## Operations Downtime Estimate

Mission/Business Process	MTD	RTO	RPO		
Ordering Supplies	72 hours	48 hours	24 hours		
Justification	Because there is a moderate impact from ordering supplies, getting supplies on time is important for their continued operation. Based on the interviews the plans can function for 72 hours without nutrients before showing side effects meaning that is the MTD. Since shipping takes two business days and the business does not want to pay for expedited shipping the RTO is 48 hours because if the supplies would not arrive before the 72-hour MTD they would need to find alternative avenues for their supplies which they have stated they are able to source locally if necessary. The company has stated that they would begin to worry after 24 hours if they are unable to order their supplies online as planned because they would not want to pay for expedited shipping and would not want to lose any plants or product due to lack of supplies which means that their RPO is 24 hours.				
Processing Customer Transactions	168 hours	6 hours	0 hours		
Justification	Because processing customer transactions has a severe impact to the business and is necessary for them to track for account and regulatory purposes there is not acceptable amount of time for RPO and the company has a backup plan in place that can be implemented as soon as their primary system goes offline. Their backup plan is to track customer transactions on paper while collecting all information they would normally collect via the electronic system. The RTO is six hours because the company would have gone almost entire shift processing customer transactions manually and then need to transfer the information to their backup laptop system for electronic processing after public facing hours end causing undue hardship on the business. The business has stated they employ an outside IT company to repair their systems and that depending on if parts are needed for repair it can take up to an entire week for the system to be functioning again, thus making the MTD 168 hours from time the system goes down.				
Creating Security Reports	168 hours	72 hours	24 hours		

## Operations Downtime Estimate

Justification	Because creating security reports is a low impact category for the business it is not essential that this function be restored immediately as these reports can be created later and they have a subscription that saves this data for six months. Given this information the RPO for creating a security report is 24 hours because it is regularly stored to the cloud for backup. The RTO for the security reports is 72 hours because if the local system is not connected to the internet, it is unable to backup to the cloud system for access remotely, however the local system is still accessible. The reports would still be generated later with the information from the dates the system was unavailable. The MTD for the reporting system being unavailable is 168 hours because it is a low priority and the essential information is still being captured and saved locally with the information being backed up once connection is restored and reporting capabilities possible for days missed once restoration occurs.				
Tracking Grow Technique Data	24 hours	12 hours	3 hours		
Justification	Because tracking grow technique data is regulated by the Department of Agriculture and therefore is regulated by state laws and regulations the company has a moderate impact to their function when this system goes down. Due to this the RPO for these would be three hours, this is an acceptable time frame for them to recognize there is an issue with the software they have been provided and to report any issues that have not been resolved. The information that is in the system would be most up to date from the start of their business day. The RTO for the software system being down would be 12 hours because this is one full business day that the company is unable to log their required agricultural data due to non-functioning software after having time to report a malfunctioning system. The data in the system is now no longer up to date but they can manually record the information to upload once the system comes back online. The point that the system being offline goes beyond what is acceptable for the business is 24 hours which represents the MTD because they have now gone a full day without being able to record their regulatory required data.				
Creating Safety Reports	168 hours	72 hours	24 hours		

## Operations Downtime Estimate

Justification	Creating safety reports has a low impact to the business because it is not a function that is carried out as a normal part of the business operation. This function is only carried out if an incident occurs or as part of monthly reporting purposes. Due to this the RPO for this eventuality is 24 hours because the most recent data is backed up and no noticeable impact will occur. After 72 hours of the system being down the RTO will occur because there will be an unacceptable impact on other systems. While safety reports can be created manually there is a chance that the monthly report could not be generated on time or that the MTD will be exceeded. Since the priority for recovery is low the acceptable MTD for recovery of creating safety reports is 168 hours from the time the system fails.				
Logging/Tracking Product	24 hours	12 hours	3 hours		
Justification	Because the logging/tracking product system is provided and regulated by the Department of Agriculture it has a severe impact on the business when the system goes down. Because of this the RPO for the system going down is 3 hours. This is because the latest information will have been backed up within the last 3 hours and be the most up to date, but the system malfunctioning should be immediately reported. After 12 hours we have reached the RTO because new products cannot be logged/tracked, sold product cannot be removed and any product that is removed due to disease or neglect cannot be appropriately documented. After 24 hours the business will face undue hardship because of the system being down and their regulatory requirements which means they will have hit their MTD for their logging/tracking system functionality.				