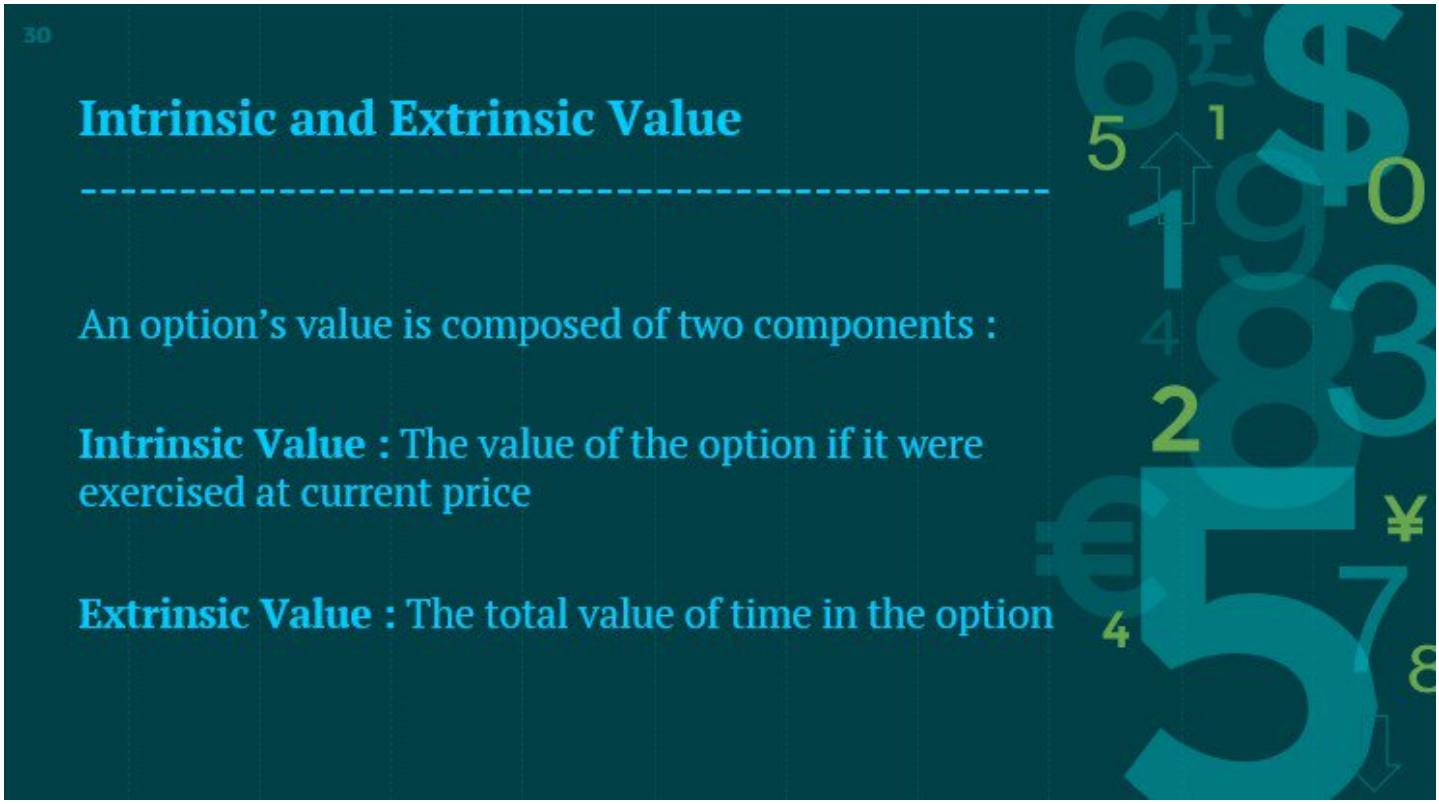
Twitter Thread by Subhadip Nandy

Subhadip Nandy
@SubhadipNandy

This friend had trouble making money in options though he was directionally right. Let us see how a basic understanding of greeks would have helped him, This thread will be about two attributes of option pricing, extrinsic value and theta

> Sir, today #niftybank was continue making new high, but 31700 CE was struggling to go up. I bought at 140, some how managed to sell it at 200. I m ok, in identifying directional edge but options behave differently.
>
> — Vikash Shrivastava\U0001f1ee\U0001f1f3 (@VikashS28) May 27, 2019

An option has two parts, intrinsic and extrinsic value. Think of a pack of Lay's potato chips. When you buy and open the pack, what you find is some chips and a lot of air. Intrinsic value is the chips, extrinsic value is air



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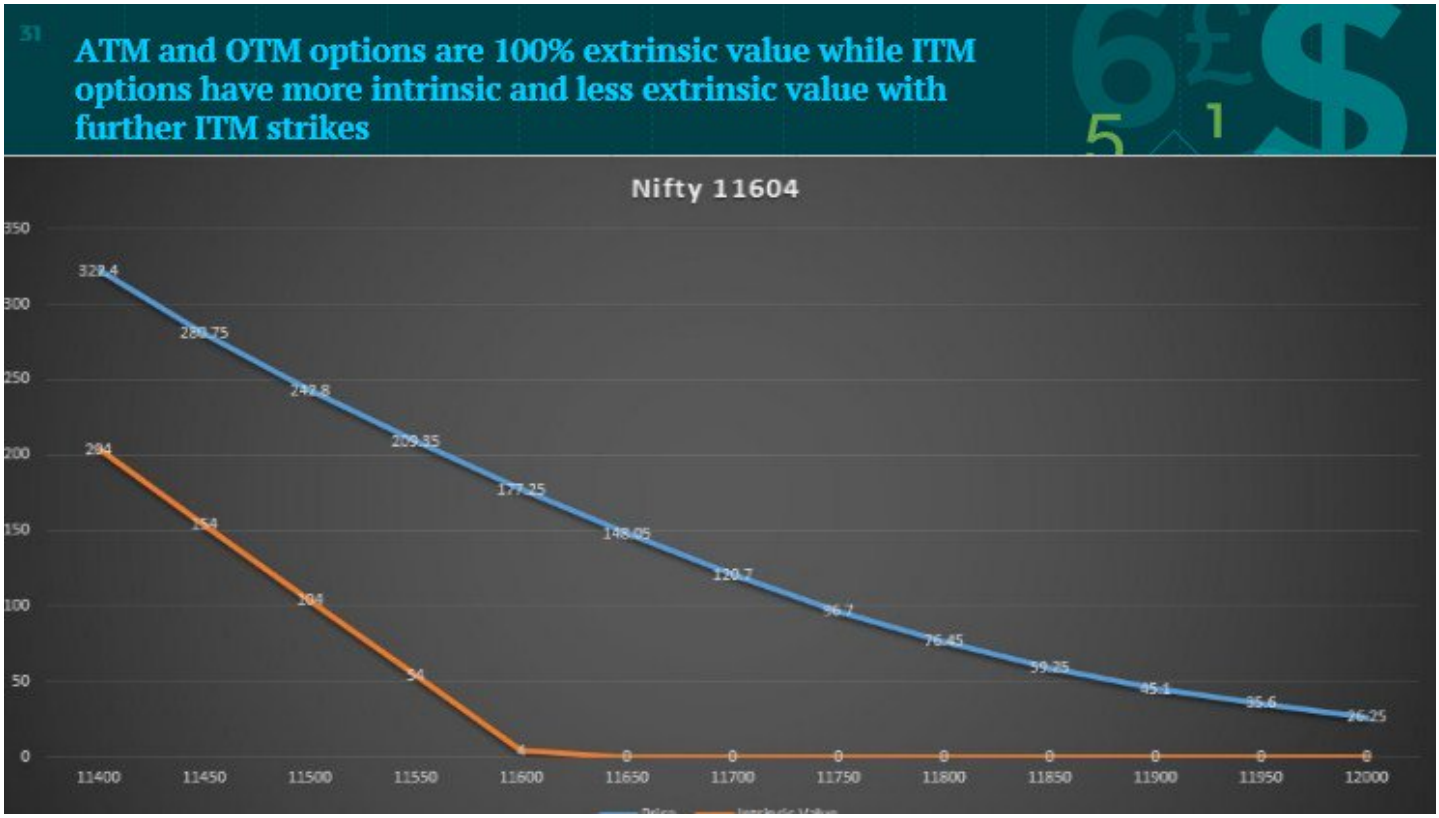

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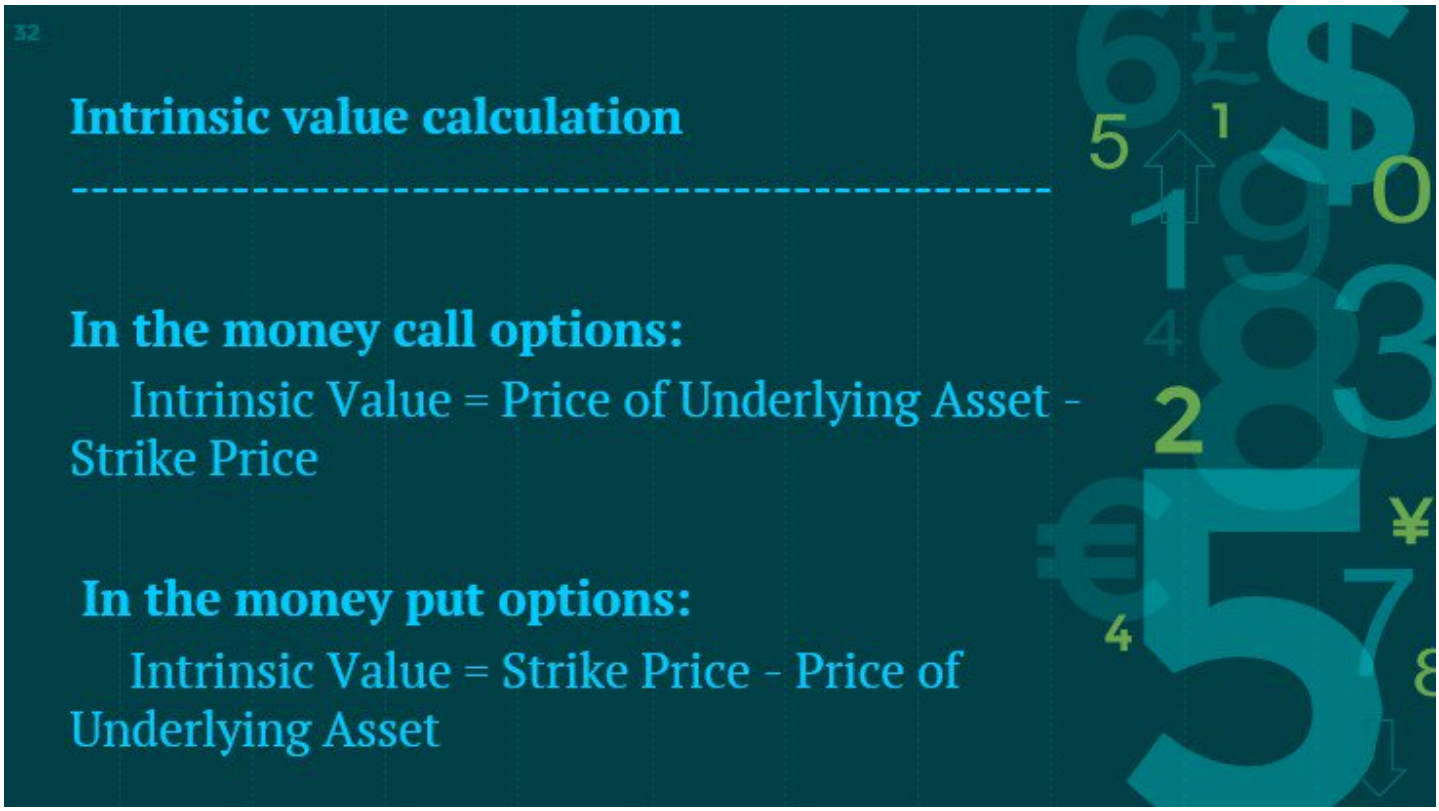

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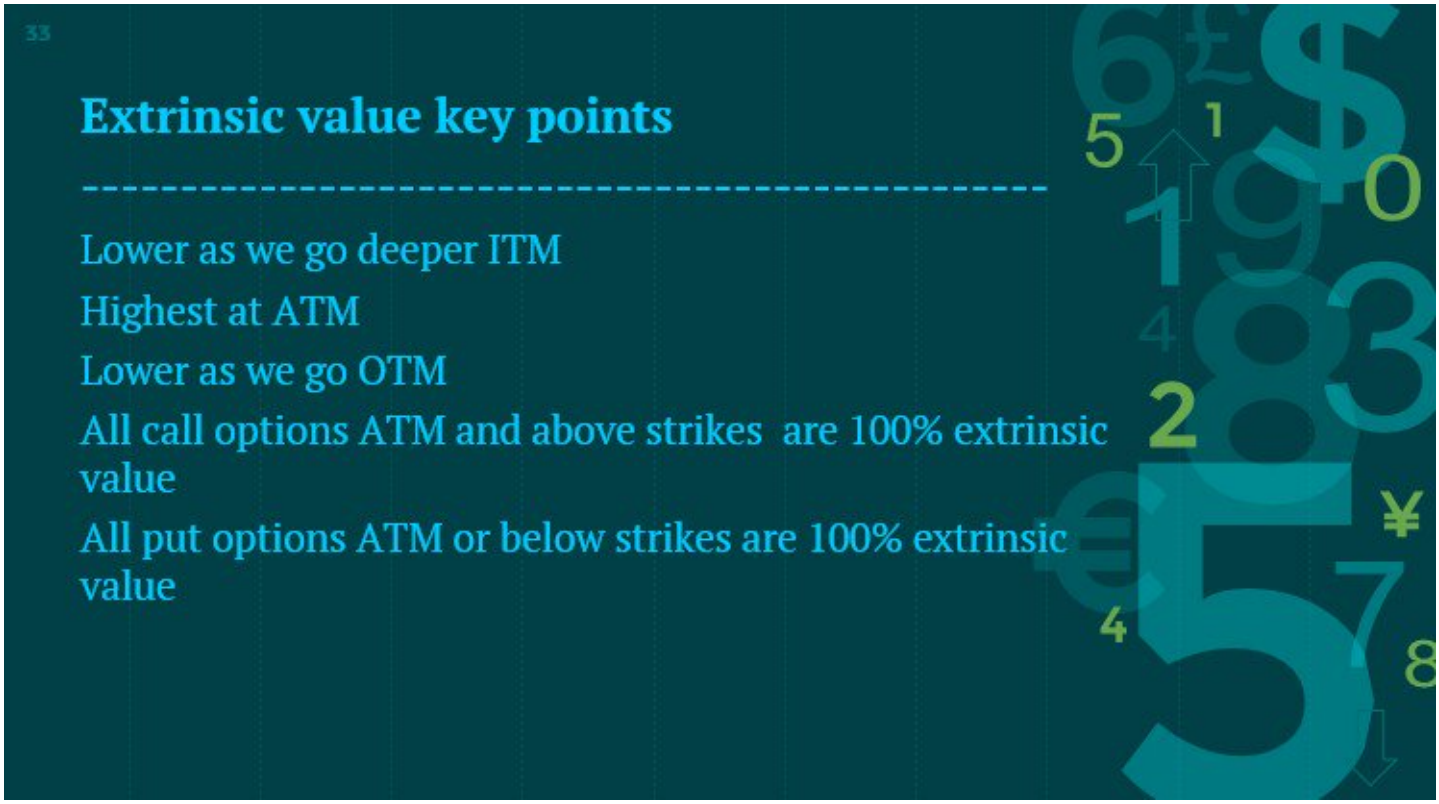
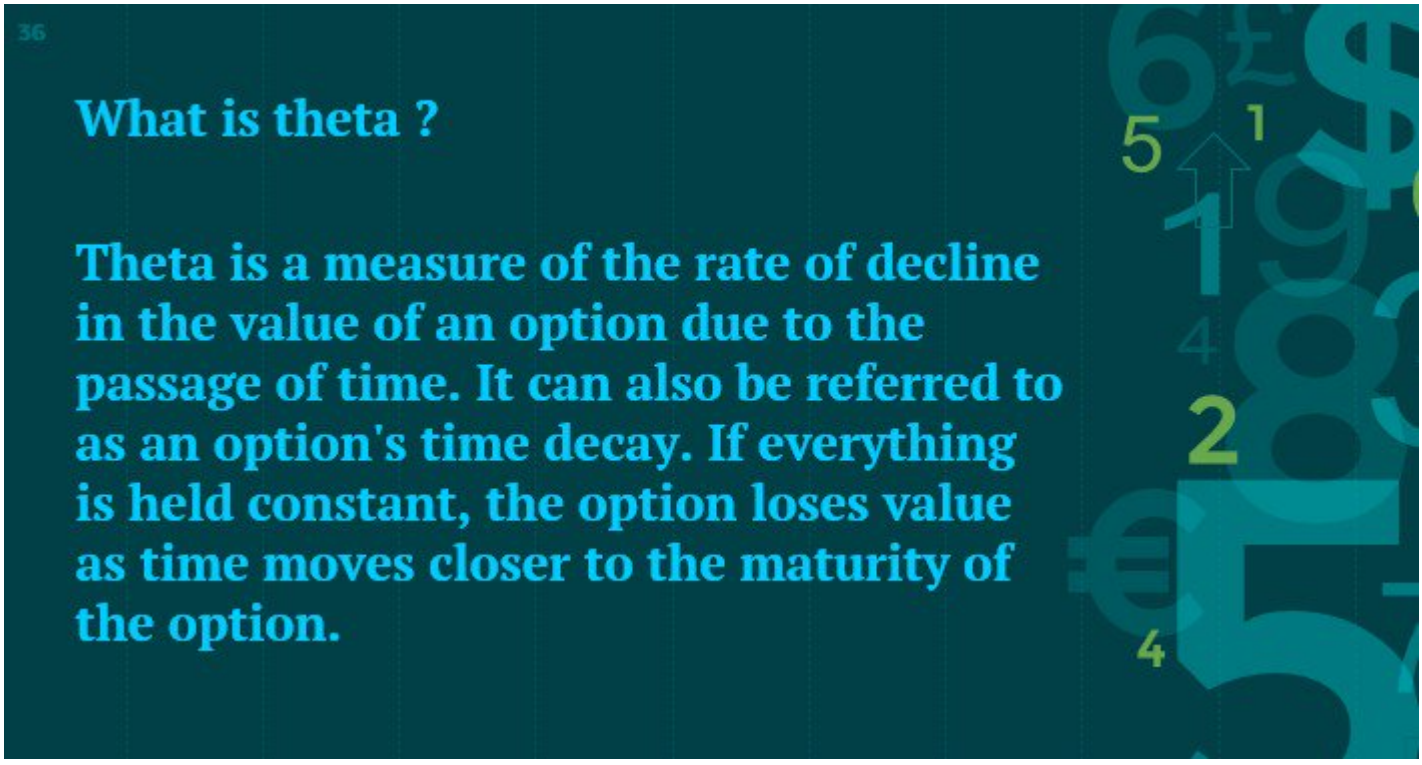


Let us stop for a second here. When our friend was buying the 31700CE, he was buying pure extrinsic value, i.e, AIR

He has a second problem, theta.

What is theta ?



Watch this example for theta. These are actual calculations of greeks

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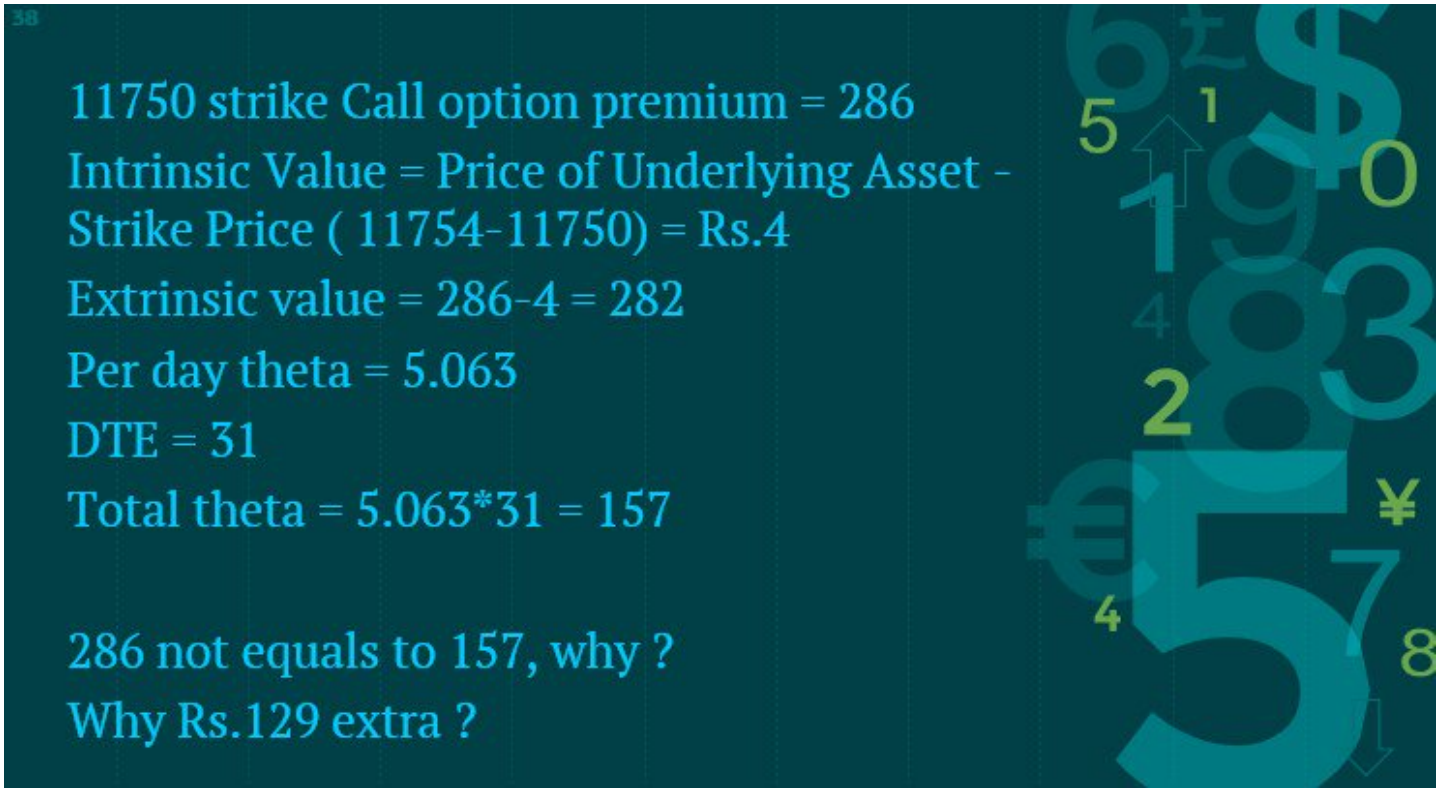

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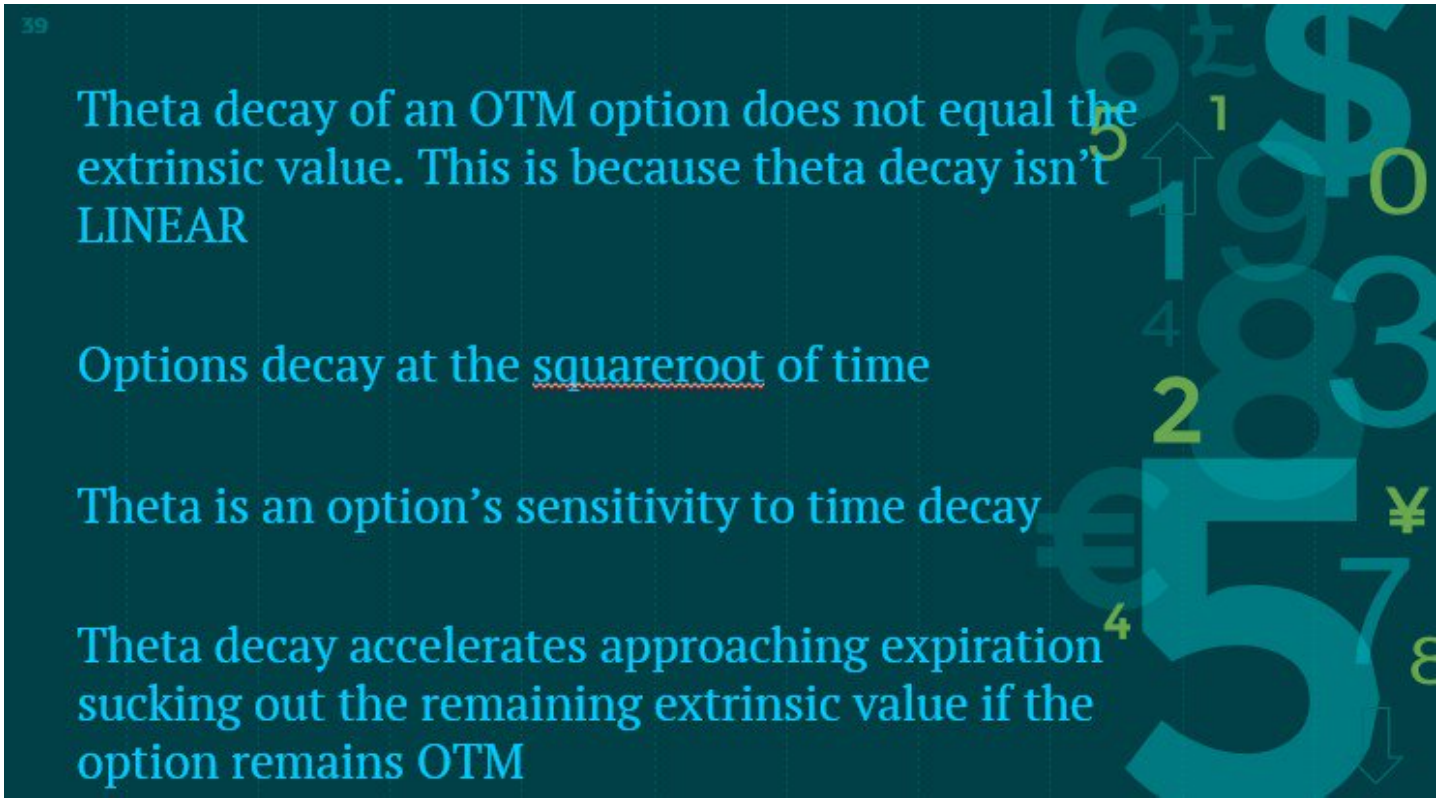

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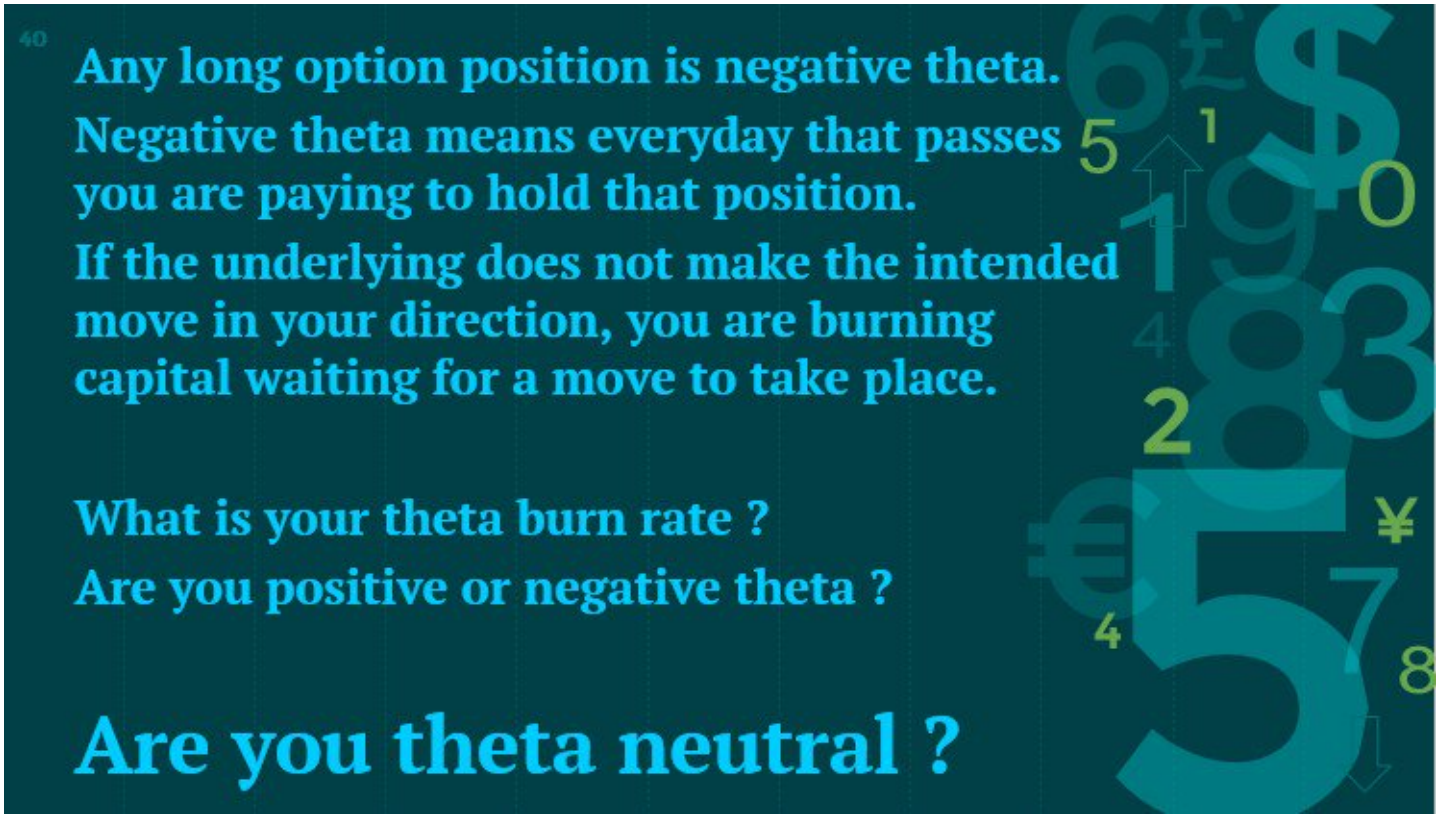

DTE = Days to expiration. Watch that the theta decay curve is not linear, it speeds up as we approach expiration

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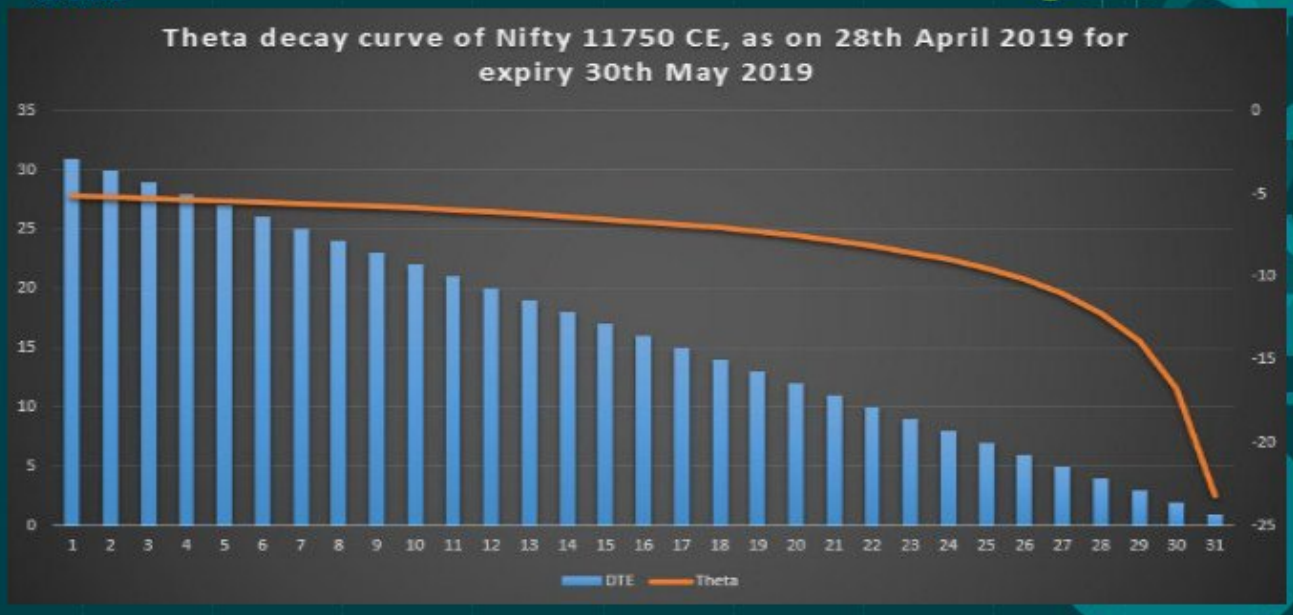
Theta decay accelerates approaching expiration sucking out the remaining extrinsic value if the option remains OTM



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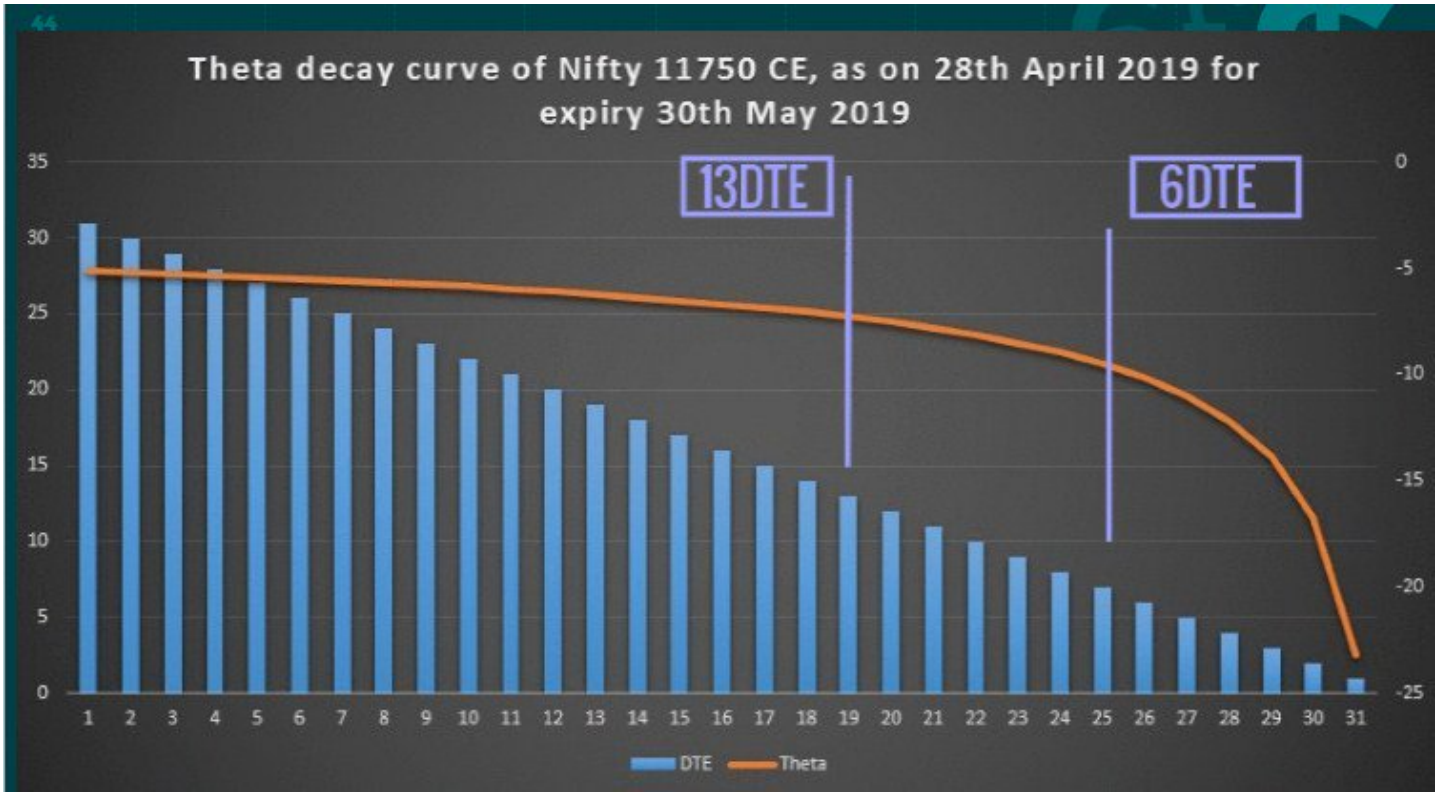
Theta decay of the 11750CE

DTE	Theta
31	-5.129
30	-5.194
29	-5.263
28	-5.335
27	-5.411
26	-5.492
25	-5.577
24	-5.668
23	-5.764
22	-5.867
21	-5.978
20	-6.096
19	-6.224
18	-6.362
17	-6.513
16	-6.677
15	-6.857
14	-7.057
13	-7.279
12	-7.529
11	-7.812
10	-8.136
9	-8.513
8	-8.959
7	-9.497
6	-10.165
5	-11.025
4	-12.189
3	-13.896
2	-16.76
1	-23.221

Theta decay starts to accelerate at 13 DTE. From 6DTE, it justs accelerates like crazy . This is true for all options



So our friend in this example was hit by a double whammy (triple actually, due to vega, but vega on a later day. Explaining vega will confuse if you are a novice).
1. He was playing pure extrinsic value
2. He has a high theta burn rate so close to expiry, the highest

Hence, his 31700 call was not moving up fast. It was continuously losing theta. Being an OTM option with pure extrinsic value, the theta burn was very high

So what is the solution ? An options buyer has to negate theta burn to a certain degree. Best way ? Should have used a bull call spread. What you lose due to theta in your bought option can be somewhat covered by theta gain in the sold option

I can or anyone knowing greeks can make a position almost theta neutral thru spreads

THIS IS HOW GREEKS HELP YOU !

I understand that when one opens an options book, the maths seems daunting. It's supposed to be, Black and Scholes won the Nobel prize for making that formula ■ To be very frank, if you ask me the total maths, I will also have trouble explaining

So, focus on the graphs. Using graphs is the easiest way to understand options. Whatever strategy you use, plot it graphically and play around with vols, DTE and direction
1. https://t.co/LpbzrgqvaH (web based)
2. https://t.co/5AHY0EmfH9 (software)

BOTH FREE, use them