Cash in The Bank, Data in The Cloud

This thought piece is designed to help senior managers and IT leaders to understand the advantages of storing and processing data in the cloud rather than keeping it within the domain of their enterprise.

Where do you keep your cash?

Keep it at home	Put it in the bank
OK, so you might try harder than putting it under the mattress. You might go so far as to buy a home safe. If you had enough cash you might even convert a room into a safe room. You might install cctv.	But you're not going to end up with a vault like this. You're not going to have 24 hour security guards and an intrusion detection system.
If someone breaks in and steals the money, it's lost. Your house insurance isn't going to cover it.	If someone does break into this vault and takes all the cash, the bank is going to give you cash from another of its vaults.
At the end of the day, it's a home, not a bank.	At the end of the day, it's exactly what a bank was designed for.

43% of Americans keep their savings in cash. An alarming 53% of those cash-hoarders "plan to hide bills in a secret location at home". (Kane, 2015).[1]

The average amount of money kept at home in the UK is £110, with some 77 per cent still proactively stashing notes or coins in their abode. Of this, 41 per cent keep their loose change in a jar and 10 per cent hide money under their bed or mattress. (Heath, 2017).[2]

DATA IS KEPT ON INDIVIDUALS' COMPUTERS

- There is no intrusion detection system
- There is no automatic failover to another location
- There will always be people trying to steal things

AMAZON WEB SERVICES

"Cloud security at Amazon Web Services is the highest priority. As an AWS customer, you will benefit from a data center and network architecture built to meet the requirements of the most security-sensitive organizations. We are continuously innovating the design and systems of our data centers to protect them from man-made and natural risks. Then we implement controls, build automated systems, and undergo third-party audits to confirm security and compliance." (Amazon Web Services, Inc., 2018)[3]

1 Heath, O. (2017). Brits are still stashing money under their mattress. [Blog] House Beautiful. Available at: https://www.housebeautiful.com/uk/lifestyle/news/a1702/brits-hiding-money-under-mattress/
2 Kane, L. (2015). Loads of Americans literally hide money under the mattress — here's why it's a terrible idea. [online] Business Insider. Available at: http://uk.businessinsider.com/americans-hide-money-under-the-mattress-2015-2

Questions you should ask yourself or your software service supplier	Cloud security
How is physical access secured from attack or natural disaster?	Physical locations have physical security measures
How is virtual access secured?	Firewalls, connectivity options, and access management control virtual access
How is a Denial of Service attack protected against?	Design and services enable prevention of Denial of Service attacks
What data encryption is there at each stage of the process?	Encryption of data adds a further layer of security
How and how often is security tested?	Inspection and penetration testing can check how secure things are
How will you know if there is an attack or a breach of security?	Monitoring can report on intrusion, events, and threshold breaches
What level of availability is guaranteed, and in the event of failure, what failover is there?	Provide application and data replication to give redundancy and fault tolerance
What certification do you have including ISO 27001 certified (the gold standard for information security) for the service, not just their internal IT?	Meets dozens of compliance programs

BUSINESS BENEFITS OF CLOUD

With Cloud, you don't have to buy, own and maintain servers and the specialist physical environment in which they are housed.

You only pay for the services you use. You don't have to build capacity to cover the largest quantity of data and the highest processing load.

In short, you need to worry a whole lot less about your cash in the bank or your data in the cloud than you do about the cash in your home or the data in your enterprise.

3 Amazon Web Services, Inc. (2018). Cloud Security – Amazon Web Services (AWS). [online] Available at: https://aws.amazon.com/security/