

Communications of the Association for Information Systems

Volume 44

Article 6

1-2019

Does Conventional Wisdom Apply? An Enterprise System Sourcing Decision for a Retail Business in Fiji

Sharlene Biswas
University of Auckland

Gretchen Irwin Casterella
University of North Carolina Wilmington, casterellag@uncw.edu

Follow this and additional works at: <https://aisel.aisnet.org/cais>

Recommended Citation

Biswas, S., & Irwin Casterella, G. (2019). Does Conventional Wisdom Apply? An Enterprise System Sourcing Decision for a Retail Business in Fiji. *Communications of the Association for Information Systems*, 44(1), pp-pp. <https://doi.org/10.17705/1CAIS.04406>

This material is brought to you by the AIS Journals at AIS Electronic Library (AISeL). It has been accepted for inclusion in *Communications of the Association for Information Systems* by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.



Does Conventional Wisdom Apply? An Enterprise System Sourcing Decision for a Retail Business in Fiji

Sharlene Biswas

Department of Accounting & Finance
Business School
University of Auckland
New Zealand

Gretchen Irwin Casterella

Department of Accountancy & Business Law
Cameron School of Business
University of North Carolina Wilmington
USA
casterellag@uncw.edu

Abstract:

This case explores a decision to replace a critical enterprise system that the directors of a family-owned and operated retail organization in Fiji (a developing country) faced. The case asks students to assess the risks and potential rewards of enterprise sourcing alternatives for the Fijian retailer. The case sensitizes students to the organizational, environmental, and technological issues that this business faced, such as unreliable and expensive electricity and broadband Internet. Students who reside in developed countries often take some of these issues for granted, and, thus, the case challenges them to consider a broader global context and question the conventional wisdom of solutions such as cloud computing and ERP packaged software benefits for small- and medium-sized businesses.

Keywords: Teaching Case, Software as a Service (SaaS), Enterprise Systems, IT Infrastructure, Small- and Medium-sized Enterprises (SME), Developing Country.

This manuscript underwent peer review. It was received 02/15/2017 and was with the authors for 10 months for 3 revisions. The Associate Editor chose to remain anonymous.

1 Introduction

Ryder, the Director of Finance at RBB, a family-owned retail business in Fiji, sipped his cup of tea and savored the warm sea breeze and the setting sun from his home's balcony. Despite the breathtaking natural beauty that lay before him, Ryder could not take his mind off work as he replayed the afternoon's discussion during the annual meeting of RBB's management team. The discussion had focused on the company's IT infrastructure and enterprise system that the company had successfully used since it began almost 30 years ago. Everyone on the management team agreed that the old DOS-based¹ system—outdated by developed countries' standards—had served the business well and continued to serve its control and reporting purposes efficiently and cost effectively. However, one of the younger family managers made a comment that got everyone thinking:

We are now in the age of touch-screens and voice recognition. My mind cannot even comprehend the idea of entering commands to get the system to do something. Bet these days, even people with IT degrees have no idea about commands and DOS systems. To be honest we are 100 percent reliant on Ryder to keep this system going. In the event that Ryder is not available and something goes wrong, our business would be crippled. None of us would know what to do, and it would be impossible to find anyone externally to fix it. It would be an atrocious disaster!

The senior management realized that internal changes (e.g., retiring senior managers and a new workforce born in the post-DOS era) and external changes (e.g., changes in government reporting requirements and discontinued compatible hardware) could create challenges for the business in continuing to use the current system.

The debate during the meeting focused on two key questions:

- 1) Should we replace the current enterprise system?
- 2) If so, what do we replace it with?

The management team's younger members advocated for cloud computing and software as a service (SaaS) and cited the emergence of cloud service providers in Fiji² as evidence that Fiji was "ready" for cloud computing. Ryder knew about some research on cloud computing (e.g., ISACA, 2009; Müller, Holm, & Søndergaard, 2015; Yang & Tate, 2012), which included case studies on how small- and medium-size businesses had successfully transitioned to the cloud (e.g., Lacity & Reynolds, 2014; Microsoft, 2013). Many of these companies reported that they had reduced their IT costs, improved their information security and disaster-recovery capability, and could access otherwise unavailable world-class enterprise software. However, he remained skeptical about whether it represented a good option for RBB. Ryder knew that the research focused on businesses in developed countries such as the United States that have strong and resilient economies and reliable and affordable high-speed Internet access. In contrast, like many developing countries, Fiji suffers from significant infrastructure barriers, such as unreliable broadband connectivity and intermittent power outages, that influence businesses' decisions to adopt cloud-based systems.

Senior managers at the annual meeting warned that cloud computing would lead to increased operating costs from SaaS monthly fees and expressed concern that a single vendor might "lock in" their data and applications. Instead, they proposed incremental hardware and software improvements to the existing infrastructure and systems because the existing functionality and service levels needed only minor additions to adequately serve the business.

As the official director of finance and the unofficial self-taught IT guru who had built and managed the company's IT infrastructure over the years, Ryder was caught in the middle. RBB needed an innovative (for Fiji) but frugal solution that would help the business to succeed and grow in the future without heavily encroaching on its fluctuating profit margins. The management team had decided to meet again next week to present alternatives and agree on a comparison and evaluation process with both short-term and long-term business goals in mind. Ryder's head brimmed with ideas. In one moment, he thought about how, in this small, developing country, RBB could lead the market in using IT as it had done years ago to provide a distinct advantage in the marketplace and propel its growth for the next family generation. In the

¹ DOS was Microsoft's dominant operating system in the 1980s and has been discontinued for some time (see <https://en.wikipedia.org/wiki/MS-DOS>).

² For example, www.ebusinessfiji.com and www.datec.com.fj/our-services/cloud-and-data-centres.

next moment, he considered practical, incremental, low-cost improvements to RBB's current IT that would keep its operating costs low but would also have minimal business benefits and would require someone from the younger generation to step into an IT administrator role. As he watched the sun set on the horizon and the waves roll in and out of the shore, his thoughts flowed between the future direction of the company and the many years that led him to this point. Somewhere in this mix of potential risks and rewards, Ryder hoped he and the other family members involved in the business would chart the right course for RBB.

2 Background on RBB

RBB operates in Fiji, an archipelago of over 300 islands in the South Pacific with a population of about 900,000 people (Countrymeters, n.d.). Most of these people live on two main islands, Viti Levu and Vanua Levu. The country, a tropical paradise for visitors, has tranquil and pristine beaches, crystal-clear ocean waters, and some of the happiest people on earth as the world witnessed when Fiji's Rugby Sevens team won the 2016 Olympic gold medal. However, Fiji is also a developing nation: it had a gross national income per capita of under FJ\$5,000 (US\$2,450) in 2015 (The World Bank, 2018)³ and a minimum wage of just FJ\$2.32 (US\$1.14) per hour (The Fijian Government, 2015).

Ryder's older brother founded RBB in 1989 and took on the managing director role. Not long after, Ryder and his nephew joined the business as the director of finance and the director of operations, respectively. These three owner-directors led the company from that point forward. They went through a tough and long road to success but appreciated what the family business had accomplished for not only the family but also the community by providing employment opportunities for so many low-skilled workers and low-cost goods for Fijian consumers.

Over the years, the business grew from one retail shop with annual turnover of FJ\$1 million (US\$490,000) to 23 retail shops in 2017 spread across the two main islands of Fiji and over 650 employees and a turnover of FJ\$40 million (US\$19.6 million). Their product lines also expanded from locally made furniture to kitchen items (e.g., dinnerware, flatware, and glassware), home décor items, and clothing lines. Ryder remembered his brother (the managing director) first proposing the idea of importing household items and his own concern about the import costs. His brother, a skilled negotiator, had a keen sense of what RBB's customers would buy. The purchasing team (which the managing director led) travelled to China and India a couple of times a year to buy items in bulk and send them back to Fiji on container ships. This high-volume purchasing strategy enabled them to keep retail prices low—an important consideration given their customers' limited spending ability. The purchasing team also had to source the right items, which meant keeping a steady supply of certain items that sold well throughout the year and other new or seasonal items with less predictable demand. RBB had been quite successful in keeping enough products on hand that customers wanted and needed at a reasonable price. The younger generations of the family expressed amazement at how much detailed knowledge the directors had about every product they stocked—past and present—such as the price, profit margin, and quantity sold. Ryder knew that this knowledge came from their passion for the business, and it represented a key reason for the business's success.

RBB had also found success due to its retail presence in so many of the main town centers. Most of Fiji's 900,000 residents live within 20-30 minutes of a town center. Travelling to town and shopping represents a main attraction for residents, and brick-and-mortar stores continue to be popular. Although Internet access and smartphone adoption have begun to rise (particularly with the younger generations), online shopping remains in its infancy in Fiji. Internet access and mobile data plans⁴ are expensive relative to the low income of average families, and most customers do not have credit cards for online payments. Cash payments dominate shopping in Fiji in stores in town centers, and RBB's directors had diligently searched for real estate buying opportunities in prime town center locations across the country.

Ryder also believed that RBB's IT infrastructure played a key role in enabling its growth. He advocated for strong IT-business alignment and continually sought affordable ways to use IT to support and improve the business. When RBB's retail business expanded beyond the one location in the 1990s and it became harder for top management to have a physical presence to monitor shop operations, he recognized that a

³ By comparison, income per capita in 2015 in the USA was almost US\$56,000.

⁴ According to Vodafone Fiji's advertised rates in September, 2017, 4G data for businesses with download speed of 20 to 40mbps and upload speed of 5 to 10mbps costs FJ\$23.70 per month (US\$11.61) for 8 GB while 3G data costs FJ\$58.08 per month (US\$28.46) for 8 GB.

point-of-sale (POS) system that connected the different locations to the head office would standardize and streamline sales operations and enforce the directors' desire to maintain control of item pricing. He knew that the solution needed to be cost effective and easy to set up when new shops opened. RBB was the first retailer in Fiji to use a POS system and barcodes. In the mid-1990s, most retailers displayed items on the shop floor *without* prices. Owners would reveal prices to customers when asked, which meant they could manipulate prices. RBB directors, however, diverged from this practice and instead pre-determined item prices and affixed barcode stickers to each item. Ryder had convinced the other directors to purchase computers to use as cash register terminals and an enterprise software package with POS functionality.

Ryder, with the support of the directors, opted for the CBA package from a New Zealand software vendor. CBA, an enterprise resource planning (ERP) solution, included all the modules RBB needed for its operations, such as POS, inventory management, cash receipts, accounts receivable, accounts payable, payroll, general ledger, and tax reporting adapted to Fiji requirements. The package cost about FJ\$12,000 (US\$5,880) to acquire. To keep costs low, a friend in the IT industry helped Ryder set up and configure the POS system in the two retail locations RBB had at the time, the enterprise software in the head office, and the networking software (Novell) the business used to transfer data between geographically dispersed servers and the server at the head office. This acquisition marked the beginning of the innovative but frugal way that the directors used IT to support the business's strategy and their values.

2.1 Current IT Architecture

Figure 1 illustrates the current architecture of the enterprise system, which has mostly not changed since the mid-1990s. The head office server has various partitions such that each partition represents a different retail shop. The server connects to a modem, which, in turn, connects to the modems in each shop. Each shop has its own server, which connects to the cash register stations that process sale transactions. The partition in the head office's server for the individual shops mirrors the system in the particular shops. Each evening, the shops' servers dial in to the head office server and transfer the day's sales data, which then updates the data in each store's corresponding partition on the head office server. This process also backs up the shops' servers. Once all shops have finished transferring their sales data, the financial controller backs up the head office server onto another server and takes this server home so that, in the event of a disaster such as fire or flooding, the business has an up-to-date backup server available.

This architecture worked well for RBB as it expanded to its 23 current retail stores across the country. As Ryder explained to the younger members of the management team:

Every time we open a new shop, all I have to do on the head office server is copy what we have for one shop, paste it into a new partition for the new shop, give it a new branch store number, and erase the data. We can set up a new shop overnight. It's easy and inexpensive.

However, with the rising adoption of Microsoft Windows operating systems in the late 1990s, the vendor gradually discontinued support for CBA and migrated most of their clients to Greentree, a Windows-based accounting package that the same programmers who developed CBA wrote. About 10 years ago, the vendor warned Ryder that it would terminate all CBA support. After considering CBA's functionality (which was quite good at the time), the risks, and the hardware, software, and maintenance costs of moving to a Windows-based enterprise system, Ryder chose to continue with the DOS-based CBA package. This choice meant that Ryder was responsible for maintaining the software but also meant that RBB had no obligation to pay to continue to use CBA regardless of how many workstations they used. Hence, despite having approximately 10 to 16 workstations at each of its 23 shops, one main server, and a back-up server at each shop and a full functioning head office accounting system that all used the CBA package, RBB had been able to keep IT costs extremely low. In 2016, RBB reported total IT costs of FJ\$113,801 (US\$55,762), which included Internet and telecommunication costs of FJ\$35,770 (USD 17,527) and hardware purchases of FJ\$78,301 (US\$38,367). The total IT costs amounted to only 0.24 percent of their sales for the 2016 financial year.

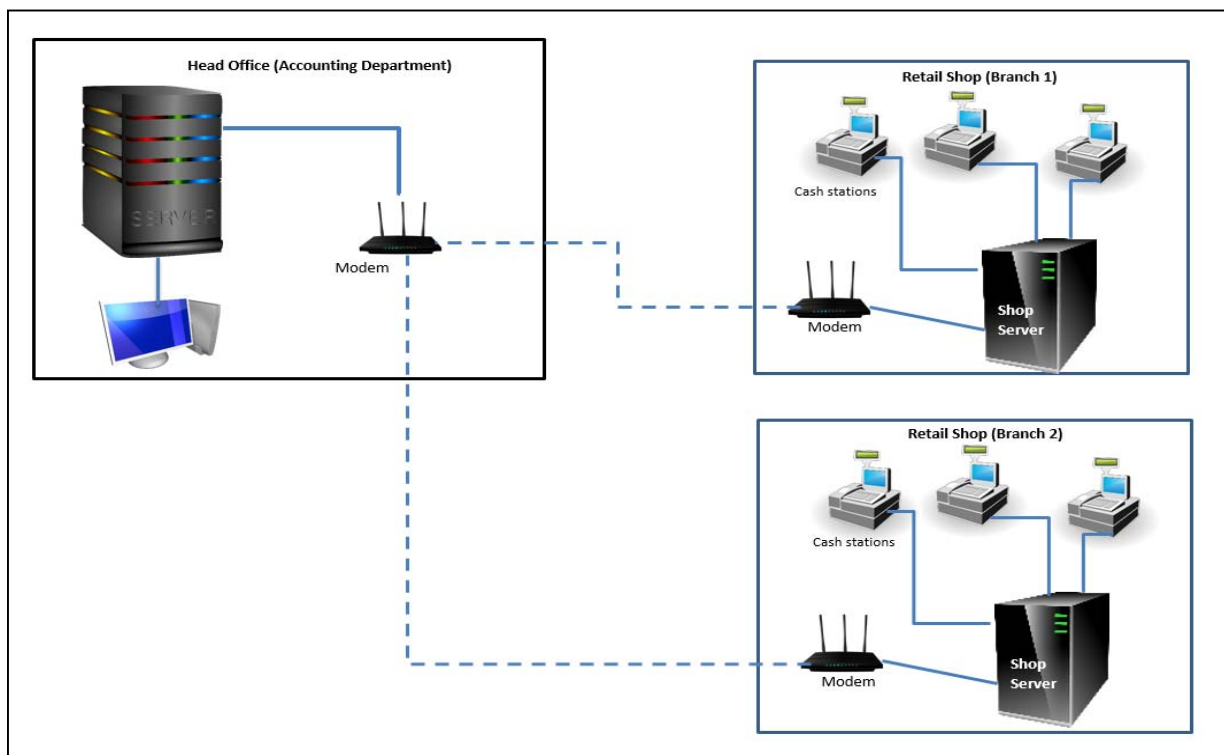


Figure 1. Current IT Architecture

RBB had no IT department and no dedicated IT staff. Ryder managed the entire IT operations of the business himself with the assistance of some of his accounting staff that he had trained to troubleshoot and fix common issues that arose in his absence. Moreover, because the software was based on DOS, it required minimal hardware processing, storage, and memory, which meant that the business did not need powerful computers, cooling systems, or temperature-controlled environments. Most workstations and servers resided in areas with no air conditioning even though temperatures in Fiji could be quite high. These factors contributed to significant cost savings over the years, and Ryder believed they made the right decision in staying with CBA and not moving to Greentree.

However, Ryder did regret that he did not purchase the source code for CBA when the vendor closed shop. Without the source code, he had a limited ability to modify the modules in the package as the company grew its retail presence and diversified its operations.

3 Emerging Challenges

With the business's rapid growth, its inventory management has come to need immediate attention (see Section 3.1). Moreover, as the existing directors near retirement, the next generation of family members has begun to enter the business, which has led to emerging challenges inside RBB (see Section 3.2) and, thus, prompted the directors to re-evaluate their IT infrastructure.

3.1 Inventory Management

To succeed, any retailer needs to be able to stock the right items in the right quantities, at the right price, and at the right time. RBB's purchasing team, led by the managing director, comprised the deputy general manager (GM) for operations and a few staff members. Purchasing decisions directly affect RBB's performance and rely on the team members' previous experience, understanding of customer preferences, and sales reports that the accounting department supplies. As Ryder explains:

We give the purchasing team whatever information they require. For example, at the moment, they are going to buy sarees [a type of Indian clothing]. We give them a report showing how many sarees we have in stock, how many we have in each cost range...under [FJ]\$50 [US\$24], between [FJ]\$50-100 [US\$24-49], and so on. In the same format, we give them the sales that

have happened...in the last 12 months, how many sarees have sold. So using this, they can gauge how many and what type they need to buy.

The purchasing team pulls the data from the CBA reports into Microsoft Excel for analysis prior to and during their purchasing trips. The company always stocks certain product lines, such as homeware (e.g., plates), because customers continue to demand them. However, it does not always stock more seasonal or fashion items because they sell with less certainty. The purchasing team uses the information from the enterprise system and Excel files, along with their bargaining skills and knowledge of their Fijian customers' preferences and demands, to negotiate and bargain at markets in China and India.

While the purchasing team finds the CBA reports useful, Ryder believes the team needs a better information system to support warehouse activities. Once the purchased items arrive into the country, they go (in containers) to the company's warehouse in Suva. With the significant growth in operations over the years, the company has outgrown its current warehouse facilities. Hence, when inventory arrives at the warehouses, the staff stores items wherever they find space, which causes problems during busy seasons in particular when multiple containers arrive at the same time. The company has seven days to empty the containers before the shipping company returns to take them away, which places pressure on the team trying to store the inventory in an already overflowing space. Further, it increases the time it takes to find the right items in the right quantities to load onto trucks for distribution to retail shops.

In response to this problem, RBB has started constructing a warehouse the size of two football fields. For a warehouse this large, the company needs an information system to identify the location of the inventory in the warehouse down to the specific aisle and bin number so that employees do not waste time looking for the items to pick. Moreover, some locations in the warehouse better suit particular types of items. For example, heavier items should be stored closer to the ground, lighter items can be placed on upper shelves, and faster-selling items should be stored closer to the dispatch area compared to slower-moving items. Ryder believes warehouse operations and the cost of sales would improve if warehouse employees had information on location availability based on these guidelines when they unload containers. They would store items in a way that would reduce damage to inventory and the bottlenecks that occur when items need to be distributed from the warehouse to the shops. Unfortunately, CBA can record only which warehouse⁵ stocks an item; it does not support more detailed locations such as aisles, shelves, or bins, and it cannot incorporate rules based on item characteristics. Further, CBA's command line-based interface does not suit contemporary warehouse technologies such as RFID tags or scanners or GPS location-based services.

3.2 IT and the Generation Gap

Over the last five years, four of the directors' children have joined the family business, and they will take over running the business as the directors near retirement. As millennials from well-off families, these future directors have grown up with smartphones, touch screens, and other mobile user-friendly devices. Needless to say, they view having to memorize unintuitive commands to operate the DOS-based CBA system as akin to learning a foreign language. As marketing and management graduates from overseas universities, the younger generation has much interest in the purchasing and sales side of the business. Thus far, however, they have refused to learn or use CBA because they fear their incompetency with this obsolete technology will create more problems for Ryder.

The team's younger members constantly complain about CBA's poor usability when discussing RBB's IT systems. Similarly, CBA generates only pre-defined and text-based reports. The older team members need to perform a cumbersome export-import process to obtain data from these reports into Excel so that the younger ones can manipulate it and produce graphs and charts for the teams. The budgeting process is similarly cumbersome. Ryder pulls sales data from CBA, imports it into Excel, and then makes many manual adjustments to incorporate factors such as special promotional activities, holidays (e.g., Christmas and Easter), and the number of weekends in a month that affect their monthly sales figures. The adjusted sales data then becomes the input for the budgeting process.

In addition, the younger generation dislikes CBA due to its inability to provide real-time sales and inventory information. However, Ryder questions the need for such information because he does not understand how the cost associated with real-time information would be particularly useful as compared to

⁵ Note: RBB currently has three warehouse facilities (two located in the same location as the head-office and one at a different location).

information that lags by a day or two. Moreover, real-time information requires 24/7 Internet availability—a possible problem given the infrastructure and environmental issues in Fiji that undermine the suitability of an always-online system.

4 Environmental Challenges

Businesses in Fiji face several external factors that increase enterprise risk, including natural disasters, political unrest, poor national infrastructure, and a limited pool of technically skilled professionals. As a tropical country, cyclones⁶ (and, as a result, flooding) commonly occur. Most town centers reside near rivers; thus, flooding frequently affects RBB's retail shops. Suva is the only location that does not suffer from flood threats because it does not reside on the bank of a river. Flooding causes stock damage and disrupts sales. Most RBB stores have multiple levels, so the servers reside on the top level. In the event of flood warnings, the shop managers have clear instructions to first move the cash registers to the higher floors and then try to move stock. The fact that most insurance companies no longer provide coverage for flood-related damages and those that do have extremely high premiums exemplify the issue's intensity. Cyclones and flooding often impact power lines and telecommunication towers, which results in unannounced disruptions to electricity and Internet services. Depending on the intensity of the natural disasters, some towns take up to a month to restore these services. Hence, RBB needs a decentralized system so that stores with power can continue to operate and power disruptions in one location do not force the closure of shops in other locations.

Businesses in Fiji also experience frequent fires. RBB suffered extensive losses twice due to fire: once in its furniture factory and again at a retail shop. Electrical faults (e.g., short circuits, overloads, arc faults) cause most fires in Fiji. The infrastructure in Fiji is old and poorly maintained. As a result, the supply of electricity in Fiji can be unreliable with frequent unannounced power cuts and fluctuations in voltage, which poses a significant risk to companies that rely heavily on electricity to run computerized systems. Ryder has an uninterrupted power supply (UPS) device attached to each workstation and server at each location to avoid damage due to power fluctuations or unannounced power cuts. The device gives the staff 10 minutes to shut down the computers in the event of a power failure. As the power cuts can last anywhere from a couple of minutes to a couple of hours, RBB needs to stop operations at the affected location for that duration.

Fiji also experiences much political unrest⁷. Between 1987 and 2006, Fiji had four coups. The coups have generally not involved much violence since only the military has guns in Fiji, and business operations have continued through the changes in the country's leadership. However, other countries and international organizations such as European Union and Commonwealth condemn the coups, and trade restrictions and foreign aid cuts tend to follow them, which, in turn, results in a devalued Fijian Dollar. For instance, in 2009, the Fijian dollar decreased in value by 20 percent. As a consequence, imports become more expensive, and retailers had to raise their prices. With increasing costs of imports that serve basic needs (e.g., fuel, flour, and rice), consumers' ability to spend on items such as furniture, homeware, electronics, luxury clothes, and so on decreases, which leads to decreased sales for RBB and other retailers.

Political unrest also causes "brain drain", a phenomenon where many qualified and skilled professionals leave Fiji and migrate to countries such as Australia, New Zealand, and Canada for better work opportunities. As a result, one can find it difficult to locate IT professionals with adequate skills and knowledge in the country. While one can generally find new IT graduates easily enough, the problem lies in finding experienced IT professionals (especially with CBA and DOS experience). Only a handful of IT companies operate in Fiji, and most are owner operated and rely heavily on one person's expertise. However, businesses that rely on these owner-operated IT companies face risks when the owners move away because no one can replace them and because the businesses cannot maintain the systems without external tech support.

Many organizations in Fiji similar in size to RBB have invested millions of dollars in IT systems that have failed or nearly failed due to a lack of qualified programmers and consultants to help with implementation and ongoing support. For instance, a supermarket chain struggled to maintain its POS system after its

⁶ November to April is the cyclone season in Pacific Islands, which brings cyclones and tropical depressions with heavy rain, wind, and flooding. Fiji may face multiple cyclones or floods during this period (e.g., in 2018, it experienced six cyclones, and some towns flooded three times in just under two weeks).

⁷See <http://www.bbc.com/news/world-asia-pacific-14919688> for a summary of Fiji's history, including its coups and political struggles

head IT person left the company and they could not find a suitable replacement. In desperation, they hired an expatriate IT professional; however, this hire came at a high cost and directly impacted the company's bottom line.

5 The Inevitable Decision

While Ryder has served RBB well as the de facto director of IT since the early days of the business, at 60 years old, he is five years over the national retirement age in Fiji. At some point, Ryder will retire and the younger generation will take over. In Ryder's opinion, they have several options to consider.

First, they could continue as usual with the CBA enterprise system for as long as possible. Doing so would keep their costs down and the directors and managers would continue to build their own spreadsheets, templates, and standalone database programs to meet new requirements that exceed CBA's capabilities. Taking advantage of the clearance prices of outdated hardware in developed countries such as the USA, Ryder has sourced and stockpiled DOS-compatible hardware including servers, workstations, keyboards, and printers that should last them for at least another five to 10 years.

Second, they could develop a new and customized Windows-based enterprise system with help from external contract programmers. Ryder already knows a contract programmer who will work with him at a discounted rate to develop a new enterprise system that has a graphical user interface and includes CBA's existing functionality plus the additional warehouse functionality RBB needs. This collaboration could benefit both parties because RBB would get a custom-built ERP system and it should allow the contractor to sell the system to other companies if proves successful for RBB.

Third, they could migrate to a new third-party ERP software system. Other businesses and government organizations in Fiji, including Greentree, Epicor, and Microsoft Dynamics, have adopted several proprietary ERP packages. Ryder has talked to a couple of ERP vendors and knows that, for an on-premise implementation, they would need to budget for one-time license costs for all of the workstation in the 23 stores plus 20-25 percent annual maintenance costs. The company has the working capital to make this investment if required, but it would come at the expense of many other attractive investment opportunities. As a lower-cost alternative, the business could use an open source ERP solution, such as ERPNext, iDempiere, or Dolibarr. An on-premise implementation of an open-source ERP would dramatically reduce or eliminate the software licensing costs compared to proprietary software. However, on-premise implementations—proprietary or open source—would still require RBB to upgrade its internal IT infrastructure and hire consultants to assist with the initial implementation. The business could largely avoid IT infrastructure costs by choosing a cloud-based Software as a Service (SaaS) option instead of an on-premise implementation. All of the ERP products mentioned above provide this choice. With SaaS, monthly service fees replace the one-time licensing costs and upgrade costs, which cloud operators typically charge on a per-workstation basis (even for some of the open source products). These monthly fees would dramatically increase RBB's operating expenses and would mean that the ERP system would depend on continuous Internet access. Again, Ryder has significant concerns (and rightfully so) about committing to a new expensive IT solution.

6 Conclusion

As Ryder gazed at the sunset and sipped his tea, he wondered which direction the management team would choose. Certainly, RBB's outdated, homegrown IT infrastructure and applications were reliable, but they lacked the flexibility to support the business's growth, and he knew that IT could provide more value to certain areas of the business (particularly the new warehouse and distribution center). Nevertheless, the old systems and processes still supported the business adequately. As he had explained towards the end of the annual meeting:

I think what is unique to our business is how we control the branch stores in the head office. With the current system we are able to have every store's sales and inventory data in the head office. For each physical shop, there is a corresponding virtual shop here on the server. This means we have data backups for all the shops. It also means the head office can always have complete data for reporting purposes. Another advantage is that our shops' accounting is always up to date. This is important—even if the head office accounting is a month late because we do direct transfers, reconcile accounts receivable, payables, etc., the shops' activities are updated with every sale. Our current systems are also inexpensive. We are able to pull the

whole day's transactions over the phone lines within 2-3 minutes. If we need dedicated lines for an online system, it will cost more, and if network communication breaks down, then operations would be disrupted in the shops. In our current situation, even if we have a full power failure here [in the head office], if there is power in the individual shops, operations keep running. If we miss a day, or even if we do not pull data for the whole week, it would still work. All the data would come through when we dial in. We should consider various upgrade alternatives, but the alternatives should offer these same features at the same or lower costs bearing in mind that we cannot compromise control of the branches.

Ryder recognized his bias toward CBA but also recognized the succession planning and warehousing operational issues that highlighted CBA's shortcomings. He had more questions than answers and decided to tap into his network of business scholars and professionals for advice and guidance.

References

- Countrymeters. (n.d.). *Fiji population*. Retrieved from countrymeters.info/en/Fiji
- ISACA. (2009). *Cloud computing: Business benefits with security, governance and assurance perspectives*. Retrieved from <http://www.isaca.org/knowledge-center/research/researchdeliverables/pages/cloud-computing-business-benefits-with-security-governance-and-assurance-perspective.aspx>
- Lacity, M. C., & Reynolds, P. (2014). Cloud services practices for small and medium-sized enterprises. *MIS Quarterly Executive*, 13(1), 31-44.
- Microsoft. (2013). *Small and midsize businesses cloud trust study: U.S. study results*. Retrieved from <https://news.microsoft.com/download/presskits/security/docs/TwCJune13US.pdf>
- Müller, S. D., Holm, S. R., & Søndergaard, J. (2015). Benefits of cloud computing: Literature review in a maturity model perspective. *Communications of the Association for Information Systems*, 37, pp. 851-878.
- The Fijian Government. (2015). *Fijian Government increases national minimum wage*. Retrieved from <http://www.fiji.gov.fj/media-center/press-releases/fijian-government-increases-national-minimum-wage.aspx>
- The World Bank. (2018). *Fiji*. Retrieved from <https://data.worldbank.org/country/fiji>
- Yang, H., & Tate, M. (2012). A descriptive literature review and classification of cloud computing research. *Communications of the Association for Information Systems*, 31, 35-60.

About the Authors

Sharlene Biswas is a lecturer and the Director of Postgraduate Programmes in the Department of Accounting and Finance at the University of Auckland, where she also earned her Bachelor of Commerce (Honours) and PhD. Prior to joining the faculty at the University of Auckland, she was an auditor at KPMG Auckland. Her research interests include management accounting, new product development, open innovation, and auditing. She has published in journals such as *Advances in Management Accounting* and the *Accounting Research Journal*,

Gretchen Irwin Casterella is an associate professor in the Cameron School of Business at the University of North Carolina Wilmington. She earned a PhD in Information Systems from the University of Colorado, Boulder. Her research interests include human-computer interaction, database management, and systems analysis and design. She has published in the *Journal of the Association for Information Systems*, the *Journal of Management Information Systems*, and *IEEE Transactions on Professional Communication*.

Copyright © 2019 by the Association for Information Systems. Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and full citation on the first page. Copyright for components of this work owned by others than the Association for Information Systems must be honored. Abstracting with credit is permitted. To copy otherwise, to republish, to post on servers, or to redistribute to lists requires prior specific permission and/or fee. Request permission to publish from: AIS Administrative Office, P.O. Box 2712 Atlanta, GA, 30301-2712 Attn: Reprints or via e-mail from publications@aisnet.org.