

# Kick-Starting Inventing the Future

Allen Wirfs-Brock  
@awbjs

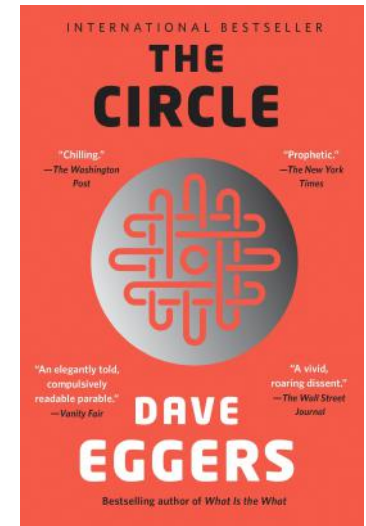
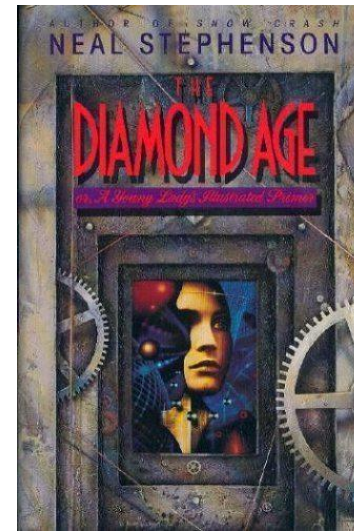
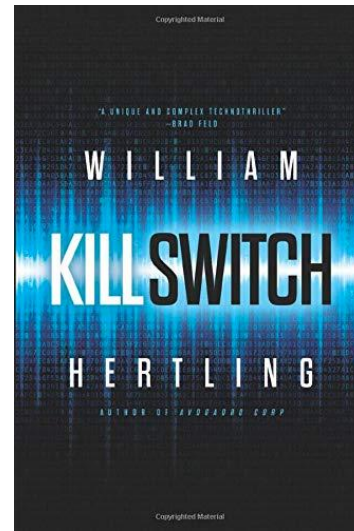
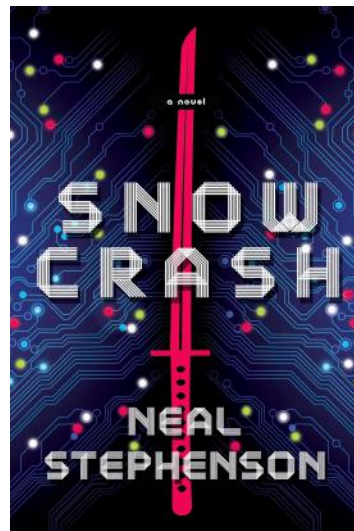
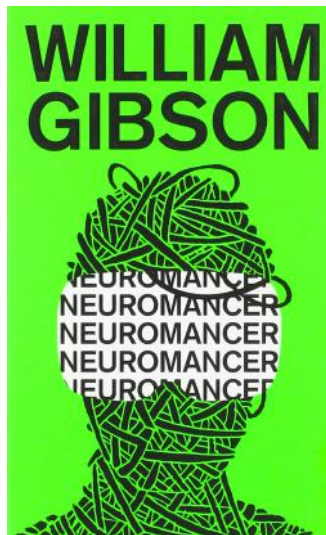
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***“The best way to predict  
the future is to invent it.”***

Alan Kay, 1971

<http://quoteinvestigator.com/2012/09/27/invent-the-future/>

# Writing science fiction ≠ Inventing the Future



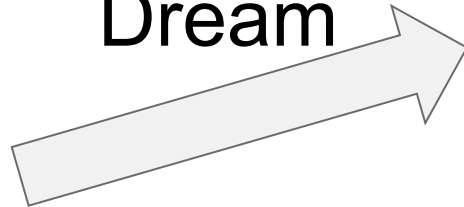
“Inventing the future” must be actionable

Alan Kay

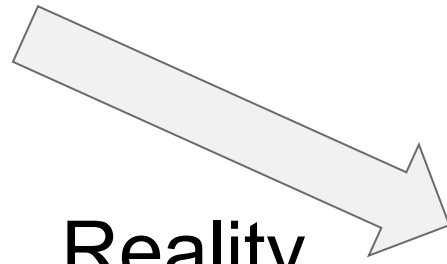


Circa 1970

Dream



?



Reality



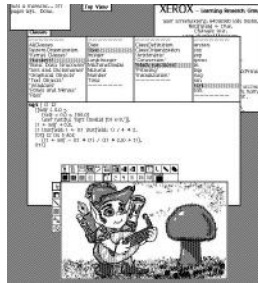
The Dynabook



# Alan Kay and Colleagues 1971-1980



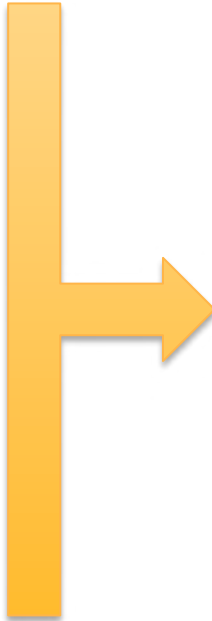
The Interim  
Dynabook  
aka  
Xerox Alto



Smalltalk-76



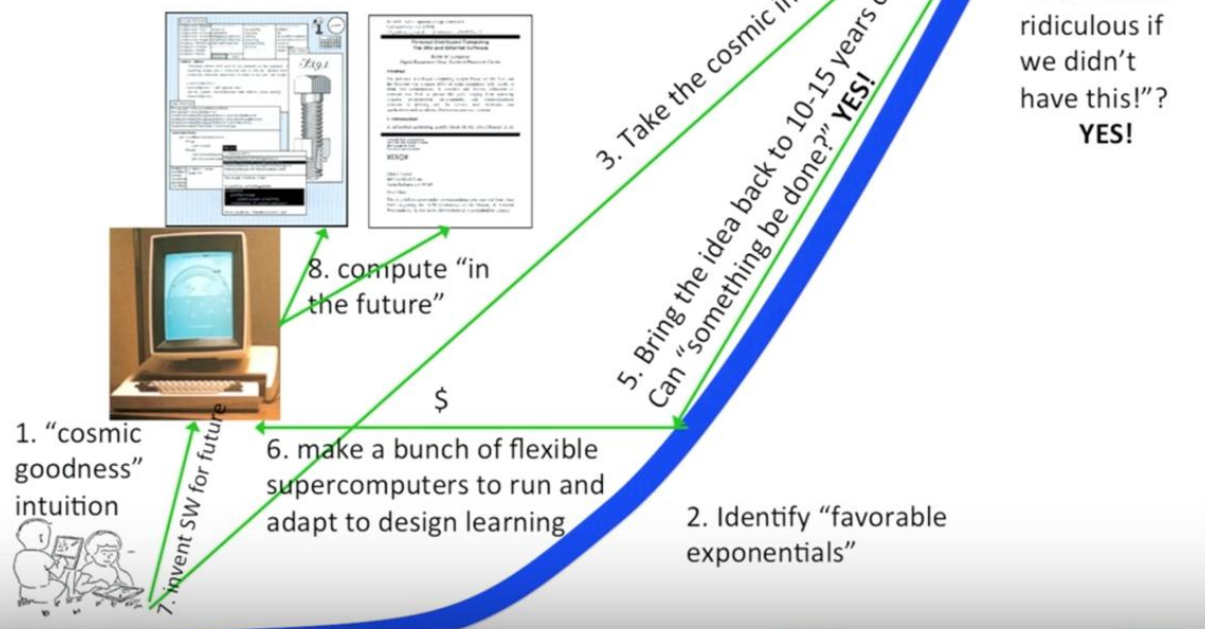
Notetaker



# How to Invent the Future I - CS183F

## Wayne Gretzky Game

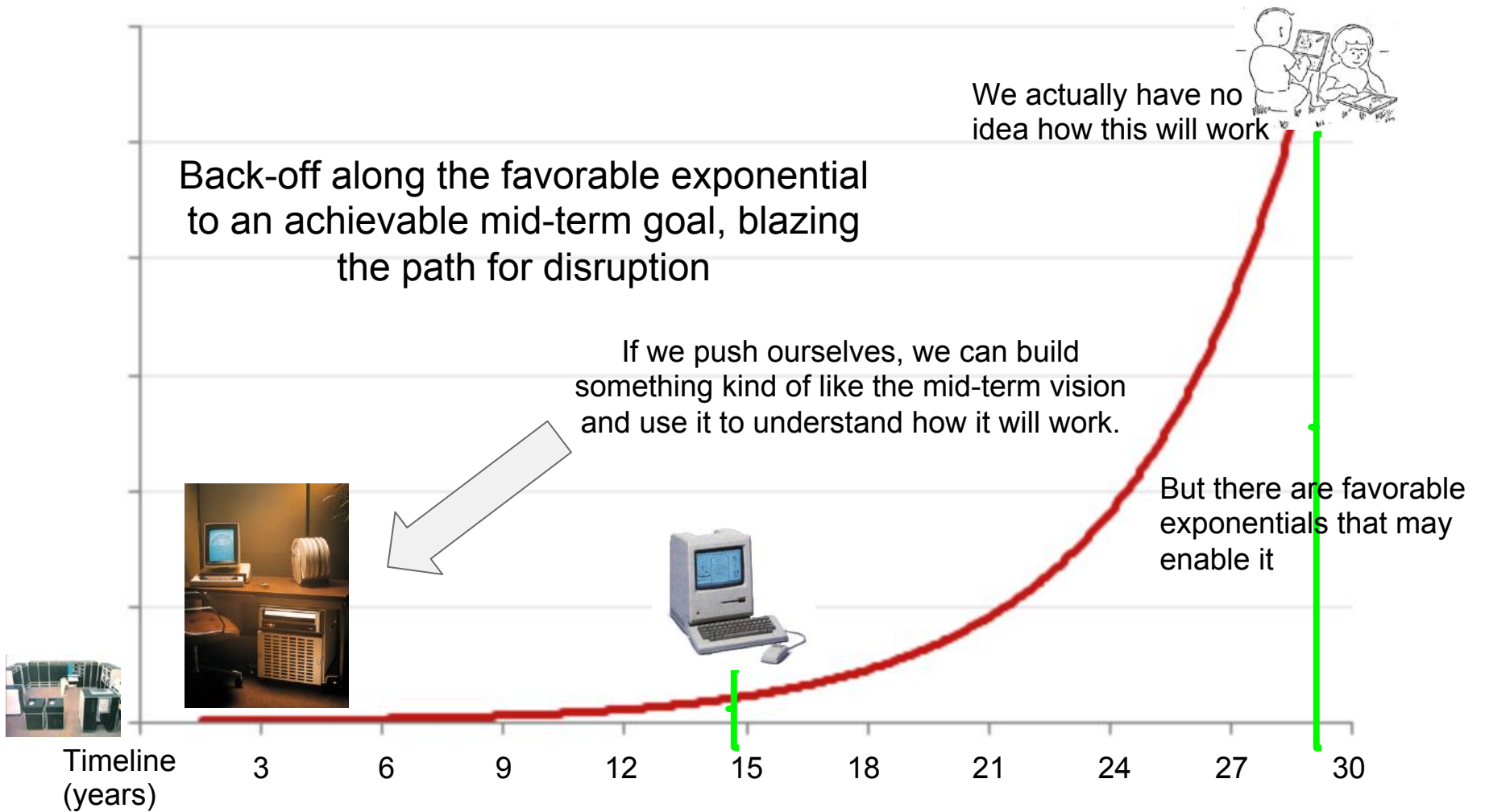
<https://www.youtube.com/watch?v=id1WShzzMCO>  
[https://www.youtube.com/watch?v=1e8VZIPBx\\_0](https://www.youtube.com/watch?v=1e8VZIPBx_0)



56:39 / 58:01







## Another Example

- 30 Year Vision: Clean electric vehicles are the dominant form of transportation.
- Favorable Exponential: Price/performance of battery technology, driven by portable consumer electronics
- 15 Year Goal: Successfully selling a mass market electric car that is superior to contemporary conventionally powered cars
- Plan
  - Use an OEM sports car platform to develop as an electric car proof of concept. Take to market at very low volume, very high price point
  - Develop and market from the ground up a comprehensive electric car platform and take to market. Focus on medium volume, luxury sedan market segment.
  - Develop and take to market the mass market vehicle



<https://www.tesla.com/blog/secret-tesla-motors-master-plan-just-between-you-and-me>





Pick a time-horizon that is appropriate for your organization

If your time horizon is too short you are doing product development or



To intentionally “invent the future” you need to choose a future sufficiently distant to allow time for your inventions to exploit the favorable exponentials.

# An “Inventing the Future” Workshop Exercise

0. Pick your time horizon,  $n$  years into the future.
1. What’s your  $n$  year vision?
2. Which favorable exponential(s) support it?
3. Back-off  $n/2$  years, what’s possible?
4. What can you do today that gets you started?

# Warnings

- This is just an exercise. Developing an actual plan for “inventing the future” will take significant time and effort.
- This isn’t about day-to-day incremental product development. It’s about a disruptive vision that drives you to leap ahead
- Using today’s technology to “brute force”  $n$  years into the future will probably be expensive. Funding will be a challenge.

A 30-year time horizon is probably too long for your organization  
Try 10 years or even 5.

# Don't be blinded by your present success

- “I think there is a world market for maybe five computers.” – T.J. Watson Sr, President IBM, 1943 (but probably misattributed)
- “There is no reason anyone would want a computer in their home” – Ken Olson, Founder and CEO Digital Equipment Corp, 1977
- “There's no chance that the iPhone is going to get any significant market share.” – Steve Ballmer, CEO Microsoft, 2007

Invent the Future

The origin of “Inventing the Future”

<http://quoteinvestigator.com/2012/09/27/invent-the-future/>

Alan Kay’s “How to invent the future” lectures:

Part 1: <https://www.youtube.com/watch?v=id1WShzzMCQ>

Part 2: [https://www.youtube.com/watch?v=1e8VZIPBx\\_0](https://www.youtube.com/watch?v=1e8VZIPBx_0)

Tesla’s “secret” master plan:

<https://www.tesla.com/blog/secret-tesla-motors-master-plan-just-between-you-and-me>

@awbjs: “How to Invent the Future” pattern language:

<http://www.wirfs-brock.com/allen/posts/754>