

Future Of The Linux Kernel

Tanish Shinde/ Weyland Inc

@TanishShinde1

About Me **Tanish Shinde**

- Developed various operating systems for embedded Linux boards
- Worked on various open source embedded Linux projects, primarily buildroot
- Working as a developer for The BareMetal Server OS



Agenda

- **Advantages and Disadvantages of using Open Source Software**
- **Linux in Desktop applications**
- **Software Development on Linux**
- **Importance Of Linux Kernel in the Embedded System Market**
- **OS development on Embedded Systems**
- **How Linux Community will shape the Future of Linux Kernel**

Advantages and Disadvantages of using Open Source Software



Why Large Companies Do Not Prefer Open Source?



Open Source Security Over Linux Security

A decorative graphic on the left side of the slide, consisting of several overlapping circles in various shades of green. The background within these circles is a dark, slightly blurred image of a building or structure.

Linux Advantages

A decorative graphic on the left side of the slide, consisting of several overlapping circles in various shades of green. The background within these circles shows a dark, stylized image of a building or structure.

Options

A decorative graphic on the left side of the slide, consisting of several overlapping circles in various shades of green. The background of these circles is a dark green image of a building on a hillside.

**Tailored for your
needs**



Disadvantages Of Using Linux

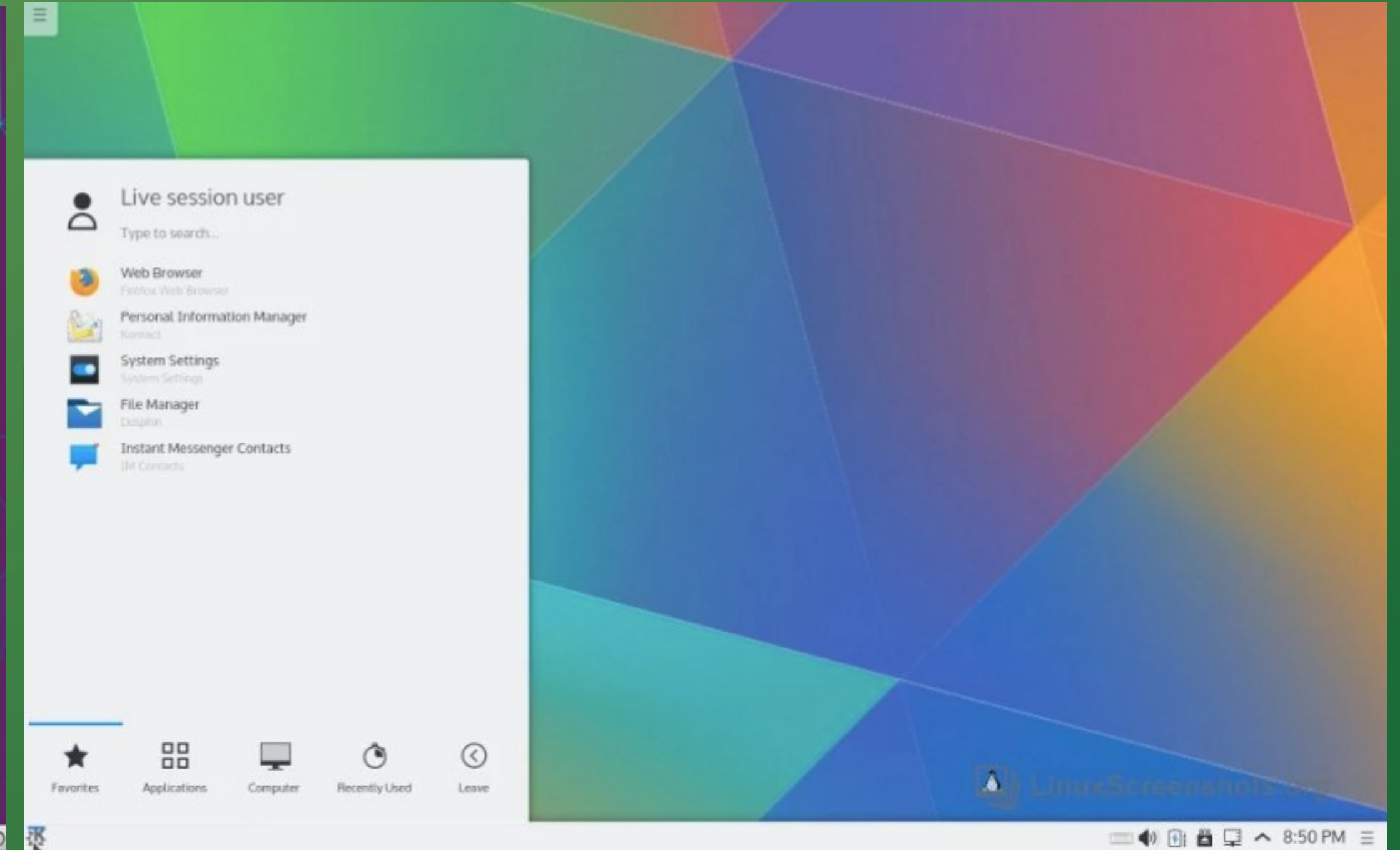


User Friendliness

Typical Linux Desktop Environments



LXDE



KDE

`$Sudo Apt Install` `“Something”`

Linux in Desktop Applications



Why Are The Desktop Distributions Failing?



Losing Popularity Over Time




**No New Development
In A Typical Operating
System Environment**

 THE LINUX FOUNDATION
OPEN SOURCE SUMMIT
EUROPE

Software Development on Linux



Why There Is Less Software Development On Linux



**Very Few Users,
When Compared To
Other Operating
Systems**



**Linux Has Different
Package Installers
and No Unified
Installers**

A decorative graphic on the left side of the slide, consisting of several overlapping circles in various shades of green. The background within these circles is a dark, textured image of a building or structure.

.deb

.rpm

Importance Of Linux Kernel in the Embedded System Market



Linux Can Be Customised



Users and Developers Want Functionality in a Tiny Package



Linux Already Dominates The Embedded Systems Market


A decorative graphic on the left side of the slide, consisting of several overlapping circles in various shades of green. The background of these circles is a dark green image of a building on a hillside.

Next Steps


Operating System



Why Should a Developer Create A New Operating System For Embedded Boards




**Embedded Boards,
Do Not Require The
Typical Desktop
Packages**



**OS Developed For
Embedded Boards,
Should Not Be Focused
On User Friendliness**

How Linux Community will shape the Future of Linux Kernel



The Linux Community



Why The Linux Community Is Better Than Many 24/7 Supports



How Do The Following Topics Help Us Understand The Future Of Linux



OPEN SOURCE SUMMIT

EUROPE

THE LINUX FOUNDATION

