**A) (i)** File servers are devices which controls access to independently put away documents, as a feature of a multiuser framework connected to specific clients (Loblaws’ employees). Useful for covering long distances, it is a central storage place for the keepsake of internal data/media (LAN). Such server enables remote access for Loblaw employees in Covid-19, and effective shared working without it hindering formats of documents. **(ii)** Enterprise network comprises of LANS and WANS that altogether enact as the corporate backbone. It helps connect computers and related devices among departments dispersed. It is advantageous for Loblaws as this infrastructure aids further insight and data accessibility of Covid-19 forecasts, inventory and more regionally or globally (covering a larger distance). **(iii)** Packet switching is the primary usage for data communications networks because it allows delivery of data into bundles of information with a fixed designation (IP), sent over a decentralized network. This is helpful for Loblaws when shifting fully online because such a business transformation will require lots of back to back communication. Packet switching eases trafficking (less lag) because due to its function of broken discrete data when in transmission at end, it is easier to reroute assembling at a timely manner which stabilizes the enterprise effectively during the changes of Covid-19. **(iv)** Peer-to-peer processing network is a distributed arrangement made when at least two PCs are associated and share assets over the internet without experiencing a different server. Could be done when Loblaw shares files instantaneously virtually because it allows the computers to do so remotely if the central server crashes. Setting up for Loblaw is easy especially during a pandemic that needs to be responded to quickly and accordingly. **(v)** Internet telephony (VoIP) is a form of voice communication that allows voice calls and other similar applications to be digitized into packets then broadcasted through the internet. Loblaws can facilitate this channel as it has great scalability by using Zoom for formal meetings remotely at no cost, anytime and anywhere. **B (i)** Amazon is planning to implement an automated workforce (robots) to improve delivery times. However, producing robots is not cheap, plus it is a large purchase. Amazon could request an RFQ through the Electronic Tendering System and wait for a suitable buyer to bid. This reverse auction mechanism can save costs yet select a supplier that is compatible. **(ii)** Online direct marketing is a strategy for retailers/manufacturers to sell directly to consumers. Amazon is a great example because it is a technological customer-oriented company offering a digital platform between sellers and buyers. **(iii)** Affiliate marketing is when vendors ask affiliates to place their branding on the partner’s site. So that potential buyers click that brand, and commission is paid to the partners. Loblaws uses this model with their multiple partner stores such as Photo Lab and the Real Canadian Superstore on their websites. **(iv)** Viral marketing is the practice of current customers sharing information regarding a product or service of a business to their peers. Loblaw could use this strategy online by using a promotional tactic of giving out digital coupons for later use if the customer shares this product or service’s details to 5 or more contacts. **(v)** Memberships are exclusive of customers that sign up to use extra services, as well as accessing information for better deals. Amazon has a membership program called ‘Prime’. An annual or monthly fee subscription is offered to customers registered to snatch discounted deals on marked goods and delivery times. **C)(i)** In a wide scope of businesses, they can utilize GPS to upgrade their present set-up of administrations coverage. In this case when the customers drive to the “click and collect” section. Between Loblaw and the customer, a location must be shared to know the nearest and suitable spot. GPS would be great because it is a wireless system using satellites to pinpoint their spots. **(ii)** Near field communications are short ranged wireless networks installed in compact devices such as smartphones and credit cards. By waving the NFC at a proper angle inches away from the counter, the purchase is simply made. With the current pandemic, Loblaw should encourage this idea to customers when purchasing their groceries as the POS, to ensure safe contact. **(iii)** QR (Quick response) is a 2D code, defined by a matrix of black and white dots, readable by camera phones and QR readers. Loblaw can use this feature by printing it on the end of every receipt, digitally and/or physically for the customer to scan later to see perks available provided by their most recent purchase. **(iv)** Active RFID utilizes inner batteries as a source of power, and they communicate radio waves to a reader. For the utilizing of batteries, it is a costly specialized piece. It covers a huge range and Loblaw can use it for inventory tracking of large amounts, or anti-theft purposes. **(v)** The UPC is composed of 12 digits that are grouped in different (black bar) permutations otherwise commonly known as the barcode. Mainly used for the scanning of marked items for identifications purposes. Loblaw cashiers would use it when checking out the items to preview price and name. This transaction would also input and update the inventory system depleting the item. **D)(i)** RSS is a configuration wherein web channels, for example, updates to websites, digital recordings, news' destinations, are conveyed to readers. This aggregation permits the rundown to be consequently passed from site to subscriber. For instance, Amazon has this feeds generator, sign up for it, it will fully automate the process for searching Amazon oriented products, updates, seller schedules, visits and more. Such syndication promotes a stable market that would stay engaged due to the curated content. **(ii)** Microblogging services is a form of blogging that enables users to publish short passages or media. It can be done through different devices or applications over the web. Differs from a blog due to the limited space. Loblaw can use Twitter to quickly share information or be the first to announce a product or sale before its competitors. A lot of people stream through twitter sharing their interests too, thus becoming a real time tool for Loblaws to keep track of trends and competition. **(iii)** Enterprise social network is essentially an interior, informal organization, which organizations regularly actualize trying to empower communication and networking among representatives behind the firewalls. Usually IT companies utilize this method due to huge employee base, so staffs of Amazon could use platforms like Yammer to connect with other qualified employees for potential collaborations. **E)** **(i)** Employee development enables and encourages employee self-esteem amongst others. If Loblaw HR managers try to motivate them, everyone can be better rewarded for their experience. Loblaw could implement a progressive interactive Skill Based Training program for their employees to accumulate points after successfully completing a module in their department. **(ii)** Recruiting in social computing is a process where job seekers and recruiters shift to corresponding online platforms. When Loblaw is available for positions, the recruiting process can be sped up by posting at several different social networks like LinkedIn. That way, a suitable candidate can be shortlisted from the pool of applicants efficiently.

**REFERENCES**

Rainer, Prince, Splettstoesser-Hogeterp, Sanchez-Rodriguez (2017). *Information Systems-Supporting and Transforming Business ( pp.156-173; p.190; pp.221-234; pp.247-250; pp.265-267)*. Toronto, Ontario: John Wiley & Sons Canada, Ltd.