***Conduct a feasibility study and report on***

* ***potential risks that can occur during the development of the system (e.g., communicational, technical, legal, and scheduling)***
* ***how they can be reduced and/or eliminated.***

***Benefits and Risks***

The Scan and Go system has potential for retail applications. By automating and improving the checkout process, Scan and Go can minimize the number of cashiers, reduce customers’ waiting time in queues, and reduce the cash out queues which are considered as one of the most negative aspects of supermarket shopping (Roussos, 2006). The utilization of Scan and Go technology can reduce labour costs while increasing customer satisfaction at check-out operations. Aside from this, the Scan and Go system would come particularly in handy now during the Covid 19 pandemic as it offers less social interaction. The scanner will give customers greater control over the number of people they need to interact with whilst also offering customers with social interaction related anxiety the option to shop independently. Furthermore, the ability to switch to digital receipts would save retailers money whilst helping keep the company’s carbon footprint to a minimum. In addition to this, The Scan and Go system allows for personalised ads to be sent to customers by analysing their purchasing data and shopping trends. The problems associated with the Scan and Go system in retail are mainly economic and technical. The technical limitations of the Scan and Go system include: difficulty interacting with the system due to lack of assistance. Customers whose first language isn’t English, have a disability and/or aren’t familiar with using technology may experience difficulty when this new system is introduced. The other technical risk being the increasing customer vulnerability to theft: along with shoplifting due to lack of monitoring there is a higher chance of thieves using skimmers. These devices attach to card readers and then record information from the card swiped whilst a mini camera captures the pin. The economic problem is that companies will hesitate to invest in the Scan and Go devices because of the high upfront cost; it would be expensive to accommodate each trolley with the scanner. Also, there may be customer confusion regarding the cost of goods remaining the same despite customers having to do the ‘legwork’ (since staff won't be scanning/bagging items). In addition to this, a legal issue which may arise is when a customer is unwilling to share their shopping data for personalised ads. However, an easy solution to this would be giving customers the option to refuse sharing their shopping data.

***Costs***

Although this Scan and Go system can be integrated with existing systems such as till service and self-checkout as they will not coincide, is the cost of introducing another checkout system worth it? Despite the advantages of having the self-checkout system, customers still use till service and the same is likely to apply once the scan and go system is implemented as customers may find it difficult to operate or aren't willing to learn. The advantages of self-checkout over till service are the same as the advantages of scan and go over self-checkout: when it comes to cost of space, checkout counters take up a lot less space than registers and the scan and go system will take less space than self-checkout. Since self-checkout is typically faster than till service, there is only one queue for several checkout counters with a single staff monitoring, which saves additional space and labour costs. Another advantage being reduced wait times compared to using a cashier lane but with scan and go there will be no queues / wait times. The cost of running multiple systems would defeat the advantages of introducing a cheaper system (scan and go).

***Reducing Costs and Risks***

To eliminate these issues and make the system worth implementing, I would suggest replacing an existing system, in particular the self-checkout systems, with the Scan and Go system as it will prove to be the best out of the two. Implementing the scan and go system would extend all the benefits and risks presented by self-checkouts. These extended benefits: eliminate customers’ waiting time in queues, reduce labour costs and offer customers control over who they need to interact with, will create a better shopping experience for customers, help businesses manage some of their costs and give employees the opportunity to better focus their attention on other tasks. To eliminate the risks of theft using skimmers, I would suggest a security feature to be implemented whereby a user is notified through the scanner that an external, unknown device (the skimmer) is attached and to seek staff assistance. Another way this risk can be controlled is by offering online transactions / contactless payments. Customers should be encouraged to make payments via the app since it will be easier to enforce security measures. To tackle the issue of making the system accessible to as many users as possible I’d recommend a tutorial, including visuals and audio, on how to use the scan and go system to be displayed on the default “landing” screen and also the option to select a language for non-native users. If the latter isn’t possible I’d then suggest the content displayed to be written in basic English to make it easier for non natives to shop independently.