

# Analytical Study of Competencies Skills with Special Reference to Bajaj Auto Pantnagar

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## Abstract

A competency holds diversified meaning for individuals from different areas. It changes depending on the purpose for which it is used. Competencies are the traits which individuals possess in their specialized area. A cluster of related abilities, commitments, knowledge, and skills that enable a person (or an organization) to act effectively in a job or situation. Competence indicates sufficiency of knowledge and skills that enable someone to act in a wide variety of situations. These are such individuality which can be easily acquired at any stage of life or career.

Competencies can easily differentiate one person from the other. Bajaj Auto is one of the giant players in auto industry. Its various factory plants are in Akurdi, Aurangabad, Pune, and Pantnagar with its corporate office at Mumbai. The motorcycle segment constitutes about 81.5% of the two wheeler market in India. It also contributes to three-fourths of the total exports in the two wheeler industry. Bajaj is the second largest player in this segment after Hero Honda.

This Paper is an attempt to highlight the competencies of technical people at Bajaj Auto Pantnagar. Bajaj Auto Pantnagar has a capacity of producing one million bikes per year. Built on a total area of 65 acres with the balance 155 acres allocated to the vendor cluster, the Pantnagar facility would be Bajaj Auto's fourth Plant & first Plant outside Maharashtra. The cluster suppliers will meet 75% of the component requirement of the new Plant by the Supply of Key components including Speedometers from Pricol, Front Fork and suspension from Endurance, Lighting systems from Lumax, Plastic and Electrical components from Varroc, Control switches and Ignition systems from Minda group and frames from JBM, in the vicinity of the new Bajaj Auto Plant.

The study has been done by the division of plant in various departments like, Engine Assembly, Vehicle Assembly, and Paint Shop respectively through multi skill matrix

## Keywords

Competencies, Technical, Speedometers, Lighting Systems, Engine Assembly, Vehicle Assembly, and Paint Shop

## 1. Introduction

With change in globalization and technological changes. The competition within the market in different specialized areas is immensely increasing. Companies are indulged in continuous research and development in order to sustain within the market as a result of the above mentioned phenomenon (globalization) in order to increase the performance of a product by focusing on zero defect concept. Zero defect means for every 100 motorbikes, 99 of them will be defect free and the remaining 1 would be considered negligible. This would help the company to maximize its profits by maintaining quality standards. Quality standards would thus results in measuring competencies of the employees. Bajaj Auto Pantnagar has a capacity of producing one million bikes per year. Built on a total area of 65 acres with the balance 155 acres allocated to the vendor cluster, the Pantnagar facility would be

Bajaj Auto's fourth Plant & first Plant outside Maharashtra. The cluster suppliers will meet 75% of the component requirement of the new Plant by the Supply of Key components including Speedometers from Pricol, Front Fork and suspension from Endurance, Lighting systems from Lumax, Plastic and Electrical components from Varroc, Control switches and Ignition systems from Minda group and frames from JBM, in the vicinity of the new Bajaj Auto Plant.

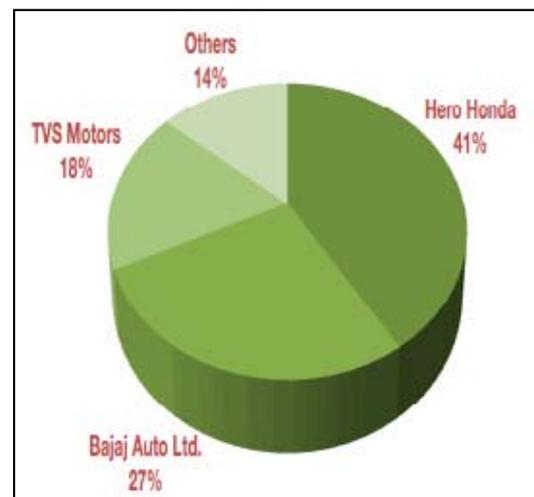


Fig. 1: Shows Various Players in Auto Industry

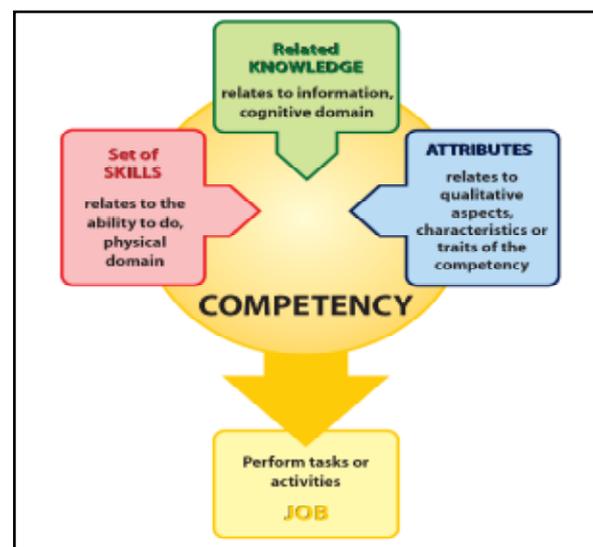


Fig. 1: Shows the Skills, Knowledge and Attributes that Together Forms Competency of an Individual

“Competencies” refers to the knowledge, skills, abilities, and personal characteristics as demonstrated by behaviors that are needed to succeed in a job. A competency is demonstrated or mastered in a job and could be easily transferred to another job. A set of skills related knowledge and attributes that allow an individual to perform a task or an activity within a specific function or job. They are grouped in three main categories; Managerial, Generic or Technical and Functional

## A. Types of Competencies Managerial

Competencies are considered essential for staff with managerial or supervisory responsibility in any service or programme area, including directors and senior posts. Some managerial competencies could be more relevant for specific occupation; however they are applied horizontally across the Organization. Some of the managerial competencies include:

- Strategic thinking and Scenario-building
- Analysis, Problem -solving and Decision making
- Planning and Organizing
- Change Management
- Managing small organizational groups
- Managing large organizational groups
- Team Leadership
- Information Management
- Innovation and Creation
- Mediation and Negotiation
- Mentoring and Coaching
- Facilitation and Group Moderation
- Presentation and Public Speaking
- Interviewing

### 1. Generic

Competencies which are considered essential for all staff, regardless of their function or level, communication, programme execution, processing tools, linguistic etc.

### 2. Technical/Functional

Specific competencies which are considered essential to perform any job in the Organization within a defined technical or functional area of work, environmental management, industrial process sectors, investment management, finance and administration, human resource management, etc. Any function in the Organization requires a set of essential managerial/generic and technical/functional competencies to be performed effectively.

Competencies are useful to staff and managers in assessing self development needs and setting performance standards and career plans. Competencies analysis would help the company to go for designing training and development framework on continuous bases. A competency is more than just knowledge and skills. It involves the ability to meet complex demands, by drawing on and mobilizing psychosocial resources (including skills and attitudes) in a particular context. For example, the ability to communicate effectively is a competency that may draw on an individual's knowledge of language, practical IT skills and attitudes towards those with whom he or she is communicating.

### II. Objectives of the Study

1. To define various competencies of the employees within the Engine Assembly.
2. To learn the multi skill matrix of employees for both XCD and Platina in the production department(Engine Assembly/ Vehicle Assembly/Paint Shop)
3. To evaluate the training need of XCD employees through Skill Evaluation.

### III. Literature Review

The concept of core competencies was developed in the management field. C.K. Prahalad and Gary Hamel introduced the concept in a 1990 Harvard Business Review article. In the article it was said that a core competency is "an area of specialized expertise that is the result of harmonizing complex streams of technology

and work activity." As an example they gave Honda's expertise in engines. Honda was able to exploit this core competency to develop a variety of quality products from lawn mowers and snow blowers to trucks and automobiles. To take an example from the automotive industry, it has been claimed that Volvo's core competency is safety. This however, is perhaps the end result of their competency in terms of customer benefit. Their core competency might be more about their ability to source and design high protection components, or to research and respond to market demands concerning safety.

Ever since Prahalad and Hamel introduced the term in the 1990's many researchers have tried to highlight and further illuminate the meaning of core competency. According to D. Leonard-Barton (1992), "Capabilities are considered core if they differentiate a company strategically." On the other hand Galunic and Rodan (1998) argue that "a core competency differentiates not only between firms but also inside a firm it differentiates amongst several competencies. In other words, a core competency guides a firm recombining its competencies in response to demands from the environment."

For example, Black and Decker's core technological competencies pertain to 200 to 600 W electric motors, and this motor is their core product. All of their end products are modifications of this basic technology (with the exception of their work benches, flash lights, battery charging systems, toaster ovens, and coffee percolators).

They produce products for three markets:

1. The home workshop market: In the home workshop market, small electric motors are used to produce drills, circular saws, sanders, routers, rotary tools, polishers, and drivers
2. The home cleaning and maintenance market: In the home cleaning and maintenance market, small electric motors are used to produce dust busters, etc.
3. The kitchen appliance market: In the kitchen appliance market, small electric motors are used to produce can openers, food processors, blenders, bread makers, and fans.

The main ideas about Core Competencies were developed by C K Prahalad and G Hamel through a series of articles in the Harvard Business Review followed by a best-selling book - *Competing for the Future*. Their central idea was that over time companies may develop key areas of expertise which are distinctive to that company and critical to the company's long term growth.

'In the 1990s managers will be judged on their ability to identify, cultivate, and exploit the core competencies that make growth possible - indeed, they'll have to rethink the concept of the corporation it self.' C K Prahalad and G Hamel 1990.

These areas of expertise may be in any area but are most likely to develop in the critical, central areas of the company where the most value is added to its products.

For example, for a manufacturer of electronic equipment, key areas of expertise could be in the design of the electronic components and circuits. For a ceramics manufacturer, they could be the routines and processes at the heart of the production process. For a software company the key skills may be in the overall simplicity and utility of the program for users or alternatively in the high quality of software code writing they have achieved.

Core Competencies are not seen as being fixed. Core Competencies should change in response to changes in the company's environment. They are flexible and evolve over time. As a business evolves and adapts to new circumstances and opportunities, so its Core Competencies will have to adapt and change. The above research by various theorists highlights the fact that competency

holds different concepts which differ from people to people and it also differs from segments to segments and are not fixed. It works on certain standards in terms of quality and performance.

The four empirical studies in the dissertation Presented aim to answer the question whether competencies are a farce, a fad, or a useful concept, continuously that should be used in the future. The nature of the competency concept, its relevance, and its use in daily practice was analyzed. In separate studies, the relationships and competencies were focused between constructs personality and cognitive ability, Such As, and on relationships between competencies and effectiveness. Further More, the value of competencies beyond other constructs were studied. Various Artists Including cognitive ability and Personality in the prediction of sales and managerial effectiveness were focused. Finally, the research focused on the use of competencies in daily practice. A multi-source and multi-method approach was adopted in order to Enhance the generalize ability of Research Findings. Results showed That, as expected, mostly Psychologists focus on cognitive ability, personality or behavioral aspects of applicants, depends on the competency domain (ie thinking , feeling, or power) they are rating. Further more, competencies were indeed found to be related to perceived effectiveness. Probably due to variation in situational demands and roles, subordinates, peers and supervisors differed in the competencies they relied on when assessing managerial effectiveness. Also, based on data Gathered at multiple time-points, competencies were found to

Contribute uniquely to the prediction of perceived effectiveness, include sales and managerial effectiveness. Finally, results of a survey and a scenario study provided clear guidelines for the implementation of one of the most widely overused competency applications, namely competency management. It was shown that employee involvement contributed to a positive attitude. Towards competency management and to a sense of perceived behavioral control. Both attitude and perceived behavioral control were found to be Responsible for the use of competency management by employees.

The above literature shows the existence of the concept of competency under different disciplines. The literature for designing multi skill matrix is not available and what are the requirements for a company to go for its designing do not exist.

**IV. Research Methodology**

For this research work, researcher have choosen Non- Probability Convenience Sampling because time limit for the completion of the work is limited and also managers and employees are not available all the time. Sample Size which was taken to design multi skill matrix was 69 employees from shop floor of Engine Assembly Department. The data is collected through interviewing the employee on both the lines (XCD and Platina) and crossed checked by the experts of the respective department. The research is mainly dependent on the primary sources.

**V. Findings**

Table 1: Shows Multi Skill Matrix

TICKET NO.	OIL SEAL PRESS MACHINE	COLLET PRESS MACHINE	ROCKER ARM ASSEMBLY	NUMBER PUNCHING	LH "C" CASE LOADING	LH MULTIBEARING PRESS MACHINE	KITBIN LOADING & "C" SHAFT FITMENT	RH MULTIBEARING PRESS MACHINE & SEALENT APPLICATION MACHINE	RH "C" LOADING	ENGINE CLAMPING AND JOINING	PARALLEL PIN FITMENT	CAM DRUM TIGHTENING	PLATE POSITION FITMENT	OIL PUMP FITMENT	GEAR SHIFTING	CYLINDER BLOCK FITMENT	LH CHAIN GUIDE FITMENT	RH CHAIN GUIDE FITMENT	CLUTCH ASSEMBLY FITMENT
58333																			
58519																			

Table 2: Showing Number of People Working on Both Lines (XCD and Platina)

S NO	STAGE NAME	LEVEL 1			LEVEL 2			LEVEL3			LEVEL 4		
		XCD	PLATINA	TOTAL	XCD	PLATINA	TOTAL	XCD	PLATINA	TOTAL	XCD	PLATINA	TOTAL
	STAGES THAT ARE COMMON TO BOTH PLATINA AND XCD	NUMBER OF PEOPLE HAVING BASIC KNOWLEDGE			NUMBER OF PEOPLE WHO CAN DO WITH HELP			NUMBER WHO CAN DO WITH OUT HELP			NUMBER OF PEOPLE WHO ARE PERFECT AND CAN TEACH		
		XCD	PLATINA	TOTAL	XCD	PLATINA	TOTAL	XCD	PLATINA	TOTAL	XCD	PLATINA	TOTAL
1	COLLET PRESSMACHINE	6	22	28	11	5	16	3	4	7	10	19	29
2	ROCKER ARM ASSEMBLY	5	22	27	10	2	12	2	5	7	10	19	29
3	NUMBERPUNCHING	12	19	31	10	9	19	2	2	4	5	14	20
4	LH "C" CASE LOADING	10	14	20	12	8	20	2	4	6	8	16	24

Table 3: Shows Skill Evaluation for Training Need

TICKET NO.	TRAINING NOT REQUIRED									SKILL EVALUATION FOR TRAINING NEED												
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
	Chassis & engine number selection as per model	Selecting parts as per model	Handling of components	Working safely	Assembly skills with respect to motion of conveyor with cycle time	Tightening of bolts and nuts by using various	Inspection of abnormal fasteners & replacement	Checking torque by using torque wrenches	Torque setting in setting nut runners	Inspection of components	Setup & Adjustment skills	Cleaning filter in FRL	Inspection and adjustment of pressure in FRL	Lubricating oil top up & drop setting in FRL	Adjusting spring force in spring balancer	Correction of defects	Doing JH step 3	Correction of abnormalities	Kaizen to reduce motion loss	Kaizen to reduce major and interface losses	Achieving production target	Fault finding & repairing
58367	■	■	■	■	⊙	⊙	■	■	■	■	■	⊙	■	⊙	■	⊙	⊙	⊙	⊙	■	⊙	
58687	■	■	■	■	■	⊙	■	⊙	⊙	■	■	■	■	■	■	⊙	■	■	■	■	■	■

**VI. Conclusion**

This paper has analyzed the number of people working in Bajaj Auto Pantnagar, who can work on both PLATINA and XCD line based on multi skill matrix constructed on certain parameters were identified and cross checked by the department in charge, the findings were in two sections, First section holds designing of multi skill matrix and the second holds skill evaluation for training need. People on both the line were divided into four levels. Level One holds individual with basic knowledge about work which includes new entrant on the line or the individual who takes time in learning. Second level comprises of employees who require help before performing any task or duty of their own. These were the employees who have learnt something from coaching imparted to them by the in charge and through his regular supervision in the engine assembly department. Third level is based on employees who can perform their respective task without help. These were the employees who have crossed the previous levels on multi skill matrix and were not new to their work. The last level number four posses the employees who are expertise and can teach other employees about their respective duties and perform their own work without any help and guidance.

This multi skill matrix is an attempt to identify the people and their number performing certain technical activities, which is a kind of competency skill required by the employees of engine and vehicle assembly to manufacture an engine for a motor bike. These people who were identified through this skill matrix can be easily shifted from engine assembly to vehicle assembly as certain technical activities were same on both the lines.

The second section of research includes designing of skill evaluation training matrix which was made with the help of multi skill matrix. Through this multi skill matrix the company can easily identified

the employees requiring training of different level. Training need would help the company to redesign the expectations required from the side of employees. These employees were mostly diploma holders from various ITI colleges. The study would help Bajaj Auto Pantnagar, to expertise their employees mainly of technical ground as it is one of the strong players in the Auto industry. The study holds certain limitations as every employee within the department was scared and perceived, that this might be an attempt of a Bajaj Auto to retrench the employees so they were reluctant to answer the question asked in an interview. But the researcher had console them and make them believe that the study is an attempt to provide training to them. Language is one of the prime problem with the employees. The reviews of the answers given by the employees were re-crossed by person in charge. The secrecy of the technical activities is maintained in this research, only certain activities are highlighted to show the validity of the research.

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