XR? VR/AR/MR/Spatial Computing?

The acronyms AR, VR, XR, and MR represent different technologies that enhance our interactions with digital environments. Here's a breakdown of each:

- **AR (Augmented Reality)**: (Magic Leap 2, XReal, Rokid.... glasses form factor) AR overlays digital content on the real world. Think of it as enhancing your current environment with additional information, such as 3D visuals or data. Flow prefers AR because it allows users to interact with data and information while still being grounded in their real-world context. This makes AR ideal for collaborative business environments, where spatial awareness and real-world interactions are crucial.
- **VR (Virtual Reality)**: VR immerses users in a fully digital environment, blocking out the physical world. While highly immersive, it's less practical for tasks that require interaction with real-world tools or people, which is why Flow prioritizes AR, as AR keeps the user connected to their environment.
- **MR (Mixed Reality)**: Today, Meta has defined the term and it has come to mean VR with passthrough, so that a VR headset is still cut off from the real world visuals, but cameras outside the device show the real-world view with digital visuals superimposed. This provides for large field of view, less expensive, and higher resolution than AR devices. (Meta Quest 3 and Quest Pro, Apple Vision Pro, HTC Vive are MR devices) Mixed Reality has been used by companies in various ways. The Microsoft HoloLens used it, even though the device was Augmented Reality.
- **XR (Extended Reality)**: XR is an umbrella term covering all immersive technologies, including AR, VR, and MR. It refers to any form of real-and-virtual combined environments.
- **Spatial computing** is the term that Apple has adopted for its MR device, the Apple Vision Pro, and Magic Leap adopted for its Augmented Reality device. Confused yet? Spatial computing can be used to generally apply to all XR devices. It refers to the use of digital technology to integrate and interact with the physical world by understanding and mapping spatial dimensions.

Flow prefers AR because it enables *informational AR*—allowing users to engage with complex data visualizations while remaining aware of their physical environment and see other people in co-located multiuser meetings. This approach helps create richer mental models of data and fosters better decision-making in collaborative spaces.

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