

Who is looking at myCloud - Angels or Demons?

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Information Technology Trends

There are observable trends recently in the domain of information technology, which are triggering different issues worthy of ethical consideration. Some notable current trends are highlighted below and subsequently discussed in this paper.

- The pervasiveness of SoCloMo¹
- The Big Data and Data Analytics race
- Ownership dilemma of Ecommerce transactional data
- Data Security and Trust – the Snowden saga

The pervasiveness and increasing popularity of *social media, cloud computing and mobile devices* have brought along with them the issue of data privacy among other ethical concerns. This trend now sees more people generating data on-the-go via mobile, sharing data freely to potentially thousands/millions of people via social media and storing vital data in the cloud without having any clue where on the planet the server is located via cloud computing.

Big data and data analytics have become one of the recent buzz in the information technology world. The promise of amazing insight and value that can be achieved via these advances in IT has led many organizations to aspire and consciously aim at gathering as much data from as many outlets as they can. In contrast to point one above where the main actor are the users who are by themselves generating all the SoCloMo data by their freewill, the Big Data view has the organization as the primary actor pushing for the generation and acquisition of data.

With the increasing popularity of *ecommerce*, businesses are eager to utilize any available opportunity to know more about their customers. Every data collected about an individual's transactional activities are considered mini gold mines. The underlying principles driving the ecommerce model is the notion that the better you know your customers the better you can better customize your offerings and position your products to motivate the customer to engage in business with you. The challenge however is the ownership debate about who really owns the data generated about the user. Additionally, the question remains as to what extent the data about a user can be utilized?

Furthermore, the issue of the *security* of the data stored by a user with an external provider remains a grey area particularly as it relates to the *trust* vested in these providers. This is even moreso with the recent Snowden revelations which largely diminished the level of trust associated with many top IT companies. This has ushered in an increasing awareness about the issue of the security and trust associated with the storage and collection of data from the users' perspective.

In this paper, we position *myCloud* conceptually to firstly describe the data generated by a user which is stored externally and secondly as data generated and stored about the user by

¹ SoCloMo - Social Media, Cloud Computing and Mobile

other actors, all in the digital space. From the foregoing, *actors* involved in this discussion about the creation, access and utility of myCloud can be categorized into four. These are:

- Users – the subject of the data and who can also be the data creator.
- Businesses – the facilitator for the creation and/or the creator of the data.
- Governments – the mediator, regulator and/or policy maker.
- Others – external parties, hackers, friends...

Ethical Challenges

While most of the trends highlighted above are driving forces advancing the increasing generation of myCloud data, the ethical challenges surrounding such user generated data tends to be sources of hesitation to these trends (see figure 1). Some of the ethical challenges and questions about myCloud data include:

- Ownership – Who owns the data? The subject or the facilitator of the creation of the data? (Users versus Business?)
- Privacy - Who has access to what part of myCloud? Just the user, those the user willingly shares with, the businesses, the government, or other actors?
- Utility – How is myCloud data used? For commercial purposes or non-commercial, to study the user as an individual or as part of an aggregate group?
- Data life – Can a user truly terminate the existence and use of his/her data/digital life?

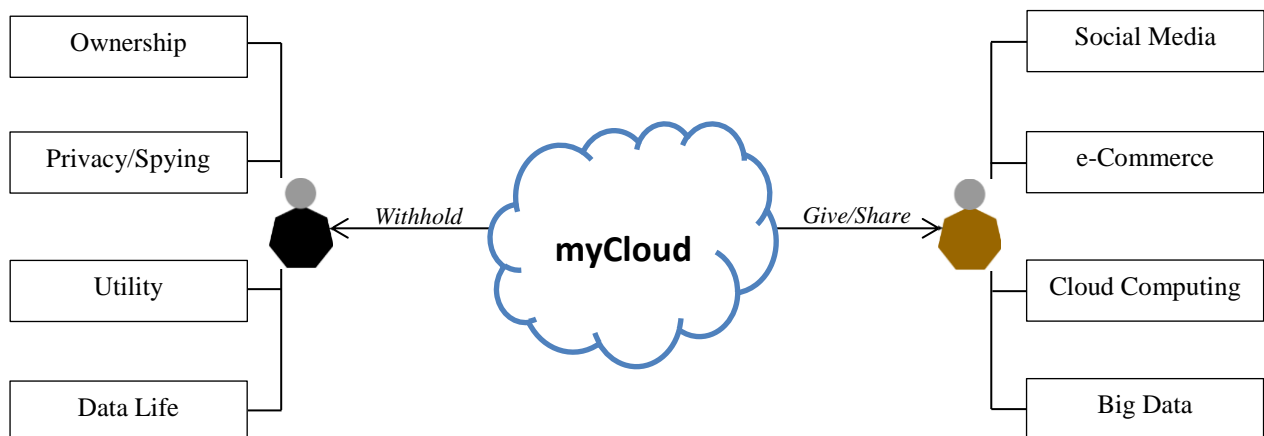


Figure 1: A framework showing trends *for* and challenges *against* the evolution of user data.

Scenario Model – myCloud User Options

Considering the unanswered questions and open ethical issues in the discussion about user data, it is logical to expect that there would be different possible stands a user can take. Due to the interlaced nature of the generation and utility of the data by both the user and the underlying technology/business, the users' eventual stand can be largely influenced. Based on the social, economic and technological relationship in the mix, four likely scenarios can be deduced. These are: the *phobia*, *transparent*, *compromise* and the *generous* scenario. These four scenarios are illustrated in four quadrants in the model in figure 2.

Phobia Scenario: This is a scenario that typifies what we call the ‘Snowden model’. In this scenario there is a complete lack of trust in most providers of facilities that enable myCloud either via social media, ecommerce, cloud computing (file storage, email...) among others. This is a possible scenario when users consider that they are either being socially manipulated

or they realize that supposed privacy agreements have not been honored either for profit or other reasons.

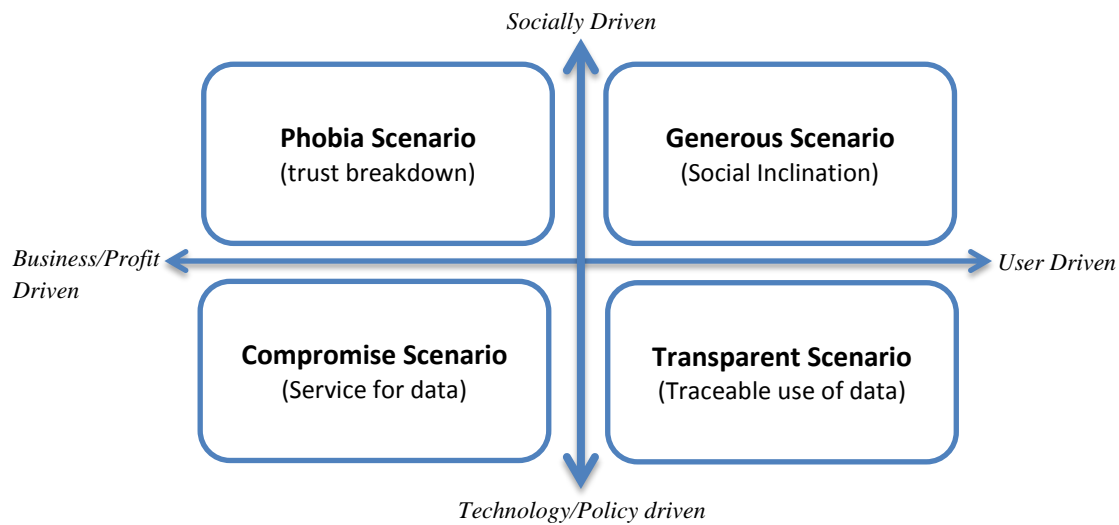


Figure 2: A scenario model of possible user options

Compromise Scenario: In this scenario which we have tagged the ‘Google model’, the myCloud setup is driven by business and technology decisions that have been laid out such that users have to provide their data to be able to utilize the service offered by the technology.

Transparent Scenario: For this scenario, the users are the key drivers. This is a sort of ‘Privacy Respect model’ where the user has the right, the power and the necessary facility to monitor the data generated about him/her and also possesses good control over the usage of data where he/she is the principal subject.

Generous Scenario: This is a scenario patterned after the ‘Facebook model’ where users although users are aware of the privacy loopholes and ethical issues, they nonetheless still willingly provide data about themselves and allow the generation and use of such data.