In the World of Learning

Dr. Suruchi Pandey, Ms. Shivani Sindhwani, Associate Professor, SIMS, Symbiosis International University, Pune. Student Manager, SIMS, Symbiosis International University, Pune.

Case summary: The entire business environment of organisations have changed over past few decades rapidly and the same is effecting the Human Resource functioning. Changes in the environment has led to the more usage of strategic and analytical approach towards managing people function. Technology has been integral part of entire HR process. Talent management functions from acquisition to retrenchment and learning management systems have been completely automated.

The case study presents learning environment related challenges of an IT company in making its training program effective. The Learning and Development function faces numerous challenges of meeting business required, bridge skills gap, being performance consultant, ensuring talent pipeline, assist career progression and certifications, meeting clients and business specific training requirements, legal compliances. There are various generation and people for different culture working together at workplace. The training methods and styles have always been challenge in training effectiveness.

This case study surrounds around such issue and a break through solution in making training effective for organisations, departments and people.

I. Introduction:

Luminescent Technologies is a one of the biggest Indian Information Technology Services companies. It has shown an annual revenue of \$6 billion in 2012-13, and has a workforce of over 1,80,000 employees, providing services spanning across 100 countries. The company has successfully globalized its operations across Asia, Americas, Africa and Europe.

The company specializes in providing tailor made technological solutions to a large variety of businesses across sectors, including petroleum and energy, retail, space exploration, healthcare, pharmaceuticals, heavy engineering, Telecom, Media, Infrastructure and even education. The company was established in the early 1980s. And over the past 30 years, it has constantly negotiated and sometimes even led the technological shifts facing the sector. And in keeping with its culture of constant innovation, it is now making shifts into new areas of technological advancement such as SAAS, cloud computing, mobility and Big Data Analytics.

Problem

As an IT services company, one of the chief revenue generating arm of Luminescent Technologies is the Infrastructure Management Services. This branch provides helps clients by providing them data centre resource, taking care of their storage and network needs. Additionally clients are also aided in implementing virtualization, automation, standardization and also migration initiatives that they might be contemplating, from one software platform to another.

This Service arm has the largest employee strength of around 40,000 employees, in the company. Out of these approximately 18,000 employees are deemed as technical experts, directly involved in the provision of services.

Most of these employees are either engineers or science graduates. A majority of them are in the age bracket of 22-30 years. These employees are engaged in providing round the clock and around the year servicing to clients of all sizes. An employee who begins at the lowest grade at this job, troubleshoots technical problems for clients over the phone or even the website. The number of such repeat calls he is able to handle with accuracy, marks the quality of his performance. As he grows, he gets to work on more complicated tasks, and eventually even becomes a part of the dedicated team for a specialized project for the client. There is constant oversight by superiors, and a lot of the troubleshooting is done by means of a collaborative team effort. As software engineers, each employee is skilled in a set of software languages that form the basis of the different softwares he/she services for the clients. In the software industry, the value of the employee is measured in terms of both the variety of these technical skills acquired, and the specialization obtained in them, through continuous certifications and application at work. Thus employees in this stream of work need to continuously update their technical skills, since this is also the basis of career progression The service arm is the biggest revenue generator in Luminescent Technologies. However on the flip side, the nature of the job here tends to be quite monotonous and repetitive. The employee might be expected to troubleshoot the same problem again and again, for different clients. The stress arises from the nature of the work wherein the employee is expected to know solutions all the time, and also be able to communicate the same to the client.

The technical employees here are only as good as their technical skills are sharp and current. And the revenues for Luminescent will be only as high as the quality of its technical employees. Therefore learning and technical competency development initiatives are crucial to maintain and secure Luminescent's future profitability.

The company had so far depended on periodic classroom trainings for updating the awareness of their employees about the technical advancements taking place around them, and to encourage them to acquire skills in some of these areas. This was done so that the employees could use the knowledge acquired in to forecast the business requirements of their clients. The sessions were conducted by subject matter experts on these technologies, in the form of lectures, often involving an accompanying presentation also. The sessions were conducted over a period of a week. And at the end of the period, they could be tested through case study solutions. However, following problems were faced by the Infrastructure Management arm in the technical competency development efforts for its technical employees, when it used classroom training as a methodology.

- The sheer scale and number of projects that the employees were involved in, made planning the schedule a year in advance almost unfeasible. As a result the supervisors who were meant to release the employees under them, to attend training often received a very short notice. Sporadic scheduling of the classroom training initiative ensured that there was not enough notice for project managers to relieve the eligible employees. Thus there was a lack of adequate participation due to business challenges. Over a period of time, the result was that those employees who might have been at projects, every time training came up, missed out on the opportunities repeatedly, while certain others went more than their share. It was therefore difficult to ensure a fair, and even availability of training opportunity across the entire workforce, and this bred discontent.
- Quality of technical experts was wanting, as it was found that there was rampant backfilling of the appointments by their understudies who were not up to the mark. As a result there was a dilution of the quality of knowledge that was imparted, and there was no method to rectify the damage, post the feedback, till the end of the training schedule. Also the participants could not suggest what training they required, for a communication system for this was not in place. This gap eventually led to waning interest levels among the participants.
- The methodology of presentations and lectures was found to have a limited benefit since it was often unidirectional and monotonous. The opportunities to ask for clarifications or explanations were limited by the classroom format, as the entire class's requirements must be taken into consideration. Thus the methodology did not provide for the differential learning curves of individual participants. Thus the actual impact of the trainings was considerably diluted, as opposed to what had been envisaged. Additionally, the company incurred not only training costs, but even opportunity costs of keeping billable employees away from revenue generating work.
- The nature of the employee's work, back at the client site, often did not change even once he or she had upskilled himself or herself, thus there was little or no skill transference on the job, which was a disincentive for both the project manager to relieve the employee for training, and even for the employee to attend it.
- There was a lack of a mechanism to evaluate the learning and change in behavior after a certain amount of time had lapsed once the training was over. Only feedback from participants was taken on the completion of the sessions. And since there was no opportunity for immediate application of the learning at the job, the new skills could not be evaluated. Although attending trainings, and enhancing one's technical skills was a part f the KRAs for the annual performance appraisal cycle, it was almost rendered ineffective due to any lack of professional application of the skills that might actually lead to career growth. Thus the effectiveness of the training effort could not be successfully gauged.
- Even as Luminescent is a globalized organization, the classroom trainings were held only in India, therefore the employees who found themselves at client sites abroad, missed out on the same, creating inequity in terms of access to training, and consequently the subsequent career growth.

The organization also tried to bolster the existing classroom training methodology with online modules, for different levels of each technical language used. The learner could learn according to his own pace, and at

his own time, but he was learning alone, with no incentive to finish the training within a time frame, or to improve over a period of time. Since the workplace dynamic depended a lot on team synergy, such learning in silos, prevented an even distribution of knowledge, competition and even cooperation that a social context to learning, could have facilitated.

The major challenges faced at Infrastructure Management arm with regards to technical competency development are those of accessibility, relevance of content taught, learning in isolation, skill transference of training on the job, and evaluation of training effectiveness.

Solution

In order to solve the training conundrum at Luminescent , the use of a gamified learning portal was suggested.

Gamification is the use of game design and behavior economics to bring about the desired behavior change in the target audience. Gamification is the process of redesigning any process-be it learning, recruitment, filing of income tax returns, in the form of a game i.e. it should consist of a linear progression, periodic, worthwhile rewards and an opportunity to share the achievements with other gamers.

Gamification caters specially to the needs of the technical employees at the Infrastructure Management arm. A large portion of the workforce here is made up of millennials. This generation which acquired education and entered the formal workforce in the new millennium is known to have distinct learning characteristics. It demands autonomy in designing their training plan which must be relevant to their line of work. These employees also seek immediate and worthwhile incentives for exerting themselves in learning. And most critically for an IT services company like Luminescent, they are natives of the digital world and are 'connected' virtually, almost 24x7. Gamification as a solution combines the demands of autonomy, worthwhile and clear incentive, and digital access,that the millennials are now posing.

Research shows that millennials are likely to hold atleast 6-8 careers in their lifetimes. They are a somewhat restless generation that works better with immediate recognition and motivation, and easily quits a work environment that is not meeting its need for career advancement. It views the workplace also as an extension of the formal educational environment, where career advancement is mediated through enhancement of relevant skills. Thus the learning and development function needs to be modeled for this generation's employees, who already make up for over 50% of the workforce of technological organizations like Luminescent.

And here gamification becomes a valuable tool to engage the employees of this generation as playerlearners in a continuous manner. Millennials are seen to be interested in participating in initiatives that affect them. They not only consume online content but even create it. This becomes a significant factor in designing a self-sustaining social media based learning platform, as in gamification. It ensures that the content is constantly modified as the needs of the participants change.

It must be understood that gamified learning is distinct from using e-modules or online modules for learning. The distinguishing feature is that of a social network based context. This means that just like in a social network, each member on the portal can connect with fellow employees who are also players on the portal. He or she can also keep a tab on how the others are faring, if they are doing better or worse, if they are chosing to upskill themselves on a particular technology over another, what are the current advancements in the sector, and what is the most popular way of getting skilled in the same. There is also an opportunity to collaborate in teams on the portal, as one tests one's learning on the technical skills acquired. Any doubts that might arise, or road blocks that might occur, can be overcome by taking help from the virtual study group. This not only fosters a healthy learning community that cooperates, but even incentivizes self-improvement through the principle of competition.

Some elements of the suggested gamified learning design are:

- Employees or 'Players' can access different individual as well as group challenges on their respective skills. The progress of the player-his scores, his competition, his performance over a period of time, all will be reflected in a **player profile**. This player profile will be visible to other players, and the player stats, become a mark of his technical acumen, as well as frequency of participation on the portal.
- The individual challenges will be broken down into levels. Only clearing a primary level "**unlocks**" a higher one. There are additional rewards for moving up in the form of points and badges. **Badges** which are meant as digital equivalent of appreciatory epithets could range between "new recruit", "seasoned player", "veteran" etc.

- These badges are reflected in the player profile, and become a mark of status on the online community. The player can assess his own relative performance by comparing himself with his nearest performers, as displayed on a **leaderboard**.
- A player who has amassed a certain score and badges in the individual challenges then becomes eligible to participate in **team challenges**. The novelty of these teams is that they need not necessarily be the same as the player's circle at the workplace, and thus allow him to engage with a cross-functional social community.
- Competition is one of the motivators on the portal, while the other is of co-operation through information sharing. Thus the portal will also contain an **answer marketplace.** If a player gets stuck in a challenge or wants to consult the community on any other technical issue, he can post a question on the marketplace. Other players can answer, attach links to relevant blogs, share wikis or videos for assistance. The most relevant answers get **upvoted** by other players. The participation of the player is incentivized by awarding him scores as well as badges for giving relevant answers.
- Gaming currency of scores and badges combined with the social prestige of being sought out for technical expertise acts as a strong in-built incentive for the answer marketplace.

Benefits of the Gamified Solution:

- Clear worthwhile incentives: Players work through a consistent set of reinforcements through points, scores, ranks, badges and growing esteem in the workplace, among fellow players. A player can track his improving performance, and thus be convinced of actual skill acquisition through application of knowledge in specially designed challenges.
- Voluntary Participation: Traditionally training has had to be *pushed* to employees by mandating it in the appraisal procedure. However here, the engagement mechanism of the portal creates a *pull*. As more employees at the *real* workplace come on board the *virtual* learning space, the performance on the portal would almost become a social marker of esteem. Additionally the design of the content on the portal will be constantly modified, ensuring that stagnation or degradation of the user experience can be prevented.
- Equal Access to Learning: The portal can be accessed across the globe, by employees situated in whichever country Luminescent might have operations in. From the employer's perspective, the learning portal would be a great step ahead, in the equalization and democratization of learning opportunities of the employees.
- **Continuous development by practice:** Players will now be at par with the technological changes that face them regularly, and can sharpen their skills by constant practice through simulations and challenges on the portal.
- Autonomy in planning competency development: Autonomy being a chief need of the millennial employee is met elegantly by the individualized nature of the portal, which allows the player to suit the learning experience to his needs.
- Learning in communities: Even as the learner learns at his own pace, he is able to map his performance relative to that of other players on the portal. He can also collaborate with them on team challenges. Thus a multi-directional flow of technical expertise can be catalyzed through communities fostered on the portal.

Discussion Points

- 1. What are the chief challenges facing an ITES company in developing the technical skills of its Human Resources?
- 2. What are the possible methods a globalized company, with a globally spread workforce can adopt for equal learning opportunities for all its employees?
- 3. Give a SWOT analysis of the solution suggested in the Case.
- 4. Suggest two alternate solutions for the problem stated in the Case.

References

Books:

- [1]. Bradley, Anthony J. and Mc Donald, Mar P. "The Social Organization". Gartner Inc. Harvard Business Review Press, 2011
- Zichermann, Gabe. And Cunningham, Christopher. "Gamification By Design" O'Reilley Media, Canada 2011. [2].
- [3]. Kumar, Mythiliy Janaki. Herger, Mario. "Gamification at Work: Designing Engaging Business Software". Interaction Design Foundation, 2013.

Research Papers:

- Chintapalli , Bharat. "Enhancing Engagement in IMS with Gamification." 2014. [4].
- [5]. Towards Maturity. "Next Generation Learning@Work in BT", www.towardsmaturity.org. 2009
- [6]. Deloitte. "Gamification Goes to Work".2011
- Glover, Ian. "Play as you learn: Gamification as a technique for motivating learners". Sheffield Hallam University Research [7]. Archive (SHURA),2013.

Websites:

- Getting Started with Gamification.co/getting-started/ May 15th 2014 from http://www.gamification.co/getting-started/ [8].
- Gamification Blog.www.bunchball.com. Retrieved May 17th 2014 from <u>http://www.bunchball.com/blog</u> Stackexchange.www.stackexchange.com. Retrieved May 19th 2014 from <u>http://stackexchange.com/</u> [9].
- [10].