MANPOWER PLANNING AS A STATISTICAL TOOL FOR ATTAINING HIGH PRODUCTIVITY IN MEDICAL DEVICE MANUFACTURING INDUSTRIES OF DELHI/NCR

Rashi Srivastav, Assistant Professor, Greater Noida Institute of Technology

Corresponding Author Email: rashi1994srivastav@gmail.com

Received:14.10.24/ Published: 01.11.24

ABSTRACT

Human resource planning or manpower planning plays one of the important roles in organizational productivity. Manpower Planning is an interdisciplinary activity of an organization. It is a combined technical skill of statisticians, economists, behavioral scientists together. Organizations consider their human resource as an important asset as it leads towards better performance and productivity in an organization. This research paper focuses on the impact of human resource planning on the organizational performance. For conducting our research we selected the manufacturing industry of medical devices. Top 8 companies who manufactures the medical equipments from Delhi/NCR. Data collected through questionnaires, personal interviews. A questionnaire has been circulated to the 550 employees from managerial to operational level. We received responses from 504 employees belong to operational level and 46 employees who belong to managerial level. The result shows that the organizational performance measures constitute the significant relationship with other. This study concluded that if the proper manpower planning implemented in medical device manufacturing industry, it would lead to more productivity.

KEYWORDS

Manpower planning, organizational productivity, employees' performance, manufacturing industry

INTRODUCTION

Human resource planning is also known as manpower planning, it is the process by which management used to determine in which way organizations should move from one path to another. It depends on the proper manpower planning that which human resource is suitable for the post. Human resource department also assess which skills, capabilities, knowledge required to perform the duties (Armstrong, 2005). Manpower planning plays one the most important role in organization success. Organizations who do not put their efforts in finding and retaining talents will find their organization in consequences. In carrying out the proper manpower planning, manager faces the number of challenges includes the dynamic nature of the corporate planning (Bach, 2002). Effectiveness of the manpower planning will get limited if they do no retain the right talent or do not motivate their employees in performing the task. (Wagner, 2008) found that the contribution of highly skilled worker will get limited if he/she do not get the opportunities to enhance their performance. An effective manpower planning will help to eliminate many loop holes in an organization like, talent gaps, lack of motivation, job insecurity, pay etc. Recruitment procedures provides a chance to the eligible applicant to show their capability, selection process have power to decide which type of skill actually needed for the post. Proper training, mentoring, coaching can influence the employees' development (Stewart, 2012). Manpower planning additionally includes evaluating employing and training costs. Here, measurable strategies are fundamental for making a reasonable employing and preparing financial plan. Employing cost computations frequently

incorporate expense per-recruit, time-to-fill and turnover costs and the yield proportion. The adequacy of worker preparing and improvement programs frequently is assessed by deciding the yearly expense of training every representative and the hours every representative spent in preparing, then, at that point, contrasting the outcomes with the percent of execution objectives met or surpassed as well as the percent of all representatives falling inside a particular an exhibition rating range.

OBJECTIVES OF THE STUDY

- > To determine the factors of manpower planning which leads to high productivity.
- > To determine the importance of manpower planning in organizational productivity.

HYPOTHESIS OF THE STUDY

H1: There exists no positive relationship between manpower planning and employee's motivation.

H2: There exists no positive relationship between manpower planning and job satisfaction.

LITERATURE REVIEW

Walker (1998) characterizes manpower planning as breaking down organization's human asset needs under changing circumstances and fostering the exercises important to fulfill these requirements.

Vetter (2001) additionally characterizes manpower planning as the cycle by which the executives decide how associations move from current place of labor to its ideal state. Human resource planning is a continuous interaction that isn't static including many interrelated exercises which should be adjusted and refreshed as conditions require.

Conyers (2013) characterized planning as a nonstop interaction which includes choices or decisions about elective approaches to utilizing accessible assets, fully intent on accomplishing specific objectives sooner or later.

Williams (2005) manpower planning includes concluding what ought to be done, how it ought to be done and when it ought to be done in deciding authoritative objectives and the method for accomplishing those objectives of the association.

Dessler (2018) believed that manpower planning is a continuous interaction that isn't static including many interrelated exercises which should be changed and refreshed as conditions require.

Okenmwa (2015) recommended that during the time spent putting together the business should continually acknowledge he is coordinating individuals to working and to create the most common way of staffing includes the examination of staff necessities and filling the different positions with the perfect people.

Ikedi (2019) contended that labor planning is the demonstration of fostering a casing work program that would be expected for touchy position in the business venture for better the board of the framework.

Obi (2020) exampling that the point of labor supply arranging or the point of creating labor supply plan is to accomplish corporate target through the improvement of systems intended to expand the commitment of labor.

Noe (1996) referenced different variables that impact gauging interest for staff which incorporate spending plan limitation, turnover because of renunciations, contract terminations, moves and migrations.

Strauss (2009) characterizes training and improvement as "The course of social alteration or embellishment of laborers to coordinate authoritative necessities with their qualities.

SIGNIFICANCE OF THE STUDY

Manpower planning has its real significance in manufacturing industry as it is the key driver towards maintaining organizational efficiency. This research will definitely provides a path towards making manufacturing industry's HR practice competitive as compared to other sectors.

FACTORS OF MANPOWER PLANNING LEADS TO ORGANIZATIONAL PRODUCTIVITY

Manpower planning can be defined as the number of people required to perform the task. Right manpower planning helps in achieving the organizational objectives which leads to productivity.

There are some important factors of manpower planning that leads to high productivity in an organization:

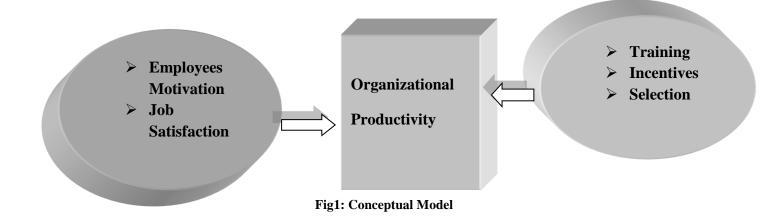
- 1. Incentive pay: In the event that your HR management plans, you can utilize rewards to support efficiency. The arranging decides a financial plan for rewards, as well as which positions to offer them to get the most advantage from fundamental undertakings. Take care that your HR office doesn't give rewards to workers basically to going about their responsibilities. Rewards for additional work or further developed efficiency will give representatives impetuses to effectively work harder or more. Have HR show the rewards on checks independently from customary wages so workers comprehend this is additional compensation for additional work and not something they are qualified for routinely.
- 2. Specialization: The HR division should either enroll workers with the specialized abilities vital for the business or make preparing projects to encourage those abilities among existing representatives. Inability to anticipate specialized capability can leave the organization without fundamental skills it necessities to contend. Alternately, viable HR arranging can stay with the on the bleeding edge of specialized capability and position it to catch piece of the pie through prevalent execution of fundamental undertakings.
- 3. Teamwork: Cautious preparation in allocating workers to groups helps increment efficiency. This is both an administrative and a HR ability. Directors should screen groups to see that they stay on task. The HR office can help with surveying which ranges of abilities people have and decide how they might add to a compelling collaboration. Truth be told, HR can prepare for groups it realizes the organization will require and either recruit or train so the essential ranges of abilities are accessible when the requirement for the group emerges.
- 4. Training: The HR division can advance work capability in more than one work. By giving preparation, the organization can have representatives who can switch offices and finish undertakings dependent upon the situation. This is especially helpful when you are briefly increase creation for another client or participating in an action that won't demand a full-time worker all year. HR should prepare to prepare for such undertakings.

IMPORTANCE OF MANPOWER PLANNING IN ORGANIZATIONAL PRODUCTIVITY

Productivity level expands when assets are utilized in the most incredible way. It is qualified to take note of that higher efficiency is the result of least wastage of endeavors, cash, energy and time. In each association HR administrator is liable for the planning and controlling of representatives to foster the associations' presentation. In the present market, the viable utilization of HR to arrive at the goals of the organization is vital (Eniola, 2013). Thus for this exploration the area of human asset the executives that is of center is the act of arranging by the human asset division. Human asset arranging guarantees smooth stockpile of laborers without interruption. Human asset arranging is fundamental despite stamped ascend in labor force turnover which is inescapable and, surprisingly, helpful. Intentional stops, releases, relationships, promo-tions and occasional changes in business are the instances of variables prompting labor force turnover in associations. These reason steady recurring pattern in the work force in numerous associations. Anyway, different experts uncovered that human asset arranging rehearses are acknowledged to be the essential constituent of authoritative method (Benjim, 2014).

RESEARCH METHODOLOGY

- Research Design: This study is all about to know the impact of manpower planning on organizational performance and their productivity. Survey research design has been adopted. It comprised a well structured questionnaire to gather the accurate information.
- Sources of Data Collection: (a) Primary data- questionnaires and personal interviews (b) Secondary data articles, research papers, thesis, books.
- ➤ Variables of the study:
- (a) Dependent Variables job satisfaction, motivation.
- (b) Independent Variables- incentives, training, selection.
- Sample Size: For conducting this research sample size of 550 employees has been drawn. 504 employees belong to operational level and 46 employees belong to managerial level.



ANALYSIS AND RESULT OF THE STUDY

H1.0: There exists no positive relationship between manpower planning and employees motivation.

Relationship between employees motivation with independent variables

Table1. Model Summary

Model	R	R square	Adjusted R	Std. error of the	Durbin-Watson
			square	estimate	
1	.562	.215	.189	2.30453	3.679

In the above table, value of R square reflects that the total variation in dependent variable employee motivation is detailed by independent variables.

Table2. ANOVA

Model		Sum of	df	Mean square	F	Sig.
		squares				
1	Regression	321.423	4	134.746	13.010	.000
	Residual	1503.986	145	15.742		
	Total	3024.315	168			

ANOVA tables clarifies that the relationship of employee motivation with independent variables is highly correlate and its value is .000.

Table3. Coefficients

Model	Unstandardized		Standardized Coefficients'		
	Coefficients				Sig.
1	В	Std.error	beta t		
Constant	3.576	1.457		1.712	.123
Selection	758	.536	112	-1.432	0.57
Incentives	1.522	.275	.521	6.105	.000
Training	206	.282	.045	487	.564

Above table indicates employee motivation is highly significant with incentives, significant level at .000. Value of beta clarifies that if incentives increase than motivation of the employees will also get increases. There is a positive relationship between incentives and employee motivation.

H2.0 There exist no positive relationship between manpower planning and job satisfaction.

Relationship between job satisfactions with independent variables

Table 4. Model Summary

Model	R	R square	Adjusted R	Std. error of the	Durbin-Watson
			square	estimate	
1	.314	.054	.025	35.36932	2.423

In the above table, value of R square reflects that the total variation in dependent variable employee job satisfaction is detailed by independent variables.

Table 5. ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10285.813	5	2523.104	3.94	0.62
	Residual	230781.342	145	1142.123		
	Total	2435115.741	165			

ANOVA table indicates that that the relationship of employee job satisfaction with independent variables is significant at 10%, and its value (0.62).

Table 6. Coefficients

Model		Unstandardized Coefficients		rdized cients'	Sig.
1	В	Std.error	beta	t	
Constant	12.782	15.734		.586	.497
Selection	-13.784	5.566	157	-2.43	.026
Incentives	-1.894	3.012	045	675	.412
Training	2.372	2.186	.079	1.270	.322

Above table indicates employee job satisfaction is highly significant with incentives, significant level at .026. Value of beta indicates that there is a negative relationship between selection and employee job satisfaction.

MAJOR FINDINGS OF THE STUDY

The main aim of this study was to indentify the performance of manufacturing industries and the impact of human resource planning on the qualitative performance measures. Practices of human resources are their real success as organizations follow the modern techniques and methods. We checked the selection, training and incentives with our performance measures which are having the positive and significant relationship.

CONCLUSION

This study concluded that the manpower planning like training, incentives, selection has significant relationship with organizational productivity. Effective manpower planning attracts right talent and quality of personnels, maintain staff within an organization. Employees motivation should be undertaken which leads to better productivity. To ensure satisfactory labor force in the association, the executives should design appropriately, legitimate preparation in this regard includes precise projection of things to come, taking stock of existing labor force, contrasting the power and the current one and take remedial measure. Efficiency implies pace of result, level of result and achievement which is straightforwardly connected with productivity and turnover. These examinations concentrate on focuses on the conceivable effect of HR anticipating laborers' efficiency.

REFERENCES

Armstrong, L. (2005). Middle Term Practices. International Journal of Management Science. 2(2).3-12.

Bach,S.(2002).Framework for Human Resource Planning. International Journal of Human Resource Management. 345-358.

Benjim,H.(2014).Strategic Human Resource Practice in High Performance Organization. *Innovative Human Dynamics*. 14(3).342-350.

Conyers, P. (2013). Succession Planning : Strategic Goals and Leadership Behaviors. *Nursing Leadership Forum*. 92-97.

Dessler, I. (2018). The Effect of Training on Employees Performance. European Journal of Business & Management. 5(4). 138-145.

Eniola, J. (2013). The use and impact of Human Resource Information System on Human Resource Management professionals. *Information and Management*. 16(5).503-511.

Ikedi, F. (2019). Human Resource Strategy and Competitive Advantage . Radiology Management. 9(3). 399-429.

Noe, R. (1996). Human Resource Practices and Organizational Performance. *International Journal of Humanities* and Social Science. 4(1).25-34.

Obi,O.(2020). Employees Attitude and Job Satisfaction. Human Resource Management. 43(5).295-301.

Okenmwa,Y.(2015).Effect of Employee Resourcing Strategies on the Performance of Commercial Banks in Kenya. *International Journal of Education and Research*. 2(1).1-20.

GNIOT JOURNAL OF MANAGEMENT AND TECHNOLOGY VOLUME 1: ISSUE 1 (JULY- DECEMBER) 2024

Stewart, T. (2012). The Impact of Human Resource Management Practice on Turnover, Productivity, and Financial Performance. *Academy of Management Journal*. 38.653-670.

Vetter, M. (2001). Impact of Human Resource Management Practices on Perception of Organizational Performance. *Academy of Management Jorunal*. 39 (4).

Wagner, R. (2008). Hospital Human Resource Planning in Slovakia . *Journal of Global Business and Techniques*. 395-407.

Walker, R. (1998). Human Capital: Educational Aspects. *International Encyclopedia of the social and Behavioral Sciences*. 21-36.

Willimans,K.(2005).Human Resource Strategy and Competitive Advantage. Journal of Management Studies. 36(2).443-463.