

# AI BASED NUDGES WOULD BE EVEN MORE POWERFUL LEVERS TO MODIFY BEHAVIOUR



#### Can't meet your NY resolutions? Al could be the answer year with nudges to achieve them.

It is another new year and time to make bright eyed plans towards a healthier, more disciplined, better informed, kinder and a greater socially responsible self. What if we had some means of keeping the enthusiasm unwavering; the right kind of push, to get us back on track and a sure-fire way of making us stick to our resolutions? This is the nature of promise, that Al based nudges bring, at least in principle.





## **Al powered Nudges**

Nudge strategies are about making small cost-effective changes in the environment, that lead to changes in behaviour. By working on how choices are presented, a nudge pushes you towards outcomes that are believed to be good, without limiting choices or infringing on your free-will to choose.

The subtle question about your willingness to donate for a social cause at the checkout line, messages about your contribution to the economic development of the nation in the weeks before tax returns deadlines, are all examples of nudges.

Al based nudges would be even more powerful levers to modify behaviour. Having learnt from an individual's prior responses, Al powered nudges would deploy the right type of influence, at the right time.

In fact, these deep learning algorithms can also learn from the big data of responses of other individuals to nudges. Al based nudges would not just be dynamically sensitive to reactions, the ability to learn from the emerging data also implies that the system would deliver more and more effective nudges over time. With Al in the play, you will not just be asked politely about your inclination to contribute to a good cause; the message, visual used, the timing and the cause itself presented to you, will be worked out specifically, to make you reach for your wallet.



### MASS DELIVERY OF INTELLIGENT NUDGES

The ability to design specific influences for individuals on a mass scale, may seem like a vision for the future, but the data and technology required is perhaps already available. Consider the following enablers for this transition:

Our digital trace, as we navigate through connected virtual spaces, is rich data with many hooks for manipulation. Even with privacy protection guardrails, there is a lot of data available for designing nudges.

Digital technology also provides a delivery mechanism, to create individualised intervention.

To this mix if we add IoT (Internet of Things), then the seamless collaboration between Al algorithms linked to different devices could take nudging to a new phase. Imagine being reminded by your voice assistant while you are driving past your favourite mall, if you would like to make the detour to buy some casual wear for your upcoming vacation.



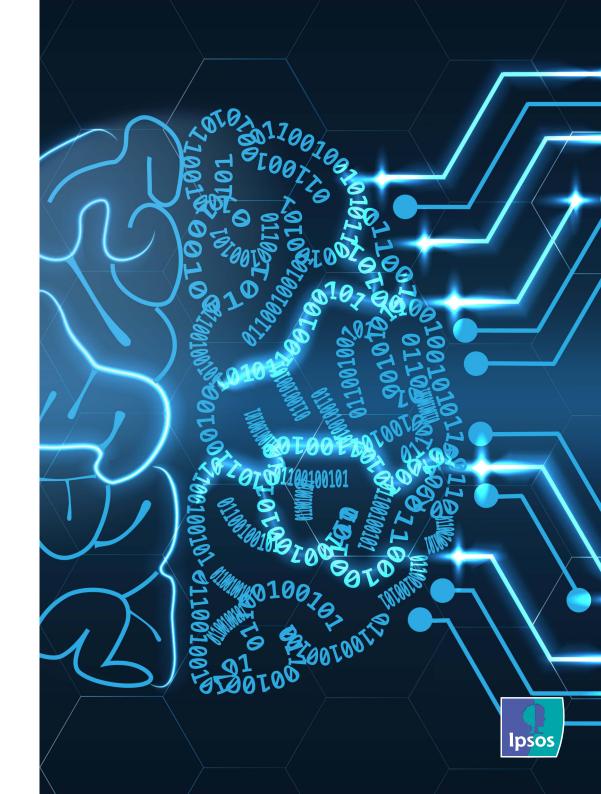
#### AI DRIVEN NUDGE - A REASON TO WORRY?

With intelligent manipulation of individual behaviour on mass scale almost a technological reality, there are bound to be concerns. There are two aspects that readily come to mind.

One, infringement of free-will: In an environment where Al driven nudges come into play, the individual may not be aware that the choice he/she makes has been pre-determined by sentient algorithms. To some this would seem like a manipulation,not just of our choice, but a manipulation of our free-will.

Two, concentration of power: Big data and deep learning capabilities, are by design not resources which will be equitably distributed. The monoliths that this combination can create, would be unprecedented in their power and influence.

Doomsday visions of sentient machines taking over humans by brute force, do seem farfetched; but becoming subjects of intelligent mass manipulation, is not a comforting thought. There is a need to think seriously about governance and control of such technology.



#### AUGMENTING PSYCHOLOGICAL CAPABILITIES

One could argue that we have always been nudged. Language was perhaps the first instrument of nudge. The printing press multiplied the influence of the written word and enabled mass transmission of powerful ideas, which changed the course of history.

One could also argue that Al driven nudges are just one more step in advancing human capabilities. If Al can be used effectively to boost physical abilities and address disabilities with bionic limbs, why not psychological capabilities?

There are many arenas where the power of Al driven nudges can improve the quality of life; be it better compliance with therapies or de-addiction programmes. It is important to recognise that with the arrival of Al driven nudges, human learning from the feedback received will not cease. One could also view Al driven nudges as a means for enhancing self-awareness.

The advent of the machine age did not stunt us physically, we simply redeployed our physical capabilities in tandem with machines to the tremendous advantage of humankind. Similarly, revolutionary transformation in computing capabilities has not blunted our mental faculties. Why then be wary of Al-powered Nudges? We can always direct Al capabilities to be nudged in the desired direction.

Picture a scenario, when new year resolutions are no longer the ineffectual rituals they are now. When each year we can set powerful transformative personal goals, and then work with Al driven nudges, to achieve them.

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