Professional Implications of AI

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Outline

Professional implications of AI – what do you mean?
Trading analogy
Technical implications - how can we help ourselves here?
Will we be taken over by machines?
What do you mean?

AI – Algorithmic logic created by human (and/or by other algorithms created by humans)

Also effectively covers, Big Data, Data Science, Machine Learning etc.

Or what we commonly call Maths and Statistics

Implications – for us!
Trading saw the introduction of Algorithmic Trading, High Frequency Trading etc over the last 15 years. Traders faced similar challenges to those we are facing...

Huge increase in the amount of computer power being used, new technical aspects to get to grips with, and huge increase in number of calculations being carried out

Examples

What have traders learnt?....
Technology is always introducing new software (bells and whistles) to try and speed up the process of trading. The older I get the more I realise you should be doing the exact opposite, which is slow it down.

30/06/2018, 04:39
Technical Implications

What can we do to help ourselves here?

1) Help yourself

2) Join the ranks of Independent Examiners in the IFoA

3) And…
Technical Implications

3) We need to work together more

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- history, what is it?
- plans

Worst case it will become a cabal to look after our joint interests – best case scenario would see greater quality interaction between us, reciprocal sharing of ideas, us looking after ourselves rather than just following the IFoA. We also would become a better partner for the IFoA.
Will we be taken over by machines?

Many jobs, especially the commodity types ones, will be taken over by machines. What machines can do best is applying pre-determined logic than can be turned into an algorithm and they can do more of this and do it faster than us.

What can we do that machines can’t do?
Classically, our psyche is split into
- Nous (hearts)
- Logos (heads)
- Pyr (guts)

The strongest and most important part of our psyche is *Nous* and *Pyr*
## Humans v Machines

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<thead>
<tr>
<th></th>
<th>Humans</th>
<th>Machines</th>
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<tbody>
<tr>
<td>Nous (heart)</td>
<td>They have hearts – but usually don’t get educated how to use them</td>
<td>Don’t have hearts</td>
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<tr>
<td>Logos (head)</td>
<td>Can become good at rationalizations</td>
<td>Are much faster and more efficient at rationalizations – but need to be build by humans</td>
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<td>Pyr (guts)</td>
<td>Have a gut instinct Limited power in gut</td>
<td>Have lots of power but no gut instinct</td>
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“With regard to the superstitions of logicians, I shall never tire of emphasizing a small terse fact, which is unwillingly recognized by those credulous minds – namely, that a thought comes when “it” wishes, and not when “I’ wish; so that it is a perversion of the facts of the case to say that the subject “I” is the condition of the predicate “think”. One thinks, but that this “one” is precisely the famous old “ego”, is to put it mildly, only a supposition, an assertion, and assuredly not an “immediate certainty”.

– Nietzsche (from Beyond Good and Evil)
Applying our Psyche

“Intuition is a fragile and personal thing, and its study had been easily discouraged by those who cling strictly to scientific principles and refuse to admit that a faculty exists unless it can be exercised and its effects reproduced at will”.

– Eric Berne (Psychologist)
Unprofessionalism of Machines

If machines go wrong, that is if an algorithm goes wrong, the machines will never know – this is the essence of unprofessionalism.

Can machines ever have real humility?
Thank you for your attention

Questions very welcome?