

E.F. Schumacher  
Small is  
Beautiful  
Economics as if  
People Mattered

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*Chapter 15*

Organization and Ownership

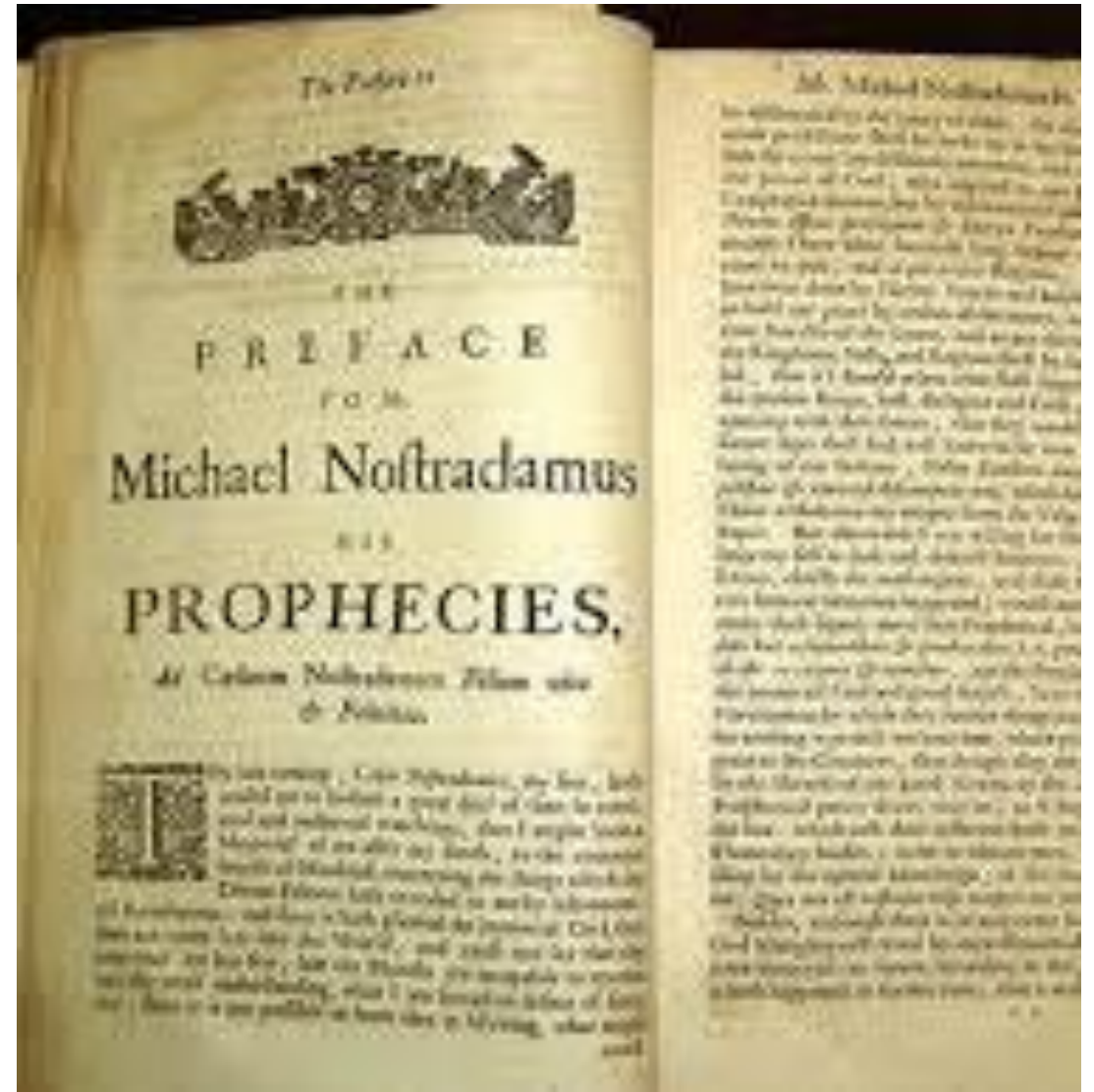
A Machine to Foretell the Future

*A Lonergan Institute Seminar*

*St Anselm's Abbey*

# From Schumacher:

*"The reason for including a discussion on predictability in this volume is that it represents one of the most important metaphysical - and therefore practical - problems with which we are faced. There have never been so many futurologists, planners, forecasters, and model-builders as there are today, and the most intriguing product of technological progress, the computer, seems to offer untold new possibilities. People talk freely about 'machines to foretell the future'. Are not such machines just what we have been waiting for? Ah men at all times have been wanting to know the future."*



Prophecies by Nostradamus

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# Predictions from Science Fiction

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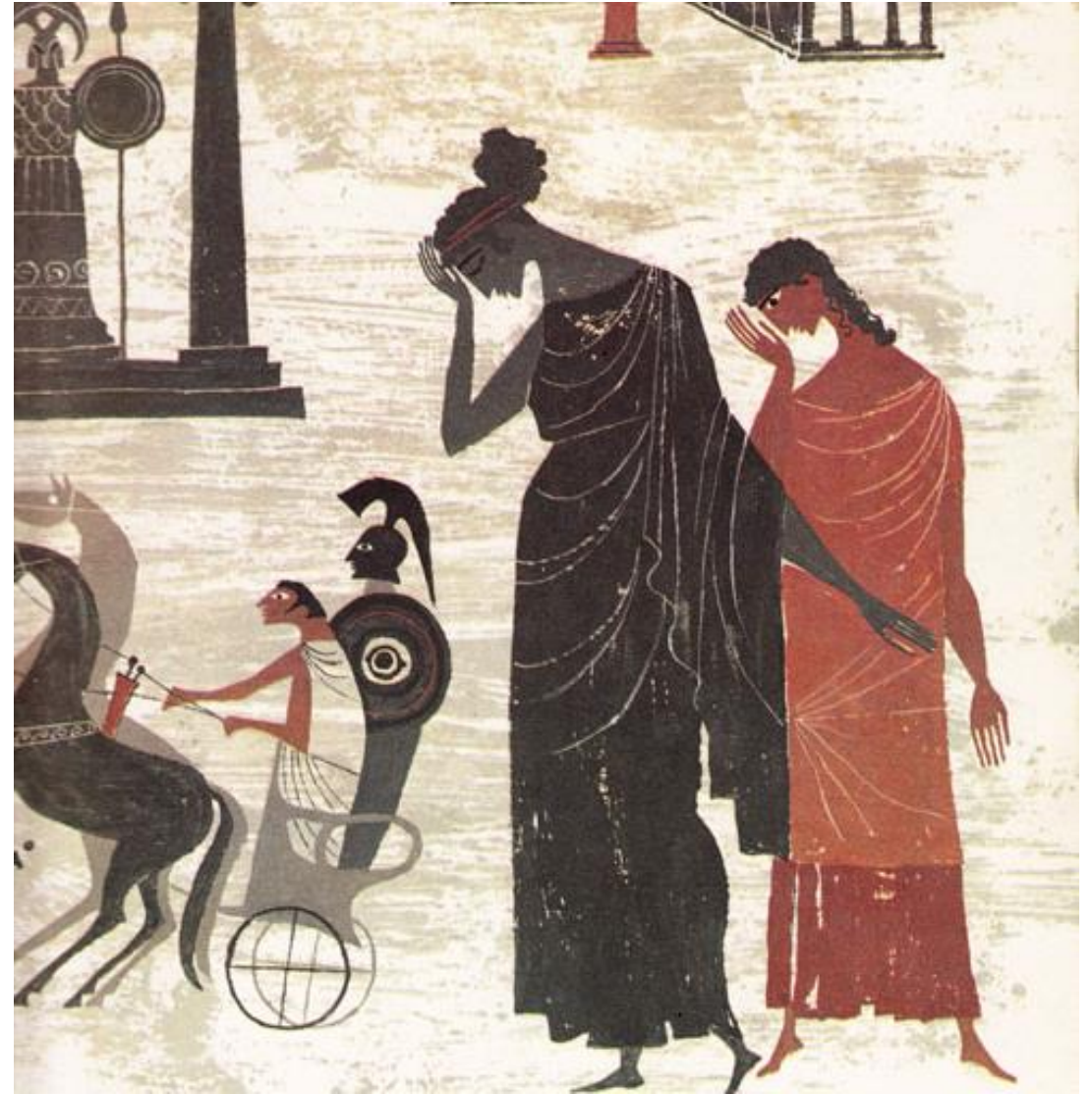
<https://www.youtube.com/watch?v=IKH0lpcc87E>



## Discussion Question: Does Human Freedom Exist?

### **From Schumacher:**

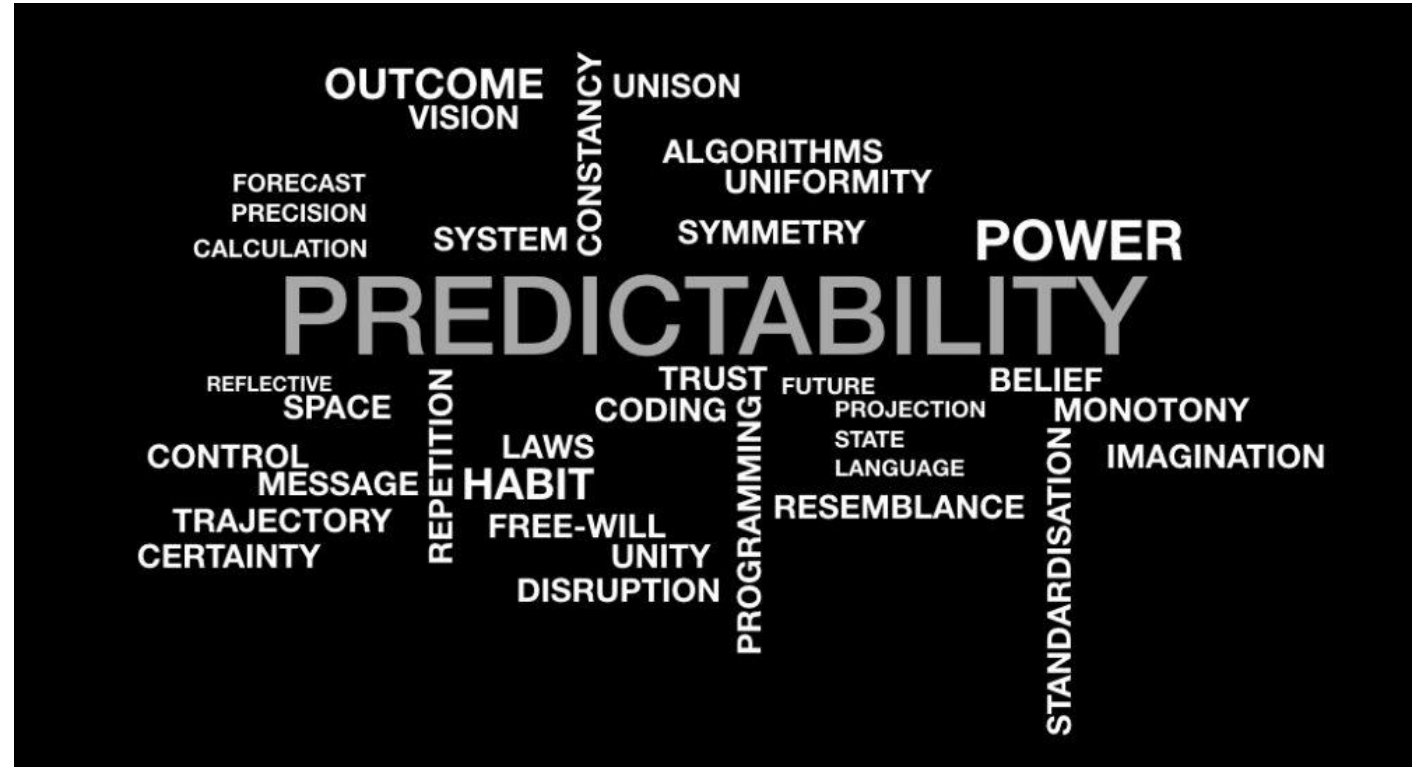
*"It might be thought that the I Ching and the oracles are metaphysical while the computer model is 'real'; but the fact remains that a machine to foretell the future is based on meta-physical assumptions of a very definite kind. It is based on the implicit assumption that 'the future is already here', that it exists already in a determinate form, so that it requires merely good instruments and good techniques to get it into focus and make it visible. The reader will agree that this is a very far reaching metaphysical assumption, in fact, a most extraordinary assumption which seems to go against all direct personal experience. It implies that human freedom does not exist or, in any case, that it cannot alter the predetermined course of events. We cannot shut our eyes to the fact, on which I have been insisting throughout this book. that such an assumption, like all metaphysical theses, whether explicit or implicit, has decisive practical consequences. The question is simply: is it true or is it untrue?"*



**Plato's Two Charioteers: Free Will, Moral Agency, and How to Negotiate Our Capacities for Good and Evil  
Illustration from Alice and Martin Provensen's vintage adaptation of Homer's Iliad and Odyssey**

## From Schumacher:

“Predictability, let us now return to our main subject - predictability. Is prediction or forecasting - the two terms would seem to be interchangeable - possible at all? The future does not exist; how could there be knowledge about something non-existent? This question is only too well justified. In the strict sense of the word, knowledge can only be about the past. The future is always in the making, but it is being made largely out of existing material, about which a great deal can be known. The future, there, is largely predictable, if we have solid and extensive knowledge of the past.”



# From Schumacher:

*"We can therefore distinguish as follows:*

*(a) Full predictability (in principle) exists only in the absence of human freedom, i.e. in 'sub-human' nature. The limitations of predictability are purely limitations of knowledge and technique.*

*(b) Relative predictability exists with regard to the behavior pattern of very large numbers of people doing 'normal' things (routine).*

*(c) Relatively full predictability exists with regard to human' actions controlled by a plan which eliminates freedom, e.g. railway timetable.*

*(d) Individual decisions by individuals are in principle unpredictable. "*



**Protestor defies tank to assert right to free will in Tiananmen Square**

# From Schumacher:

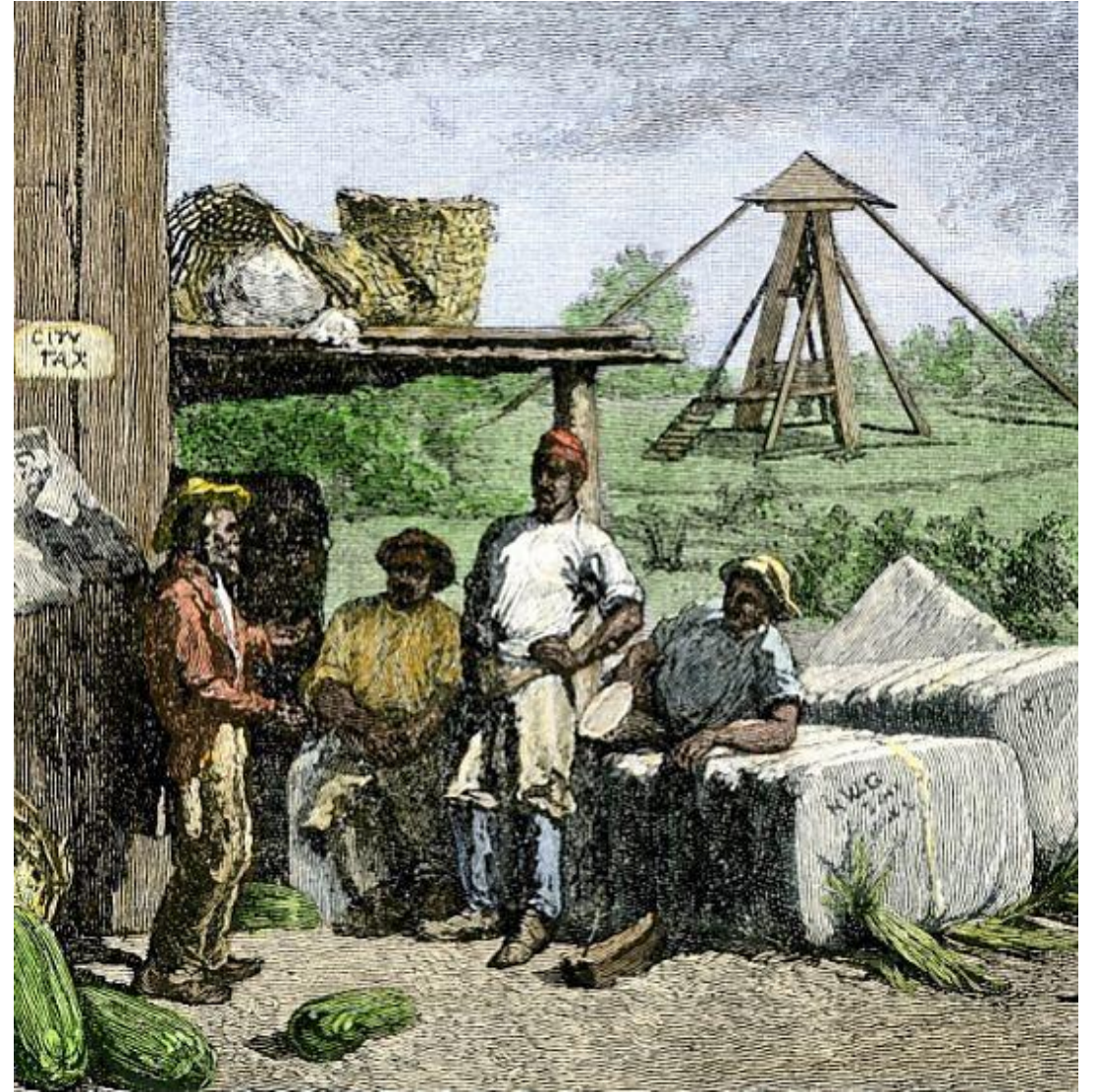
*"I have already insisted that a plan is something essentially different from a forecast. It is a statement of intention, of what the planners - or their masters - intend to do. Planning (as I suggest the term should be used) is inseparable from power. It is natural and indeed desirable that everybody wielding any kind of power should have some sort of a plan that they should use power deliberately and consciously, looking some distance ahead in time. In doing so he must consider what other people are likely to do: in other words, he cannot plan sensibly without doing a certain amount of forecasting."*



Stalin and the Communists and the use of the five-year plan

# From Schumacher:

- “What, then, could be the meaning of a 'national plan' in a free society? It cannot mean the concentration of all power at one point, because that would imply the end of freedom: genuine planning is co-extensive with power. It seems to me that the only intelligible meaning of the words 'a national plan' in a free society would be the fullest possible statement of intentions by all people wielding substantial economic power, such statements being collected and collated by some central agency.”*



*Slaves planning their escape to freedom. Woodcut, 19<sup>th</sup> Century.*



From Schumacher:

*"In all this, the most essential need is a purely intellectual one: a clear appreciation of the difference between a forecast and a feasibility study. It is surely a sign of statistical illiteracy to confuse the two. A long-term forecast, as I said, is presumptuous; but a long-term feasibility study is a piece of humble and unpretentious work which we shall neglect at our peril."*

# Feasibility Study

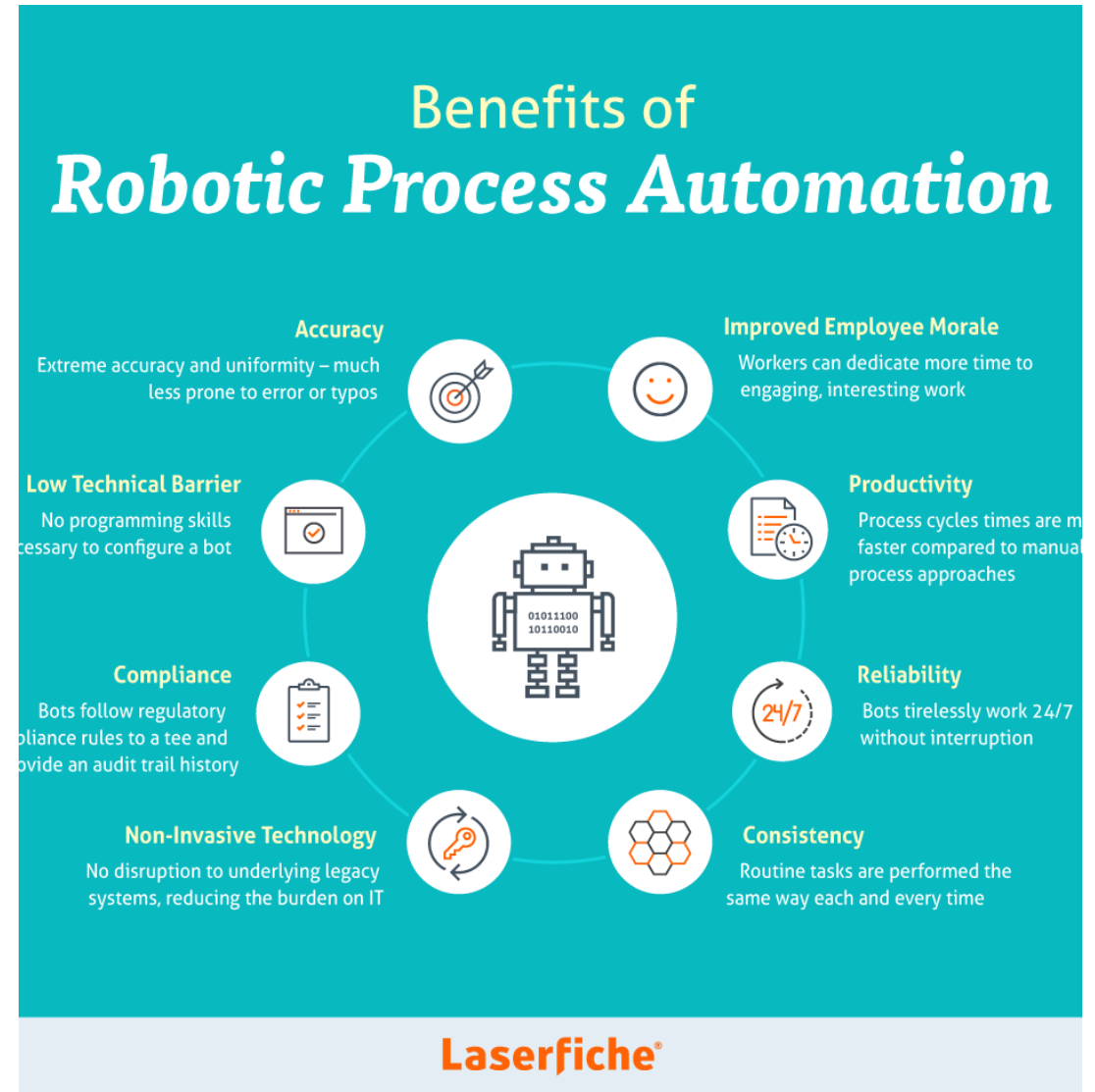
***An analysis of a proposed project to determine whether it is feasible and should go ahead.***

## Feasibility Studies



# From Schumacher:

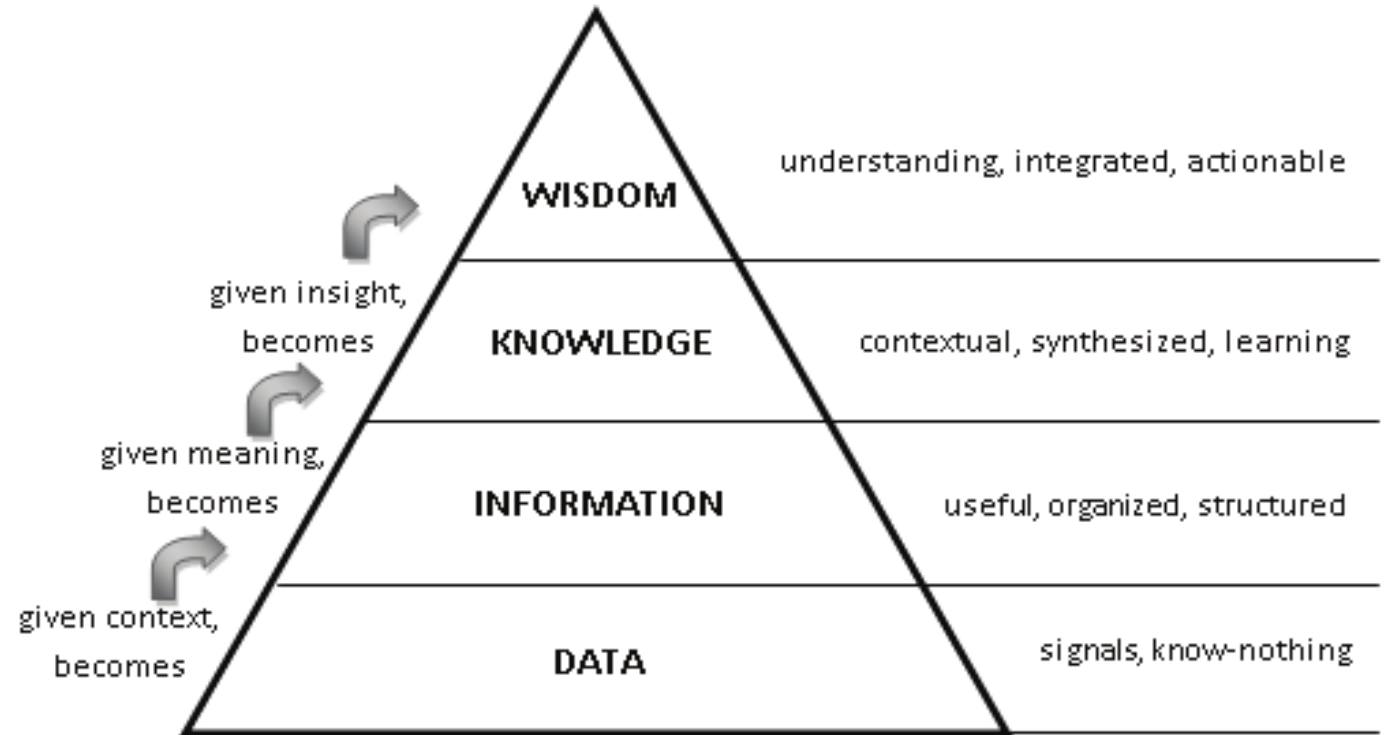
- *“If I hold a rather negative opinion about the usefulness of 'automation' in matters of economic forecasting and the like, I do not underestimate the value of electronic computers and similar apparatus for other tasks, like solving mathematical problems or programming production runs.”*



## From Schumacher:

*“Great damage to human dignity has resulted from the misguided attempt of the social sciences to adopt and imitate the methods of the natural sciences.”*

*Economics, and even more so applied economics, is not an exact science: it is in fact, or ought to be, something much greater: a branch of wisdom.”*



Discussion Question: How do you know when quantifiable logic has eclipsed wisdom?



<https://www.youtube.com/watch?v=gekdt0QwFQw>

*Interview with Robert McNamara, U.S Secretary of Defense during the Vietnam War*

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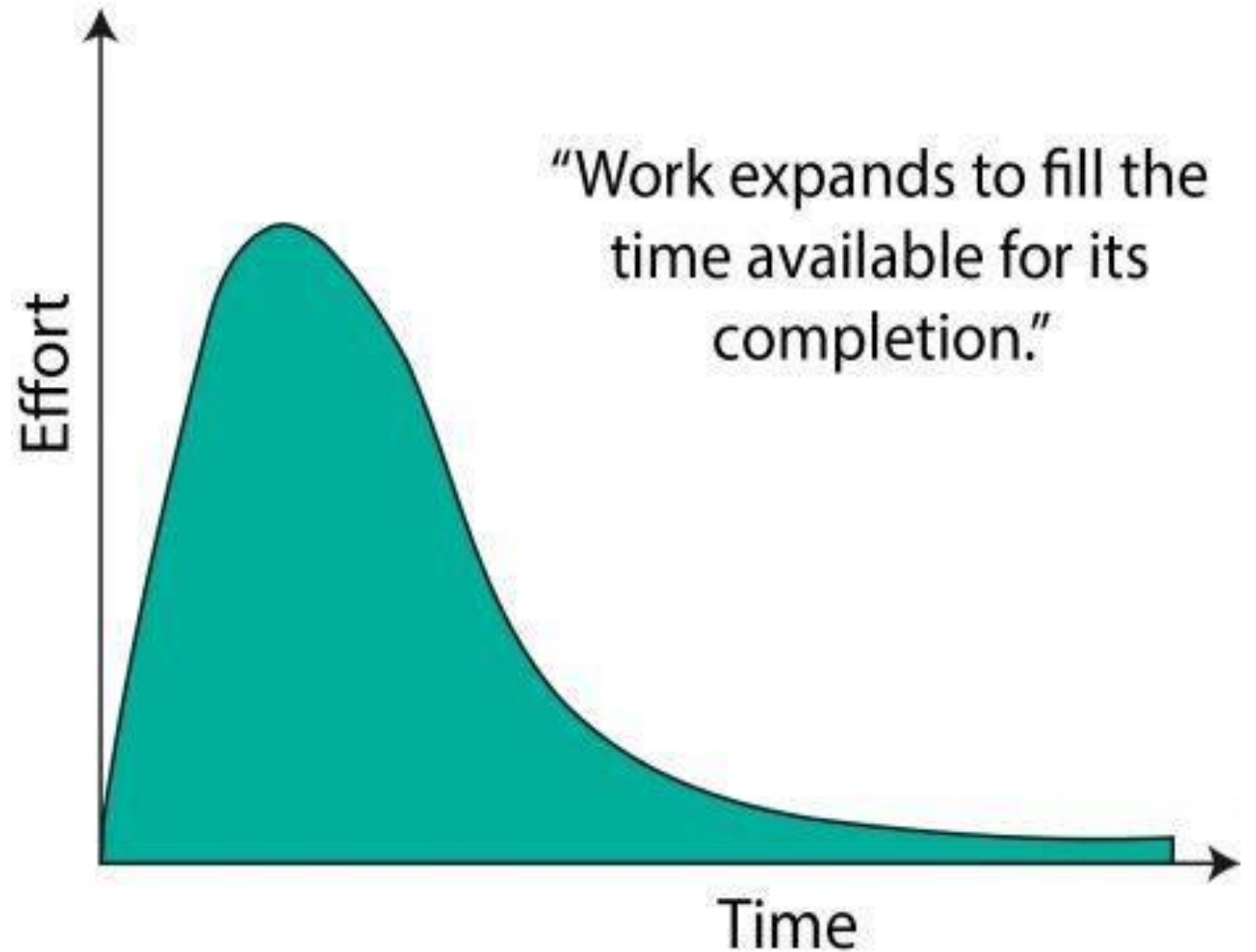
## From Schumacher:

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"In his urgent attempt to obtain reliable knowledge about his essentially indeterminate future, the modern man of action may surround himself by ever-growing armies of forecasters, by ever-growing mountains of factual data to be digested by ever more wonderful mechanical contrivances: I fear that the result is little more than a huge game of make-believe and an ever more marvelous vindication of Parkinson's Law. The best decisions will still be based on the judgments of mature non-electronic brains possessed by men who have looked steadily and calmly at the situation and seen it whole. 'Stop, look, and listen' is a better motto than 'Look it up in the forecasts'."

Final Thoughts and Comments

## Parkinson's Law





THE END



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