A Study on sector wise skill gap in Pune District  
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Abstract:  
Sector wise Skill gaps in Pune district is one of the major factor which can impact the balance of demand and supply of workforce with different levels of skills, thus leading to unemployed workers and dissatisfied employers. This study focused on various sectors and explores sector wise skill gap in Pune district. The Maharashtra State Government has worked on building a good education infrastructure in the State over the last few years to ensure availability of qualified and skilled manpower in the State. Today, Pune district, with its good infrastructure and industrial opportunities acts as one of the main centers where skilled youth are attracted in search of opportunities. This study recommends to the government and industries to fill skill gaps in various sectors in Pune district.

Keywords: Skill, Training, Productivity, Industry, Workforce, Employer, Employee,

Introduction  
Finding and keeping workers with the knowledge and skills to get the job done is critical in today’s workplace. Increasingly knowledge-based economy is in turn increasing the demands on workers’ skill levels. A skilled workforce is often the key to a company’s growth and stability, and it could be the determining factor in the success of any business. Improving the essential skills of workers has tremendous impact for both the employee and employer, including higher retention rates, improved safety and increased productivity. Employees who participate in literacy and essential skills programs increase their level of self-confidence, acquire new skills, are better prepared to seek promotion opportunities, and believe that they are valued by their workplaces. Employers looking to hire new employees look for specific skills and qualities in new workers in hopes of creating or maintaining an efficient, professional and productive workplace. This study focused on sector wise skill gap in Pune District and recommends to offer improve skill gap by offering skilling modules to employees.

A skills gap analysis is a business tool used to assess the difference between the current state and a future goal state. This tool can be used to assess the current skills possessed and identify areas for improvement. This tool will basically help an organization in refining and defining the skills.

Recommendations for Pune district focus on the sectors mapped in the skill gap section. Some of these sectors will have recommendations for the private sector which will directly translate to skills being developed and the others will need Government intervention to facilitate improvements.

Objectives:-
- To analysis of the different types of sectors and sector wise skill gap in Pune district
- To study on essential skills, recognizing that some employees may lack of sufficient levels of those skills.
- To focus on different sectors in Pune District by their skill levels
- To observe the changes in Demand & supply gap of human resources due to sector wise skill gap in Pune District
- Recommendation to overcome the sectorwise skill gap in Pune district.
Research Methodology and Main Study
This research has been focused on skill gap in various sectors and suggests sector wise skill requirements in Pune district. This is descriptive research. Secondary data has been used. The related data is collected through magazines, websites, journals, books and a report of National Skill Development Corporation on District wise skill gap study for the state of Maharashtra.

❖ Pune district’s worker profile, as of 2011, in thousands

The district has a total workforce of about 38.50 lakh persons. Of this, 27 per cent are cultivators, 13 per cent are agricultural labourers, two per cent are workers in household industry and 58 per cent are other workers.

(Source: Census 2001, Census 2011. Numbers are estimated)

(HHI: Household Industry)

❖ Sector wise distribution of Pune’s GDDP, as of 2011-12

As of 2011-12, Pune district had 3rd largest Gross District Domestic Product (GDDP) in Maharashtra at Rs 12,103 crore (11.3 per cent of the Gross State Domestic Product). The per capita NDDP of Pune was Rs. 127,716, making it the second highest in the state among districts.

The district economy is pre-dominantly service based, with service sector’s share in GDDP at 52 per cent in 2011-12. This is followed by secondary sector at 43 per cent and primary sector at five per cent.
Agriculture: Pune district has an area of 945,000 hectares in which major crops like sorghum, paddy, and wheat, maize are cultivated. The district has rivers like Bhima, Pushpavati, Ghod and Bhama which aid in agriculture. The output of the agricultural produce feeds into the many agro based processing units in the district.

Industry: As of 2012, Pune had 642 large and 27,683 MSME units registered. The MSME units paved way for the employment of about 1.5 lakh people with an investment of Rs. 4.01 lakhs. These units span across both manufacturing and service sectors. There are 10 industrial areas in the district with the largest one being the Pimpri area with an area of about 1224 hectares. In addition to the industrial areas, there are several IT and SEZ zones to aid the growth of the sectors.

Services: Services account for 52 per cent of GDDP in Pune district. Of all the services, the key services in the district are ‘real estate, ownership of buildings and business and legal services’ at 13 per cent, ‘trade, hotel and restaurants’ at 13 per cent and ‘banking and insurance’ at 11 per cent.

Employment Potential of Pune District
In this part, research forecasted the demand and supply of human resources in the district for the next ten years (2012-22). The demand forecasts show that the district is likely to generate demand / jobs for about 2.85 million persons between 2012 and 2022. Sectors which will drive demand are expected to be auto and auto components, BFSI, IT & ITES, organized retail, unorganized sector and building, construction and real estate. The requirements for skilled personnel are likely to increase, as the maximum demand will be generated for semi-skilled and skilled workers.

Incremental Demand of human resources in Pune – by sector
(Source: IMaCS Analysis)

<table>
<thead>
<tr>
<th>Year</th>
<th>2012-17</th>
<th>2018-22</th>
<th>2012-22</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture and allied</td>
<td>29,554</td>
<td>15,060</td>
<td>44,614</td>
</tr>
<tr>
<td>Auto and Auto component</td>
<td>64,191</td>
<td>99,004</td>
<td>163,195</td>
</tr>
<tr>
<td>BFSI</td>
<td>58,303</td>
<td>93,721</td>
<td>152,024</td>
</tr>
<tr>
<td>Building, Construction industry and Real Estate</td>
<td>147,083</td>
<td>204,125</td>
<td>351,208</td>
</tr>
<tr>
<td>Education and Skill Development</td>
<td>39,069</td>
<td>18,062</td>
<td>57,131</td>
</tr>
<tr>
<td>Food Processing</td>
<td>4,388</td>
<td>5,661</td>
<td>10,049</td>
</tr>
<tr>
<td>Healthcare Services</td>
<td>20,064</td>
<td>27,458</td>
<td>47,522</td>
</tr>
<tr>
<td>IT &amp; ITES</td>
<td>174,487</td>
<td>267,169</td>
<td>441,655</td>
</tr>
<tr>
<td>Organised Retail</td>
<td>229,130</td>
<td>570,150</td>
<td>799,280</td>
</tr>
<tr>
<td>Textile and Clothing</td>
<td>3,836</td>
<td>4,862</td>
<td>8,697</td>
</tr>
<tr>
<td>Transportation, Logistics, Warehousing and Packaging</td>
<td>31,414</td>
<td>35,611</td>
<td>67,025</td>
</tr>
<tr>
<td>Tourism, Travel, Hospitality &amp; Trade</td>
<td>23,394</td>
<td>34,064</td>
<td>57,458</td>
</tr>
<tr>
<td>Unorganised</td>
<td>217,206</td>
<td>308,610</td>
<td>525,817</td>
</tr>
<tr>
<td>Other manufacturing</td>
<td>45,853</td>
<td>75,483</td>
<td>121,335</td>
</tr>
<tr>
<td>Others*</td>
<td>2,453</td>
<td>2,736</td>
<td>5,188</td>
</tr>
<tr>
<td>Total</td>
<td>1,090,425</td>
<td>1,761,775</td>
<td>2,852,199</td>
</tr>
</tbody>
</table>
Incremental demand of human resources in Pune – by skill level

(Source: IMaCS Analysis)

(Unorganised sector includes domestic workers, handloom and handicrafts, beauticians, facility management personnel and security guards. *Others include chemicals and pharmaceuticals, electronics, gems and jewellery and furniture and furnishings)

Incremental supply of human resources in the district at 1.29 million persons for the period 2012-22. Based on the incremental demand estimates, This research finds that the incremental supply will be insufficient to meet the incremental demand in the district. The shortage of human resources is likely to be met by migrants coming into the district. The demand supply gap is more acute at the skilled level. Thus, this leads to huge skilling potential. All the stakeholders need to work in conjunction to meet the skill shortage in the district.

Demand supply gap of human resources in Pune – by skill level

(Source: IMaCS Analysis)

Skill mapping

Sectors where interventions are required in Pune district – comparison with Maharashtra

(Sectors highlighted in green are the sectors present in the district / state)

(Source: IMaCS Analysis)
Auto and auto component

The district of Pune is the foremost auto hub in Maharashtra. Supported by the auto and component cluster in Pimpri area and the Baramati auto cluster, the areas of Chakan, Pimpri have attracted all the major auto players of the world like Volkswagen, Fiat, Cummins, Mercedes Benz, Mahindra and Mahindra, etc. to set their shop floor in the district. With the Up-gradation of existing testing and homologation facilities at Automotive Research Association of India (ARAI) in Pune and the expansion plans of the corporates on the anvil, the employment opportunities in Pune for the sector look to be on the rise.

Some of the key skill gaps observed in this sector are:
- Less awareness about modern production techniques like lean production, Just In Time, etc
- Softer aspects of management like leadership and team guiding skills need to be built
- Lack the discipline to come and put in the required hours of work
- Absenteeism and attrition of the shop-floor workers
- Limited knowledge in using multiple quality control equipments and tools
- Inadequate understanding of the quality standards of the industry

Banking, Financial Service and Insurance

Banking and Financial Service is an important sector which acts as a backbone for economical activities. It aids commerce and trade activities happening in the region. Pune, being the one of the main industrial centers of the state, large number of commercial transactions takes place daily. Almost all the scheduled commercial banks have their branch in Pune and banking is a major activity in the city of Pune.

The skills gaps in Retail Banking sector of Banking, Financial service and Insurance are mentioned below:
- Limited selling skills, especially cross selling and up selling
- Inadequate communication skills
- Limited understanding of the banks products
- Difficulty in comprehending the unstated needs of the customer
- Inadequate knowledge of banking law and practice
- Understanding of banking process
In sufficient Know Your Customer (KYC) understanding
Limited computer knowledge

Insurance is another segment where employment is generated. Awareness and importance on Insurance has increased among the public. Insurance products are broadly classified into life and non life. There are many insurance companies offering various products for public. As like Banking, all the major Insurance firms such as LIC, ICICI prudential, HDFC Life, ICICI Lombard, Bajaj Allianz, etc. have their branch offices in Pune. In Insurance sector, major employment is generated in the sales / marketing department. The youth must be trained to handle the customer facing roles.

Key skill gaps in the Insurance sector are listed below:
- In depth knowledge in structuring the projects
- Inadequate financial planning skills
- Cross selling skills
- Time management and target management
- Inadequate awareness of the regulations, compliance, and product which results in wrong entries

Building, Construction industry and Real Estate services
The building, construction and real estate industry provides the services for augmenting the commercial buildings, residential buildings and special areas like SEZs, theme parks, roads, bridges, ports, shipping, airports, urban infrastructure, and utilities in the district.

In a rapidly expanding district like Pune, this sector assumes importance due to the role it plays in ramping up the core infrastructural services in the district. Pune has requirement both in the building of the commercial spaces as well as residential areas. Some of the key hotspots of real estate and commercial development in Pune include Aundh, Hinjewadi, Pimpri, Chinchwad, Chakan, Shivaji nagar, Model Colony, Katraj, and Warde amongst others. The key reasons attributed for this are:
- Increased business opportunities
- The boom of the service sector
- Increased spending power
- Increased influx of immigrants into the city and suburbs
- Changing lifestyle pattern expecting well planned and constructed localities

Thus, the sector requires more skilled personnel to take it forward. Some of the key skill gaps exhibited in this sector are:
- Inadequate project management skills
- Difficulty in controlling cost and finances
- Inadequate resource management skills
- Inadequate planning skills
- Time management and target management
- Co-ordination skills with other skilled teams
- Workers lack of motivation
- Workers lack of innate pride in working in construction sector
- High attrition in the workers

Chemical and Pharmaceuticals
Chemicals and pharmaceuticals sector has made in-roads in Pune district with several reputed firms like Emcure, Centaur, Hindusthan Antibiotics, Kimberly Clark Lever Limited, etc. Though these firms are able
to attract the skilled youth to work in the organizations, there is the requirement to build speciality skills in this sector.

Some of the key skill gaps exhibited in this sector are:

- Most of the work in chemicals and pharmaceutical industry is automated, thus scope for employment generation is limited.
- On-the-job training is held by most companies.
- One of the key issues faced by the companies is load shedding.

Education and Skill Development

Pune district is given the name of ‘Oxford of the East’ due to the quality and heritage of the educational institutes in the district. The district has several institutes like the Pune University, Fergusson College, ILS Law College, Symbiosis Institutes, D Y Patil College, amongst many others. There are about 321 technical education institutes which have admitted over 62,000 students.

The need of the hour for the district now is to make the education market-oriented. Majority of the education institutes which have admitted over 62,000 students.

Food Processing

The food processing sector in Pune is fairly well developed with multiple food products being processed – like fruits, vegetables, chikkis, frozen products, ready-to-eats, etc. The fruits and vegetables processing is lead by the Fruits and Vegetables cluster and the chikki processing is lead by the Chikki cluster in Lonavala. In fact the chikki cluster was started very modestly 125 years ago and today has over a 100 units which manufacture namkeens and chikkis.

The key reasons for the success of the food processing industry in Pune are due to the following:
- Well connected with air, rail and road services, which ensure that the raw materials are saved from spoilage wastage
- Good market connectivity
- Presence of agro-strong districts like Satara, Solapur which supply quality raw material
- Able to exploit the changing eating habits of the population due to the easy access to the end consumers

The skill gaps for this sector reflects the need for R&D, superior packaging, awareness of health standards and marketing required in the sector now.

IT and ITeS

The growth of the IT and ITeS sectors in Pune has given rise to the comparison with Bangalore with majority of the industry players referring to Pune being ‘Banglored’ – mainly due to the number of the hiring and job opportunities across this sector. More campus hire phenomenon is occurring across Pune with IT majors like Cognizant hiring about 350 students from the College of Engineering Pune and the Sinhgad Institute of Technology also giving about 700 students to the sector. The leading IT and ITeS firms in Pune include Tata Consultancy Services, Infosys, Cummins Infosystems, Wipro Technologies, Tech Mahindra, Capgemini, Fluent India, Symphony Services, Accenture amongst others.

Some of the key skill gaps faced by the industry include:

- Lack of in-depth understanding of hardware related information
- Lack of understanding for delivering complex situations
- Lack of client handling and managerial skills
Lack of practical knowledge
Inadequate soft skills and communication skills
Insufficient knowledge across domains
Limited understanding of overall business dynamics
Limited presentation skills
Limited understanding of competitive products
Inadequate report writing skills
Inadequate team management skills

**Healthcare**

Pune along with Mumbai can be regarded as the Medical capital of Maharashtra. With internationally renowned hospitals like RubyHall, Symbiosis Healthcare, Sahyadri Hospitals, Apollo Hospitals being present in the district, it has carved a name for itself in healthcare. In addition to the private hospitals, there are 48 allopathic hospitals in the district with have bed capacity of about 3,500. In addition there are ayurvedic and unani hospitals too.

The key drivers for the growth of the healthcare segment in Pune are:
- Change in the lifestyle of people
- Rising income level banking upon the opportunities, which leads to better expectation of healthcare?
- Rise of lifestyle diseases like diabetes, cancer, blood pressure, etc which require high quality care
- Enhanced R&D in global medical field which raises the internal expectations

The skill gaps indicate the need for specialized personnel, nurses and ward boys. Some of the other exhibited gaps are:
- Disaster management skills
- Medical equipment maintenance skills
- Soft skills including empathy for patient
- Knowledge of usage of modern medical machinery

**Logistics, Warehousing and Packaging**

With Pune being a hub for manufacturing and service activities, the logistics and warehousing sector assumes great importance. Commencing from the preliminary step of receipt of the goods to the pre-packaging, picking and the dispatch, skilled personnel are required in this sector in Pune. While the initial steps require more of skills that are built on-the-job, industry interaction has revealed the following major areas where skill building is required:
- Automation of logistics
- Route optimization
- Inventory management
- Green logistics
- Team management skills

**Media and entertainment**

Media is one of the important sectors in Pune. As the cultural capital and a business hub, these organizations churn out news and other current affairs to enlighten and increase the awareness in people.

Many popular newspapers have their editions in Pune. This includes English magazine such Times of India, The Indian Express, Lok Times etc. and Marathi newspapers such as Lokmath, Sakaal, etc. These media houses require quality journalist and reporters to cover the news.

Some of the skills required in print media are:
- Inadequate general knowledge
Organized retail

The face of Pune city has undergone a significant change post the 2000s with the advent of the mall culture and increased spending power of the people with the growth of the other sectors. In the last 5-6 years, Pune city has seen the establishment of multiple malls like Market City (Phoenix Mills) on Nagar road, Market city at Amanora Township, Magarpatta City Mall in Magarpatta City, Hadapsar, Kharadi Plaza, Inorbit Mall on Nagar Road.

In addition with about 60 per cent of the population being in the working age group, who are shifting towards lifestyle change, organized retail is poised to grow in the district. Pune district’s organized retail has the end-to-end operations from purchase to the front in-store operations.

There is availability of some training institutes who provide trained manpower for the retail sector. A key skill gap includes:

- Soft skills,
- Communication skills,
- Supply chain management skills,
- Knowledge of legal requirements and norms,
- Understanding the perceived and unstated needs of the customer,
- Customer interaction skills

Textile

Pune is one of the major textile hubs in Maharashtra. The cotton, woollen, and artificial thread based units are spread across the district in Pimpri, Chakan, Baramati areas. There are about 62 cotton and woollen units in the districts which offer employment to about 400 people at an investment of Rs. 1,203 lakhs. In addition to these units there are 487 garmenting units at Rs. 4,958 lakh and offers employment to about 2,500 people. The reasons for the success of the textile and garmenting sectors in Pune district is due to the availability of raw materials, good connectivity and the interest in the local people to be employed in the sector.

Some of the key perspectives and gaps in this sector are:

- Lack of knowledge of product diversification
- Lack of innovative manufacturing
- Lack of design know-how
- Lack of good finishing

Tourism, Travel, Hospitality & Trade

Pune acts as the gateway to Lonavala, Mahabaleshwar and Panchgani, prime tourism destinations for scores of tourists. This apart, business traveller is also high owing to the IT/ITES, auto and manufacturing industry concentration; which provides tremendous opportunity for hospitality industry in the state. The key potential areas for the hospitality sector in Pune district are Pune, Pimpri, Chinchwad, Hinjawadi, and Bhosri. The Maharashtra Tourism Development Corporation has also acquired lands in the key spots to develop infrastructure.

The skill gaps exhibited hint at the necessity to build:

- More soft skills
To build greater customer relationship.
The efficient performance of standard processes like check in, check out, etc need to be made better

**Recommendations**
Detailed recommendations to fill skill gap is as follows,

<table>
<thead>
<tr>
<th>Sector</th>
<th>For govt. players</th>
<th>For Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Textile and clothing</td>
<td>n/a</td>
<td>up-skilling modules</td>
</tr>
<tr>
<td>Organized Retail</td>
<td>n/a</td>
<td>Compulsory internal training</td>
</tr>
<tr>
<td>Food processing</td>
<td>Spread awareness of the norms</td>
<td>*Compulsory internal training</td>
</tr>
<tr>
<td>Travel, Tourism and</td>
<td>*Encouraging more courses in guide</td>
<td>*Up-skill Modules</td>
</tr>
<tr>
<td>Hospitality</td>
<td>and languages</td>
<td></td>
</tr>
<tr>
<td></td>
<td>*Explore internship opportunities with private players</td>
<td></td>
</tr>
<tr>
<td>Healthcare</td>
<td>Better the course content and quality in the undergraduate level</td>
<td>Organize up-skilling initiatives for the job roles like nurses, ward boys, etc</td>
</tr>
<tr>
<td>Chemical</td>
<td>ITI to focus on courses that will skill the youth</td>
<td>Offer internship opportunities for the youth doing their basic degree in associated subjects</td>
</tr>
<tr>
<td>Construction</td>
<td>Aid in spreading the awareness to the youth about the career in</td>
<td>Internships to ITI youth</td>
</tr>
<tr>
<td></td>
<td>construction sector</td>
<td></td>
</tr>
<tr>
<td>Logistics and warehousing</td>
<td>*Aid in spreading the awareness to the youth about the career in logistics and warehousing sector * Have courses related to sector in ITI and polytechnic</td>
<td>Offer internship opportunities</td>
</tr>
<tr>
<td>IT and ITeS</td>
<td>Offer courses at subsidized rate</td>
<td>Partner private training provider to reflect industry demands</td>
</tr>
<tr>
<td>Education and skill</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Auto and auto components</td>
<td>*Revamp the ITI infrastructure *Offer newer courses</td>
<td>Offer internships to students</td>
</tr>
<tr>
<td>Bank and financial services</td>
<td>n/a</td>
<td>*Conduct periodic ‘in house’ training for skill up gradation * Recognize certificate programs done by the candidates</td>
</tr>
<tr>
<td>Media and entertainment</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Unorganized sector</td>
<td>*Spread awareness about the benefit of obtaining certified training from organized player *Aid in formalizing the sector</td>
<td>Take steps to formalize the sector</td>
</tr>
</tbody>
</table>

**Conclusion**
This research concludes that there is a sector wise skill gap in Pune District and it is possible to fill this skill gap by providing skill module programs to employees by industry and government.

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