## **EDITORIAL**



## The Inflexibility of Technology!

Sushil<sup>1</sup>

Received: 12 July 2016/Accepted: 13 July 2016/Published online: 30 July 2016 © Global Institute of Flexible Systems Management 2016

**Abstract** The technology (information and communication technology in particular) provides increased choice and speed in dealing with systems, thereby implying more flexibility and agility. Though the developments in technology can provide more freedom of choice, somehow the technology-based tools are designed in an inflexible manner. We can have a plenty of examples of such technologybased systems and tools. Here, I would elaborate only two of them, i.e., designs of forms and bibliographic tools. The bibliographic tools either generate a second name as the first name automatically or do not recognize a publication with a single name. Today, we are living in a global world, and the technology-based tools should be designed to cater to the requirements of the global citizens and not for a class of citizens with a particular mindset. I see this more an issue of inflexibility of mindset rather than the technology. This paper is only an eye-opener about the injustice done by the developers and promoters of such technology-linked inflexibilities that, at times, may not be legally tenable.

Keywords Design · Flexibility · Inflexibility · Technology

The technology (information and communication technology in particular) provides increased choice and speed in dealing with systems, thereby implying more flexibility and agility. This is expected to make our interactions easier and

We can have a plenty of examples of such technologybased systems and tools. Here, I would elaborate only two of them, i.e., designs of forms and bibliographic tools. Let us first take the case of online forms for various uses such as university admission forms, visa forms, forms for opening bank accounts and booking air tickets. In these forms, at least three areas of inflexibility are discussed here. First, the mandatory fields; if we are not able to fill any one of these for lack of information or the information that may never be there with the person filling it, the whole process will get stuck up. The forms can be better designed to minimize the requirement of mandatory fields. I will later elaborate one of such crucial fields, i.e., 'name,' which requires minimum two mandatory filling, one for 'family name' or 'last name' and the other one for 'given name' or 'first name.' In some cases, the form may require even three names as mandatory fields.

Second area of inflexibility is generated by taking the information through 'select' well-designed options on the fields such as date, city, country, and so on. If the options given are not enough for the user, the user gets stuck up. For example, in the case of gender, normally the choices are 'male' and 'female'; now the recognition of 'third' gender is coming officially, but a lot of tools may still have

Department of Management Studies, Indian Institute of Technology Delhi, Vishwakarma Bhawan, Shaheed Jeet Singh Marg, New Delhi 110016, India





error-free in daily and work life through web-based and mobile applications. But at the same time, the technology-based systems and tools create their own bureaucracy and just cannot budge, if we do not tow their line. I see it as modern bureaucracy that is shaping our life as per the dictate of these tools, which is far more rigid than traditional bureaucracy. These tools steal a lot of our choices and mold us in a particular pattern. Though the developments in technology can provide more freedom of choice, somehow the technology-based tools are designed in an inflexible manner.

Sushil sushil@dms.iitd.ac.in; profsushil@gmail.com

only two choices. What a person with other than that should do to proceed? It would invariably be better to have an open category 'other,' which can be specified, and technology could be used to analyze such entries intelligently and create patterns to automatically generate new options in the forms to make them more dynamic and further link with dynamically evolving databases.

Thirdly, in most cases the mandatory boxes are provided to be checked for the agreement with the terms and conditions. The user, many a times, may not find the elaboration of terms and conditions or it may be in fine print. If it is so mandatory, the submission of form should assume that the user agrees with all such terms and conditions and this should be stated that way. In visa forms, many boxes are found, which one may hesitate to click without expert support, or the answer may always be 'No.' The online form filling should be made more flexible and user friendly. Is this the inflexibility of technology or the inflexibility of the designer, who failed to take advantage of the power of dynamic and intelligent technology? I personally find the pen-and-paper-based form filling to be less bureaucratic than online filling, because the physical form is handled manually and the right interpretations are made by person receiving the form or he/she may query with the person filling the form. Similarly, there is a need to go to next generation of online forms with intelligent interpretation and queries rather than holding the submission.

Now, I take a very common field of inflexibility, i.e., the 'name.' In most of the technology-enabled tools coming from the west, there is a mandatory requirement of filling minimum two names as I previously mentioned. What should be done by a person having a single name<sup>1</sup>? How should he/she move forward? I can share that in the case of US Visa they used to generate a second field for single-named persons, 'FNU,' i.e., 'first name unavailable'; so, for example, my visa would be issued as 'Sushil FNU.' In the global world, there can be persons with all kinds of names and there are millions of persons with a single name (usually the given name). The only way that remains for such persons to fill such forms is to fill the same name in both the fields, so, for example, my name would turn out to be 'Sushil Sushil.'

This is happening with bibliographic tools also that either generate a second name as the first name automatically or do not recognize a publication with a single name. This is happening in all such tools, and I am raising this issue as a common cause for all those persons with a single name before the designers of such tools. I can give some

examples that made the life funny for an academic professional like me. For example, none of my sole-authored publications appear on Google search. In the case of publications with co-author(s), my name is either dropped or merged with the co-author. Thereby, the result on citation search (on Google) for me comes out to be 'NIL.' The Google grievance officer was contacted regarding this anomaly, but it could not be helped.

Another example, I can take with publishers. I published books and articles with a leading publisher, but in the Metadata for the book or article, it has all fields except my name or will repeat the name twice. In either of the situations, this knowledge asset does not belong to me. All the publishers are using these tools, and the fate is the same.

The case is much better in the case of tools designed in India. We have passports issued with single names, bank accounts are opened with single names, and so on. Today, we are living in a global world, and the technology-based tools should be designed to cater to the requirements of the global citizens and not for a class of citizens with a particular mindset. I see this more an issue of inflexibility of mindset rather than the technology. We should make the best use of available technology to eradicate such inconsistencies as these could be legally not tenable in many cases. It may create inconvenience to the users of such technology-supported tools depriving their legal right to be known by their original name and not by the name generated by the tool. Ultimately, the tools are means and should not become ends in themselves. I urge that the issue has become alarming and should be taken up by professionals, regulators, and global forums to provide justice to a large class of global citizens to liberate them from the shackles to these technological inflexibilities. There is a need to create a movement to open the eyes of big IT companies like Google in order to avoid such erroneous projections about individuals that might deprive them their due credit in the professional world. All the people who are directly or indirectly affected by such inflexibilities of these tools should create awareness about the disservice created by such technological giants.

I also appeal the technological giants to take up the matter seriously to fulfill their social obligations rather than forcing people and the world in undesirable patterns and presenting immensely wrong projection on their sites. This paper is only an eye-opener about the injustice done by the developers and promoters of such technology-linked inflexibilities that, at times, may not be legally tenable.

<sup>&</sup>lt;sup>1</sup> There have been many mononymous persons in history and many leading personalities even today. The single names are common in many countries such as India, Indonesia, Thailand, and so on. Wikipedia.



