SOCIETY, SYSTEMS AND YOU!

This article is based on research into digital engagement.

Research revealed the mechanism of human engagement with technology and why it affects people differently.

PILES OF SAND

Twice in my life I have literally tripped over a book that was left on the floor in the library. In both cases they coincidentally ended up profoundly affected my life and my way of thinking. This post is about one of them, the book titled 'Complexity - life on the edge of chaos' by Roger Lewin which caused quite a stir when it came out.

The book is easy to read and based on sound research. Lewin takes the reader on his personal journey to make sense of complex system and what causes them to collapse. His journey covers diverse fields of study from archaeology to fledgling computer science. As it turns out many of the people that he interviewed went on to become prominent leaders in their respective fields.

In Lewin's book (pg 61) he talks to Per Bak ,a physicist. Bak explains his hypothesis that large, interactive systems naturally evolve to a critical state and that when systems reach a critical state they have one characteristic property. If you disturb or interfere with a system once then you might get a small response, if you disturb the system again then you may collapse the system completely. But if you disturb the system many times you will certainly get a range of responses.

He illustrates this by describing a *pile* of sand which represents the *system*, and the *grains* of added sand are the *perturbances* that disturb the system.

He describes how if you create a pile of sand by running a 'thin stream of sand onto a round plate you will find that a pile of sand will start building, getting higher and higher. At some point the addition of a single grain of sand will result in a small avalanche. If you continue adding sand to the pile in the same way you will find it results in multiple small avalanches. However,

at some point … the addition of one more grain of sand causes a *complete collapse of the pile of sand*.

It is the image of multiple avalanches occurring as sand is added to the pile that keeps haunting me when pollsters, educationalists, and politicians bemoan the unexpected and unpredictable occurrences in society.

I CANNOT HELP WONDERING WHY THEY ARE THEY STILL SO SURPRISED?

Society is a system, made up of systems that are in themselves made of systems. Society is therefore a product of nested systems and increasingly these systems are being affected (disturbed) by technology.

If technology is the stream of sand and society is the pile, then what we are presently witnessing in society is the multiple avalanche stage. We are seeing many apparently unexpected events like the Brexit or Trump results. This should be of great concern. Not because of the results but rather because it means that we are nearing the edge of chaos and any single additional factor could be the tipping point and cause the collapse of society as we know it.

We should not be arrogant and presume we are invincible. There are numerous examples of societal collapse in history; the Anasazi culture, the Roman Empire and the civilisation on Easter Island. While these examples can and have been explained in economic, political or ecological terms, if we step back and examine them at the more abstract level of systems then we begin to see a very clear pattern.

SO WHAT CAN WE AS INDIVIDUALS DO? – SURELY THE PROBLEM IS TOO BIG FOR ONE PERSON TO FIX?

Society is mobilizing and the people who were formerly powerless (most of us) are leveraging the technology to exert influence on the world around us. This is currently referred to as the '*long tail*'. While each individual may only be at the level of a grain of sand, their collective influence is at the Meta level of society. It is the collection of individual opinions that can now be voiced globally with limited restriction that is changing social behavior.

Like the grains of sand reaching a critical point each individual is vital

and their contribution may well be the critical addition that causes cascading reactions or even the collapse of the system.

If each individual develops their own awareness of the systems around them then they automatically contribute to the collective system awareness of the Meta-system. It is like a set of cogs, if you start turning just one small cog you can ultimately affect a large system of connected cogs.

Know who you are
Develop your system awareness
Manage your behavioral evolution

To begin developing your personal awareness of systems you need to start by understanding who you are.

You need to have a sound understanding of your unique personality as you see it. This must not be someone else's interpretation of you but rather a set of presented results that you feel applies to you at that time. There is no right or wrong interpretation only one that you feel comfortable with.

WHAT'S NEXT?

A simple quiz cannot adequately accommodate the uniqueness of each individual so we are developing an App called 'Digital Cognitive-System Solution'. This online App will allow you to accumulate your own answers over time and provide you with feedback and insights that are unique to you and your situation. This system will allow you to probe your own profile to increasingly greater depths, helping you to understand the awesomeness that is you as you define and achieve your personal goals.

We believe people will like this tool and find it a fun and constructive way to track and monitor their own progress as they shape their behaviours to achieve what they want out of life.

If you would like to be kept informed you can sign up and be notified when it is released.

MORE INFORMATION & READING

See Chris Anderson's visionary article on the Long tail https://www.wired.com/2004/10/tail/

Spencer-Scarr, D. (2014). Long Tail Leadership: Understanding Soft Power Affecting Organizations. Organizational Agility, Intelligence and Resilience. H. Rahman and R. Dinis. USA, Hershey PA, Business Science References - IGI

How we engage with technology leads some individuals to advantageous digital management but others become disadvantaged. This makes digital engagement socially significant.

Diane Spencer-Scarr

Diane is a systems specialist focusing on digital engagement and the second order cybernetic relationships that result from the intersection of human and networked technology.

This report flows from the research and work of Dr Diane Spencer-Scarr who has studied how we engage with technology and why this is changing us and our societies. There is no other issue that is more universal and transformative at every level. Some of the results have been startling and counter intuitive.

She found people who were successfully exploiting technology were doing simple things that anyone could copy. She believes these ideas should be shared. In this and other publications you will find ideas from her research that could benefit you the world in an age driven by digital technology.

Diane's background was in the creative arts, education and business before she moved to academic research. She has an impressive list of publications and a distinctive name so a quick visit to Google will reveal her work!