate/Technician/T ech (Voc) hiring 62% of apprentices hired in 2016-17 are Trade apprentices, 22% are Graduate, 14% Technician and 1% Tech

(Voc)

51% growth in apprentice
s hired hiring in the private sector
in 2016-17 compared to
2014-15
s, 22%
62% of apprentices are in
Private Sector,

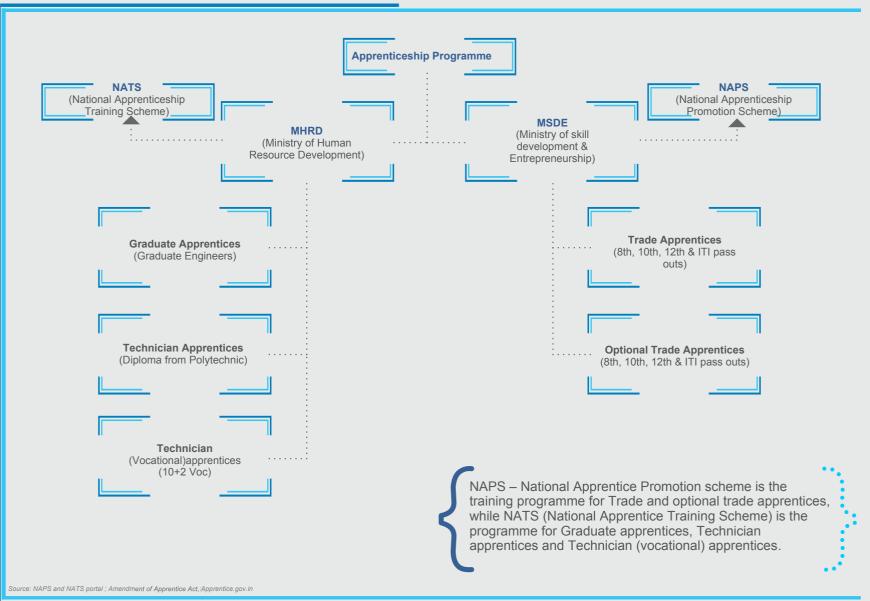
18% in Central Sector and 20% in State Sector during 2016-17 Haryana,
Maharashtra and
Tamilnadu had
the most number
of apprentices in
2016-17

33000+
eemployers hired
apprentices during
2016-17

89% of apprentices hired in Manufacturing sector and 11% hired in Services sector

The amendments of 2014 went a long way in removing obstacles pertaining to administrative and regulatory aspects and limited trades / sectors. As a result apprentice hiring, across sectors, witnessed a 14% growth during 2016-17 as against 4% in 2014-15.

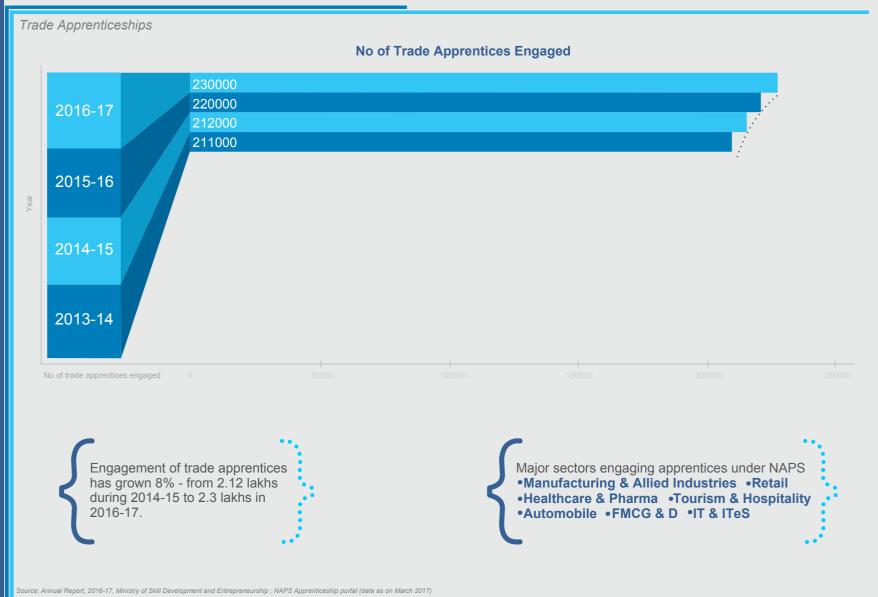
Source: Annual Reports, 2013-14 to 2016-17, NATS-Ministry of Human Resource Development: Annual Report, 2016-17, Ministry of Skill Development and Entrepreneurship



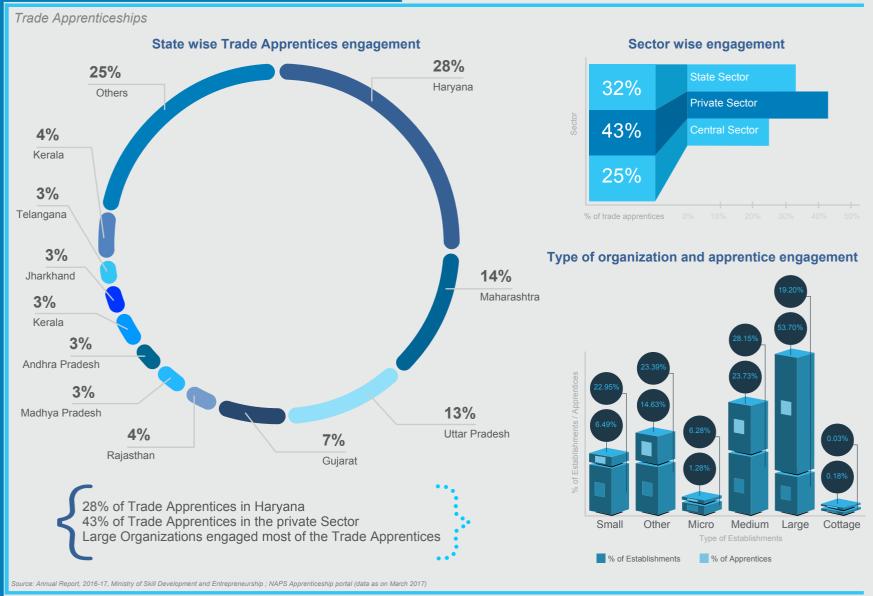
# Trends in apprentice engagement

Secondary Research and Literature Review

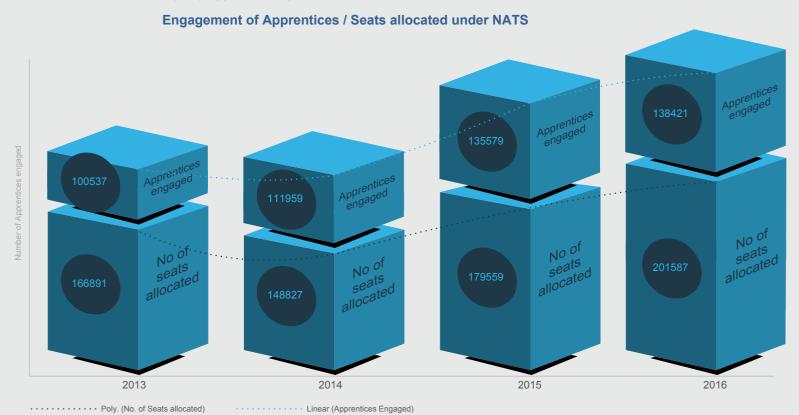
# Trends in apprentice engagement - NAPS Highlights



# Trends in apprentice engagement - NAPS Highlights



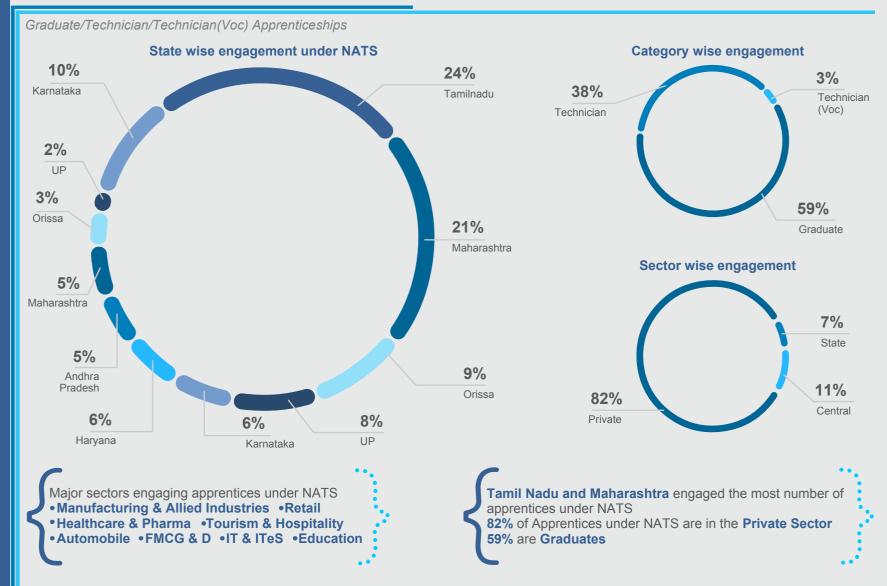
Graduate/Technician/Technician(Voc) Apprenticeships



Apprentice engagement grew 24% between 2014-15 and 2016-17. This significant growth is the result of the amendments in 2014 to the Apprentice Act 1961 and change in policies and regulations.

Source: Annual Reports , 2013-14 to 2016-17, NATS-Ministry of Human Resource Development

# Trends in apprentice engagement - NATS Highlights



Source: Annual Reports , 2013-14 to 2016-17, NATS-Ministry of Human Resource Development

# The Apprenticeship Index

The Apprenticeship index – comprising the Candidate Index and the Employer Index – measures the effectiveness of the apprenticeship program in India.

The higher the index , higher the efficiency of the apprenticeship program.

The indexes are computed based on a set of ratios that measure the health of the program basics.

# Candidate Index 0.0024 (2018-19) 0.0018 (2017-18) (is the ratio of apprenticeship aspirants to the total workforce)

# Aspirants to workforce addition ratio

**0.168** (2018-19)

**0.117** (2017-18)

(is the ratio of apprenticeship aspirants to the total workforce addition)

# **Apprentices engaged to Capacity Ratio**

**0.62** (2018-19)

(is the ratio of apprentices engaged to the seats allocated)

### **Applicants to Capacity Ratio**

0.83

(2018-19)
(is the ratio of apprentices engaged to the seats allocated)

# **Employer Index 0.059** (2018-19)

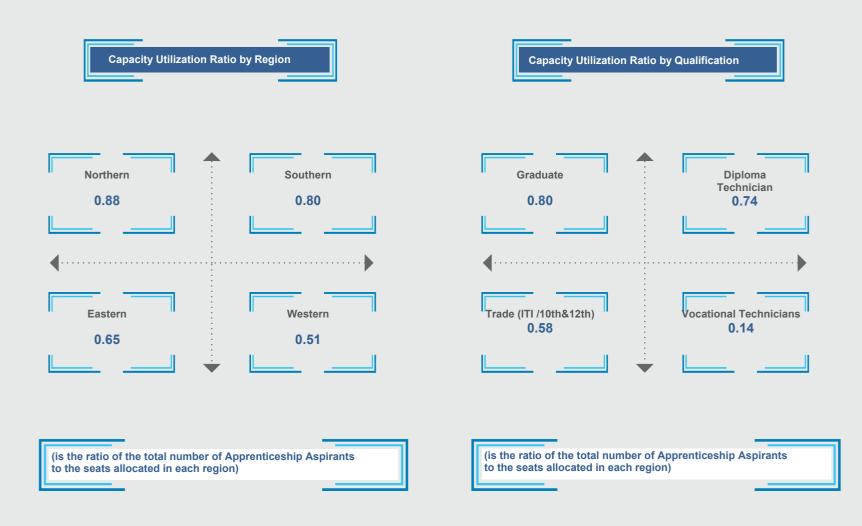
**1** 

**0.052** (2017-18)

(is the ratio of apprentices in the formal workforce to the number of jobs created in the corresponding year)

Each of the ratios – and, therefore, both the Candidate and the Employer Indexes – have grown appreciably over the year, indicating that the program is in great shape.

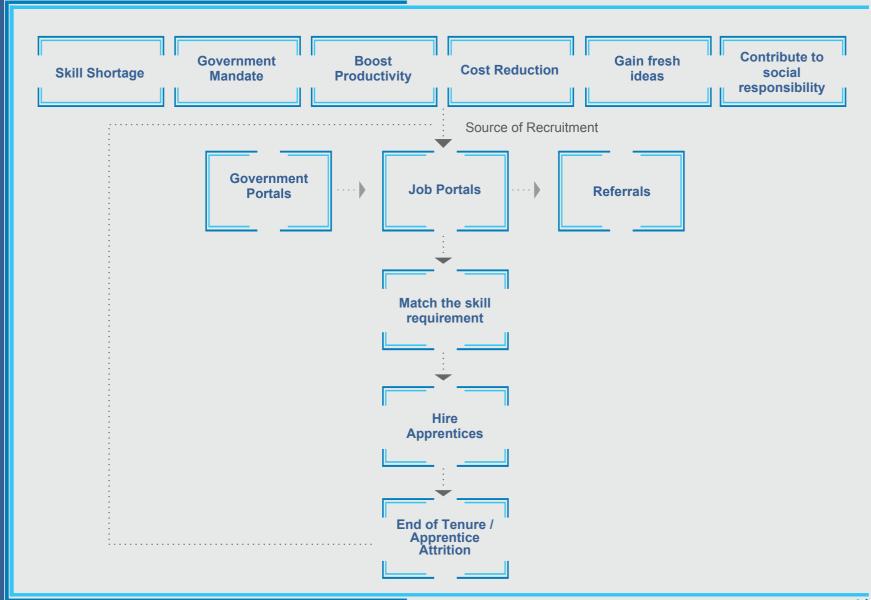
Source: Annual Reports, 2013-14 to 2016-17, NATS-Ministry of Human Resource Development: Annual Report, 2016-17, Ministry of Skill Development and Entrepreneurship;



Source: Annual Reports, 2013-14 to 2016-17, NATS-Ministry of Human Resource Development: Annual Report, 2016-17, Ministry of Skill Development and Entrepreneurship;

# **Annexure**

The Apprenticeship Framework Research Methodology Sample Design Bibliography



# **Research Methodology**

## **Sample Design**

- Exandom stratified sampling technique was used to identify respondents for the survey. Data sources used to collect contact data were:
  - Apprenticeship NAPS portal (http://www.apprenticeship.gov.in) for Trade Apprenticeship employers contact data
  - Apprenticeship NATS portal (http://mhrdnats.gov.in) for Graduate, Technician, Technician(Voc) Employers contact data

### **Respondent Selection**

Target respondents for the study were HR Managers, HR head, Business owners or directors (for small companies).

### **Data Collection**

The survey instrument was then administered to the target respondents using the valuvox® mobile survey application. Please refer the following section named 'Sample Distribution' for details on city and business size-wise breakup of the sample.

# **Data Analysis**

■ Data Analysed using statistical methods and techniques. The Major tools used are MS Excel and Python.

## **Secondary Data Sources**

- ERegion wise Annual Reports of Board of Apprenticeship Training(Autonomous body of Ministry of skill Development and Entrepreneurship )(2013-2017)
- EAnnual report of Ministry of skill development and Entrepreneurship (2017)
- Cother Apprenticeship related research papers, news articles and reports

# **Sample Design**

# Respondents by Sector & Region

Sector / Region		Automobile	Beauty & Wellness	BFSI	Const. & Real Estate	FMCG & D	Health & Pharma	IT & ITeS	Logistics	Retail	Telecom	Travel & Hospitality	Total
East	2	12	8	5	5	5	4	2	3	7	3	6	65
West	2	18	14	8	6	8	7	12	4	8	2	11	100
North	3	29	18	11	11	9	10	26	6	11	4	38	176
South	3	31	20	7	14	7	9	25	5	14	3	25	161
Total	10	90	60	31	36	29	30	65	19	40	12	80	502
			:										

# Respondents by Business Size & Region

Business Size /Region		Medium (employees between 500 & 5000)	<b>Large</b> (employees more than 5000)	Total
East	35	20	10	65
West	54	28	18	100
North	94	68	14	176
South	73	71	17	161
Total	256	187	59	502

# **Bibliography**

- **Annual Reports**, 2013-14 to 2016-17, NATS-Ministry of Human Resource Development
- **Annual Report,** 2016-17, Ministry of Skill Development and Entrepreneurship
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- **Ministry of Human Resource Development NATS** mhrdnats.gov.in



