Pradhan Mantri Kaushal Vikas Yojana (PMKVY)

A COURSE PROJECT REPORT

MASTER OF TECHNOLOGY

INDUSTRIAL ENGINEERING AND MANAGEMENT

SUBMITTED BY:

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UNDER THE GUIDANCE OF

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1. Abstract:

In this project a study is done to analyze the success rate of PMKVY in India. Pradhan Mantri Kaushal Vikas Yojana (PMKVY) is a skill development initiative scheme of the Government of India for recognition and standardisation of skills. The aim of the PMKVY scheme is to encourage aptitude towards employable skills and to increase working efficiency of probable and existing daily wage earners, by giving monetary awards and rewards and by providing quality training to them. The impact and performance of PMKVY was analysed along with the comparison of students that are enrolled in different states of India. Similarly, analysis of data revealed students that have trained, assessed and certified by this programme. The primary and secondary data is collected from the website(data.gov.in). Python and SQL were used as a tool to analyse the data. Data visualization revealed that highest number of students enrolled are in Delhi and lowest in Lakshadweep. The highest certified to training ratio is in Dadra and Nagar Haveli And Daman And Diu and lowest in Lakshadweep, Placed by Training Ratio is maximum in Puducherry and minimum in Lakshadweep.

2. Dataset and Database

2.1.Description of the data:

1) Date Till - Date upto which data is taken. Here Data is taken till 21-04-2022.

2) Scheme - Divided into PMKVY 2.0(2016-2020) and PMKVY 3.0(2020-2022).

3) Component - Its having two components CSCM(Centrally Sponsored Centrally Managed) and CSSM(Centrally Sponsored State Managed)components.

4) Training Type - It includes three types of training namely : Recognition of Prior Learning (RPL), Short term training (STT), Special Projects (SP).

5) TCState and TCDistrict - Consists of 8 Union Territories,28 States and 720 Districts of India

.6) Enrolled - How many students enrolled in the PMKVY scheme.

7) Trained - How many students got trained in the PMKVY scheme.

8) Assessed - How many students got assessed in the PMKVY scheme.

9) Certified - How many students got certified in the PMKVY scheme.

10) Reported Placed - How many students got placed in the PMKVY scheme

3. Dataset in 3nf form:

3.1. Table1

	0	1	2	3	4	5	6	7	8	9	10
0	Data Till	Scheme	Component	TrainingType	TCState	TCDistrict	Enrolled	Trained	Assessed	Certified	ReportedPlaced
1	21-04-2022	PMKVY 2.0	CSCM	RPL	Andaman And Nicobar Islands	Nicobars	46	46	46	46	0
2	21-04-2022	PMKVY 2.0	CSCM	RPL	Andaman And Nicobar Islands	South Andamans	10	10	6	6	0
3	21-04-2022	PMKVY 2.0	CSCM	STT	Andaman And Nicobar Islands	Nicobars	120	120	120	108	0
4	21-04-2022	PMKVY 2.0	CSSM	STT	Andaman And Nicobar Islands	Nicobars	156	156	78	57	0
5	21-04-2022	PMKVY 2.0	CSCM	STT	Andaman And Nicobar Islands	North And Middle Andaman	1041	870	861	839	124

3.2. Table2

	0	1	2	3	4	5	6	7	8
0	Scheme	Component	TrainingType	TCDistrict	Enrolled	Trained	Assessed	Certified	ReportedPlaced
1	PMKVY 2.0	CSCM	RPL	Nicobars	46	46	46	46	0
2	PMKVY 2.0	CSCM	RPL	South Andamans	10	10	6	6	0
3	PMKVY 2.0	CSCM	STT	Nicobars	120	120	120	108	0
4	PMKVY 2.0	CSSM	STT	Nicobars	156	156	78	57	0
5	PMKVY 2.0	CSCM	STT	North And Middle Andaman	1041	870	861	839	124

3.3. Table3

	0	1
0	TCState	TCDistrict
1	Andaman And Nicobar Islands	Nicobars
2	Andaman And Nicobar Islands	South Andamans
3	Andaman And Nicobar Islands	Nicobars
4	Andaman And Nicobar Islands	Nicobars
5	Andaman And Nicobar Islands	North And Middle Andaman

4. Data types

4.1. Data type- primary source

```
Data Till          object
Scheme             object
Component          object
TrainingType       object
TCState            object
TCDistrict         object
Enrolled            int64
Trained             int64
Assessed            int64
Certified           int64
ReportedPlaced      int64
dtype: object
```
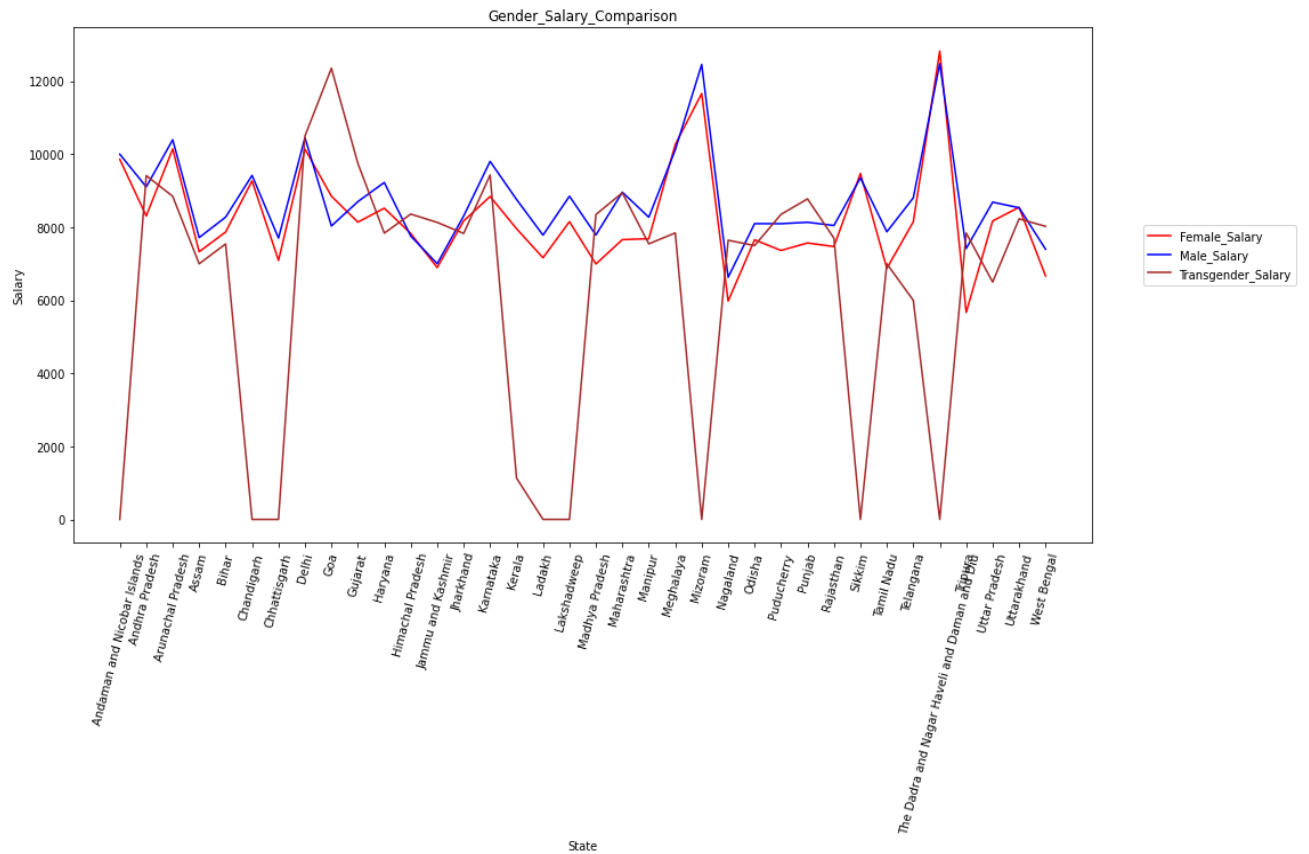
4.2. Data type- secondary source 1

```
TCState                         object
EnrolledFemale                   int64
EnrolledMale                     int64
EnrolledTransgender              int64
ReportedPlaced_Female            int64
ReportedPlaced_Male              int64
ReportedPlaced_Transgender       int64
TotalEnrolled                    int64
TotalReported_Placed             int64
dtype: object
```

4.3. Data type- secondary source 2

```
TCState            object
Female_Salary       int64
Male_Salary         int64
Transgender_Salary  int64
dtype: object
```

5. Visualization:

5.1.Objective

1.The graphic display of information and data is known as data visualisation. Data visualisation tools offer a simple way to visualise and comprehend information by employing visual components like charts, graphs, and maps.

2.Data patterns, outliers, and trends. Here, I've used ggplot and matplotlib to visualise data that shows the number of people enrolled in different cities , salary wise comparison for male female and transgender in different cities and number of training centre in different cities.

6. Analysis of preliminary data

6.1.Number of training centre in different cities:

Insights: Uttar Pradesh has Maximum Training Centres followed by Madhya Pradesh And Least being in Lakshwadeep.

6.2.Gender salary comparison in different states:

Gender_Salary_Comparison

Insight:

- The highest female salary state is The Dadra and Nagar Haveli and Daman and Diu.
- The highest male salary state is The Dadra and Nagar Haveli and Daman and Diu.
- The highest transgender salary state is Goa.

## 6.3.Average salary comparison among different genders
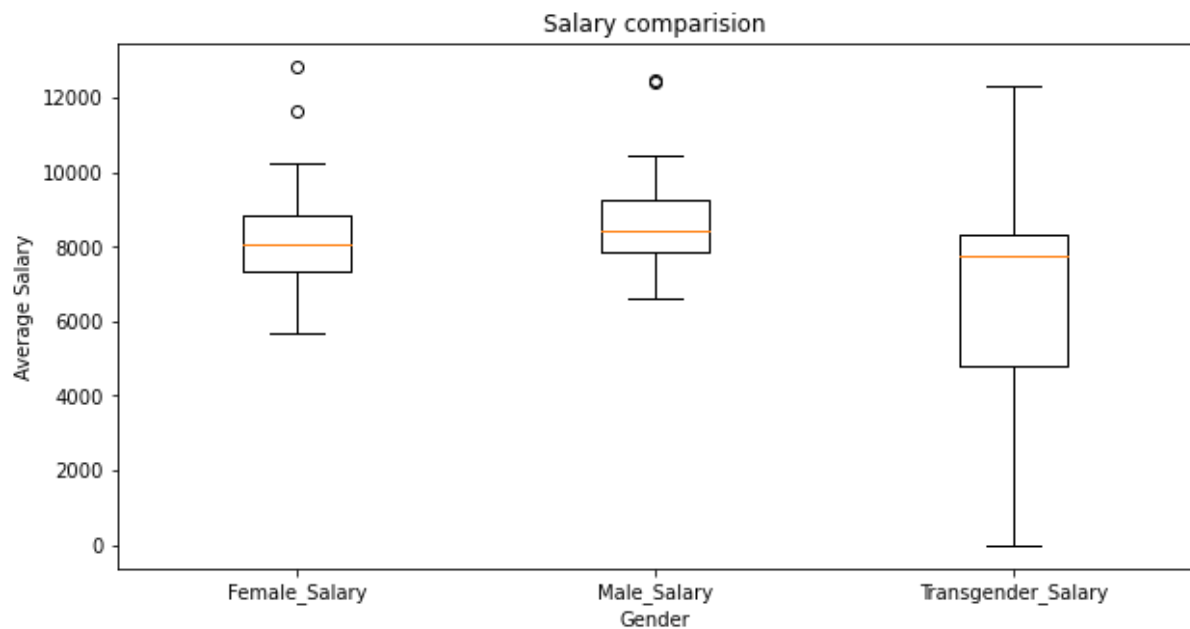
Insights: By visualizing trends of line we can predict that average salary of Men is greater than women and Transgender.

6.4. Average Number of Students enrolled in different cities:
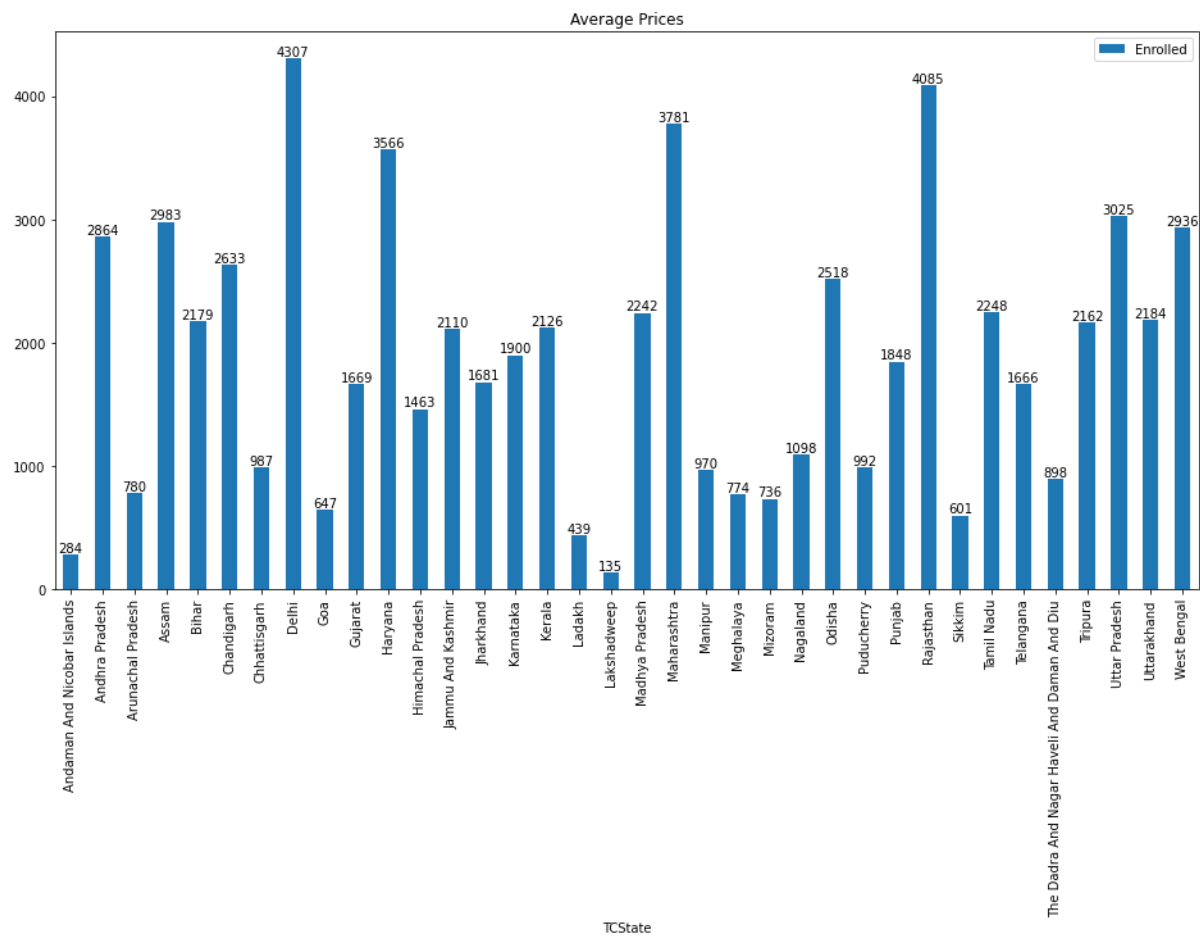
Insights: Most number of average students enrolled in Delhi followed by Rajasthan and least being in Lakshwadeep

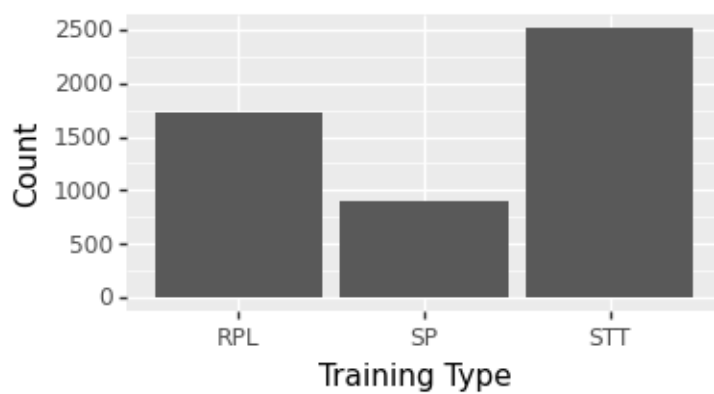## 6.5. Maximum Number of student enrolled in different states:
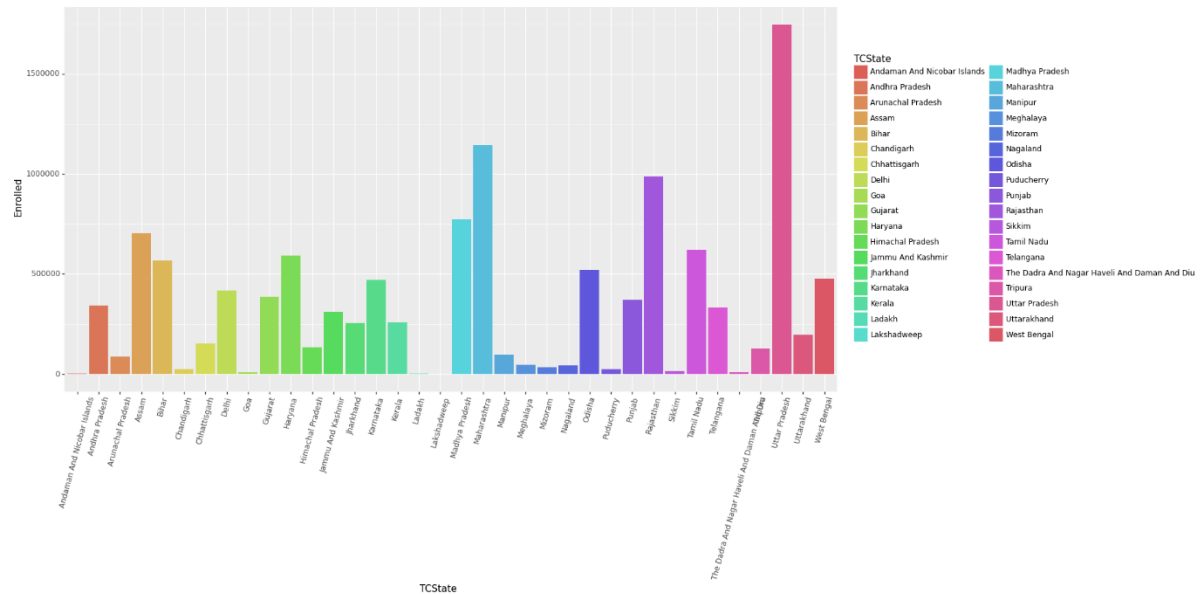
Insights: Maximum students enrolled in Uttar Pradesh and minimum in Lakshwadeep.
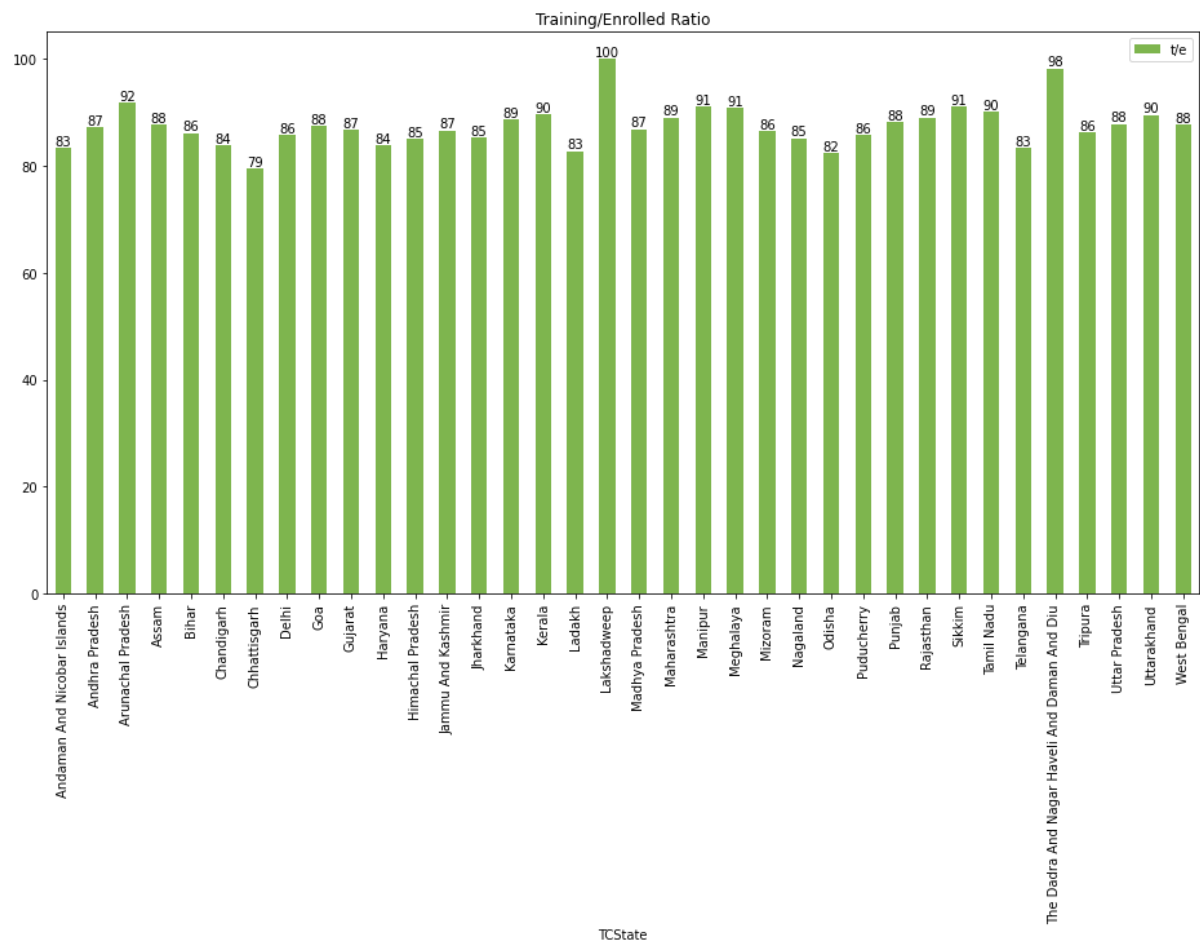
6.6. Participation in different Scheme
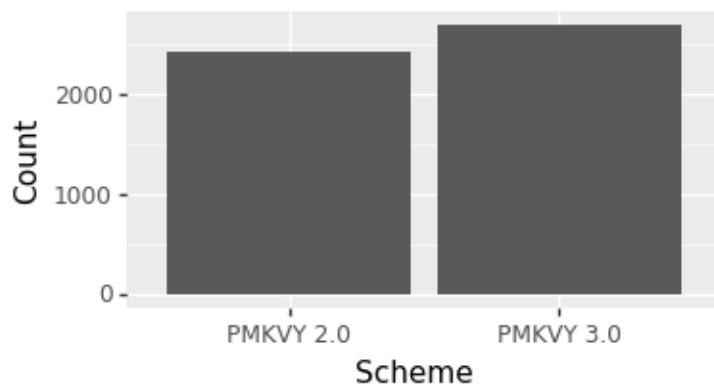
Insights: In our data mostly PMKVY 3.0 is covered
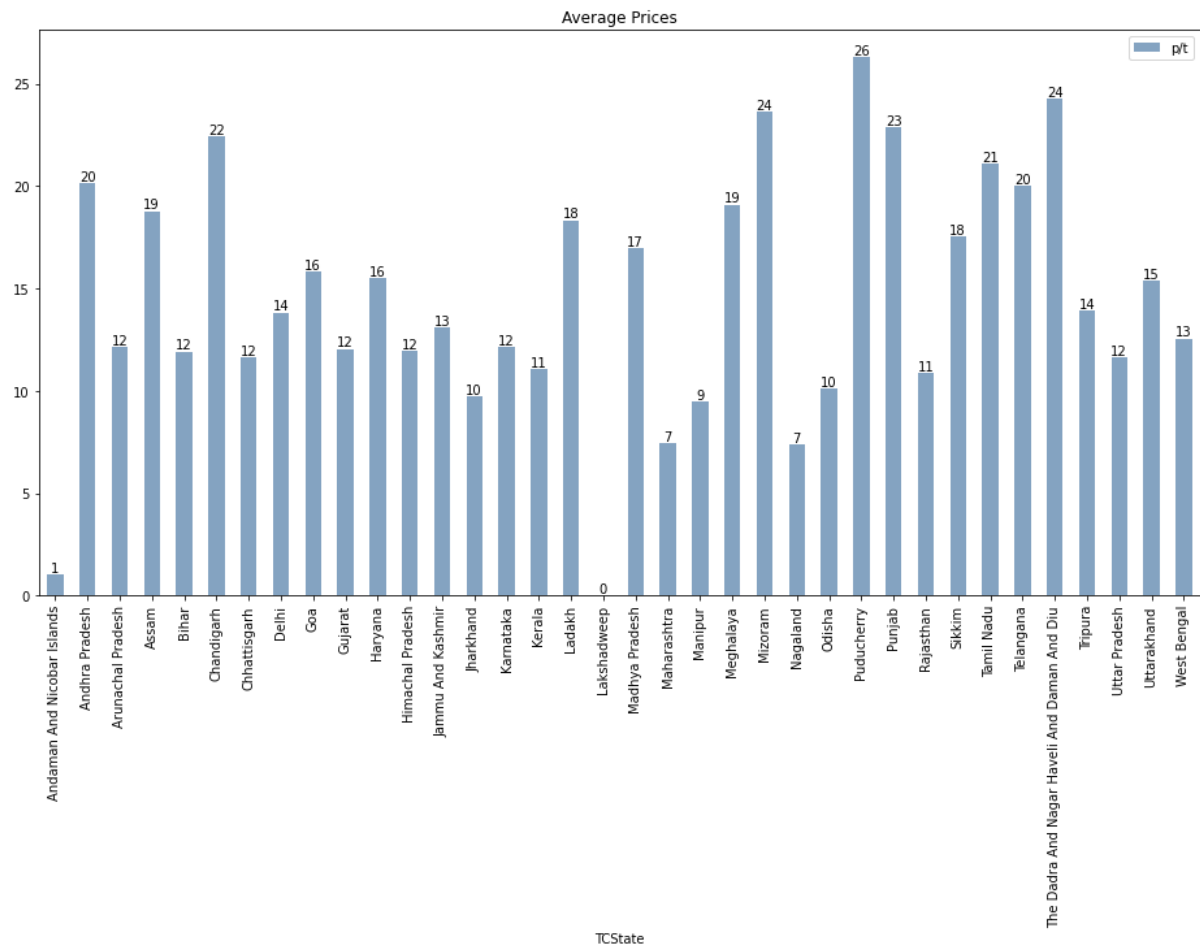
6.7. participation in different trainings types

Insights: Mostly STT is the Training type done by the students least being SP.

6.8. Training by enrolled ratio in different states:
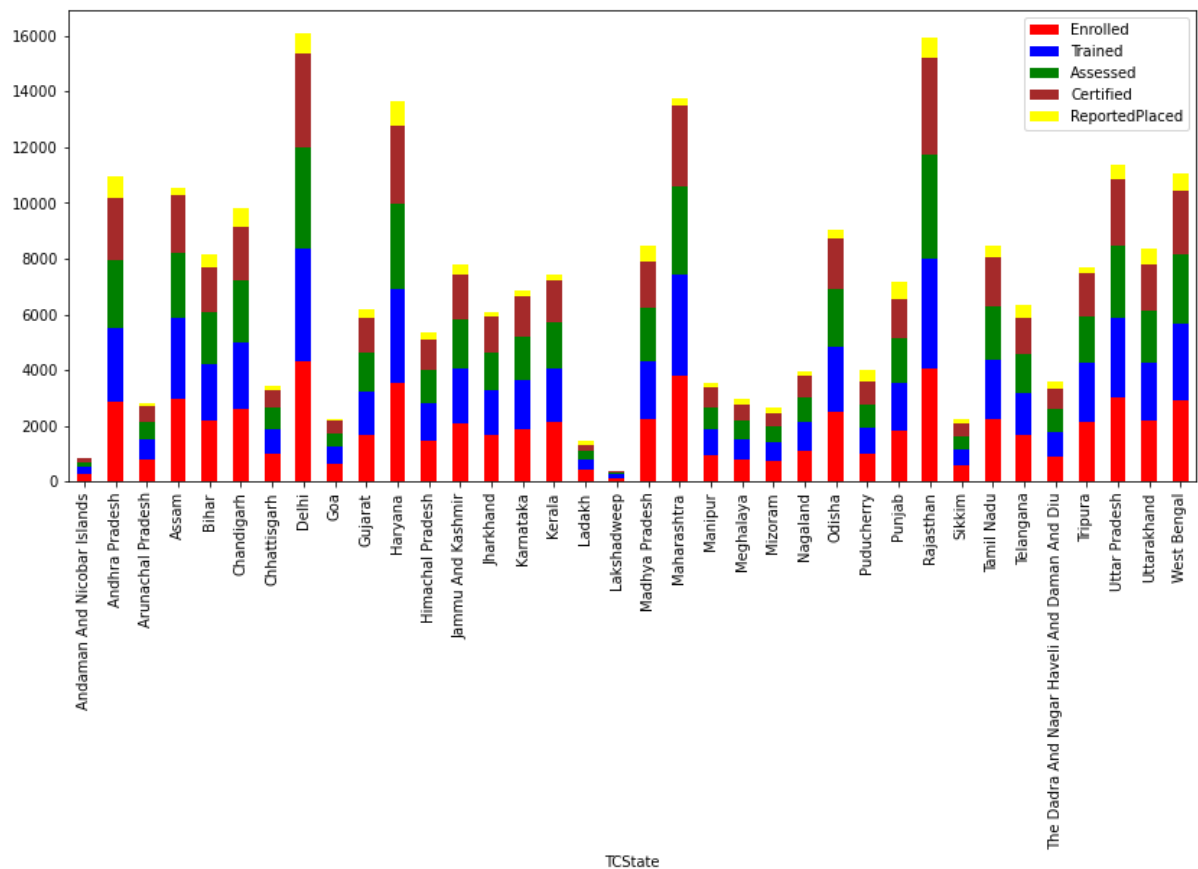

Training/Enrolled Ratio

Insights: Training by Enrolled Ratio is Maximum in Lakshwadeep and Minimum in Chattisgarh.

6.9. Placed by Training Ratio in different state:

Insights: Placed by Training Ratio is maximum in Puducherry and minimum in Lakshwadeep.

6.10. Stacked Graph for PMKVY

Insights:

- DELHI has more enrolled persons in PMKVY scheme followed by Maharashtra and Rajasthan.
- DELHI has more trained persons in PMKVY scheme followed by Maharashtra and Rajasthan.
- DELHI has more assessed persons in PMKVY scheme followed by Maharashtra and Rajasthan.

7. Conclusion:

1)Total Fund allocated to combined PMKVY, PMKVY 2.0 and PMKVY3.0 is around 13,000 Cr.

Which gave training to around 1 Cr. Persons so that they can acquire skills which will help them to get a job. Thus, this scheme is a huge success.

2)UT like Puducherry, Daman has achieved great success by achieving around 25% placed to training ratio.

3)States like Andhra Pradesh, Mizoram, Telangana, Tamil Nadu, Punjab performed well as they have around 20% placed to training ratio.

4) Salary Comparison between Men, Women and Transgender is not very wide. Thus, showing good Signs.

8. Reference:

https://data.gov.in/catalog/msde-pradhan-mantri-kaushal-vikas-yojana-pmkvy