

The background is a dark teal chalkboard filled with various handwritten mathematical equations and diagrams in white chalk. Some visible equations include $x^2 + y^2 = ab + 4c$, $A \cdot T = B$, $24 \frac{+x}{y} + \frac{d^2 + 3^2}{c} + \frac{1}{x} = 9$, $men = 384 + n^{2v}$, $x^2 + 34x - 4$, $u = 14!$, $x \leq 549$, $\beta = 9 + x^2 + y^2$, and a binary sequence 010112 , 010002 , 200110 , 011002 . There are also geometric diagrams like a circle with a shaded sector and a bell curve.

CS 428

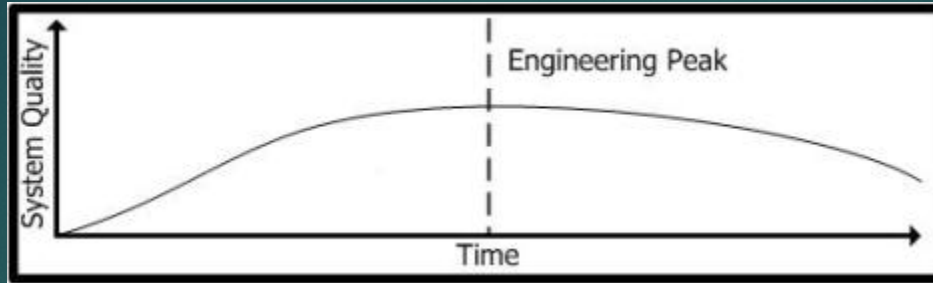
Webster #4 Readings

WINTER 2023

BRUCE F. WEBSTER

- ▶ Certain cycle mismatches for organizations looking to adopt new technologies – keep your eyes open for these:
- ▶ **Firefly**: initial release is inadequate; you wait for the next; the next release is not quite functional enough, either; rinse and repeat until you finally give up.
- ▶ **Underdone**: new release of established technology that's not quite ready for production use
- ▶ **Conveyor Belt**: limited lifespan – challenge to make use of it and then migrate off before it goes away.
- ▶ **Landfill**: great promise (hype), but dead on (or soon after) arrival.

Getting Technology Lifecycles in Sync
(Baseline, 2009) [[Link](#)]



- System/product quality rises over time to a peak value and then starts to decline.
- Why does this happen?
 - The **developer loses conceptual control** of the system (bloat, loss of personnel, organizational changes)
 - **Software rot** sets in (piecemeal changes, growing incompatibilities w/external interfaces)
 - The enhanced system finally **outgrows its original foundation**
 - Market or **business needs shift** beyond the product's fundamental design
 - The developer begins to add "**blue sky**"/"**kitchen sink**" **enhancements**
 - **Backward compatibility** is maintained at all costs

The Arc of Engineering (Baseline, 2008) [[Link](#)]

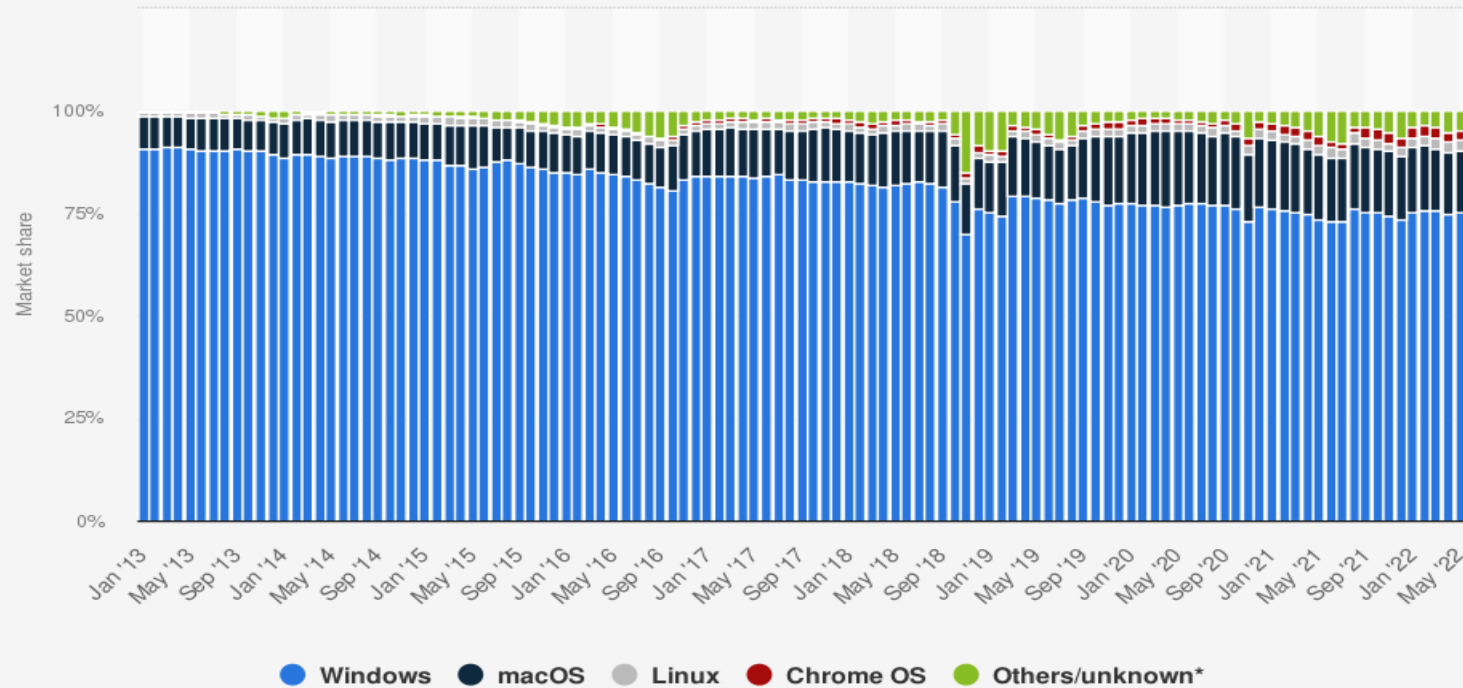
▶ **Me, in 1996:**

“As impossible as it might seem, **Windows may still be dominant in 2025**, nearly 30 years from now. It may look and work a bit differently, just as phones, TVs, and cars from 30 years ago do, but the principles will be the same. Our grandchildren will wonder about the quaint relics of terminology and work flow (when was the last time you actually put gloves in a glove compartment?), but they’ll be able to clearly see the inheritance from MS-DOS/Windows to whatever they use.”

▶ As of June 2022 – see next slide.

Microsoft Windows Forever and Ever?
(Windows Magazine, 1996) [[Link](#)]

Global market share held by operating systems for desktop PCs, from January 2013 to June 2022



Source
StatCounter
© Statista 2022

Additional Information:
Worldwide; 2013 to 2022

Windows Forever and Ever? (cont.)

- ▶ It seems that **the first sufficiently adequate technology in a given sphere usually gains broad acceptance and entrenches itself.**
- ▶ Once the technology is entrenched, **the focus is then on refinement and slow upgrading of the existing technology**, not on radical innovations and wholesale replacements.
- ▶ The investment in hardware, software, market standards, training, business process, development expertise, custom applications, and deployed environments **all argue against any broad changes**, even those introduced by Microsoft. That investment grows year by year and will dominate more, not less, as time goes on.
- ▶ Thoughts and observations?

Windows Forever and Ever? (cont.)