An Action Research to Improve the Service Quality of an Information Technology Service Team in a Business Process Outsourcing Company

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Abstract: This action research was done by an IT service team of a BPO company during the first year of the COVID-19 pandemic. It addressed the team's non-compliance with its monthly time tracking. The team followed the action research steps of constructing, planning, taking action, and evaluating action, and used various action research tools. It also used the people, process, and technology framework and Lewin's change management model. The First Author (FA) and his teammates collaborated throughout the research to ensure its authenticity. Afterwards, the FA reflected on the content and the process of the action research, and the premises that he had had during the action research. The interventions contributed to the client's contract renewal with the BPO company. Based on the above frameworks and reflections, the FA created a framework showing the company's internal environment – represented by people, process, and technology – embedded in the company's task and general environments. The factors that affected the team's research, such as the availability of hardware and software (task environment) and the local and international lockdowns (general environment), were also reflected in the framework. The results of this study can provide insights to other IT BPO companies aiming to improve their customer service.

Keywords: Insider Action Research; Time Tracking; Information Technology BPO; Customer Service Quality

INTRODUCTION

This study is an insider action research (IAR) that followed the action research steps of constructing, planning, taking action, and evaluating action (Coghlan, 2019). The First Author (FA) had two objectives: 1) to solve issues in the company where he was working at that time; and 2) to extrapolate to a broader context what he would learn from his research so that other companies could perhaps benefit from it.

Purpose and rationale

In most business process outsourcing (BPO) companies, teams have to track their time. Time tracking enables the company to know its employees' and teams' daily tasks and actions. It also helps clients know what they are paying for. However, the compliance with time tracking by the team to which the FA belonged was poor because of multiple reasons. This study sought to solve this problem.

This IAR was the final milestone in the MBA course of the FA. For the company, the research was an opportunity to improve the team's services and the client's satisfaction. Coincidentally, the study was done when the client's service contract with the company was about to expire, and the client was considering whether to renew it.

This IAR focused on team-level participation. The collaborators were directly involved in providing service to a specific client, a French travel retail company. This research did not include collaboration of other company employees who may or may not have direct working relations with the team (e.g., the SAP manager and the region manager). To ensure confidentiality, all names were anonymized.

The company during the COVID-19 pandemic

The BPO company was formed in 2017 by the merger of two global companies in the technology industry. It provides IT services to nearly 6,000 private- and public-sector customers in different industries across 70 countries. Its distribution centers act as service supply points where employees work in teams to provide specific services to clients. The distribution centers in the Philippines are in three strategic sites in Metro Manila. The FA was part of an IT service team that handled a French travel retail company.

In March 2020, Metro Manila and the rest of Luzon were placed under enhanced community quarantine in response to the COVID-19 global pandemic. All companies except essential ones were shut down, and public transportation was limited. Because of the pandemic's impact on its client's business, the team downsized in March 2020 from eleven to six members: the client delivery manager, the team leader, and four subject matter experts.

In June 2020, the client's business returned to normal, which meant that the team was understaffed. This IAR was started in mid-September 2020, when the country had shifted to the more lenient general community quarantine.

Even before the pandemic, the BPO employees could work from home twice a week. But during the various government-enforced community quarantines, the team switched to a total remote work setup. In the first year of the pandemic, the delivery manager asked if anyone would be interested in handling a project to improve client service. The FA volunteered.

The FA played two roles in the study: employee and researcher. As a non-managerial employee, he had less control in making decisions and changes than his team lead and his delivery manager. Fortunately, his two superiors actively participated in the action research. As a result, the FA focused on being a researcher, and concentrated on observing and ensuring collaboration during meetings. Nonetheless, he involved himself in the various actions planned by the team. This practice increased his sense of responsibility and appreciation for the desired future state that the group had agreed upon.

Theoretical Lens

The first step in action research is constructing the issue, which may be either a problem that needs to be solved, or an opportunity that can be taken advantage of. If the issue is a problem, all of the root causes of the issue should be identified. This research used problem tree analysis, which looks at the issue, its various root causes, and its effects (Hovland, 2007).

Using Levin's (1951, as cited in Thomas, 1985) force field analysis, the researcher can convert the above root causes into hindering forces. Force field analysis assumes that forces for (driving forces) and against (hindering forces) a current state are in equilibrium (status quo) (Andersen et al., 2006). The gap between the status quo and a desired goal is the issue. The goal can be reached only if interventions (strategies) act upon these forces: either by reducing the strength of a hindering force, strengthening a driving force, or adding a driving force (Barry, 2013). According to Thomas (1985), "Accurate evaluation of the various forces should improve the speed at which strategies can be evaluated and eliminated from consideration or implemented" (p. 56). Alternative solution implementation tools such as the tree diagram, in which main activities are merely divided into sub-activities (Andersen et al., 2006), do not require the same thoroughness as force field analysis.

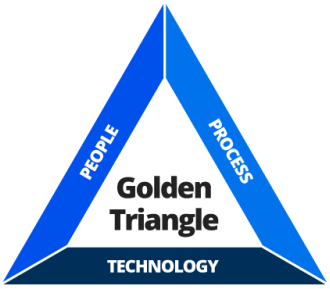
Service quality refers to how well and consistently a service satisfies or exceeds a customer's expectations of (Crosby, 1979; Parasuraman et al., 1985, as cited in Wu, 2014). It affects customer satisfaction, and mediates the relationship between service quality and service loyalty (Caruana, 2002) and brand loyalty (Ashraf, et al., 2018). Wu's (2014) study also revealed that "perceived service quality significantly influences perceived value and corporate image, respectively. In addition, perceived value and corporate image are main determinants of customer satisfaction."

Buavaraporn et al. (2013) showed how business process initiatives and projects improved internal quality (specifically operational employees' satisfaction, attitude, skills development, and productivity) which, in turn, facilitates external quality (perceived by customers).

The People, Process, and Technology (PPT) framework, specifically the golden triangle framework shown in Figure 1, was used in this IAR.

Figure 1

PPT Framework: Golden Triangle



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This framework is based on the original Leavitt (1965) diamond model, which includes four variables in an organization: task, technology, actors (people), and structure. Effecting a change in one variable to improve the organization usually affects other variables. In the golden triangle framework, task and structure are combined to form process. The team identified interventions in the three variables. For example, creating a monitoring tool fell under the technology element, but integration with both people and process was present.

METHODOLOGY

Action research is

> an emergent inquiry process in which applied behavioral science knowledge is integrated with existing organizational knowledge and applied to address real organizational issues. It is simultaneously concerned with bringing about change in organizations, developing self-help competencies in organizational members, and adding scientific knowledge. Finally, it is an evolving process that we undertake in a spirit of collaboration and co-inquiry. (Coghlan, 2019. p. 5)

This study followed the action research steps of constructing, planning, taking action, and evaluating action (Coghlan, 2019). Action research tools used were Schein's (1999) realistic ORJI model, Argyris et al.'s (1985) ladder of inference, Schein's (1999) three types of inquiry, Argyris' (1995) left-hand/right-hand column, Torbert et al.'s (2008) four parts of speech, Hovland's (2007) problem tree analysis, force field analysis (Lewin, 1951, as cited in Thomas, 1985), Lewin's (1947) change management model of unfreezing, changing, and refreezing, and Mezirow's (1991) three forms of reflection.

Because the team worked remotely, all collaboration was done online using Microsoft Teams. Data were collated from meetings with and interviews of collaborators, audits, logs, and other documents.

The FA used a critical realist approach to acknowledge his limited understanding of his team's situation (Teehankee, 2018). By performing activities such as the problem tree analysis, he and his collaborators recognized the multiple causes of a specific issue, which led him to gather data using first-person, second-person, and third-person inquiry.

RESULTS AND DISCUSSION

Story and Outcomes

The unfreezing part included the orientation by the FA of his team members on the goal and methodology of action research, addressing confidentiality concerns, securing the team members' written consent to participate in the research, issue construction, and planning of actions. The team met several times before deciding on non-compliance to time tracking as the issue, which was both important and urgent. The objective therefore was to increase the compliance rate. Using problem tree analysis, they determined that the following, in decreasing order of strength, were the root causes of this issue: 1) poor prioritization of time tracking due to growing workload; 2) system issues, particularly that the user interface was written in French, and that only one team member could access the system at a time; and 3) lack of monitoring. They also identified the effects of the issue as: 1) the growing number of escalations; 2) non-reliable workload forecast; and 3) negative impact on client contract negotiation.

Using the force field analysis, the team identified these same causes as forces that hindered the team from reaching its goal. In contrast, the following were identified as driving forces, also in decreasing order of strength, that would help the team reach the goal: 1) strong know-how of tenured team members of the time tracking tool; rapport with client representatives, who allowed the team to correct time tracking entries even at the last minute; and weekly verbal time tracking reminders during

team meetings. The team also assigned weights to each force.

The team could not change the time tracking tool, which had been issued by the client. Instead, to address the lack of monitoring, it created a Microsoft Excel tool that would give every team member a real-time view without having to check the logs one by one. The tool would generate two reports: 1) total hours tracked per day; and 2) entire days tracked per month. To address the poor prioritization of time tracking due to its growing workload, the team onboarded the new hire, who would help in the increasing tasks brought about by the return to normalcy of the team's workload.

The team also planned two interventions that aimed to strengthen the weekly verbal time tracking reminders (a driving force). It planned to have a spot check of members' time trackers during the weekly meetings. Depending on their availability, either the delivery manager or the team leader would check at least two members' time trackers. Also, the team leader would create a weekly reminder using Microsoft Outlook or Teams.

The interventions can be slotted in the PPT framework, as follows:

Table 1

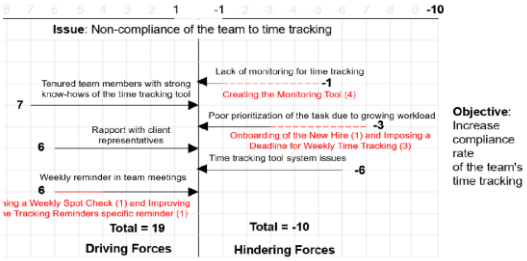
Interventions Based on the PPT Framework

Variable	Intervention
People	Onboarding the new hire
Process	Performing a weekly spot check Improving the time tracking reminders Imposing a deadline for weekly time tracking
Technology	Creating a monitoring tool

The team gave a weight for each planned intervention. The force field diagram is shown in Figure 2. The interventions are represented in the diagram as red lines (Teehankee, 2017). The red solid lines represent the interventions the implementation of which increased the scores of the driving forces. The red dashed lines represent the interventions the implementation of which decreased the scores of the hindering forces.

Figure 2

Application of the Force Field Analysis with Planned Actions



The change part involved the implementation and evaluation of the planned actions.

After working on the time tracking tool, the FA asked his team leader to review his output. Table 2 shows the actual conversation over a Microsoft Teams online meeting, and the FA's thoughts during the conversation.

Table 2

Application of the Left-Hand/Right-Hand Column Method

What I was thinking	What we said
Based on our initial agreement, I should be presenting a tool with two functionalities now. I had done both and the additional request of my TL, which is why I was oozing with confidence in the call.	Me: Hello, TL. I'll make this quick and show you the latest iteration of the tool I've created. TL: Hello. Okay, go. We should finish the tool by today, right?
I was grateful that my TL cared about my weekend plans. With the pandemic, I leave the house only once a month; that was why I didn't have plans for this weekend and was okay with finishing the tool (and my IAR journals).	Me: Yes. We should have the finished tool with functionalities to monitor our compliance. But I am planning to edit the tool over the weekend. TL: Okay. But do not waste your weekend, okay? The tool does not have to be perfect, but it should have

	the functionalities we need.
This additional request for the tool came in last Wednesday. I was able to do and apply it yesterday and today because the request was relatively easy.	Me: Noted. I do not have any plans this weekend, so it's okay. Let me start the demo with the changes you wanted last time. TL: Sure. My request was to have a highlighted part to see where the entries are incorrect. Me: Yes. I made an if-else condition such that if the tracked hours are more than 8.5, the field will turn red. Same with a blank entry; the field will turn red, too.
This discussion was more about the second agreed upon functionality. Compared to the first one, this was easier. But I was honest in saying that I had had a hard time in dealing with the database filled with the team's logs.	TL: Nice. I can immediately see what entries are incorrect. How about the function for the whole month? Me: Here. This function was quick to create as I just used the sum formula,but I had difficulty in dealing with multiple databases.
I was so confident that I was asking for more work. One thing that frustrated me during this part of the conversation was that my DM was out almost the whole week. He had the final say about the tool, and I would have appreciated comments from him. I must ask his comments immediately on Monday.	TL: That's okay.We need to compare it with the real worked days and the days people when were on leave. Me: Got it. Do I have to compare it with any data so it can perform quick checking? TL: The DM would have that file. I am not sureif he can give it to you for the team's workload planning. You can ask him directly.
Hearing the confirmation from my TL made me sigh with relief. This tool had been easy to create, but it was hard to integrate with the team's files. And since I was working on it in my free time, this is unpaid work, which made the affirmations sweeter.	Me: Okay, I'llask the DM on Monday once he comes back from his leave. TL: Sure. But for me, the tool is okay. If he wants to add anything, we can do it for the next run.
I thought that my TL was already ready for the weekend and wanted to end the call. This situation is one of the drawbacks of having a meeting on a Friday. Everyone is already mentally out of the office.	Me: Okay. Do you have any more question or comment? TL: For now, none. Let's also finish the call so as to not waste our Friday. Ha-ha! Me: Ha-ha! Sure, thank you again. Bye! TL: Bye!

The FA and the team leader noticed no significant impact of the new hire's onboarding on the team's growing workload. When they raised this matter to the delivery manager, the latter asked if the new hire should be moved to the team's regular shift. Before replying to the delivery manager, the FA applied Argyris et al.'s (1985) ladder of inference

to reflect on his assumptions and meanings attributed to observable data during this situation.

I observe data and experiences: The new hire joined the team on September 24, 2020. The team had planned to already give him simple tasks so that he could help with the growing workload, especially with the upcoming month-end, during which we expected our work to grow more than the team's capacity to do the work. However, he first had to be onboarded, oriented, and introduced to us. Furthermore, the new hire was scheduled to work on the day shift because he was not yet entitled to the premium benefit given to those working on the swing shift. Nonetheless, our delivery manager asked my team leader and me if we should move the new hire to the swing shift so that he could help us with our work. This arrangement assumed we were confident that the new hire could indeed already help us with our tasks. This decision would also mean that the new hire would have to postpone his attendance of the company orientation scheduled on Monday, September 27, 2020.

I select data from what I observe: The team urgently needed help. Also, the new hire joined the team on September 24, 2020.

I add meanings (cultural and personal): I had been one of the members who had clamored for additional manpower. The team would appreciate his joining us in the swing shift. However, because he had been with us for only two days, there would be considerable need to guide him in his tasks.

I make assumptions based on the meaning added: The new hire would need more time before he could become useful to the team. Also, it would take time for the team members to guide him and oversee his actions.

I draw conclusions: I must tell my delivery manager that I was not confident that the new hire could significantly help the team.

I adopt beliefs about the person and the situation: If I give logical reasons to my delivery manager, he would decide not to move the new hire to the swing shift.

I take actions based on my beliefs: I told my manager I was not confident about moving the new hire to the swing shift. I explained why, and shared experiences about my own onboarding. I suggested that the new hire be allowed to skip the day-long orientation so that he could help the team for an additional day. Lastly, I asked my team leader what he thought about the situation.

Despite the new hire's inability to help the team during the two-week research period, the IAR was a success. The team had only one finding: the lack of time tracking of the new hire. The delivery manager immediately challenged this finding because the client had agreed that the new hire would not need to track his time, and that it (the client) would pay the new hire's salary while he was still being onboarded.

The delivery manager also confirmed an inconsistency in the start date of the new hire in the client's records. The client cleared this finding with the delivery manager, and did not send an audit report. Thus, the team was 100% compliant in time tracking.

During the evaluation phase, the FA asked for a meeting to get feedback on the research activities. The team members were happy especially because their actions had resulted in success. However, one member remarked, "The intention is good, but I felt that I was being policed and micro-managed particularly because of the weekly spot check."

Because of this honest feedback, the team decided to have the spot check once every two weeks. However, the delivery manager stipulated that if the team were to lapse into non-compliance, the spot check would be done weekly once again.

The following month, the client unexpectedly decided to replace the time tracking tool. Thus, the team was not able to do any refreezing activity.

Content reflection

The FA did not expect the team to choose time tracking as its issue. Everyone in the team used to consider time tracking as a trivial task, and would usually treat any audit as a mere slap on the wrist. Only recently did it become a controversial matter. But the FA believed the team had focused on the correct issue because of the growing concerns of both the managerial team and the client about how the team was treating this task poorly. The possible negative impact on the contract negotiations had been constantly reiterated to the team whenever it would receive negative feedback. Thus, it was important to address every concern so that the company could continue working with the client.

Process reflection

Before the pandemic, the team would have lunches, dinners, and informal conversations – excellent occasions during which the FA could have gathered candid IAR-related information and feedback. But because all collaborations had to be done online, he found it difficult to assess if the team members were still receiving the activities favorably. This setup made him apprehensive about doing research activities because these might be disruptive for his collaborators. He was worried about the time, date, length of discussions, and other factors while doing collaborative meetings. He hated the feeling of always walking on eggshells. Thus, he was gratified by the compliments he received after the IAR.

The FA used workarounds when doing collaborations. Instead of asking for separate meetings for the team's collaborations, he piggybacked on weekly team meetings, and hijacked the discussions when the team had extra time. And when the discussion went on for an extended period, he made sure to apologize and to thank the team for having participated.

All collaborations could not have succeeded without the support of all team members. Some team members, primarily the FA's superiors, initiated the collaboration even if no meeting had been scheduled. Also, ever since the team was downsized, morale and professional intimacy had been diminishing, but these collaborations made the team more engaged.

Premise Reflection

The FA had assumptions and doubts before starting the IAR.

First, he assumed that power struggles would occur between the delivery manager and team leader. The delivery manager had joined the team in 2020 while the team leader has been with the team since it was formed. The FA envisioned strong clashes in perspectives regarding decisions between the two superiors. They did happen, but not to the extent of affecting the research. The delivery manager would take the client's perspective, and the team leader, the team's perspective. At one meeting, everyone fell silent because the delivery manager's suggestion sounded like a rebuke. The team leader took the initiative of bringing back the conversation to life and taking the team's side. These healthy discussions made the interventions more comprehensive.

Second, the FA had doubts about the level of engagement in the activities. Before the pandemic, the team had already been working from home twice a week. The team had an unspoken rule of not contacting members working from home except for urgent matters. This informal agreement was carried over to the pandemic setup; thus, the team communicated less frequently. But when the research started, the FA, with his superiors' help, took the initiative of interacting with and connecting people. Although he and his teammates had different work shifts, everyone was brought together when needed.

Last, the FA assumed that the team would be preoccupied with other work particularly because the team was at its lowest member count. For this, the FA had to be flexible with the timing of activities especially during the team's expected busy periods. But because everyone wanted the project to succeed, everyone participated as long as meetings and other collaborations were done during working hours.

Extrapolation to a Broader Context and Articulation of Usable Knowledge

The team used the PPT golden triangle framework to ensure that its interventions would consider all three components – people, process, and technology – as it strove to achieve the desired results. But after completing the IAR, the FA realized that factors in the environment had affected their change initiatives.

Wigand (2007), in her organizational interaction diamond model, showed the interconnections of Leavitt's diamond model with technological, political, economic, and social forces in the external environment. Daft (2010) divided the external environment into two categories – the general environment and the task environment, which affected an organization indirectly and directly, respectively. Daft's task environment layer included four sectors – customers, suppliers, labor market, and competitors. During the IAR, the team experienced direct influence from these sectors, as follows:

> **Customers:** The IAR focused on the feedback the team received from the client in the form of monthly audits. The team was also

conscious of contract negotiation between the company and the client.

Suppliers: The team had been provided with laptops and the option to request mobile Wi-Fi to ensure that the members could collaborate anytime. Unfortunately, employees were not allowed to use communication software, such as Zoom and Facebook, that the IT security team had not approved. Instead, the company upgraded its Microsoft Teams and Skype for Business subscriptions. Thus, the team engaged better with features such as whiteboards and share screens while ensuring data security.

Labor Market (or Human Resources): The team hired an outsider to address the workload problem. The decision to hire had been made even before the IAR. However, the interventions related to the new hire had minimal impact as he first had to be onboarded, and was thus unable to help in the workload.

Competitors: Competitors were relevant because the client could switch to one of them if its service requirements were not being met.

The general environment includes six dimensions – natural, political, sociocultural, economic, international, and technological (Daft, 2010). The team experienced indirect effects from all of these factors.

Natural: The COVID-19 epidemic caused multiple changes in the team's working conditions.

Political: The nationwide lockdown forced the team to work remotely. The "epidemic-induced telework or remote work" has caused strong negative and significant impact, such as stress, on employees (Carillo et al., 2020). The lockdown also led to work-life conflict among the team's family members due to lack of concentration caused by frequent invasion of family members into the workspace (Chanana et al., 2020). Throughout the variations in the community quarantine and attempts to ease the lockdown, the company adhered to the Philippine government's rules. However, the constant changes left the team uneasy. For instance, some team members had returned to their provinces because of the difficulty in either commuting or finding a place to rent where health precautions were being followed. The uncertainty as to whether they would suddenly be required to work at the office caused stress.

Sociocultural: During the pandemic, people became more conscious about their physical and mental health. Carillo et al. (2020) found that stress and professional isolation are the most influential negative effects on employees in a work-from-home (WFH) setup. This setup resulted in less communication among the FA and the other team members, and decreased the team's camaraderie. The team overcame the feeling of isolation by constantly communicating and collaborating on online platforms. Communication can increase the sense of belongingness in a team when they are working separately (Hafermalz et al., 2021).

Economic: The pandemic-induced lockdowns caused many businesses to shut down and the unemployment rate to increase. The FA and his teammates wanted to secure their employment and earn more. The company does not give yearly salary increases to its employees. So, if team members want to increase their salaries, they have to either work on the late shift to get overtime premiums, or get additional work outside the team. These extreme actions were considered by team members especially during the height of the pandemic.

International: The team needed to work on a swing shift to accommodate the needs of its France-based client. Also, any international development could affect the team's service delivery. For example, because of the pandemic's impact on the client's business, the team had to downsize in March 2020 from eleven to six members. But by the time the IAR was done, the lockdown in France had been lifted, and so the team's workload approached its pre-pandemic level.

Technology: Technology companies are expected to be well equipped with tools to serve their clients well. Because of the pandemic-induced WFH setup, the team members had to rely on technology to stay connected and collaborate with each other. New technology such as teleconferencing and digital transformations emerged during the pandemic, but also created threats. For example, there has been a huge increase in

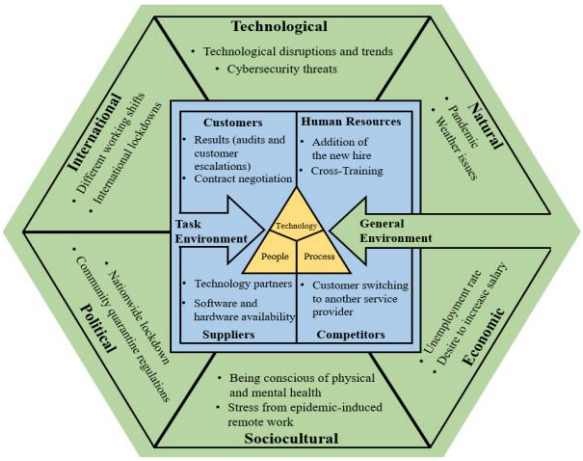
hacking attacks during the lockdown worldwide (Jolly, 2020; INTERPOL, 2020), and such attacks could disrupt the team's operations.

CONCLUSION

Inspired by the abovementioned frameworks and reflecting on his team's experience, the FA enhanced the PPT framework as shown in Figure 3.

Figure 3

People, Process, and Technology in the Context of the General and Task Environments of a Service Team



The core of this enhanced framework is the PPT framework to ensure the balance of intervention elements in a service improvement strategy. As in Daft's (2010) model, the two layers of the external environment that impacted the service improvement interventions were incorporated. Represented in the blue square, the task environment sectors that directly affected the team's service improvement are customers, suppliers, competitors, and human resources. Pictured in the green hexagon is the general environment, which indirectly impacts the framework's core. The dimensions in the general environment are technological, natural, economic, sociocultural, political, and international.

Other organizations may find this framework useful when improving their customer service. However, not all organizations will behave as the FA's team did. This is why the enhanced framework uses broad terms, such as task and general environments. Also, organizations should decide which aspects affect their service improvement more. For example, at the task environment level, another company may be more affected by its competitors rather than by its clients.

By completing this research and extrapolating it to a broader context, the FA was able to develop the graduate attributes expected of him. For example, through critical and creative thinking, he and his team collaborated, analyzed problems, and came up with decisions based on sound reasoning. By using effective communication, he ensured that he listened to and obtained feedback from his collaborators, and expressed ideas to his team that aided in decision-making, service improvement, and success that benefitted various stakeholders. This IAR challenged him to always aim for big hairy audacious goals as he develops into a technically proficient and competent professional. The FA also overcame his growing indifference in providing valuable service to his client.

Beyond this IAR, the FA is still using action research tools such as personal journals to help him reflect on his mental and emotional health. This practice will hopefully develop him into a reflective lifelong learner.

The FA's teammates appreciated the action research tools, supplementary frameworks, and interventions that improved their performance. The company itself benefited because its interventions contributed to the client's contract renewal. Finally, the client itself benefited because it received the team's time tracking reports on time.

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