

# The power of technology to drive culture change and improved behaviours

In the Construction Industry





- Technology and behavioral change
- The importance of moral engagement in industry
- Lessons from other sectors

### Part Two- How?

- "Your name in lights"
- What's in it for me?
- The importance of language
- Benefits over features





## Technology and Behavioural Change

- Irrespective of the level of genius attributable to any technological change and innovation, the greatest factor in the success or failure of any new initiative is people.
- Unless we can fine-tune our understanding of human beings and what drives their behaviour, we will fail to deliver the governance and leadership required to realise the potential of the innovation itself.



## Technology and Behavioural Change

### Why should company's focus on behaviour

- Gallup Research, companies that apply the principles of behavioral economics <u>outperform their peers</u> by 85 percent in sales growth and more than 25 percent in gross margin. Nonetheless, many organizations still take a technology-first approach.
- With a deeper understanding of what makes people tick, technology and business leaders can make better technology decisions and create more meaningful digital transformations, engaging experiences, and valuable disruptions.



## Technology and Behavioural Change

- Behavioral design, which marries behavioral economics with human-centered design, explores the entire decision-making process with an eye to the factors that affect an individual's choices. As such, it helps increase the likelihood new products or technologies will be adopted. The biggest influences include:
- Self/kinship: a person's sense of self, both individually and socially.
- **Expectations:** the attitudes and presumptions people bring from prior experiences.
- Influences: the social norms and cultural forces that shape a person's beliefs.
- **Framing:** the ways in which choices are presented.
- **Time distortion:** the ways in which people overly value the present and poorly understand the future.
- Barriers and enablers: situations that hinder or empower the ability to make choices or reach goals.
- Experience: the structure and sequencing of key interactions.
- By combining the principles from behavioural economics with user insights and business context, organizations can more systematically mitigate the risks of introducing new technology products and solutions.
- Indeed, this approach has driven some of the greatest disruptions in the consumer marketplace, such as those caused by Uber and Amazon Prime. Small behavioural changes enabled by technology have contributed to the success of each.



## Moral Disengagement in Industry

- "Psychological theories of morality focus heavily on moral thought to the neglect of moral conduct."
- "People suffer from the wrongs done to them regardless of how perpetrators might justify their actions. The regulation of conduct involves much more than moral reasoning. A complete theory of moral agency must link moral knowledge and reasoning to moral action."
- In essence, the vast majority of human beings wish to view themselves as good people. The extent to which they selfregulate their behaviour however, varies depending on whether or not they activate their moral agency.
- There are many social and psychological manoeuvres by which moral self-sanctions can be disengaged from one's conduct. This "moral disengagement "can be conscious or sub-conscious.



### **Moral Justification**

- This occurs when people engage in reconstruction of the behaviour itself. People do not ordinarily engage in harmful conduct until they have justified to themselves the morality of their actions.
- In this process of moral justification, detrimental conduct is made personally and socially acceptable by portraying it as serving socially worthy or moral purposes.
- People then can act on a moral imperative and preserve their view of themselves as a moral agent while inflicting harm on others.
- This is often present in warfare.
- "Those who can make you believe absurdities can make you commit atrocities." Voltaire



### **Euphemistic Labelling**

- People think in words, vocabulary is important
- Language shapes thought patterns on which actions are based. Activities can take on very different appearances depending on what they are called
- e.g. "friendly fire" or even "practical completion"
- Not surprisingly, euphemistic language is widely used to make harmful conduct respectable and to reduce personal responsibility for it.
- People sanitise behaviour by giving it a nicer sounding label. This can be particularly dangerous.



### **Advantageous Comparison**

- "Advantageous comparison is another way of making harmful conduct look good. How behaviour is viewed is coloured by what it is compared against. By exploiting the contrast principle, reprehensible acts can be made righteous."
- E.g. "This is common practice", "You should see what some of our competitors do!",



### **Displacement of Responsibility**

- "Moral control operates most strongly when people acknowledge that they cause harm by their detrimental actions. People will behave in ways they normally repudiate if a legitimate authority accepts responsibility for the effects of their conduct"
- Milgram's Obedience Study
- Under displaced responsibility, people view their actions as stemming from the dictates of authorities rather than being personally responsible for them.
- Firms can authorise immoral actions without direct authorisation. They rarely assume this responsibility openly and in many cases remain consciously uninformed. "Get it done ASAP, we need you on another site!".



### **Diffusion of Responsibility**

- "Personal agency get obscured by diffusing personal accountability. There are several ways of doing it. A sense of responsibility can be diffused, and thereby diminished, by division of labour."
- "Group decision making is another common practice that gets otherwise considerate people to behave inhumanely. When everyone is responsible, no one really feels responsible."
- This is particularly rife in construction. The "CC everyone" culture and the very nature of subcontracting lead to a natural diffusion of responsibility.
- Technology has a huge role in mitigating the opportunity for diffusion of responsibility.



### **Disregard or Distortion of Consequences**

- When people pursue activities that are harmful to others for reasons of personal gain or social pressure, they avoid facing the harm they cause or minimize it. If minimization does not work, the evidence of harm can be discredited. As long as the harmful results of one's conduct are ignored, minimized, distorted or disbelieved, there is little reason for self-censure to be activated.
- Availability bias, "I've delivered countless buildings and I've never had a problem, etc. etc "
- This is another major issue in our industry and it speaks to the "Time Distortion" issue which we previously identified.



### **Dehumanization**

- The final set of disengagement practices operates on the recipients of detrimental acts. The strength of moral self-censure depends partly on how the perpetrators view the people they mistreat.
- If you can vilify the client, the contractor, the architect, your own boss or whomever you choose to dehumanise, it is much easier to disengage from your own moral compass.
- "The client didn't pay for quality, so I couldn't deliver a good job.", "The bloody architect designed it wrong and I'm only paid to build what he has designed!".



### Lesson's learned from other industries

- Medicine Simple checklists introduced in recent years for central line infections save thousands of lives every year in the U.S
- Health & Fitness, "the quantified self", everything is measured from food, to exercise to sleep.
- Energy and utilities We are more aware of our energy consumption and what drives it.
- Video-conferencing Skype, Web-ex, etc have changed our patterns of behaviour and how we work.
- Ecommerce, the immediacy of information and choices has driven huge changes in consumer bevaviour.

The same people you use these innovations every day are also operating in our industry. We need to connect them with the benefits of new technology without scary acronyms and TMI.



### Your Name in Lights! (the Stick)

What we have learned from deploying technology for building regulations and quality assurance.

- It's all about accountability.
- Nobody likes to have their name in red on a dashboard.
- Once you set a fair requirement, notifying everyone that you will track and report on deliverables, you can achieve small but very significant behavioural changes.
- CertCentral® manages all building defects, inspection and supervision reporting, quality benchmarking, technical submittals, design development, planning conditions, environmental certification and health & safety deliverables using this simple and clear traffic light system.
- The simpler the idea and the cleaner the interface, the more likely people are to adopt it.
- We have used data analytics based on Uniclass nomenclature to extract information and statistics relating to construction defects. This information can tell us which systems were most likely to be found defective on site and indeed which companies produced the greatest number of defects.



## What's in it for me? (the Carrot)

It's not all about making people comply. Innovations work best when there are clear benefits for all stakeholders.

- The initiation of a change effort might be relatively easy to trigger, but the maintenance and consolidation of that change is where the real challenge lies
- Consider the users fully in the system design.
- If you are asking someone to adopt a new practice, try to design the process in manner which will bring efficiencies e.g. inspection reporting app and digital checklists
- Treat people with respect and don't allow them to disengage from their moral duties. Highlight the self-valuation benefits of positive actions.
- Get them to focus on future benefits, combat the "Time Distortion" factor. E.g. "high performers will be seen on our reports to the client and the client has indicated that this would become a factor in future procurement decisions."



### The importance of language

- We have already discussed the risk of euphemistic labelling but there is another major risk arising from Digital Construction, which is that the over-use of acronyms and complex language makes it inaccessible.
- We need to hide the "BIM-ness" of it all.
- Many stakeholders do not relate to BIM or digital construction, as it often has a sense of "otherness"
- Sadly, unless this changes, the sectors of our industry which could benefit most from the features of these new technologies are the one's least likely to adopt it fully.



# Benefits over Features (Why did we do this again?)

- Behavioural change begins with procurement practices and this means communicating the implications of adoption in an effective manner.
- Too many people in our industry overwhelm clients with a "level of detail" which goes beyond useful information.
- As such, even when a client chooses to go for a BIM Level 2 project, they often don't understand why they have done so, what needs to change in order for it to work, how it should benefit the building during the project and over it's lifecycle or indeed what they are going to do with the information.
- The message needs to be tailored to highlight the real benefits, rather than listing off features.
- A better educated client can make better procurement decisions and better support the maintenance of the process throughout the project.



### Closing comments

- There is currently a huge opportunity to change and improve the culture in our industry.
- Technology has a huge role to play in this and many companies are doing incredible work in this field.
- In order for it to be as effective as it could be, we need to place as much emphasis on people as we do on the technology itself.
- As leaders in this space, there is a responsibility on everyone to make it as accessible and relatable as possible for all industry stakeholder's (especially those who feel it's not about them!)

