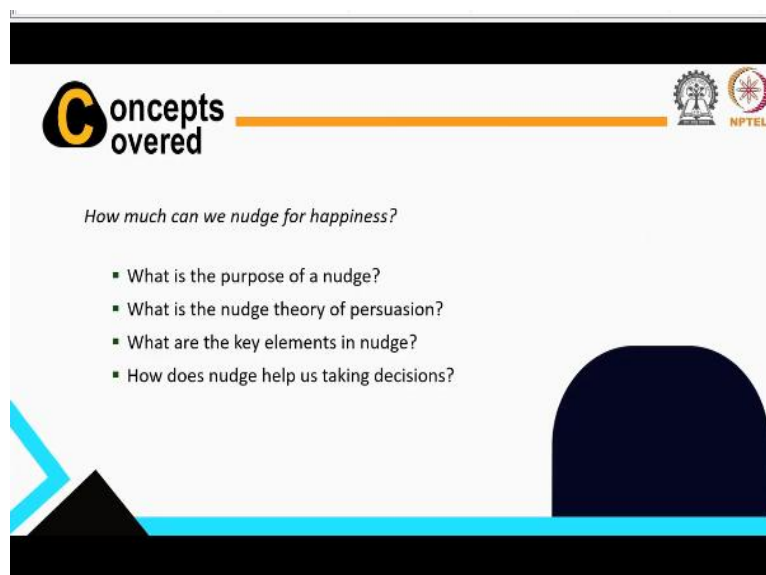


**The Science of Happiness and Wellbeing**  
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**Rekhi Centre of Excellence for the Science of Happiness**  
**Indian Institute of Technology-Kharagpur**

**Lecture-33**  
**Nudging and Decision-Making**

This module that we are going to talk about in science of happiness and well-being is about how do we take decisions we have come to know what are the decision making difficulties that we face and what are the misconceptions. But the question is can we guide our decision making towards happiness that is an important issue. So, there has been a concept called nudge and nudge concept we will discuss that how we can nudge ourselves towards happiness.

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So, towards that effect will have this question how much can we nudge for happiness? And nudge is a concept probably is not well known. Nudge is nothing but pushing someone in a milder form towards a given direction is called nudge. You will get to know about in big detail, but before that let me tell you what would be our question that why do we nudge someone?

It is not a decision making that we force upon someone, we simply try to bring someone's attention towards a given direction is a process through which we persuade someone to take a better decision. So, it is important for us to understand what are the basic theory of persuasion, how do we persuade people and then what are the key elements in nudge and how does nudge help us in taking decision?

Can we change somebody's decision architecture by nudging them towards a given direction? And towards this end a famous theory has come up and this theory has been propagated by Richard Thaler and Richard Thaler is the person who got Nobel Prize in 2014 on this particular book what you see in this screen. So, nudge, this book is the final copy on which he got the Nobel Prize that on his idea about how human decisions can be nudged covertly subconsciously without forcing them to take an action. That is the fundamental concept behind nudge.

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**K**eywords

- Nudge
- Behavior economics
- Decision architecture
- Choice-preserving solutions
- Libertarian paternalism

Decision

Source: see list

The slide is part of an NPTEL presentation, as indicated by the logo in the top right corner. It includes a video inset of a man speaking in the bottom right corner.

Therefore we will have certain key concepts in nudge that what do we mean by nudge. Nudge is a process through which we try to take a decision through our implicit thoughts and ideas, our covert messages through our inner call and how that inner call can be influenced is actually nudge. So, it is all about decision. The very idea of nudge has come from behaviour economics.

In fact we have got two kinds of economics. One is traditional economics which suggests that we try to earn profit or we try to suppose purchase a particular stuff without adding emotion into it, but behaviour economics suggests that anything that we purchase, anything that decision we take on a commercial or a transactional basis has a component of impulse has a component of emotion.

So, behaviour economics actually deals with this concept which suggests that there is a system 1 and there is a system 2. System 1 is basically a thought process which is more impulsive,

which is more instinctive, which does not go by the logical way and it takes a decision based on how they feel and system 2 is something where people take decisions based on their logical reasoning, rational thought process and their viewpoint.

The whole idea has been extended by Daniel Kahneman on the other day we have discussed about Daniel Kahneman's theory and on that particular theory we have learned about why people take decision with their feeling components in. So, it actually changes your decision architecture. So, if the feeling component is there then your logical decision making gets changed.

Therefore we will discuss about the decision architecture and while we do that we will talk about choice preserving solutions, it means that you are never forced to take a decision, your choices are preserved, you are only implicitly given an input to take a direction and through auto suggestion you actually take a decision. The whole concept has been defined by Richard Thaler with a jargon called libertarian paternalism.

Libertarian paternalism apparently seems to be oxymoronic that is they are very incompatible. Libertarian means when you have got the freedom of choice when you enhance somebody's freedom of choice is called liberty or libertarianism, but paternalism means when you are skeptic about somebody's freedom to opt for choice like parents. I mean the paternalism is about skepticism about your freedom of choice.

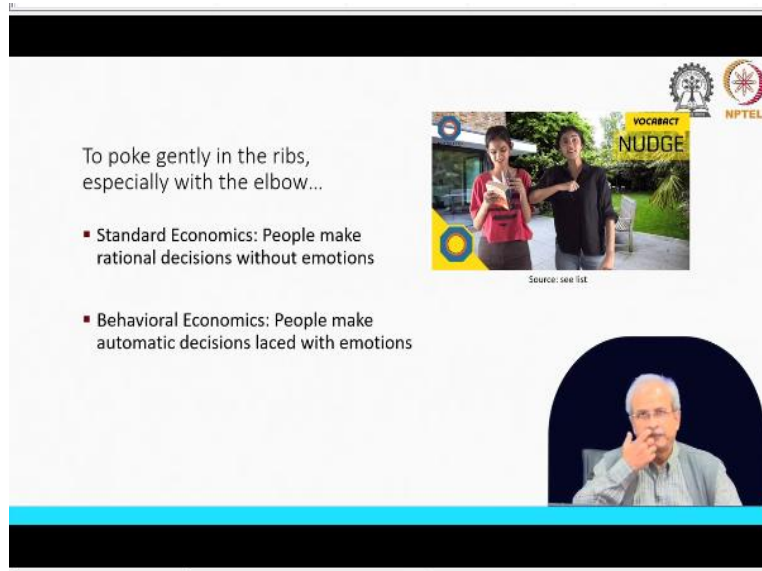
So, if two things come together with libertarianism getting the temporal priority over paternalism it means you are actually promoting both that is you are giving the freedom to take a choice at the same time you are giving certain suggestions in a given direction. So, that people can take such suggestions towards their happiness and towards the common good or betterment.

So, we will try to understand it, but when we try to understand it as I said we must understand first what is the difference between traditional economics and behaviour economics? The whole question, the whole knowledge of nudge has come from behaviour economics and that behaviour economics theory is also influenced by another Nobel laureate Daniel Kahneman as I said who got Nobel Prize in 2002.

**(Refer Slide Time: 06:52)**

To poke gently in the ribs,  
especially with the elbow...

- Standard Economics: People make rational decisions without emotions
- Behavioral Economics: People make automatic decisions laced with emotions



Source: see list

So, by nudge we mean to poke gently in the rib, especially with the elbow. That is the literature meaning. That is you simply poke someone with your elbow towards a given direction, you do not force them, you do not push them, you do not coerce them, but you simply guide their attention to a given direction. So, the whole concept has come from this tradition and behaviour economics.

The standard or traditional economics suggest that whenever people take a decision they take decision without emotion. There is no emotion into it, you have to earn profit and you do it and there is no emotion into it. If you have to purchase certain things you think that which one is the best for you in terms of money and in terms of the product. So, that's what is all about standard economics.


But when it comes to behaviour economics it suggests that people make automatic decisions less with emotions. That decision do not come through strenuous logical process because logical process is a sequential process, where you analyze lot of things together and then arrive at a decision is little strenuous process. But do we really strain our brain all the time everything that we purchase. That is probably not true.

So, the concept of behaviour economics has come and within that concept the very idea of nudge has got a very best fit into it, will try to understand it better.


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Persuasion:  
Message types

- Direct messages : *Let's plant a hope for tomorrow*
- Cryptic messages: *Use your brain & not your drain*
- Inclusive messages: *Reflect your hope; not fears*
- Nudge messages: ???



Source: 200 Bts



So, let us first try to understand that nudge if it is to influence your decision structure or decision architecture it means you are trying to persuade people to a given direction. Now if you have seen many kinds of advertisements throughout maybe in the television screen, maybe in the roadside maybe anywhere you will find that four kinds of messages are generally given.

One is the direct message; a direct message is directly telling you that you drink this particular product you will be healthy. That is a direct message; like let us plant a hope for tomorrow is a direct message, we understand what you mean to say by that, but there are certain messages which are indirect cryptic, they are actually not given a very clear notion what we mean to say by that.

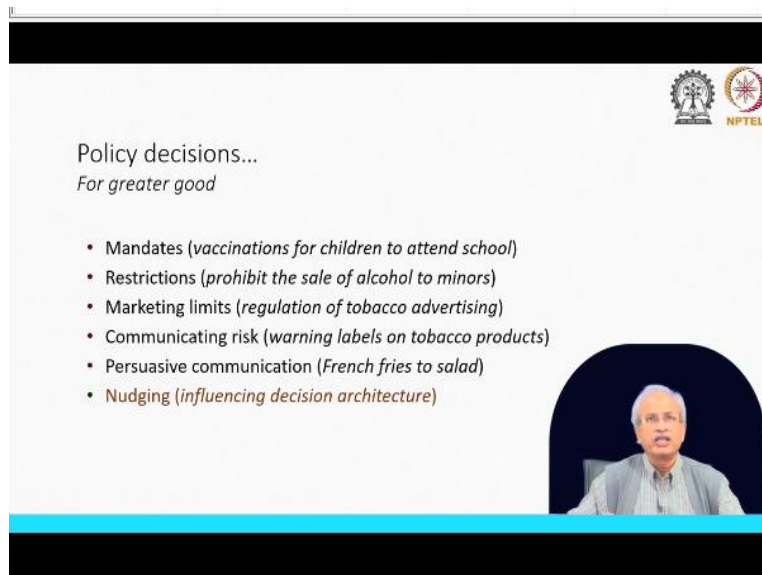
Like use your brain not your drain, means use your capabilities, not your incapacities. So, when we try to see a product if they are sending a cryptic message they are letting us know that use your brain to understand the qualities in it, not the deficiencies in it. They can cryptically present it in this way. There are certain messages which are inclusive type. That is reflect your hope not your fears.

That reflect your optimism do not be guided by your pessimism. These are the kind of messages we often see, but probably we do not see much about nudge messages. Let us see an example. Now you see a person is having two things; one is green apple, other is a donut.

Now we all know eating an apple is very healthy but having a donut will have short term benefit between long term it does not give you a very healthy habit.

So, can I nudge you towards getting an apple without coercing you, without forcing you, without restraining you not to take the donut? That is what is the concept of nudge. So, we understand now that nudge is something through which we indirectly influence people's choice behaviour towards betterment, towards common good.

**(Refer Slide Time: 11:10)**



The slide features a black header bar at the top. In the top right corner, there are two logos: the Government of India emblem and the NPTEL logo. The main content area is white and contains the text 'Policy decisions...' followed by 'For greater good' in italics. Below this, a bulleted list of policy types is shown. In the bottom right corner, there is a circular video inset showing a man with grey hair and a beard, wearing a light blue shirt, speaking. A thick blue horizontal bar is at the bottom of the slide.

Policy decisions...  
*For greater good*

- Mandates (*vaccinations for children to attend school*)
- Restrictions (*prohibit the sale of alcohol to minors*)
- Marketing limits (*regulation of tobacco advertising*)
- Communicating risk (*warning labels on tobacco products*)
- Persuasive communication (*French fries to salad*)
- Nudging (*influencing decision architecture*)

So, when such decisions are made at the higher level because of greater good so many policy decisions are taken, we will try to understand how nudge helps in taking such kind of policy decisions. Now we know there are mandates; mandates means if you do not have vaccination you cannot attend the school, I am not talking about the pandemic related vaccinations, the early childhood vaccinations.

If you do not have a vaccine card you cannot attend school, you are mandating that in order to come to school you have to have that. So, that people are safe, you can impose a restriction that you cannot sell alcohol; you cannot show any kind of image or advertisement of alcohol in the TVs. This kind of restrictions can be possible, you cannot sell or you cannot have a alcoholic beverage product within 500 meters of a educational institutions

Those are restrictions. You can have marketing limits that you cannot advertise a tobacco product, even you cannot show smoking in a movie, you can have risk communication which we see in the tobacco product that chewing tobacco will cause you cancer or warning levels in the tobacco products like smoking cigarette will have lung cancer, you can communicate risk in order to bring common good.

You can have persuasive communication, look take salad not French fries, you can persuade them, but if you do not do any one of these because they are forcing people to actually take a particular decision we are not allowing them the freedom of choice. Nudge is something where you are guiding them towards a better good or a common good or a greater good without taking their options away. Therefore it is important to understand what nudge is all about.

**(Refer Slide Time: 13:22)**

The slide is titled "Changing human behavior..." and features two bullet points. The first bullet point states: "Small & insignificant details can have major impact on people's behavior". The second bullet point states: "Power of these small details comes from focusing the attention of users to a given direction". Below the bullet points, an example is provided: "Example: *etching a barely noticeable house-fly into urinal to reduce spillage*". To the right of the text, there is an image of a urinal with a red arrow pointing to a small house fly etched into its surface. A small inset image shows a book cover titled "Nudge" with a yellow elephant. In the top right corner, there are logos for the Indian government and NPTEL. In the bottom right corner, there is a video feed of a man with grey hair and glasses, wearing a light blue shirt, speaking.

Changing human behavior...

- Small & insignificant details can have major impact on people's behavior
- Power of these small details comes from focusing the attention of users to a given direction

Example:  
*etching a barely noticeable house-fly into urinal to reduce spillage*


So, nudge is something which is small insignificant detail that can impact people's behaviour in a very big manner and the power of this small details come from focusing the attention towards a given direction; I will give somewhat uncanny example but that is the example has been given is like etching a barely noticeable house fly into the urinal. Now this example has been given in the book of nudge, where people have a tendency not to attend while they actually urinate.

So, there are a lot of spillages and there are a lot of sweepers work, Amsterdam in Holland in Europe they introduce this kind of nudge and found that by having a house fly in the urinal it

has reduced this spillage to over 80 percent. So, today when it started actually in Amsterdam entire Europe and North America wherever you go you will find that the public urinals are having such kind of house fly itch in the urinals.


So, this is an example of small and insignificant detail. So, having a house fly etched in the urinal is a small thing is an insignificant thing, is a small detail but our attention gets focused not in the urinal, our attention gets focused on the house fly which is etched in the urinal. That is the point we are talking to trying to mention in changing human behaviour.

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Nudge

- It is about steering people towards better decisions, but leaving them free to choose
- It influences behavior by indirect suggestion to a given direction without removing option
- Low-cost, behaviorally-informed, choice-preserving solutions
- Libertarian paternalism - influencing decisions while respecting freedom of choice



Source: see list



We can have more examples for that but before that we must also understand what are the theoretical points of views. So, the major point is that is about steering people to have better decisions, but at the same time the freedom to choose is left open, you do not remove the option, you simply give indirect suggestion and by indirect suggestion you actually try to influence people's behaviour.


This does not cost much; for example having a housefly etched in the original does not cost much, but it is behaviourally informed, it is a choice preserving solution. So, the concept of libertarianism and paternalism has come you are influencing somebody's decision by preserving their choice, architecture but at the same time you are actually guiding them towards a given direction.



So, the photograph that you see is of who is the best player in the world? Ronaldo or Messi. Now in UK they have started having these boxes. Now UK found that a lot of people are actually throwing cigarette butts here and there how to reduce that kind of nuisance? So, they thought if people are guided towards a given direction by giving their option because everybody has their own choice who is a better footballer? Ronaldo or Messi.

So, if they have to actually vote with their butt they will put the butt inside the box and rather than throwing it in the road or dustbin. So, by doing that they could found that over 70 percent of the behaviour which are unclean otherwise because they throw here and there could actually be cleaned in that process. So, it is a nudge and it is a policy decision towards common good. And while doing that they did not force anybody to take any action in a given direction; yet the job is done.



**(Refer Slide Time: 17:05)**



How are the choices made in nudges?

- ...by subconscious logic, based on 'inner call'
- ...by going beyond linear thought processes & using gut reaction, feeling & instinct, covert knowledge
- ...by viewing relationships & connections automatically / reflexively

Source: see list



So, question is how are these choices made in nudges? It is done through the inner call, you are not forced to, you do not you go by your gut reaction you are feeling, your instinct, your covert knowledge, you understand that well something has to be done in a given direction when nobody is trying to force you, because we know that any instruction always comes with the resistance.


If you are instructing people to do something there would be an automatic resistance, if you say that do not spoil this floor people will have a tendency to spoil the floor, in order to avoid such kind of tendencies these nudge choices have come up. The photographs that you see is

about people are using papers for in the washroom to wash their hands. Now the first photograph is something like Africa or maybe it is South America.

They it is all green in the first. In the following you find that the greenery has come down and they did the last you see in today's environment it is all dark, it means more and more green areas deforestation is taking place because papers are made through certain tissues derived from the plants only; as long the plants are not cut or as long such tissues are not derived from the plant the papers cannot be made.


Therefore the question is we are trying to direct their attention towards this side in South America that more and more deforestation is taking place because we are wasting more and more paper. If we do not waste paper there would be more and more forest. So, it is an implicit in knowledge and the inner call that we are trying to provoke in the people who are using such papers for nothing at times.

**(Refer Slide Time: 19:27)**



When do we need a nudge?

- When choice & consequences are separated in time ... 'purchase now – pay later'
- When difficult decisions are to make without the opportunity to experience
- When decisions do not provide feedback
- When choices will end up affecting life




So, the question is when do we need a nudge? Actually when choice and consequences are separated in time that like purchase now, pay later. You can be nudged easily. If I say you can get a car at a 0 payment but you can pay it later. We know if we pay it later through installments we will be paying at least one third of the cost much more. But at the moment you will get a short-term benefit you will get a car.

So, purchase now, pay later under such conditions you can nudge people's mind. When difficult decisions are to make without opportunity to experience you will be saying that well 50 years down the line you are going to get some benefit. So, that opportunity you will not get 50 years down the line. So, you can influence them what you can actually get from them in terms of having some commercial advantage.

When decisions do not provide good feedback, when choices will end up will affecting your life; under such conditions you become suggestible. If you are not suggestible then it is difficult to nudge your mind. So, suggestibility is a very important factor before nudge and everything that we do; we do not do with lot of confidence as well and everything that we do not with rational and logical processing at the same time. Therefore it is very important for us to understand that how we can exploit people's suggestibility.


**(Refer Slide Time: 21:01)**



Nudging human mind for organ donations...

*Waiting list is growing by 12% per year; the primary hurdle is to get consent from family members of the brain-dead*

- **Explicit consent:** people have to take concrete steps to demonstrate that they want to become donors
- **Routine removal:** state holds the right to remove organs of brain-dead persons
- **Mandated choice:** Checking a box in driver's license, yes or no with no choice for like 'unsure'
- **Presumed consent:** citizens will be presumed to be consenting donors, unless they indicate unwillingness



Likewise you see how in UK people have been nudging human mind for organ donations. Now we all know organ donations are actually the waiting list is growing 12 percent per year and we cannot wait for the brain dead people and every time what happens as long the family member does not agree you cannot actually extract the organs. So, what government has done?

There are four ways they thought that organ donation can be expended. The first way is explicit consent that as long the family members do not give the consent you cannot extract the organ. So, it does not work because people generally have to take a very concrete step for

that, you have to go, fill up your form, you have to register yourself and you have to tell why you would like to give so many things.

So, explicit consent is one thing which is not working. There could be a routine removal that state holds the right to remove organs of the brain dead persons. That also does not work because there are lot of public sentiment attached to it, you can have a mandated choice that is if you want to get a driving license you need to write that in case you are brain dead then your organs could be donated that you have to mention it either yes or no.

If it is yes then you would be given a driving license, if it is no then you have to go for extra training you have to pay more license fee for that, but there is nothing like unsure. The nudge comes in presumed concept. So, the UK government the citizen should be presumed to be consenting donors if you do not want to donate the brain dead person's organ you have to register yourself and you have to actually do all this exercise to indicate your unwillingness.

So, it is the people's inertia to actually take some concrete steps and do it. Therefore in explicit consent they do not do it because they have to do it well ahead of time. In fact even if they are not brain dead they have to do it with lot of juggleries, but in presumed consent it is not like that. So, here the nudge is on presumed consent.

**(Refer Slide Time: 23:29)**

The slide is titled "Nudging human mind for health..." and features a list of two health-related nudges:

- Commitment for health-check by automatic credit-card deductions
- Motorcycle helmet wear be made optional by asking people 'not willing' to apply for special license

To the right of the text is a photograph of a staircase with green arrows pointing upwards on each step. The arrows are labeled "1. COMMITMENT", "2. CREDIT CARD", and "3. CREDIT CARD". Below the staircase image, it says "Source: see list".

In the bottom right corner, there is a small video inset showing a man with glasses speaking. The NPTEL logo is visible in the top right corner of the slide.

Likewise you can nudge human mind for health; the photograph that you see in the staircases lot of people use accelerator or the lift in order to go up, but when the staircases are marked

that if you actually climb 3 stairs you can lose one calorie. If you get up to 10 stairs then you will lose two calorie. If such kinds of feedbacks are given; people will have a tendency to go by the stairs.

So, likewise people can have commitment towards health check through automatic credit card deductions, like motorcycle helmet-wear. Motorcycle helmet one may be made optional, if you do not want to have your helmet you can do that but you have to apply for a special license, you have to pay extra fee for that. So, under such conditions people's mind can be nudged towards betterment.

**(Refer Slide Time: 24:29)**

The slide is titled "Loss aversion" and features two logos in the top right corner: the Indian government emblem and the NPTEL logo. It contains two bullet points: "• **Loss aversion** is the tendency to prefer avoiding losses to acquiring equivalent gains." and "• **'losses** loom larger than gains" (Kahneman & Tversky, 1979). Below the text are two bar charts. The first chart, labeled "Pain from loss" and "Pleasure from gain", shows a pink bar for pain and a green bar for pleasure, with the pain bar being significantly taller. The second chart, labeled "GAIN 5\$" and "SAVE 5\$", shows two bars of equal height, with the "GAIN" bar in red and the "SAVE" bar in green. A small video inset of a man is visible in the bottom right corner of the slide.

Loss aversion

- **Loss aversion** is the tendency to prefer avoiding losses to acquiring equivalent gains.
- **"losses** loom larger than gains" (Kahneman & Tversky, 1979).

Pain from loss  
Pleasure from gain  
Source: see list

GIFT voucher GAIN 5\$  
GIFT voucher SAVE 5\$  
Source: see list

The commercial players are also making use of it because we know that loss aversion is a tendency to prefer avoiding losses to acquire equivalent gains, we do not want to lose anything, we do not want to make gains but we do not want to lose anything. That is the theory of Daniel Kahneman and if you see at the picture that pain from loss is much higher as compared to pleasure from gain.


So, if you are advertising that gain 5 dollar nobody would be a taker, but if you say save 5 dollar there would be more taken because we do not want to lose anything. So, loss aversion is a tendency and that tendency human mind is nudged by the commercial exploiters as well.

**(Refer Slide Time: 25:20)**

NPTEL


## Goal gradient

Goal motivation changes as people move closer to target. The closer you get to the target, the greater the motivation is to achieve it.



Source: see list

- Buy 10 coffees – get one free!
- 10 coffee punch card Average 15.6 days;
- 12 coffee punch card with 2 pre-punched Average 12.7 days



We have got more examples like goal gradient; here the goal motivation is that if you find that you are moving closer to target then probably you would be able to achieve that target much easily. If you look at these two photographs you see you buy 10 coffees get one free. Now in the first photograph you see there are 12 stamped card with 2 pre-completed stamp. That is we presume that you have already taken two cups of coffee and rest 10 you have got to take and in the other occasion nothing is pre-stamped you have to take 10 cups of coffee.

So what really happen if you advertise that buy 10 coffee and get 1 free in order to promote yourself and if you got a punch card then you actually get an average 10 coffee punch card average is 15.6 days. That is on the right side without having pre-stamped you are actually getting that only after free for 15 days, but if it is 12 coffee punch card with 2 pre-punched cards then the average is 12.

That is you can promote yourself with pre-punched card in 12 days but if they are not pre-punched then you will promote yourself only after 15 or 16 days. So, goal motivation changes is also a tendency of the people where you can nudge their mind and promote yourself. So, the nudge as a concept is being used in market theory, nudge as a concept is being used in health sectors, nudge as a concept is being used in educational sectors, financial sectors everywhere. The idea is to influence your decision structure without taking your options away.

**(Refer Slide Time: 27:22)**

The slide features a black header bar at the top. On the left, the word 'CONCLUSION' is written in blue, bold, sans-serif capital letters. On the right, there are two circular logos: the first is the Indian National Emblem, and the second is the NPTEL logo. Below the title, there is a list of two bullet points. In the bottom right corner, there is a small, semi-circular inset video showing a man with white hair and glasses, wearing a light blue shirt, speaking. The slide has a white background and a black footer bar.

## CONCLUSION

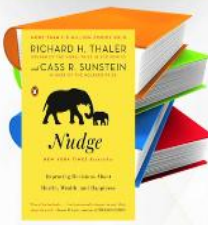
- Small & insignificant details can have major impact on people's behavior
- Power of these small details comes from focusing the attention of users in each direction

So, finally what we understand today that small and insignificant detail can have major impact in people's behaviour, you can impact people's behaviour not always in a very large way in a very detailed manner and the power of these small details come from focusing the attention of the user in a given direction. So, how nudges are to be created? It needs lot of creative ideas; it requires lot of innovative thoughts in order to promote such nudge.

And during pandemic we have seen how people's mind could be nudged towards a given direction. So, that they do not sit close to each other within 6 feet. So, that they can wear their face mask and others do not get infected in the process. So, whenever people are suggestible, whenever you know people's mindset the nudge can be utilized as a tool in order to actually influence their decision structure, but only for happiness for towards greater good not for unhappiness.

**(Refer Slide Time: 28:24)**

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- <https://www.youtube.com/watch?v=UHF8agAM2uY>



So, there are books available and I would strongly recommend the book by Richard Thaler nudge. If you read that there are several ted talks also available, there are several weblinks also are available. You go through and you will find that it is an excellent way of making yourself happy. Thank you.