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Xerox Star = the first computer you could buy with icons, folders, a mouse and a desktop, sold as one finished idea.

Xerox announced it on 27 April 1981. One workstation cost about $16,000, and a useful setup meant two or three of them plus a file server. About 25,000 sold, so the Star gets filed as a noble failure and skipped.

Skipping it is the costly part. The team published the rules they worked to, and three of them are broken in software I opened this week.

> *"Having two or more ways to do something increases the complexity without increasing the capabilities." They wrote that in 1982. Your app has three ways to copy a file.*



Nothing exposes a repeated pattern like printing it forty times and standing back.

1. One command, every object

What teams ship: a fresh command for every type of thing.

Why it fails: Star had six generic commands on real keys. Move, Copy, Open, Delete, Show Properties and Same. Each object decided what the command meant for it. There was no Print command. You copied a document onto a printer icon. There was no Send Mail. You moved the document to the out basket. The 1989 retrospective lists what the rest of us built instead: Delete Character, Delete Word, Delete Line, Delete Paragraph, Delete File. Then synonyms on top, Remove or Delete, Duplicate or Copy, Find or Search.

Ship instead: one verb per intent, and every object answers to it. The same paper caught the Mac breaking this in 1989. Duplicate inside a disk, dragging across disks, Copy and Paste for everything else. Three gestures, one intent.

2. Properties belong to the object, not the session

What teams ship: the setting lives in a toolbar, or in whatever state the app was in.

Why it fails: in Star a file had a Name property, a character had a Font family, a paragraph had Justified. You changed them on a property sheet and the object kept them. The retrospective sets that against WordStar, where a heading did not remember whether it was centred, because that depended on how the program was set when the line was typed. Unix directories still do not remember a sort order, so you respecify it on every ls.

Ship instead: for every setting, ask whether it describes the thing or the moment. If it describes the thing, store it on the thing.

3. Hide the detail until someone asks

What teams ship: every option on screen at all times, so nobody can say it was missing.

Why it fails: Star called the fix progressive disclosure. Detail stays hidden until the user asks or needs it. The page layout sheet did not offer running header options until you said the document had running headers. Property sheets came on request and then left. An interface that shows everything has decided every option is equally likely, which is never true.

Ship instead: make the common case bare and let the rest be summoned. You are allowed to guess what matters. That guess is the design.

Where the Star was wrong too

This is not a plea to copy a 1981 office machine. Its own designers published the limit in 1989. Remembering and typing is sometimes better than seeing and pointing. If a folder holds four hundred files, let someone type the name instead of hunting for an icon. They owned the rest too. Star was closed, slow, and priced against minicomputers while fighting PCs for desk space.

THE RULE	WHAT BREAKS IT NOW	THE FIX
One command, every object	Three gestures for copy	One verb per intent
Properties on the object	Settings held by the session	Store it on the thing
Progressive disclosure	Every option, always visible	Summon the rare ones

The audit takes fifteen minutes. Pick one screen. Count the ways to do its most common action, and if the answer is more than one, pick a winner. Then find a setting that lives in your toolbar and ask whether it belongs on the object. Thirty work-years went into the Star's interface before the features were settled. You can spare the afternoon.

Checked against

Read on 18 November 2026.

- Johnson, Roberts, Verplank, Smith, Irby, Beard and Mackey, The Xerox Star: A Retrospective, IEEE Computer, September 1989. Source for the generic commands, property sheets, progressive disclosure, the WordStar and ls examples, the Macintosh criticism and the authors own caveat about typing.
- Smith, Irby, Kimball, Verplank and Harslem, Designing the Star User Interface, Byte, April 1982. Source for the line about two or more ways to do something, and the thirty work-years spent on the interface.
- Xerox Star, Wikipedia. Source for the 27 April 1981 announcement date, the per workstation price and the figure of about 25,000 units sold.