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Case Study

Digital Learning and Employee Development at the Gulfistan Co., Ltd.¹

It was a pleasant late afternoon in December 2015. Abeer Ahmed looked at her table calendar, and realised that winter holidays were only a few days away. "A well-deserved break, finally. Blue Mountains will be great fun", she thought. It had been a hectic year at the Gulfistan Co., Ltd. (GCL) where she worked as Director of Human Resource Development (HRD). "Not everyone has the same interest or openness when it comes to digital learning. Experienced and mature employees are most difficult to convince... Good grief! I haven't yet booked my flights to Sydney", Abeer had rambling thoughts about her work and vacation.

After completing her MBA from the local campus of a renowned American university in 2008, Abeer had progressed rapidly from a management trainee officer to director in the past eight years. Having spent the first two years at a multinational beverage corporation, she joined GCL in 2010 as Deputy Manager of Human Resources, and had been able to impress her bosses with sheer hard work and innovative approaches to managing and developing human resources.

GCL had been facing major issues of declining revenues in recent years. Owing to global recession, the company had been forced to restructure its various departments. Relatedly, there had been a pressure on the company to improve employee productivity and efficiency. There was an impression that a significant number of employees lacked in skills and knowledge needed in the OG industry and were not up to date with latest advancements in the field.

In 2014, the Gulfistan government announced Vision 2030, a 15-year plan to reform the economy and also to enhance the declining productivity and profitability in the oil and gas (OG) sector. The country heavily depended on the OG industry (45% of the GDP) and had suffered a great deal in past few years due to declining OG prices in the international market. The OG industry was dominated by the GCL, the

¹ Professor Jawad Syed (University of Huddersfield and Lahore University of Management Sciences) wrote this case as a basis for class discussion rather than to illustrate either effective or ineffective design and implementation of digital learning. All names and some peripheral facts have been disguised to protect confidentiality.

state-owned enterprise that owned and governed almost all rights to extract, process, sell, transport and export OG products.

In April 2015, Mr Khaled Mubarak, the Chief Operating Officer of GCL, tasked Abeer to consider ways about improving employee skills and productivity. Abeer in turn consulted directors of training or HRD in other companies in Gulfistan and other countries to learn from their experiences. She also had detailed meetings with Directors of Technical Operations, Marketing, and Research and Development to redesign and implement training in the company.

The consultations within and outside the company led to two main recommendations which were presented to top management:

1. An online training system 'GC Learn' may be introduced in the company to facilitate flexible and virtual learning. The contents of training at GC Learn may reflect the current skill and development gaps in the company as well as the future plan to introduce new technologies.
2. Digital technologies may be acquired and used in operation and training to enhance employee and departmental productivity. These technologies may be used for the augmentation and automation of both physical and mental processes.
 - Physical processes may be assisted through wearable computing helping workers in the field with maintenance, training, safety and so on.
 - Mental or cognitive processes may be assisted through analytics or the internet based retrieval and analysis of information, and how GCL could use available data to make better decisions. Automation of mental processes may be used to remove workers in hazardous sections.

In her presentation, Abeer assured that senior managers and leaders would be regularly briefed about how digital technologies were affecting learning and productivity in the company. The top management decided that the company needed to adopt 'GC Learn' and other elements of digital technology to drive increased efficiency and prepare employees for innovation in their respective departments. Moreover, it was decided that the programme's efficacy will be assessed in a year time.

The HRD department redesigned their training programme by incorporating augmentation technologies such as wearable computing, and other new tools for workers to learn how to make faster, better decisions. The department also coordinated with Technical Operations to introduce technologies such as head mounted displays and smart watches to improve safety and process efficiencies.

However, while these technologies were accepted and welcomed by young employees, relatively older or mature employees were a bit uncertain about their reliability and efficacy. In fact, the company noticed

that some of the most experienced and well-respected employees were absent from the initial training sessions. At that stage, Director of Technical Operations personally invited and sat with employees in training sessions to experiment wearable computing tools. After a few sessions, some of those initially reluctant were found to be quite eager of using head mounted devices, smart watches and smart clothing.

Abeer thus explained how digital technologies were being incorporated in traditional training programmes.

“The first stage is what we call *over-the-shoulder-coaching*. This is when a worker in a remote location, such as on the exploration or processing site in deep sea or desert, could access ‘GC Learn’ or share screen and seek help in maintenance or safety issues. In practice, IT and communication technologies have changed how workers need to be deployed for training, and help them learn in a flexible and expedient manner. The second stage is around *heads-up displays* where a worker is able to access and process information in real-time and locate information into their field of vision so they could follow a process or procedure as they are actually doing the work. The third stage is *full-augmented reality*, i.e., the ability to look at a piece of equipment, a dial or gauge, and overlay real-time information to make better decisions.”

GCL’s training programme paid special attention to issues of safety because, at times, workers had to operate in high-risk situations, such as pipeline surveillance, post-hurricane analysis and flare stack inspections. Drone technology was introduced as part of digital transformation. Open air, hands on training sessions were conducted as well as a simulator was acquired for in house training. Drones were introduced to safely capture data from hazardous situations. One key example was flare stack inspections. Previously workers had to build scaffolding around flare stacks to do inspections, and the flare stacks needed to be shut down. That was no longer needed due to introduction of drones fitted with cameras to capture vital information without putting the worker in danger. Another example was the use of drones in post hurricane analysis to assess the functional state of offshore platforms after hurricanes. The data captured by drones was stored in a standard format and was accessible to people across the company for analysis and interpretation.

Moreover, simulator and virtual training were used side by side the traditional classroom training for employee development. All of the training modules were made available online on ‘GC Learn’ portal along with training manuals, presentation slides and standard operating procedures (SOPs). Moreover, self-assessment was made available online and progress privately provided to each individual as well as gathered on a spread sheet for the training manager.

Muhammad Isa, Senior Training Officer at GCL, thus explained his experience:

“So, in this industry when we think about the introduction of latest technology, first we consider information and skills that could be disseminated to relevant employees in a way that is convenient, flexible and replicable. To a large extent, digital learning has made this possible. Instead of choosing either digital learning or traditional training, we use an incremental and complementary approach by offering both modes of training side by side, reinforcing each other. The use of online tools and simulators to disseminate training, monitor progress and participation, and issue certificates and notices has been a great help.”

“By June next year”, Abeer thought, “we will need to conduct a cost-benefit analysis of the investments made in digital technologies vis-à-vis employee productivity and safety, and their impact on overall organisational revenues. Therein lies the real challenge”, Abeer said to herself while she reached for her phone to contact her travel agent.

Your Task

Address the following questions:

1. How could organisations blend new technologies alongside more traditional approaches to training and employee development?
2. What are the key issues involved in the successful implementation of digital learning in GCL?
3. To what extent can digital technologies help in employee learning, safety and productivity in organisations?