

Available online at www.elixirpublishers.com (Elixir International Journal)

Human Resource Management

Elixir Human Res. Mgmt. 52A (2012) 11578-11583



Implementation of six sigma: facilitating efficient hiring in BPO industry

Shreya Bhandari, Jaya Gupta and Pooja Misra

ARTICLE INFO

Article history:

Received: 13 March 2012; Received in revised form: 11 November 2012:

Accepted: 17 November 2012;

Keywords

Business process outsourcing, Recruitment, Selection, Six sigma

ABSTRACT

Business process outsourcing is a subset of outsourcing that involves the contracting of the operations and responsibilities of specific business functions or processes to a third-party service provider. It is typically categorized into back office outsourcing - which includes internal business functions such as human resource or finance and accounting, and front office outsourcing - which includes customer-related services such as contract centre services.

The bpo industry is a people oriented industry and human capital largely contributes to the top line and bottomline of the company. Thus, one of the major functions of this industry is recruitment & selection of the right employee. Due to high attrition rates prevalent in this industry, hiring of employees needs to be a fast track job with aggressive timelines. If not done so, the organisation might get impacted on its profit margins. Therefore efficient and effective hiring of employees is very vital in this industry.

Hiring is also the first platform when an eligible candidate comes in direct contact with the organisation. The image formed then is the image the candidate takes forward. This image so created by the candidates hence becomes the market/public image of the organisation, which is very significant for the success of the organisation.

The present study seeks to apply the principles of six sigma in making the hiring process of the organisation efficient and time bound.

© 2012 Elixir All rights reserved.

Introduction

Business process outsourcing (BPO) is a kind of outsourcing that involves contracting of the operations and responsibilities of specific business functions to a third-party service provider. It is used to refer to the outsourcing of business processing services to an outside firm, replacing in-house services with labor from an outside firm.

BPO industry was incepted with a market value of 1.6 billion dollars in India, and has grown to 14.7 billion dollars in its first ten years. The low labour costs and the pool of skilled, English-speaking Indians have always been the two foremost factors contributing to the BPO boom in the country but it also has its challenges of sourcing the required talent and curbing the high attrition. It has witnessed a high attrition rate of 65% in the last two years (2009-2011), giving a massive jolt to the prospect of the country, as per the Associated Chamber of Commerce and Industry of India (Assocham).

This initiates the need of having a very effective and efficient recruitment system to reduce the gap in the demand and supply of the workforce. A robust system will enable the industry to select suitable candidates at the required time, so that there is no loss in the operations of the company.

In the era of sustainable growth and development and with companies seeking to attain and sustain a competitive advantage, quality management programs have been extensively applied in the industry. With the help of six sigma process, a company can build and efficient and enhanced recruitment system, by using the resources such as time and capital in the most optimal manner.

Recruitment

According to Edwin B. Flippo, "Recruitment is the process of searching the candidates for employment and stimulating them to apply for jobs in the organisation". Recruitment is the activity that links the employers and the job seekers. It is a process to discover sources of manpower to meet the requirements of staffing scheduled and to employ effective measures for attracting that manpower in adequate numbers to facilitate effective selection of an efficient working force. Thus the purpose of recruitment is to locate sources of manpower to meet job requirements and job specifications.

Recruitment is a continuous process whereby the firm attempts to develop a pool of qualified applicants for the future human resources needs even though specific vacancies do not exist. Usually, the recruitment process starts when a manger initiates an employee requisition for a specific vacancy or an anticipated vacancy.

Recruitment starts with seeking out interested and qualified applicants, through different channels like classified advertising, job fairs and social networking sites. Tailoring your recruitment strategy to the kind of employee you're trying to attract is the key.

Selection is the final step, when an employer narrows down the applicant pool from all prospects attracted during the recruitment phase. The primary focus is on ensuring the company finds the one applicant with the right skills and experience, and who will merge well with the company's philosophy and existing staff. During selection, it's time to hone in on each applicant's skills, aptitude, experience and personality. Interviews are standard, but many employers give aptitude and assessment tests as well. Recruitment and selection

Tele: 09560822481

 $E\text{-}mail\ addresses:\ shrey a.bhandari 12@bimtech.ac. in$

is not only about choosing the most suitable candidate. The recruitment and selection experience can also impact on the likelihood that a candidate will accept a job offer and on their subsequent commitment to remain with the organisation.

Committing time and resources to develop a comprehensive recruitment strategy is a worthwhile investment. Poor recruitment choices (i.e., poor person-job fit) can have a range of undesirable consequences for the organisation and the worker including:

- ➤ Higher rates of turnover
- ➤ Reduced performance effectiveness
- ➤ Lowered job satisfaction
- ➤ Reduced work motivation

Six Sigma

Six Sigma is one of the new quality management programs which help companies increase their customer satisfaction and financial benefits. It is a proven set of methods that help people in running their business or organisation more efficiently and profitably. Over time, many tools and techniques have been developed to help firms improve their processes to achieve Six Sigma level quality. The use of these tools and techniques is guided by an overarching structured improvement method known as DMAIC (Define, Measure, Analyze, Improve, and Control). DMAIC is a structured problem solving method. It has five stages with each letter in the acronym stands for one. The essence of the DMAIC method is to reduce variation in a process to achieve high conformance quality in customers' terms. The tools and techniques used in Six Sigma are also not unique to Six Sigma. Most tools and techniques are identical to those found in a classic TQM program. Others are generic problem solving tools and techniques. It is more about a convention to call the set of tools and techniques Six Sigma.

Six Sigma was developed at Motorola, during a time when their business and manufacturing costs were increasing. They needed to improve profitability by producing products to meet customer's requirements. When Six Sigma process was first developed, they targeted high-end saving programs, typically able to achieve cost saving of \$170000 per project.

Literature Review

Six Sigma is defined as "an organized and systematic method for strategic process improvement and new product and service development that relies on statistical methods and the scientific method to make dramatic reductions in customer defined defect rates". A more common definition of Six Sigma is that it is a set of tools and techniques for problem solving or process improvement (Das et al., 2008). Some define Six Sigma as an improvement method that holds the set of tools and techniques together. This definition reflects the evolution of Six Sigma over time. Some scholars view Six Sigma as applying a set of statistical tools and techniques. Others believe that Six Sigma is simply a repackaging of the well known total quality management (TQM) program, i.e., "old wine in new bottle" (Beer, 2003).

Six Sigma's successes in major companies including GE, Honeywell, Sony, Caterpillar, and Johnson Controls, promote the adoption of Six Sigma in every industry. Nevertheless, as a comprehensive quality program, Six Sigma implementation is a complicated process which requires substantial changes in the way that companies operate and involves many problematic issues.

It is an important advance in quality management and process improvement in the last two decades. The benefits of Six

Sigma include but are not limited to cost reduction, customer satisfaction improvement, and sales revenue growth (Pande 2000). Even with very impressive track records, research on Six Sigma was at a rather low level due to several reasons. There can been a concern about Six Sigma being just a management fad. Though no research has yet been able to prove the same but, at the same time there has been lack of detailed research on the same. Ironically, the question whether Six Sigma is a management fad can only be truly answered by rigorous research.

Applying Six Sigma to HR is no way different than applying it anywhere else in the organization. All you need to know is where the gaps are. Once you understand what the problem is, it becomes very manageable. One of the keys to Six Sigma is breaking down processes into manageable pieces and improving each piece to affect the overall performance. After mapping the process, Six Sigma forces a look at the internal workings of the department. Measuring human performance is harder than measuring widgets. People metrics often include "fuzzy" data like turnover, units, dollars, opinion surveys, integrity, speed, or work accuracy. These measurements are often affected by dozens of unrelated factors such as economic trends, politics, delayed feedback from information systems, etc. The implication for HR is that, unlike weights and measures, human productivity measures are filled with error, making statistical analysis and feedback tricky at best.

Research states that HR can help in implementation of six sigma in the organization as HR is a function of the organization which interacts with and influences every employee, thus it's a department best suited to facilitate management change. The theory says that an organization needs HR to integrate six sigma methodology and a business score card to achieve growth and profitability. It deals with how HR can be at 3.4 defects per one million as it does not deal with one million people. Human resource now in every organization is treated as human capital; therefore HR must ensure that there is good return on the human capital.

Six sigma implies dramatic improvement through innovation and reengineering of the HR function. The HR function must be set to perform better, faster and more cost effectively by creating value rather than just role support of the management or training.

The human resource people are now using six sigma to improve customer satisfaction and reduce costs in everyday HR activities. Ronaldo Costa Pinto, HRD global process leader for Dow Chemical's HR resource centre and an HR Six Sigma champion, says Dow's HR group surpassed its \$1 million savings goal for 2003, achieving \$3.2 million in financial benefit from Six Sigma. A study was conducted in a Colorado manufacturing, which was having trouble recruiting 24/7 operations where local unemployment was 2%. As a result the company was paying excessive overtime to experienced workers. The human resource department had proposed to raise the entry level salary to be more competitive. The right answer was found by applying Six Sigma quality tools to the process. The internal hiring process required candidates to return week after week-apply one week, test the next, interview the next, undergo a blood test, then receive an offer. Motivated applicants found jobs elsewhere. By mapping the process and removing barriers, the Company reduced hiring time from six weeks to one.

Organizational culture is viewed as the pattern of values, beliefs, and assumptions shared by members in an organization, which are perceived by the organization as the valid, correct way to perceive and solve problems. These shared values, beliefs, and assumptions in the organization bind its employees together and become the manner or strategies through which the organization achieves its goals. In the context of quality management, the values and beliefs underlying an organization's culture are able to shape its philosophy and policies of managing business, which in turn influence the development of the organization's quality management practices. It has been argued that for an organization to realize the value of implementing quality practices, it must have a culture that is capable of fully supporting their implementation.

Recruitment is the first point of interaction between the organisation and the employee. Recruiting can be viewed as a screening process. This is especially true during the periods of high unemployment, when job market is characterized by an oversupply of talent and also for the organisations which recruit on daily basis mainly the service industry or the Business Process Outsourcing industry. Under these conditions, the recruiting function in an organization is to eliminate unqualified people as much as to seek out talent. To improve the quality of an overall recruiting process, each step of the process must be designed to maximize the probability that the candidate ultimately selected meets the expectations of the hiring manager. One way to do this is to maximize the chances that an unqualified candidate is screened out at each step.

The Organisation

The organisation researched into for the current study is a leading BPO in the country. The organisation is charted to provide business process management capabilities that would deliver outstanding efficiencies to the company. It is a leader in the globalization of services and technology and a pioneer in managing business processes for companies around the world. The Company combines process expertise, information technology and analytical capabilities with operational insight and experience in diverse industries to provide a wide range of services using its global delivery platform. It provides a wide range of services, including Finance & Accounting, Collections and Customer Service, Insurance, Supply Chain & Procurement, Analytics, Enterprise Application, IT Infrastructure and Management.

The company's services are delivered from a global network of centres located in over 13 countries. The company is feels pride in driving seamless delivery and a singular culture across these operating locations. This is enabled by their outstanding people practices and strong local management. Their objective is to service their clients from the locations that best meets their needs – onshore, near shore, offshore – taking into consideration their business objectives, cultural needs, language requirements and cost containment strategy.

They manage over 3000 processes for over 400 clients from a diversity of industries. Operating innovation is a cornerstone in doing business, and this is enabled by having the single largest pool of Six Sigma Experts in the industry. They have a highly motivated and passionate talent pool with one of the lowest attrition rate in the industry. The customers do remark them by saying that their people are outstanding and effectively work as a part of the client's team. Their approach to reengineering is highly pragmatic. They ensure that the clients leave the engagement with a well running operation, not just a plan.

Purpose of the study:

- To understand the entire hiring process of the company.
- To highlight the factors which contribute to the efficacy/inefficacy of the Hiring process.
- Device solutions to make the hiring process efficient and robust with a focus on quality and cost reduction.

 Methodology

For performing the study the first step was to understand the operations of the hiring department. The companies in this industry have specified processes to test the capabilities of the candidates. A lot of information about the BPO sector and the companies in this sector was collected through various research papers published on the net and by the use of secondary data.

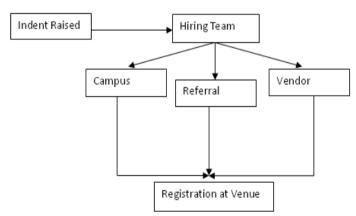
The next step before performing the hiring analysis was to understand how the hiring department of an organisation functions. This was done by observing the different process in the department and interacting with the candidates who come for their interviews to the organisation by the use of primary data.

Finally a questionnaire was used to be able to conduct a survey to understand the different parameters and points on which the experience of the candidate could be rated. The data was then collected by taking appointments and talking to people from these companies.

Data Collection

The data collection from primary source was done by conducting interviews with the candidate and gathering required information from the employees of the department.

The hiring process of the organisation is divided into 2 steps. first step is:



Step 1

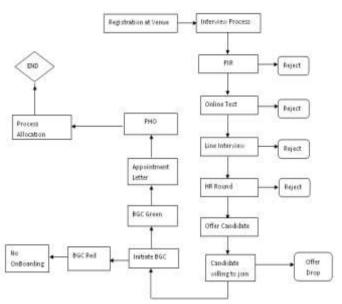
The recruitment process is initiated with the requirements given by the different departments in the organisation. On receipt of the requirements, the Hiring department starts the hiring process of the required profiles.

The organisation recruits candidates for Band 5 for the post of Process Associates and Process Developers. The hiring starts from the effort of the sourcing team. The sourcing team is distributed in three sections namely

- ➤ Campus
- ➤ Vendor
- ➤ Internal references

These sources do their work of calling up candidate for the interview processes. They line up candidates according to their availability. The interested and eligible candidates are called for the interview process.

Step 2



The interview process of the organisation starts only after the registration of candidates. The hiring process is divided into five rounds, which are:

- · Personal Introduction Round PIR
- Online test
- · Conversational Assessment
- Line interview
- HR interview
- Personal Introduction Round PIR

This round checks the candidates on their education qualifications, communication skills and on comfort with the shifts and location. Candidates found eligible in this round are sent for further steps.

• Online test

The second step comprises of two parts

a)Language Assessment

Candidates found eligible after the PIR are assessed telephonically for the language capabilities. It tests the candidate's communication skills and understanding of the language. In this the candidate is given a sheet which consists of different statements and questions in English and the candidate is required to answer the same according to the instructions given by the assessor. The score of this assessment is generated online.

b)IQ Test

Candidates found eligible in the language test are then tested on their Quantitative Ability, Logical Reasoning and knowledge of English through an online test.

Accounting skills are also tested for the candidates found eligible for profiles related to finance & accounts. Candidates are aligned for further rounds according to the scores obtained in the online tests.

• Conversational Assessment

Conversational assessment is a situational analysis where in response by the candidate to a particular situation is assessed. This assessment decides the suitability of the candidate for a particular profile. This round is conducted by the respective process communications trainer.

• Line Interview

After the conversation assessment for the voice profiles and I.Q TEST for the non-voice profiles, candidates are required to go through the Line managers round. The respective line managers conduct the interview for the candidates. They are assessed on the process specific skills.

• HR Interview

Candidates found eligible in the Line interview are required to through the last and final round i.e HR round. In this round the candidate is checked on the behavioural aspects, consent on the salary, shift timings and work profile.

The candidate meeting all the conditions gets the offer letter from the organisation.

Verifications

Selected candidates are called for their background check. The background check can last for a maximum of 21 days. Candidates found eligible on the background check are called for their Pre-Hire Orientation (PHO) which is conducted by the respective process HR where the candidates know about the process specifics.

Post the PHO session the candidates are given the appointment letter. They are then required to attend a New Hiring Orientation (NHO) session which is daylong session. The candidates are told about the company's goals, objective, vision, scope and its different business processes.

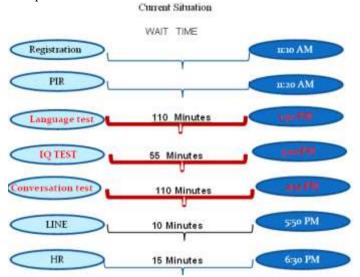
Analysis

The requirement of candidates on time is the bottleneck of the organisation. At present the organisation faces immense problems in meeting up the target on time. The entire hiring process of the organisation is allotted with an average time. The scheduled times per candidate for the different tests in the hiring process are:

Actual Process	Time for each process
Registration	5 Minutes
PIR	4 Minutes
Language Test	10 Minutes
IQ TEST	55/90 Minutes
Conversation test	13 Minutes
LINE	13-15 Minutes
HR	15 Minutes

As per the above table the maximum time for the hiring process per candidate should range from 4 to 4.5 hours inclusive with a normal wait time of 10 mins after each process.

But the actual time taken for the entire hiring process ranges from 7-9 hours. This means that a candidate who comes in for interview at 11:00 am cannot leave the hiring premises before 6:00 pm.



Time Saved

The main reason for this huge delay in the rounds is analyzed below.

PIR to language test

A delay in the first test successively leads to a delay in the subsequent rounds. This huge delay makes a candidate wait for almost 2 hours to appear in the next round. This leads to a huge gap and reduces the interest and eagerness of the candidate. Also a big backlog of candidates is created as the PIR takes about 3 – 4 minutes per candidate and there are 4 officials taking PIR simultaneously, while the language test takes 10 minutes per candidate. So this leads to pilling up of candidates who are yet to appear for their language test, as in a span of 10 minutes there at least 8 (keeping in mind that some of the candidates will be rejected in their first round itself) candidates ready for their language test vis a vis the fact that in 10 minutes the Company is able to clear a maximum of 2 candidates in the process of the language test.

Language test to IQ Test

The next round as per the process is the I.Q Test which is an online test that takes a minimum of 60 minutes and maximum of 100 minutes to be completed. This round is immediately after the language test, but herein also there is a wait time of 55-60 minutes. Ideally it should not take more than 10-15 minutes for a candidate to start with his I.Q Test after finishing the previous round.

Conversation test to LINE

Candidate eligible for voice profile have their conversation assessment after they finish with their I.Q Test. This assessment is taken by their respective process trainers. There is a large gap between the prescribed time and the actual time at which the Conversation assessment starts. This delay is due to the unavailability of adequate assessors to start the process on time. This was a detailed analysis of the gaps that occurred in different rounds for the voice profiles. In addition, the Company has three different non voice profiles. The following is the analysis of the gaps that occur in non-voice profiles.

As the rounds upto I.Q are same the reasons for the delay also remain the same. After the I.Q test the candidates have to appear for their respective Line Interview which is taken by the respective process manager. A gap of 160 minutes appears here.

I.Q test to LINE (Non-Voice)

Candidates clearing their I.Q test are eligible to appear in the Line Interview, but the same does not start before 5:00 p.m. as against the scheduled time of 4:00 p.m, due to this the candidates are kept waiting for 3 hours. This result in frustration of the candidates, candidates feeling tired by the time they face their interview due to which there are higher chances of being get rejected as they are low on energy.

Recommendations

To reduce the wait time of the candidates and to improve the hiring process, the process should have a minimum of 5 language tests going on simultaneously. This will help in reducing the backlog of candidates and will automatically reduce the wait time of the candidates. As in a span of 10 minutes there are 8 candidates ready for language test and if the number of language tests is increased to 5, there would be 5 candidates prospective ready for the next round as compared to candidates earlier. This can be done with a minimum cost as the company has the necessary infrastructure available which is not being utilized efficiently.

There are a total of 15 computers available in the computer lab for the online tests to be conducted. This lab can be utilized to increase the number of language tests. There can be additional three language tests conducted in this room in the three corners of the room. There can be glass barriers and headsets made available to the candidate so that they are not disturbed during their language assessment. This will help fulfill the requirement of 5 language tests going on simultaneously.

The next time gap is between language test to I.Q test. If the initial gap reduces this gap also reduces subsequently. Also the organization should follow a strict FIFO method with the candidate's i.e a candidate who comes in first should be the one who clears all the rounds first as compared to a candidate who comes after him. This will help improve the efficiency of the operations.

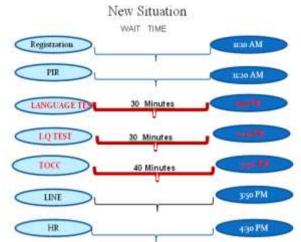
The time gap between I.Q test to conversation assessment and line interview can only be reduced by keeping a proper check on the availability of the respective employees taking the respective rounds. Here a proper report should be sent to the concerned person's head regarding their unavailability at the assigned time. Also the functional gap can be reduced by having a standardized counseling session for all the candidates which help them understand their further rounds & keep them involved and relaxed. This also helps in reducing the burden of front desk as candidates are keen on understanding which are the next rounds of interview.

The company has different profiles for which recruitment is done. The most sensitive profile among all the profiles is the voice profile, as the company faces a tough time in meeting its indents. Therefore the Company can break down the interview process of the other profiles into a span of two days. This will also help the company concentrate on the voice profile and look for finishing it efficiently in one day. This can be done by having the first three rounds i.e PIR, LANGUAGE TEST, I.Q TEST on the first day and other rounds on the second day.

At present there are 6 different assessors for different profiles, but the requirement of all the profiles are same which can be fulfilled by having a single assessor for all the profiles.

This helps in reducing the unnecessary wait time of the candidates.

The organization needs to properly manage the candidates, by keeping them informed of all the rounds and ensure that there is a swift channel of communication between the assessors and assesses, with the assesses being informed about the results simultaneously. This has to be done by the front desk which has to be co-operative with the candidates and keep them informed at each stage. With this done we can make the entire procedure of hiring more effective, as we will be able to save 2-3hrs and in turn reduce costs by a considerable amount.



This entire procedure will help us save almost 165 - 180 minutes, making the hiring process of the organisation better for the organisation as well as the candidates.

Conclusion

Recruitment in a BPO organization takes place on a daily basis. Therefore the organization has to be fast in their processes and decision of selection or rejection of candidates. A long hiring process with delay in decision making will affect the efficacy of the hiring process. The availability of employable candidates is becoming a tough task in the present scenario.

Wait time is a major pain area for the candidates as well as the company which leads to a tedious and tiring experience for the candidates. This is one of the major reasons of rejecting a candidate as by the end of the day the candidates are left with no energy to appear for any further rounds. Even though the candidates have a very good experience in the HR Interview and feel that they were properly informed about the pre-requisites, they are not happy with the entire process taking such a long time.

With reference to the case discussed above, a minimum of 5 language tests to be conducted simultaneously will help in reducing the backlog of candidates and will automatically reduce the wait time of the candidates. The time gap between I.Q test to conversation assessment and line interview can be reduced by keeping a proper check on the availability of the respective employees taking the respective rounds. Interview process of other profiles spread over a period of two days will help in keeping the prospective candidates engaged and also reduce wait time. A single assessor for all profiles will help increase efficiency of the assessors.

References

- James E. Brady LaBarge, Inc. Theodore T. Allen; Six Sigma: A Review and Agenda For Future Research, The Ohio State University
- Yewande Adeyemi, University of Pittsburgh, 2003; Analysis of Six Sigma at small vs large manufacturing companies Gupta P (2005); Six Sigma in Human Resource.
- Integration of Six Sigma and management.
- Albeanu M and Hunter I; Six Sigma in Human Resource Transformation
- Six Sigma in Human Resource in HRO Today volume 5, No. 2, march 2006
- http://en.wikipedia.org/wiki/Human_resources
- Tan A, Kaufmann UH, Why should HR know about Lean Six Sigma; http://www.hr-club.ro/en/article-excuse-me-why-should-hr-know-about-lean-six-sigma
- Heuring L; Six in Sight
- Goffnett S P; Understanding Six Sigma: Implication on Industry and Education; Journal of Industrial Technology (2004), Vol 4, No.4, Sept Dec 2004
- Fuller, Jones & Associates Inc, Transforming Human Resource Results through Six Sigma.
- Kwak YH, Anbar FT; Benefits, obstacles and future of Six Sigma approach, Technovation 26 (2006) 708–715