Case Study 23

HR/OD Intervention Focus: Information Technology

Delivering Better Software for Public Use

The National Mapping and Resource Information Authority (NAMRIA), the central mapping and resource information agency of the Philippines, provides mapping services to government agencies. In its ongoing geoportal project, NAMRIA aims to provide government agencies with infrastructure that will deliver geospatial information to the public. The software needed for delivering this information is dynamic and always evolving. Angelo Arboleda, a NAMRIA Information Technology Officer with a decade of experience under his belt, is tasked to look after this software. His other responsibilities include the maintenance of databases, servers, and other aspects of information technology (IT).

In a field where changes happen at a dizzying pace, Arboleda initially faced resistance when he introduced new software for the geoportal project. To resolve this, he introduced, coached and trained his staff to understand and grow accustomed to the new software, technology and materials. "I conducted impromptu workshops to teach them and to get their feedback to see what was preventing them from embracing this new technology," he shares. That seemed to have done the trick as the staff eventually warmed up and embraced the new technology. As Angelo shares, "As soon as we were able to hurdle the resistance, everything was fine."

Start of the journey

Arboleda's journey with change management started when he was awarded with an Australia Awards Scholarship (AAS) in 2011 to pursue Masters in Information Technology at the University of Sydney. Angelo realised that there was room for improvement in the services that his division was providing. "I thought we were doing fine. We were creating and delivering software that was up to standard and usable. When I went to Australia and was exposed to the quality and the way Australian organisations manage the software, it dawned on me that there is big gap between our practices in NAMRIA and global good practice. When I returned to NAMRIA after my scholarship, I tried to copy and implement here what I saw overseas. I think we are getting good results."

Leaving for Australia meant leaving a lot of work for finalisation. Fortunately, NAMRIA was supportive of Arboleda's scholarship. Through the help of technology and good time

management, he was also able to concentrate on his studies and attend to work issues at the same time. As he explains, "I know that going to Sydney to study meant leaving a lot of work behind. The Internet made the transition easier because it allowed me to work remotely – grab a laptop, log on to the Internet and I could still do my work, my duties."

Tangible changes

Arboleda relates how his department has already made noteworthy progress. He remembers how, in the past, it would take the department perhaps a month to respond to the problem when people complained about certain software experiences or errors encountered. "But now, since we've set up this sort of ticketing system, in which you can actually report your problems online, we are able to respond faster, more promptly. We have probably reduced the response time to about a week," Angelo triumphantly declares.

He also expounds a bit more on the decode review implemented. This appears to be truly at the heart of the more effective delivery of their service output since it enables the department to assess the code quality their programmers are writing. "Let's just say, we do a peer review. It enables us to spot defects and security flaws in the software before it's even released."

For Angelo, keeping abreast of the changes in IT and staying on top of their systems are a priority. To meet their mandate and stay relevant, his team maintains a website that delivers information and data to the public. "It is important that this website stays up 24/7 because when typhoons come up, when disasters strike, it is important that information is available to help agencies that need them," he emphasizes.

Although it may still take some time before the entire Philippine geoportal system is up and running the way NAMRIA has envisioned it, for now, Angelo is proud of the fact that their department has already made ample contributions. "By making the information available 24/7, we are helping not only the agencies, but the public gets to benefit as well," he declares.

Better software

Arboleda relates that his REAP was to help his department deliver better software for the distribution of geospatial information to the public. "What I did was to implement what techies call the source code management system. This system helps us to track the quality of the software we are producing. It is essential in helping NAMRIA reach its goal of delivering timely, accessible and accurate geospatial information," he explains further.

Armed with new knowledge and the determination to share his new learnings, Arboleda completed his REAP within two years of his return. The main driver for his plan was the ongoing Philippine geoportal project, which already started before his scholarship. "Even before I left NAMRIA for Australia, the goal was already set. I started implementing it as soon as I got home in 2012. I was reintroduced to what had been done when I was away and I saw that the REAP I was planning to implement was a good fit for the project as well as for the International Organisation for Standardisation (ISO) accreditation which the office was striving to earn. The ISO component added more depth to my REAP."

With the Philippine geoportal project going full blast and his department's full support and cooperation, implementation went rather smoothly, with no major obstacles except for the initial resistance of some staff to the new technology. "We had the money, the resources, and

everything we needed. So it became very easy for me to get the staff to do a lot of the things that needed to be done. I was given the freedom and the resources I needed to implement the REAP," Arboleda happily reports.

Achieving global standards

While the strategic direction and the original key result areas – the enhancement of and the delivery of quality software for public use – remain unchanged, there have been developments in the technologies being used and how they are being used. His learnings in Australia armed Arboleda with knowledge of globally acceptable standards. "Through my studies, I realised our gaps and learned how we can address them," he stresses.

Aside from helping NAMRIA, Arboleda admits that his goal leaving for Australia was to broaden his knowledge. Though happy and grateful for what he has learned from his scholarship, he regrets not having the opportunity to observe other organisations while in Australia. "I think it would have been more helpful if we were exposed to agencies and organisations like GeoSience Australia. It would have given us a better learning experience."

All told, Arboleda readily acknowledges that dealing with information and communications technology projects is a continuous process where constant improvements are necessary. With his quest to learn more and do more, there is no doubt that he can accomplish much. Soon, the public can expect bigger and better things from NAMRIA.

Angelo Arboleda finished his Masters in Information Technology from the University of Sydney in 2011. His REAP focused on Implementation of a Collaborative Source Code Management and Issue Tracking System for the System Development and Programming Division of NAMRIA