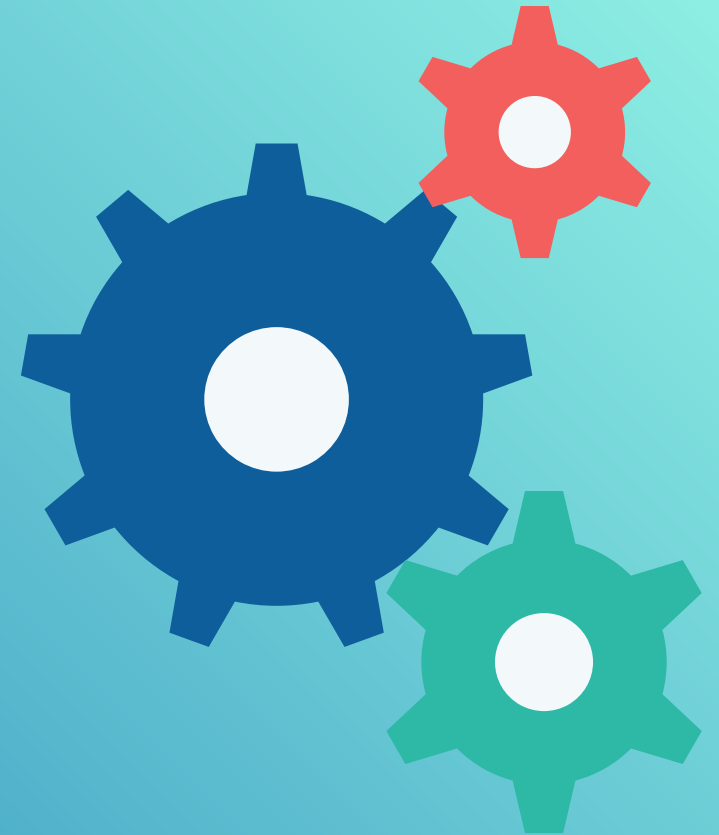


TECHNICAL SEMINAR

Robotics and Automation

Machines that sense, decide and act

Presenter Name · 2026 · hello@yourdomain.in



Agenda

01 Introduction

02 Architecture

03 Trends

04 Adoption



01

INTRODUCTION

Robots take on the dull, dirty and dangerous work.

Why it matters

Overview

- Robots combine sensors, controllers and actuators
- Automation ranges from simple arms to autonomous vehicles
- Used in factories, warehouses, hospitals and homes
- Safety and reskilling are key considerations

KEY IDEA

Collaborative robots now work safely beside people.

02

ARCHITECTURE

How it works

1 Sense

Cameras and sensors

2 Plan

Path and task planning

3 Act

Motors and grippers

4 Learn

Improve with data

Core components

1

Mechanics

Arms, wheels and grippers.

2

Electronics

Sensors and controllers.

3

Software

Control, vision and AI.

Tools and options

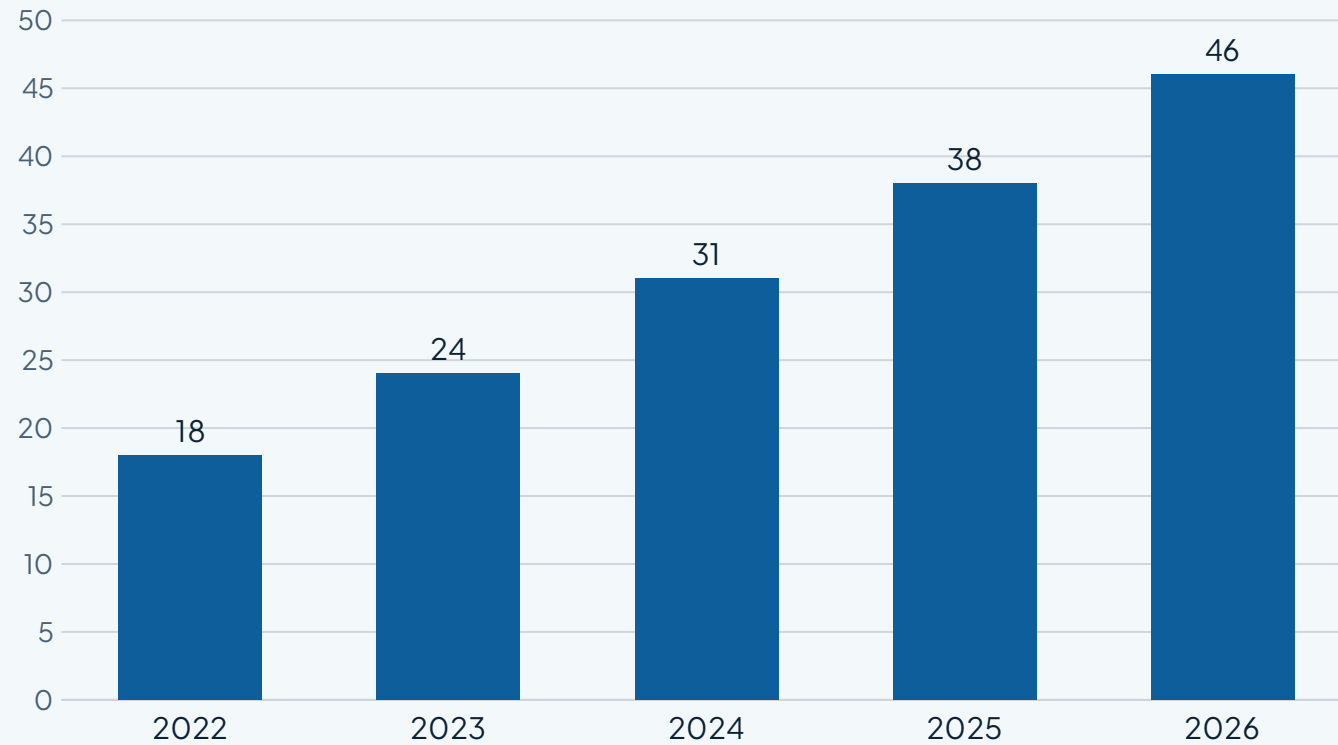
Layer	Popular choices	Notes
Controllers	Microcontrollers, PLCs	Real-time control
Software	ROS, simulation tools	Open-source frameworks
Sensors	Lidar, cameras, IMUs	Perception stack

Generic examples; pick what fits your project.

03

TRENDS

Adoption over time



Sample data for illustration — replace with your own figures.

Adoption keeps rising as tools mature (sample data).

Use cases



Image 1

Manufacturing

Welding and assembly



Image 2

Warehouses

Picking and sorting



Image 3

Healthcare

Surgical assistance

04

ADOPTION

Benefits and risks

Benefits

- Consistent quality
- Works 24x7
- Safer for dangerous tasks

vs

Risks

- High upfront cost
- Job displacement fears
- Maintenance needs

Best practices

1

Start small

Automate one task.

2

Design for safety

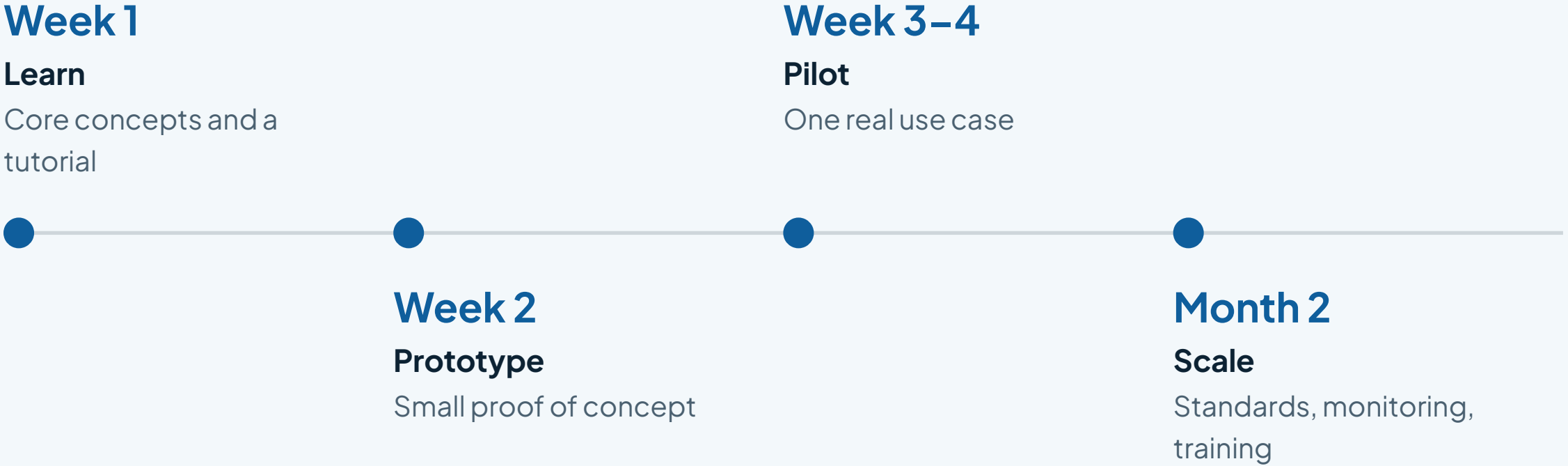
Guards and sensors.

3

Reskill people

Train operators.

Getting started roadmap



Week 1

Learn

Core concepts and a tutorial

Week 3–4

Pilot

One real use case

Week 2

Prototype

Small proof of concept

Month 2

Scale

Standards, monitoring, training

Questions?

Thanks for your time.

Presenter Name

hello@yourdomain.in

