

# *Creating a New Training and Development Program for a Quality Team inside Infotech Aerospace Services*

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**Abstract** — *The purpose of this study is to validate if the creation and implementation of a training and development (T&D) program for a quality team inside the working organization can increase both employees' competences and job satisfaction. Through the course of the project, different phases of the program were implemented as planned, including a variety of both technical and behavioral trainings. Feedback from target group has been of acceptance, showing engagement with current tasks and improving team work, as is observed.*

**Key Terms** — *behavioral, competences, development, job satisfaction, technical, training.*

## **INTRODUCTION**

Infotech Aerospace Services, Inc. (IAS) was founded in Mayagüez in 2003. IAS is dedicated to engineering and business services to the export-sensitive aerospace, defense, and industrial markets. Initially, IAS was a joint-venture with Pratt and Whitney Company, but has since expanded services to include third parties. Even when most of the services provided are engineering-related, the company also have services in quality assurance, manufacturing, technical publications and supply chain, for example. In order to maintain employee's satisfaction, IAS conducts a periodic survey for employees. In 2015, the Performance and Aerodynamics department obtained a low score in the Training and Development category. An analysis was performed and most of the root causes for the low satisfaction were related to the lack of an aiding program to help employees advancing in their careers. The purpose of the study is to implement such program to increase employees' competences and hence, their satisfaction.

However, during the course of this project, a department change was made. New working area

offers non-engineering support to Pratt and Whitney customers. Analysis on the change showed that the project was impacted slightly. Project objectives remained and the actual estimated training costs decreased since expensive trainings were initially for an engineering team.

## **LITERATURE REVIEW**

Training and Development (T&D) is an educational process which involves the sharpening of skills, concepts, changing of attitude and gaining more knowledge to improve performance [1]. It is focused in three main aspects: (1) training, which is based on individual current job, (2) education, which focus on potential new jobs, and (3) development, which comprises a group of activities that the company plans for the individual [2].

Although expensive, most authors agree that T&D is crucial for organizational development and its success [3]. Some of its benefits are: increased productivity, less supervision, reduction of errors and accidents, talent pool, uncovering employee's potential, improving job satisfaction, reduction of turnover and absenteeism, addressing employees' weaknesses, team spirit, skills development, optimum resource utilization, between others.

## **ANALYSIS**

In order to create and implement a complete program, considerations on both technical and behavioral trainings were made. The study on what technical trainings were needed to target group was based on the services that represented the biggest revenue for the department. One of these services is related to the creation and analysis of quality reports for clients. The data from the reports need to be access from different tools and processed into meaningful reports and analysis. The technical

trainings that cover most of this service are the proposed trainings that follow.

- **Excel Training:** To cover all basic, intermediate and advanced techniques.
- **Introduction to Access:** This is one of the main tools used by target team to access required data.
- **Creating Tools using Access:** After the introductory trainings, additional deep concepts should be learned to create additional tools such as data bases, facilitating landing additional more complex jobs.
- **Using VBA to Improve Processes:** This training help with the creation of macros and automating repetitive tasks.
- **Developing Critical Thinking:** Will help to facilitate analysis to complete work packages.

Similarly, the study on what behavioral trainings were needed to target group was based in: direct observations to group, feedback from previous supervisor, feedback from manager and individual meetings with employees. Target group is used to work as a team and most of them are already integrated to IAS culture and practices. However, there are a few members that are new to the group. This represents further integration opportunities that are more probably going to be implemented in team building activities or off-site meetings. The behavioral trainings that have been proposed to shape the team are as follow:

- **Tools for Time Management:** Most members of target group are assigned to more than 2 projects running in parallel.
- **Project Management Tools:** Will be used to facilitate coordination of activities, status and budget tracking, between others.
- **Accountability Workshop:** Will help employees understanding the importance of responsibilities and ownership.
- **Customer Services Best Practices:** Rather than training, intention is for employees to share lessons learned and compare them with best practices around the globe.

- **Thinking like a Leader:** Rather than training, intention is for employees to share lessons learned and compare them with best practices around the globe.

#### Selecting the Methods for each Training

Regardless of their category, all trainings were studied to determine the best possible way of delivery. The following steps were carried to determine this:

- **Identifying matter experts:** Inside working group, there are people who started with the company 13 years ago. These employees are now experts in different areas and their knowledge can be used to guide others. It is estimated that the 70% of the trainings proposed will be provided to the employees by internal experts. This means that the remaining 30% will be prepared and given by external experts, meaning contractors.
- **Selecting the best learning method for target group:** Looking at historical data and feedback from employees, proposal considers that trainings given by external experts will be classroom type courses which will include either a quiz or small project as completion evidence. The rest of them will include techniques such as tutorials (self-guided by computer), workshops and group dynamics.
- **Summary of techniques and considerations:** Table 1 shows a summary of the owners, techniques and considerations for each of the trainings. **Testing training catalog with peers:** Final list of trainings was achieved after consulting with different working peers. One of the trainings proposed initially was “Emotional Intelligence Workshop”. Ultimately, this training was not added to the catalog, since feedback from peers included concerns with ambiguity. However, further considerations will be taken to ensure training is incorporated in the near future.

Table 1

#### Proposed Trainings and their Respective Techniques

Training	Owner	Technique
Excel	External Expert	Classroom
Access	External Expert	Classroom
Tools in Access	External Expert	Classroom
VBA	Internal Expert	Workshop
Critical Thinking	Internal Expert	Team Dynamic
Time Management	Internal Expert	Workshop
Project Management	Internal Expert	Self-guided
Accountability	Internal Expert	Workshop
Customer Service	Internal Expert	Team Dynamic
Thinking as a Leader	Internal Expert	Team Dynamic

- Implementing the Program:** Initial reactions to the program were very positive. Employees showed willingness to participate in the program and also in providing suggestions for continuous improvement. Target group has shown ownership in self-development. However, there are still some challenges that need to be addressed. Currently, IAS is expanding to a new building in Aguadilla, since amount of employees has reached its limit. This represents that conference rooms to give the trainings are limited. Proposed action to manager included the utilization of classrooms in the nearby University of El Turabo. Approach is yet to be completed.

## RESULTS

Current trend of employees' competences developments is up. Customers have expressed work packages have been finessed and that improvements to current working procedures are noticeable. These improvements include creation of automated processes and standard templates to be used in their daily work. Furthermore, employees have shown commitment towards their own development by asking additional work, helping other peers completing their tasks, talking directly to clients to land additional work, etc. They have also thanked for additional developing opportunities and have shown the appreciation via emails to supervisor.

## DISCUSSION

The first step on identifying an effective T&D program is assessing the training needs [4]. One of the tools that can be used for this assessment is called Training Needs Analysis (TNA). This tool is basically a gap analysis between the current state and expectations [5]. This tool was used to determine which trainings would have the major impact or benefit to target group.

## CONCLUSION

The purpose of the study was to create and implement a T&D Program within target group to increase both their competence levels and satisfaction towards company. The program was divided into phases to ensure its success: identifying effective catalog, creating the action plan, implementation and feedback to troubleshoot. The trainings already provided to the target group have seen to have positive influences on them. Individuals have expressed their wishes of doing more work and agreed willingly to be part of the program.

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