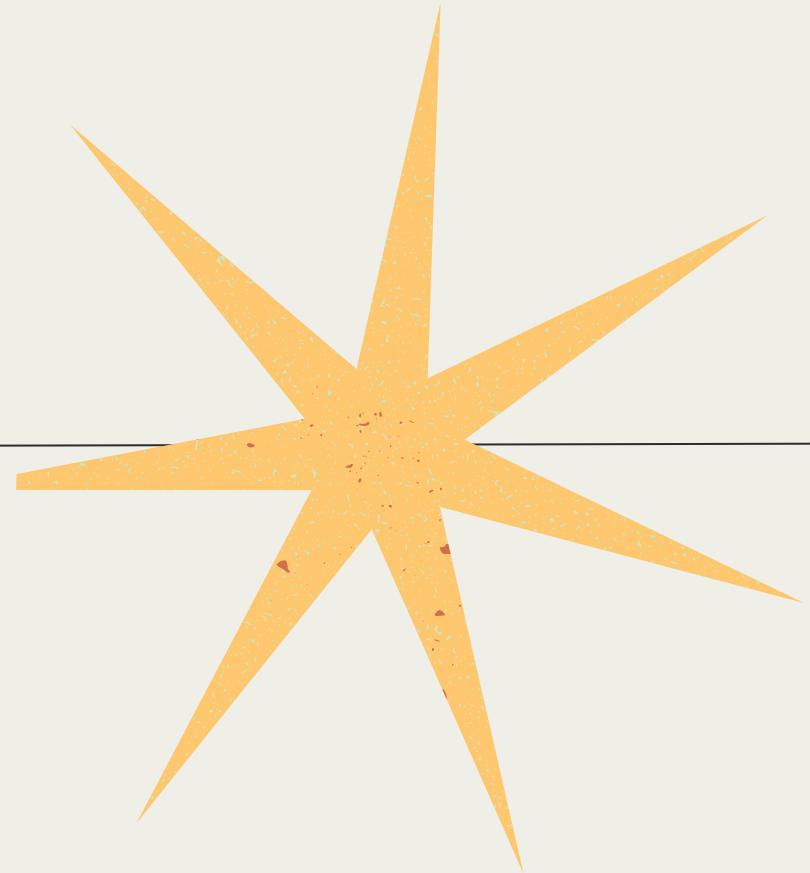


The 1990s

BOOM IN TECHNOLOGY



By Ipsita and Anagha

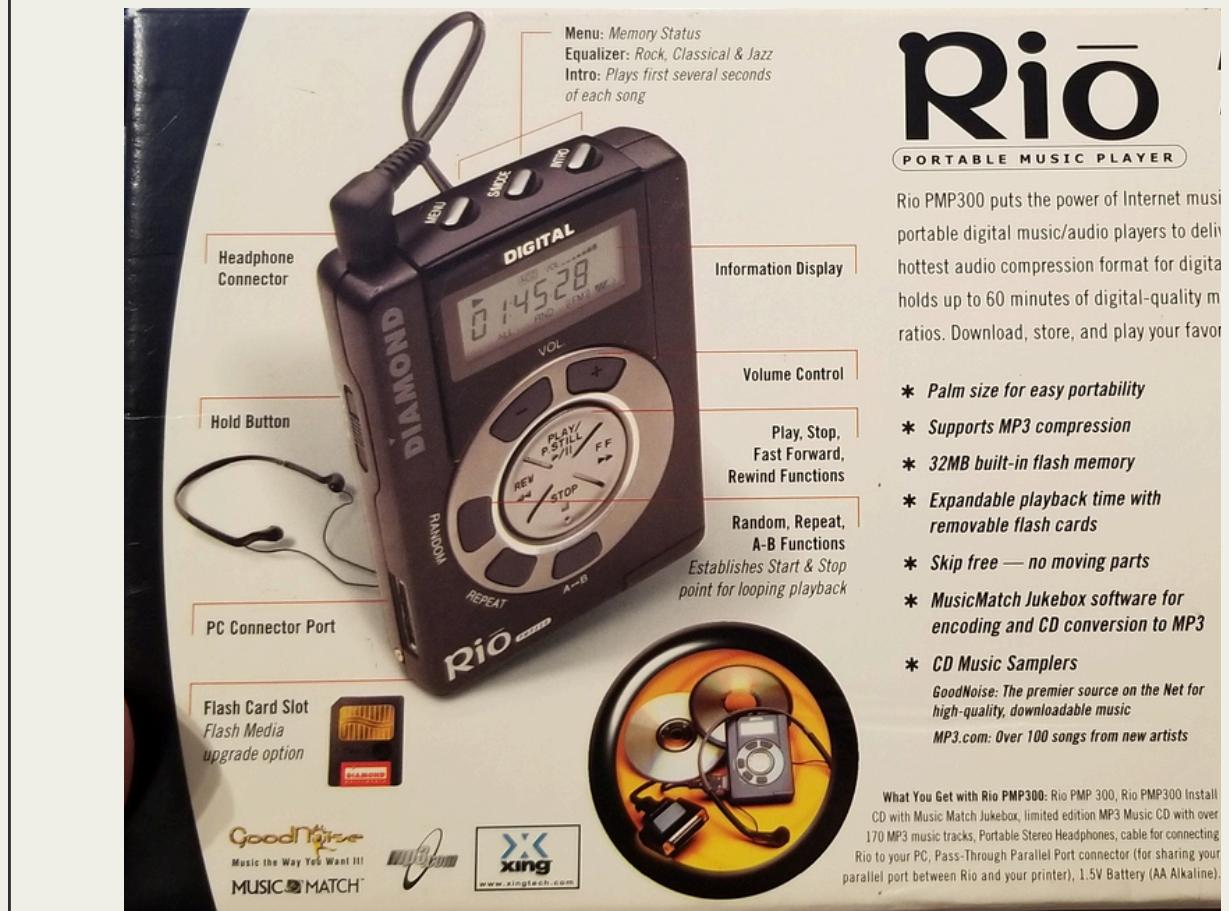
SOME INTERESTING PRODUCTS

<i>World Wide Web</i> 1990	<i>Linux</i> 1991	<i>PlayStation</i> 1994	<i>GPS</i> 1995	<i>Hybrid Vehicles</i> 1997
Internet access was primarily limited to academic institutions and research organizations, making the WWW largely inaccessible to the general public. The early WWW was relatively basic, with simple text-based pages and limited multimedia capabilities.	Linux was still in its early stages of development, with a limited number of features and a small user community. Like Unix, Linux operated primarily through a command-line interface, requiring users to type commands to interact with the system.	The PlayStation introduced 3D graphics to home consoles, providing a more immersive gaming experience. It was a huge success, helping to define the future of console gaming and solidifying Sony's position in the gaming industry.	GPS was primarily developed and used by the U.S. military for navigation, targeting, and timing purposes. Some civilian applications of GPS were beginning to emerge, such as in surveying, mapping, and navigation for ships and aircraft.	Early hybrid vehicles included models from Honda, Ford, and General Motors, but they were primarily research and development projects and were not widely available to the public.

1. MP3 PLAYERS

The **Diamond Multimedia Rio PMP300** was a groundbreaking portable MP3 player released in 1998. It was one of the first commercially available devices of its kind and played a significant role in popularizing digital music.

It contributed to the rise of digital music and significantly impacted popular culture. It helped popularize new artists and genres and changed how people discovered and shared music, **especially because of the shift in interfaces that went from DVDs to portable music players.**



**MP3 Playback/ Compact Design/
USB Connectivity/ Limited Storage**

PRINCIPLES OF INTERACTION DESIGN

Affordance

The buttons controls and USB connectivity provide a clear affordance for the devices use.



Feedback

The device provides audio feedback for every input that is given.

Signifier

Icons on or next to the buttons.

The status bar that displays battery life.

The identifiers for the different ports.

Mapping

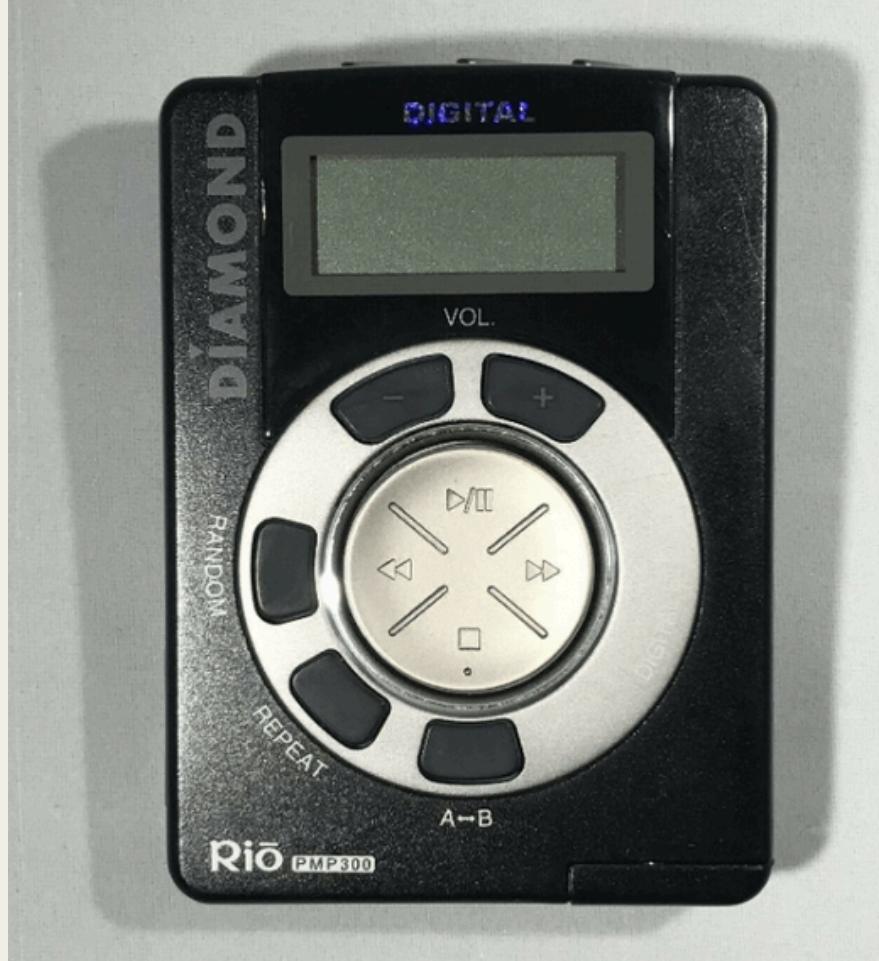
The layout was made to be intuitive and formed a foundation for the upcoming generations of MP3 players.

Not to mention it had a clip on the back that could be buckled to any pocket.

ATOMIC DESIGN SYSTEM

Atoms

Buttons, Labels,
Displays



Molecules

Playback controls,
Song information,
USB ports

Organism

Main display

Template

Layout of the
device and screen

Pages

Main page,
Settings page,
Playlist page

CONCEPTS OF INTERFACE

The Interface as a Mediator

The Diamond Rio multimedia player translates the user's inputs to audio signals that beep and tone to indicate actions and errors

Design and Usability

The design is simple and sets the base for the models produced in the future, we can see the Ipods also having similar playback controls.

The Impact on Human Experience

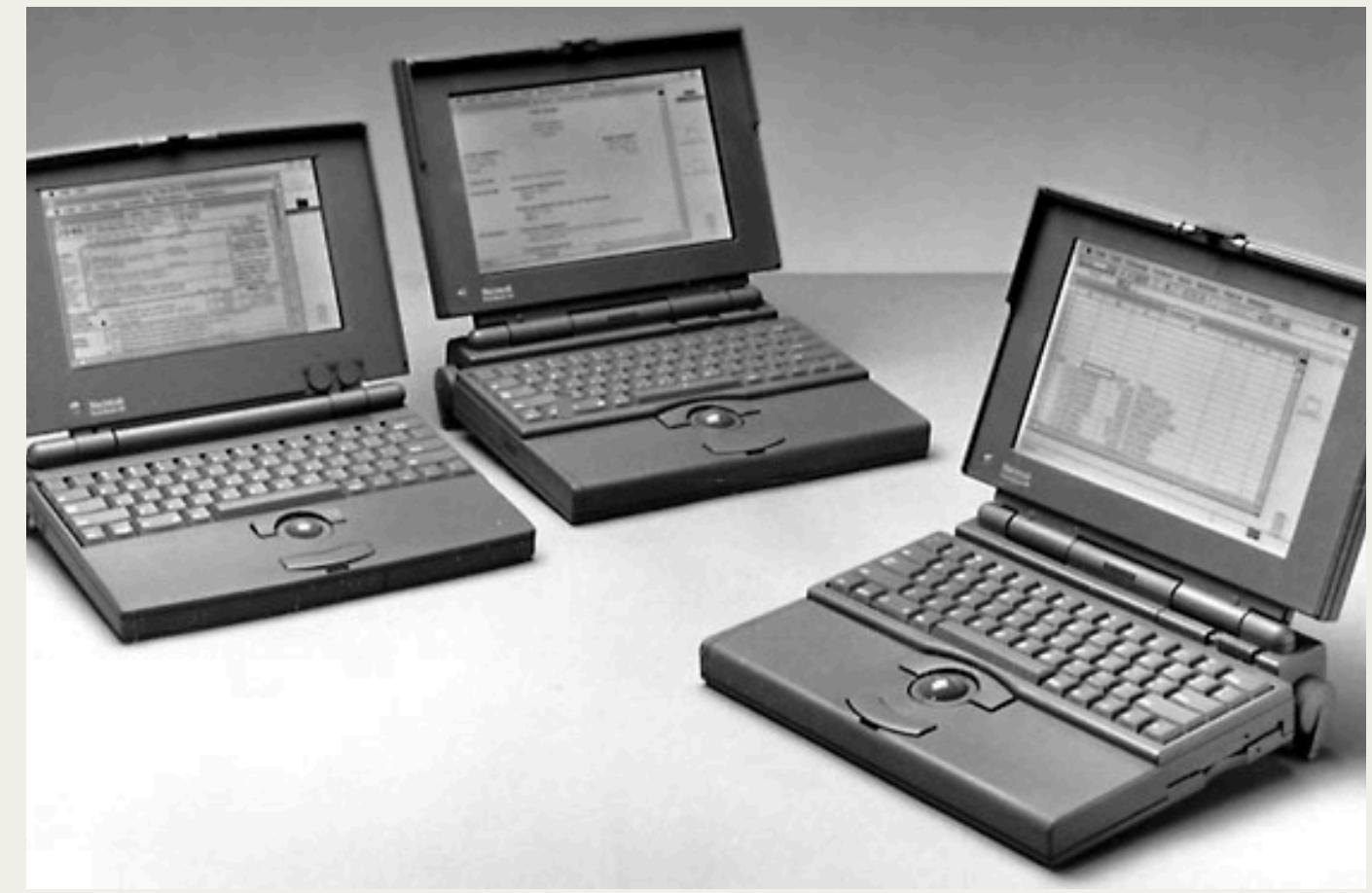
It completely changed the way users consumed music as they shifted from records and cassettes to portable devices that could play personalized internet music, it was the beginning of the spread of pop culture too.



2. APPLE POWERBOOK 100

In an era where laptops were slowly being popularized over desktops, the PowerBook 100 series (1991) was one of the first portable computers to introduce an inbuilt pointing device- the trackball. This was a major innovation since prior to this laptops relied on an external mouse.

The trackball was placed below the keyboard, right in the centre so it was easy to access by both left and right-handed users. **It was the first interface that helped users control the on-screen cursor with their fingers, a design that set the device apart from its competitors and lead to its success.**



The PowerBook 100, PowerBook 140, and PowerBook 170 all featured this built-in trackball

PRINCIPLES OF INTERACTION DESIGN

Affordance

It was able to take already existing physical features of laptops during that time and enhance them by making the portability easier.

However, there was a learning curve to it since users were already accustomed to the traditional mouse.

Feedback

The trackball offered more precise and integrated control over the pointer, making it more convenient to use than the mouse.

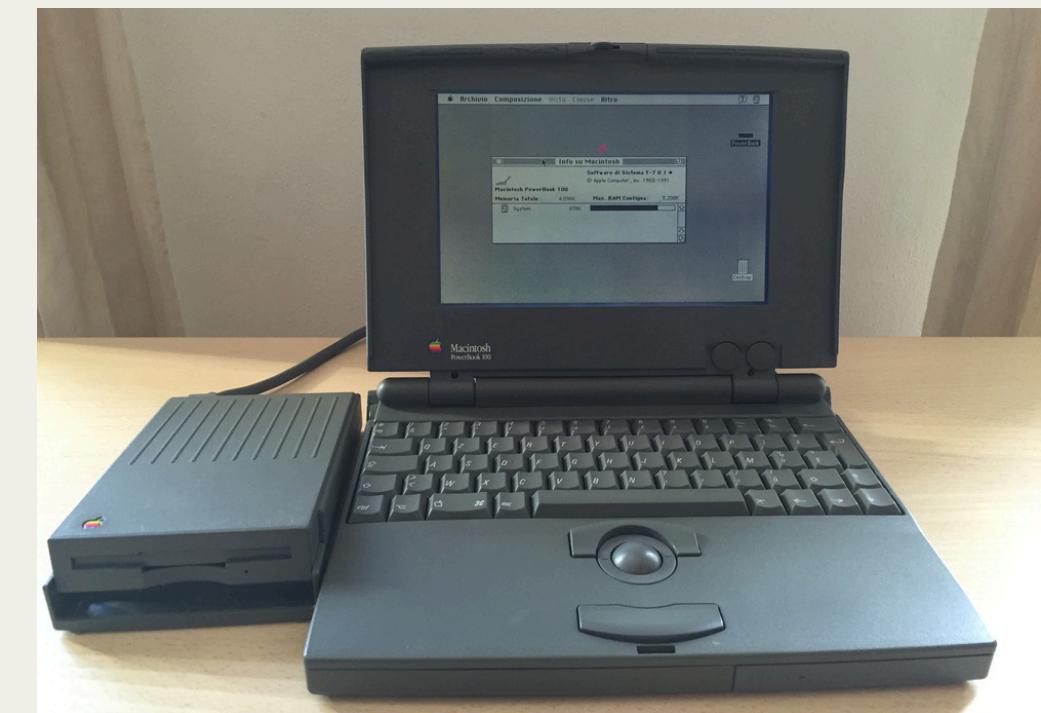
However, users have had said to find it slower than the standard mouse in its control.

Signifier

The trackball was a hemispherical projection right below the keyboard, on the flat surface of the laptop. The power button and brightness button were on the bottom right corner of the top panel, making them easily distinguishable.

Mapping

It was placed on the centre it make it convenient and easily accessible to both left and right handed users. It had a standard qwerty layout keyboard.



ATOMIC DESIGN SYSTEM

Atoms

Trackball, buttons,
screen, usb ports



Molecules

Keyboard, the
power and
brightness button
with their labels

Template

Layout of the main
display, buttons
and trackpad

Organism

The base panel,
top panel

Pages

The PowerBook
100 as a whole

CONCEPTS OF INTERFACE

The Interface as a Mediator

The trackball translated the physical movements of the user's fingers into digital commands, moving the cursor on the screen.

Design and Usability

Its simple design made it a less cumbersome experience for on-the-go users since it was lighter, compact and the external mouse could be excluded. It had palm rest and also offered more precision and control over the cursor.

The Impact on Human Experience

this built-in trackball was one of the most advanced and user-friendly laptops of the early 1990s, which also lead to the creation of touch pads later on which ended up being the standard pointing device for laptops as years came by.

