

## APPENDIX 2

# Computer science research and the information technology industry

In 2012 the U.S. National Research Council published the report “Continuing Innovation in Information Technology.” The report contained an updated version of the Tire Tracks figure, first published in 1995. Figure A.2 gives examples of how computer science research, in universities and in industry, has directly led to the introduction of entirely new categories of products that have ultimately provided the basis for new billion-dollar industries. Most of the university-based research has been federally funded.

The bottom row of the figure shows specific computer science research areas where major investments have resulted in the different information technology industries and companies shown at the top of the figure. The vertical red tracks represent university-based research and the blue tracks represent industry research and development. The dashed black lines indicate periods following the introduction of significant commercial products resulting from this research, and the green lines represent the establishment of billion-dollar industries with the thick green lines showing the achievement of multibillion-dollar markets by some of these industries.

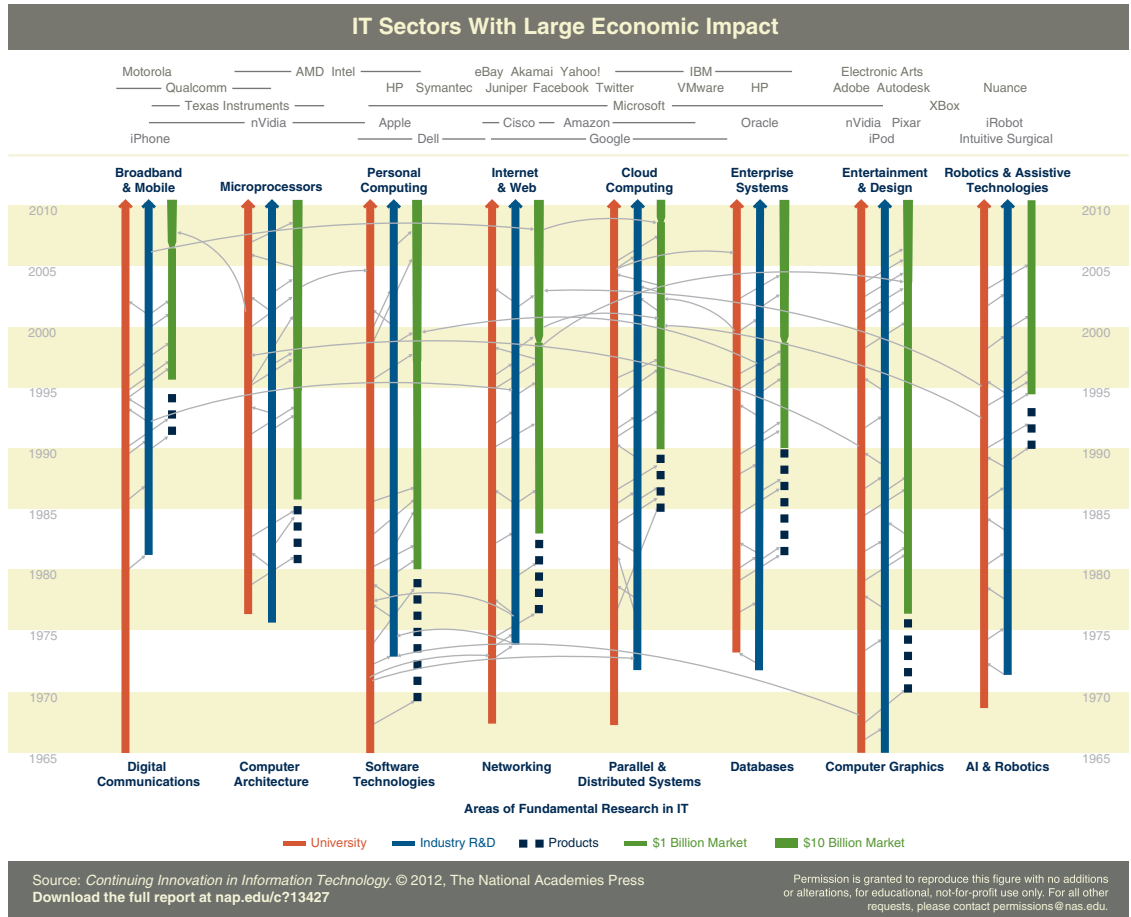


Fig. A.2. Tire Tracks diagram.

