

- a) i) The 'grandfather, father, son' backup procedure allows for access to multiple backups in case both the ~~father~~ and son backups fail; it allows for backward recovery in case some unwanted changes are made and saved to the master file, and it can allow for three different backups to be in three different places so that not all are damaged if ^{the} whole hard drive were to crash.
- a) ii) These alternative procedures should be tested periodically to ensure the alternative procedure can work at all times in real time processing, to ensure it can process large quantities at once in batch processing, to ensure it can work for a long period of time in case the computer is continuously unavailable, and to ensure no errors have occurred during the time it was unused, or altered while it was being used.

- b) i) To address the problems, the website can take upon an order form linked to a database, this will allow all orders to be automatically placed in a database so the staff do not have to enter it in. In the order form, a drop down menu should be used in selecting the pies they want, this will allow only the pies in season to be ordered because the menu can be changed periodically. If the credit card numbers successfully go into the database, then the orders can be ~~batch transaction~~ processed at a later date to save time of the staff.
- b) ii) Issues that may arise from what I have proposed ^{can} ~~would~~ be security of information, as the database is accessible online to hackers so proper measures should be taken, such as firewalls, passwords and the such. A backup should also be made of the Data System in case the system fails. The backup should also be encrypted so it is safe from hackers, using asynchronous encryption. The proper use of information should also be considered so that it is not sold to companies that send junk mail as it is an invasion of privacy, ~~or~~ or used inappropriately.

c) The data accuracy of this new facility should be considered so that account numbers and BSBs are all accurate and that the correct amount is transferred and transferred correctly. This data accuracy is important so that funds are not lost along the way because an individual may lose money in one account without it appearing their other account.

Security of the data is also important because if a hacker were to successfully break into an individual's account, they would have access to all of their accounts at different banks. The proper measures should be taken, so that a firewall and password are implemented. A user name or number added to that password can further add security to that account.

The integrity of the data is also an issue which takes the same approach as data accuracy. Data must be reliable so that the transfer of funds can be made without a problem such as loss of money. The data must also be reliable so that ~~is~~ the bank know if the person who has the account is not a money launderer or the such, so it can make the bank an



accessory to their actions if they had known, although there is a small chance of this happening.