

A Study to assess Training Effectiveness with the help of HR Analytics

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ABSTRACT

“**Human Resource Analytics**” is the application of considerable data mining and business analytics techniques to human resources data, which aims to provide an organization with insights for effectively managing employees so that business goals can be reached quickly and efficiently. It gathers employee data, aims to provide insights into each process by using data to make relevant decisions, improve the processes and operational performance. Each organization’s employee training and development programs are defined by its business needs and competency road maps.

The objective of this study is to understand through HR analytics, the effectiveness of training practices, how far employees are benefited by undergoing training programs and success in transfer of training at work performance with reference to automotive industries, as this industry accounts for almost seven per cent of India’s Gross Domestic Product (GDP) and employs as many as 19 million people, both directly and indirectly.

Descriptive research design is followed to determine some definitive purpose with the help of structured questionnaire for collection of primary information from the data bank of employees. The training effectiveness is analyzed by measuring participant’s reaction, learning knowledge acquired and impact on business performance.

The inference drawn out of analysis from the data collected from the employee data base of automotive industries are; that sufficient input was given while conducting training programs, training course covers the topics expected by them & objectives of the training programs are completed, training design has considered the challenges faced by organization, contents of the training programs was good, appropriate methods & suitable language was used while conducting training programs, sufficient time, comfortable atmosphere was provided for each training module & doubts of trainees were cleared during the sessions. Thus Training activities fosters teamwork & cooperation among participants.

The result of assessment can further be useful to make changes, improvements and modifications to effective training methodologies in automotive industries located in Pune, Mumbai and Aurangabad.

Key words: Human Resource Analytics, Data Mining, Training Effectiveness, Transfer of Training, Automotive Industry.

Introduction

Human resources are stepping into the spotlight with HR analytics. In past years, one of HR's primary goals was to collect and keep track of employees' personal and professional information, such as payroll, health benefits and performance reviews. Now, the tide of technology has reached HR's shores and is carrying it into deeper waters where it can analyze data to play a more active role in the organization.

HR managers typically used metrics to measure such data as turnover rates and sick days. With HR analytics, they can gauge employee engagement and whether or not workers have

the skills to reach company goals. HR representatives can now talk with business leaders, find out what they need and hire accordingly. HR analytics allows human resources to interpret data, recognize trends or issues, and take proactive steps with different departments to keep the organization running smoothly and profitably

Analytics is always an important topic and trend in every part of business and HR is also not far behind. Today many organizations including automotive industries are looking for metrics or analytics in HR which are not just related to people but also on processes such as recruitment, retention, compensation, succession planning, benefits, training & development, performance and appraisal and many others.

Some typical benefits and use cases of analytics are mentioned as:

- i. Improve organizational performance through high quality talent related decisions
- ii. Forecast workforce requirements and utilization for improved business performance.
- iii. Optimization of talents through development and planning.
- iv. Identify the primary reasons for attrition and identify high-value employees for leaving.
- v. Provide the source of competitive platform for the organizations
- vi. Manages applicants in better way on basis of qualification for a specific position.
- vii. Recognize the factors which turn the employee satisfaction and productivity.
- viii. Enabling HR to demonstrate its benefaction to achieving corporate goals
- ix. Exploring data to find new patterns and relationships ([data mining](#))
- x. Explaining why a certain result occurred (statistical analysis, quantitative analysis)

In automotive industries, Training & Development is carried on with an attempt to improve current or future employee performance by increasing an employee's ability to perform through learning, usually by changing the employee's attitude or increasing his or her skills and knowledge.

Training evaluation ensures that training programs comply with the competency gaps and that the deliverables are not compromised upon. Evaluation ensures that the training programs are effective in improving the work quality, employee behavior, attitude and development of new skills within the employee within a certain budget.

Since globally companies are trying to cut their costs without compromising upon the quality, evaluation just aims at achieving the same with training especially in the dynamic and fast growing automotive sector in India. Evaluation also acts as a feedback to the trainer or the facilitator and the entire training process.

HR Analytics is acting as an important tool in automotive industries to know the effectiveness of the training programs carried out for all employees for a framed time period. The Indian auto-components industry has experienced healthy growth over the last few years. Some of the factors attributable to this include: a buoyant end-user market, improved consumer sentiment and return of adequate liquidity in the financial system. Now the responsibility lies on the human resource of this industry to deliver the best for sustainability in the competitive market.

This assessment is an attempt to check whether the training practices are up to the mark and expectations which can be helpful to make changes, improvements, and modifications to effective training methodologies while eliminating those that are ineffective. Surveys, designed and delivered via survey software, are cost-effective methods businesses can employ to simplify the training evaluation process.

Objective of Study

To understand and assess the effectiveness of training practices of automotive industries through HR Analytics.

Review of Literature

“**Human Resource Analytics**” is the application of considerable data mining and business analytics techniques to human resources data. The goal of human resources analytics is to provide an organization with insights for effectively managing employees so that business goals can be reached quickly and efficiently. The challenge of human resources analytics is to identify what data should be captured and how to use the data to model and predict capabilities so the organization gets an optimal return on investment on its human capital.

Data mining is sorting through data to identify patterns and establish relationships. Generally, data mining (sometimes called data or knowledge discovery) is the process of analyzing data from different perspectives and summarizing it into useful information

Business analytics (BA) is the practice of [iterative](#), methodical exploration of an organization’s data with emphasis on statistical analysis. Business analytics is used by companies committed to data-driven decision making.

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- xii. Forecast workforce requirements and utilization for improved business performance.
- xiii. Optimization of talents through development and planning.
- xiv. Identify the primary reasons for attrition and identify high-value employees for leaving.
- xv. Provide the source of competitive platform for the organizations
- xvi. Manages applicants in better way on basis of qualification for a specific position.
- xvii. Recognize the factors which turn the employee satisfaction and productivity.
- xviii. Enabling HR to demonstrate its benefaction to achieving corporate goals.
- xix. Exploring data to find new patterns and relationships ([data mining](#))
- xx. Explaining why a certain result occurred (statistical analysis, quantitative analysis)

Objectives of Human Resource Analytics.

- I. To measure the level of ‘**Employee Satisfaction**’ and find out scope of improvement to increase the satisfaction level.
- II. To assess the ‘**Effectiveness**’ of the existing ‘**Training Program**’ and suggest valuable inputs for designing future training programs.
- III. To understand the ‘**Attrition Level**’ and suggest corrective measures.
- IV. Skill-Met goals
- V. Job Mobility / Growth Patterns
- VI. Setting internal benchmark
- VII. Identification of top performer & retain them.

Training effectiveness analysis is considered to be the foundation of all training activities. In order to deliver appropriate, effective training which meets the needs of individuals and the organisation and represents value for money a training needs analysis is essential (Boydell and Leary 1996, Reid and Barrington 1999).

There is general agreement in the literature that a training needs analysis is a best practice

first step in the systematic approach to training (Wills 1998, Boydell and Leary 1996, Reid and Barrington 1999, Garavan et al., 1995, Bartram and Gibson 1997, 1999, Reay 1994). The systematic approach to training is the predominant model found in the literature (CLMS M 2 U6, Wills 1998, Buckley and Caple 1995, Boydell and Leary 1996, Reid and Barrington 1999, Garavan et al., 1995).

The systematic approach is described slightly differently by different authors, with varying stages and elements but there are a number of core features to the approach. The systematic approach is one which involves considering the linkages between the parts of the training process. There is an assumption that training must be planned in a cyclical or processual manner and that this approach will lead to high quality, planned training (CLMS, Buckley and Caple 1995, Barrington and Reid 1999, Wills, 1998, Bartram and Gibson 1999). Bartram and Gibson (1999:107) state that a “systematic approach to identifying training needs ensures that people are offered opportunities to learn which are efficient and effective”. All of the systematic approaches outlined in the literature outline a number of steps in the process and cover similar basic elements; 11 determining the training need, choosing appropriate methods to address the identified need, planning, implementing and evaluating.

The benefit of this approach, as outlined in the literature, is that nothing is left out and there is a planned and professional approach. It also provides data necessary to justify or explain to senior management what training is required, what budgets are needed, what they are spent on and what the impact is for the organisation (Wills 1998).

Research Methodology

Research Design: Descriptive research design is used to determine some definitive purpose with the help of structured questionnaire (shared via Google forms) for collection of primary information from the data bank of employees. The training effectiveness is analyzed by measuring participant’s reaction, learning knowledge acquired and impact on business performance.

Sampling Design and Technique

Sample Size, white collar employees of the organization located in Pune. After filtering the data, finally 32 responses information was considered for the research.

Systematic Random Sampling is used for primary data collection for the study.

Data Collection:

Measurement & Scaling, A Likert-type scale assumes that the strength/intensity of experience is linear, i.e. on a continuum from strongly agree to strongly disagree, and makes the assumption that attitudes can be measured. Respondents were offered a choice of five to seven or even nine pre-coded responses with the neutral point being neither agree nor disagree.

Parameters	Rank
Extremely Satisfied	4
Satisfied	3
Dissatisfied	2
Extremely Dissatisfied	1

Methods of Data Collection

Secondary Data

Secondary data refers to the information or facts already collected. For this research data was referred from already collected data of the organization, that is the data bank of the employees with the organization.

Thus data was collected with an objective of understanding the part status of any variable or the data collected and reported by some source is accessed and used for the objective of a study.

Data was collected through the post-training evaluation forms filled by trainees after attending training programs and the data base maintained of the same.

Statistical Tools & Techniques

Tools used for analysis are Percentage Analysis and Ms-Excel. Data Analysis and presentation technique used are comprehensive charts and graphs

Analysis and Interpretation

A comprehensive analysis chart is prepared from the data thus collected with its analysis and interpretation.

Q.No	Extremely Satisfied	Satisfied	Dissatisfied	Extremely Dissatisfied	Interpretation
1	18	14	0	0	Sufficient information was provided at the conduction of training programs.
2	20	12	0	0	Exchange of information & expression is encouraged.
3	17	14	1	0	Training course covers the expected topics.
4	11	19	1	0	Training Program objectives are met.
5	15	17	0	0	It reflects that training design considered the challenges faced by organisation.
6	18	14	0	0	Training programs are effectively formulated & conducted
7	11	20	0	0	Training methods are of good Quality
8	13	19	0	0	Trainers encourages cross learning from the participants.
9	19	12	0	0	Training sessions were conducted in suitable language to be accepted and understood by trainees.
10	16	16	0	0	Atmosphere at the time of conduct of training programs was cohesive and comfortable
11	20	12	0	0	Training course fosters teamwork & Cooperation among participants.
12	20	12	0	0	Trainer possesses sufficient knowledge regarding the content.

13	24	8	0	0	Trainer has good Communication skills
14	19	13	0	0	Sufficient time was devoted to each training module
15	15	17	0	0	Doubts if any are properly addressed and cleared.

Discussion:

With the help of HR Analytics following are drawn;

Respondents agreed that a sufficient input was given while conducting training programs.

Most of the respondents agreed that the training course covers the topics expected by them & objectives of the training programs are completed.

Training design has considered the challenges faced by organisation, contents of the training programs was good, appropriate methods & suitable language was used while conducting training programs,

Sufficient time, comfortable atmosphere provided for each training module & doubts of trainees was cleared during the sessions.

Trainers having good Communication skills, sufficient knowledge of training course were selected for conducting training programs. Training activities fosters teamwork & cooperation among participants.

Conclusion

Analysis of all the facts & figures, of the **training programs** gives a very positive impression regarding the training programs conducted at automotive industries in Pune, Mumbai and Aurangabad. It becomes quite clear that there is no other alternative or short cut to the development of human resources. Training when used in a planned and purposeful manner can be an extremely effective management process; particularly with the help of upcoming tools like HR Analytics it became more accurate and easy.

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