



**rakez**  
RAS AL KHAIMAH  
ECONOMIC ZONE

حكومة رأس الخيمة  
Government of Ras Al Khaimah

BUSINESS CENTRE 4



# AI-Powered Process Optimisation for Industrial Businesses

Boost Uptime · Cut Costs · De-risk Supply Chains

**Carlo Pepe**  
Co-founder  
AI Business Consultant



**K<sub>SHIMA</sub>**

# Koshima – Who Are We?

## AI Business Consultants

**Established Jan 2024  
Operate in UAE & UK**

**Offer 2 Service Types**

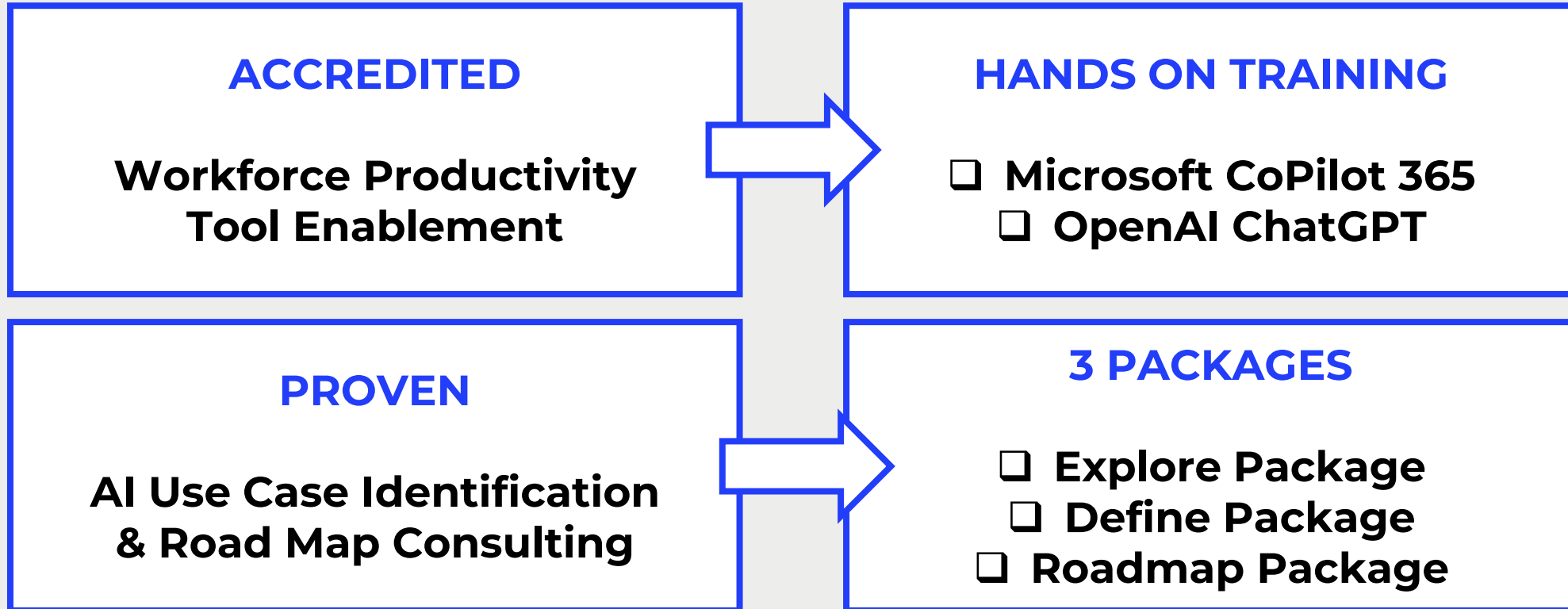
- 1 – Use Case Identification**
- 2 – Workforce Enablement**

**To Help Businesses Make  
Justified Investments In  
Artificial Intelligence**



# Rakez & Koshima Partnership

## How You Benefit



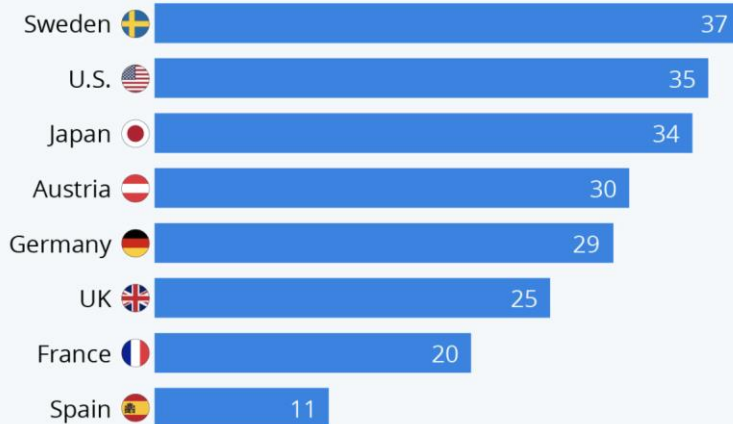
# Why AI Matters In Your Sector

## Supply Chain Optimization

### Where AI is Aiding Productivity



Projected increase in productivity due to AI in selected economies until 2035 (in percent)



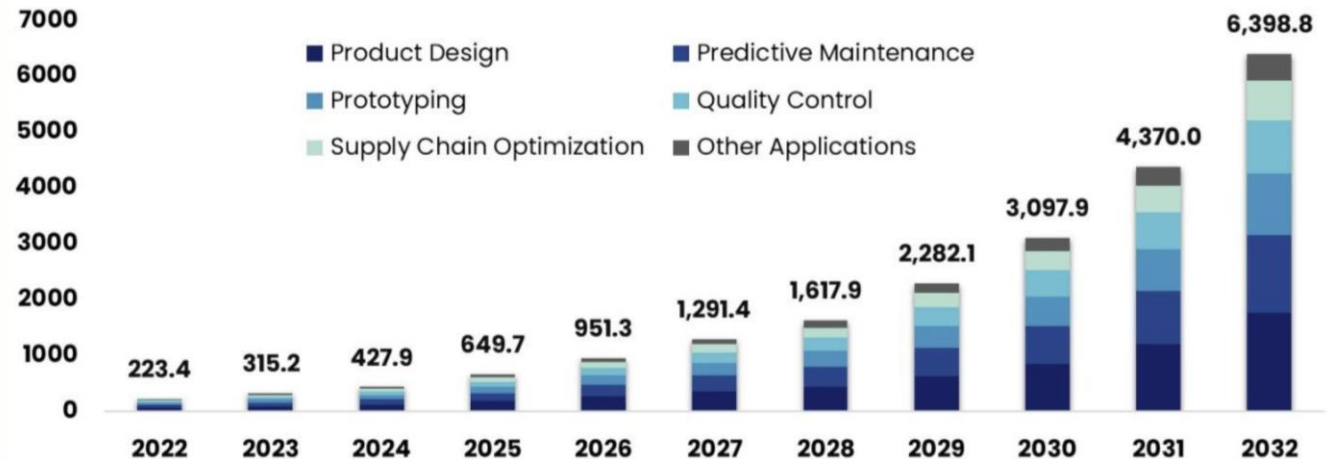
Sources: Accenture, Frontier Economics



statista

### Global Generative AI in Manufacturing Market

Size, by application, 2022-2032 (USD Million)



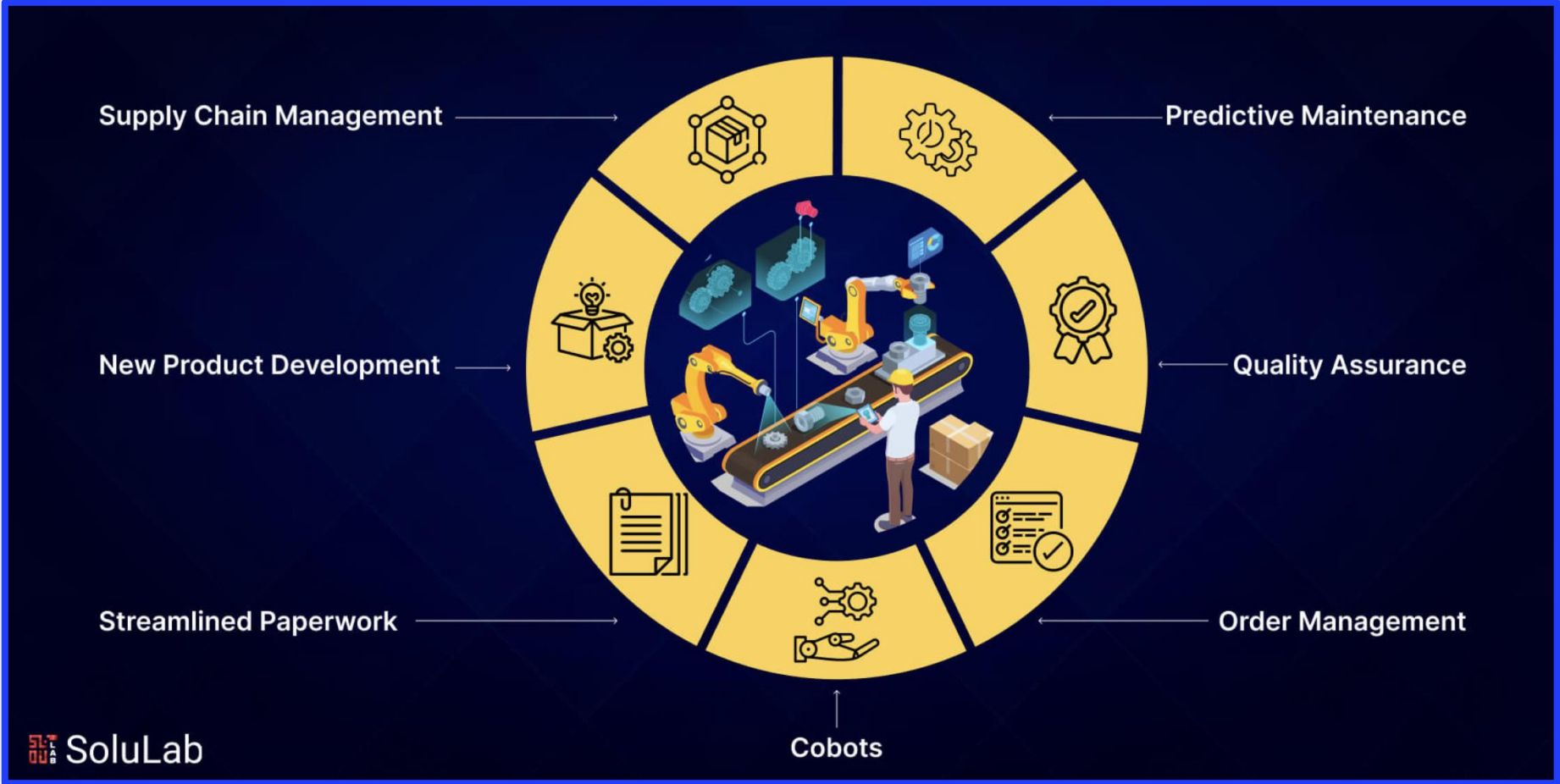
The Market will Grow At the CAGR of **41.06%**

The forecasted market size for 2032 in USD:

**\$6,398.8M**

MarketResearch.biz  
WIDE RANGE OF GLOBAL MARKET REPORTS

# Where AI In Your Sector



# 3 PILLARS OF AI ADOPTION IN BUSINESS

# The 3 Pillars Of AI In Business

<b>1</b>	<b>WORKFORCE PRODUCTIVITY</b>	Tools that help employees work faster, smarter & more efficiently.
<b>2</b>	<b>BUSINESS PROCESS OPTIMISATION</b>	Improving operations, workflows & decision-making across departments & functions.
<b>3</b>	<b>CORE BUSINESS OPTIMISATION</b>	AI embedded into the fundamental systems that power a business.

# Our Focus Today

## **Business Process Optimisation**

**2**

**BUSINESS  
PROCESS  
OPTIMISATION**

Improving operations, workflows & decision-making across departments & functions.

# Why Business Process Automation Matters In Your Sector

# Why AI Matters In Your Sector

## Efficiency

### Reducing Downtime & Enhancing Maintenance

Unscheduled downtime **saps 11% of annual revenues** from the world's 500 biggest companies - **a total of \$1.4 trillion.**

Predictive maintenance **reduces unplanned downtime by <50%**, improve downtime **forecasting accuracy by 85%**

**Siemens “True Cost of Downtime 2024” report**

# Why AI Matters In Your Sector

## **Profitability**

**Enhancing  
Quality  
& Reducing  
Scrap**

AI-driven visual-inspection **boosts defect-detection accuracy by up to 90 %** and has **trimmed Scrap 30–50 % in manufacturing.**

**HSO Manufacturing quality  
AI brief (2024) & ElectronicEra  
case study (2024)**

# Why AI Matters In Your Sector

## Supply Chain Optimization

### Improving Inventory & Forecasting

Embedding AI in planning and replenishment **cuts inventory levels 20–30%** while **lowering logistics costs 5–20 %**.

AI-driven **demand forecasting can slash supply-chain errors 20–50 %**, translating into **fewer stock-outs and lost sales**.

**McKinsey “Harnessing AI in Distribution Operations” (2024)**

**McKinsey retail-forecasting overview (2024)**

# Why Does Every Extra Minute Of Downtime Hurt More In 2025?

- ❑ **Input prices up 23 %** on average for UAE manufacturers since 2022 (steel, energy, logistics).
- ❑ **60 % of operators' time still lost** to manual data look-ups & spreadsheet copy-paste (PwC MENA benchmark, 2024).
- ❑ Talent squeeze, **maintenance & planning vacancies stay open 110 days on average**, stalling improvement projects.



# AI Can Unlock Dh Millions, **Unless You Chase The Wrong Use Case**

- ❑ 70 % of global AI PoCs stall in “pilot purgatory” (McKinsey 2024)
- ❑ Due to use-cases poorly scoped, misaligned to business and stakeholder requirements

**Technology is the easy part.  
Choosing *where* to apply it is the make-or-break.**

# Examples Of What An AI Use Case Sprint Can Uncover

# From Sticky Notes to a Ranked Heat-Map

	T	I	M	E
Chat WO Creator	8	7	3	9
WO Close On Mobile	9	6	3	8
Manual Excel Backlog	4	2	3	4

**This matrix is built & shows why we pick the 2 examples you're about to see.**

# Quick-Win 1

## Create Work Orders in < 60 s

# Mobile Maintenance **Work Order Creation**

## **Business Problem**

How  
AI Solves

Business  
Value


- Creating a simple work order in EPR applications normally takes 6 - 8 screens and a desktop login.**
- Field techs skip data entry or phone it in, so labour & material costs aren't captured and preventive schedules slip.**
- Password resets and VPN logins waste minutes and frustrate crews**

# Mobile Maintenance **Work Order Creation**

Business  
Problem

**How  
AI Solves**

Business  
Value

1. **Secure, 2-step sign-in → AI Bot sends SSO link → user enters emailed verification code + ERP User ID**
2. **Technician types a natural-language command: “Create a WO: HVAC inspection, 2 hrs, AED 1 850.”**
3. **AI Bot maps the intent to ERP CreateWorkOrder API via orchestration, submits it and replies with  WO #454707 + hours & cost.**
4. **Chat window becomes the single interface for further updates or status checks.**

# Mobile Maintenance **Work Order Creation**

Business  
Problem

How  
AI Solves

**Business  
Value**

## **T - Time**

**WO authoring drops from ~8 min at a desktop to <1 min on mobile.**

## **I - Investment of Resources**

**Leverages existing ERP Orchestrations & corporate SSO; no extra licences or head-count.**

## **M - Money**

- More WOs logged = accurate labour/material capture → tighter cost control and audit trail.**
- Faster logging helps planners rebalance manpower, reducing unplanned overtime.**

## **E - Experience**

- Techs stay in a chat UI they already use; zero forms, fewer password headaches.**
- Supervisors get instant confirmation, no phone-tag.**

10:20

84



Maintenance WO AI >



JD Edwards Authentication



Message



Search



# Quick-Win 2

## Close & Update WOs On-Site

# Mobile Work Order **Inquiry & Closure**

## **Business Problem**

How  
AI Solves

Business  
Value


- Technicians must return to a workstation, or call the planner, to confirm WO details or close a job.**
- Open WOs linger in JD Edwards because paper debriefs are keyed in days later, skewing backlog KPIs and delaying cost capture.**
- Supervisors lack real-time visibility into job status, making it hard to re-allocate crews.**

# Mobile Work Order **Inquiry & Closure**

Business  
Problem

**How  
AI Solves**

Business  
Value

1. **Secure login: same SSO / verification-code flow as Use-Case 1**
2. **Bot offers two commands: “View your work orders” or “Close a work order”**
3. **Tech types: “List the details of WO 454707” → bot pulls full header (status, hours, crew, dates, business unit, etc.) via GetWorkOrder API**
4. **Tech replies: “Close this WO: inspection complete. No issues found.” → bot calls CloseWorkOrder orchestration, returns  confirmation**

# Mobile Work Order **Inquiry & Closure**

Business  
Problem

How  
AI Solves

**Business  
Value**

## **T - Time**

- Status check or closure drops from ~10 min phone/tag-out process to <1 min in chat.

## **I - Investment of Resources**

- Re-uses existing JDE work-order APIs; no extra modules or devices

## **M - Money**

- Faster closure posts labour & material costs the same day, improving cost accuracy and accelerating client billing where applicable.
- Live backlog data lets supervisors redeploy crews sooner, cutting idle time and overtime.

## **E - Experience**

- Technicians finish admin on-site, not back at a terminal.
- Planners see up-to-date status without chasing calls, reducing frustration on both sides.

10:42

81



Work Order Completion >



🔒 Authenticate in JD Edwards



Message



🌐 Search

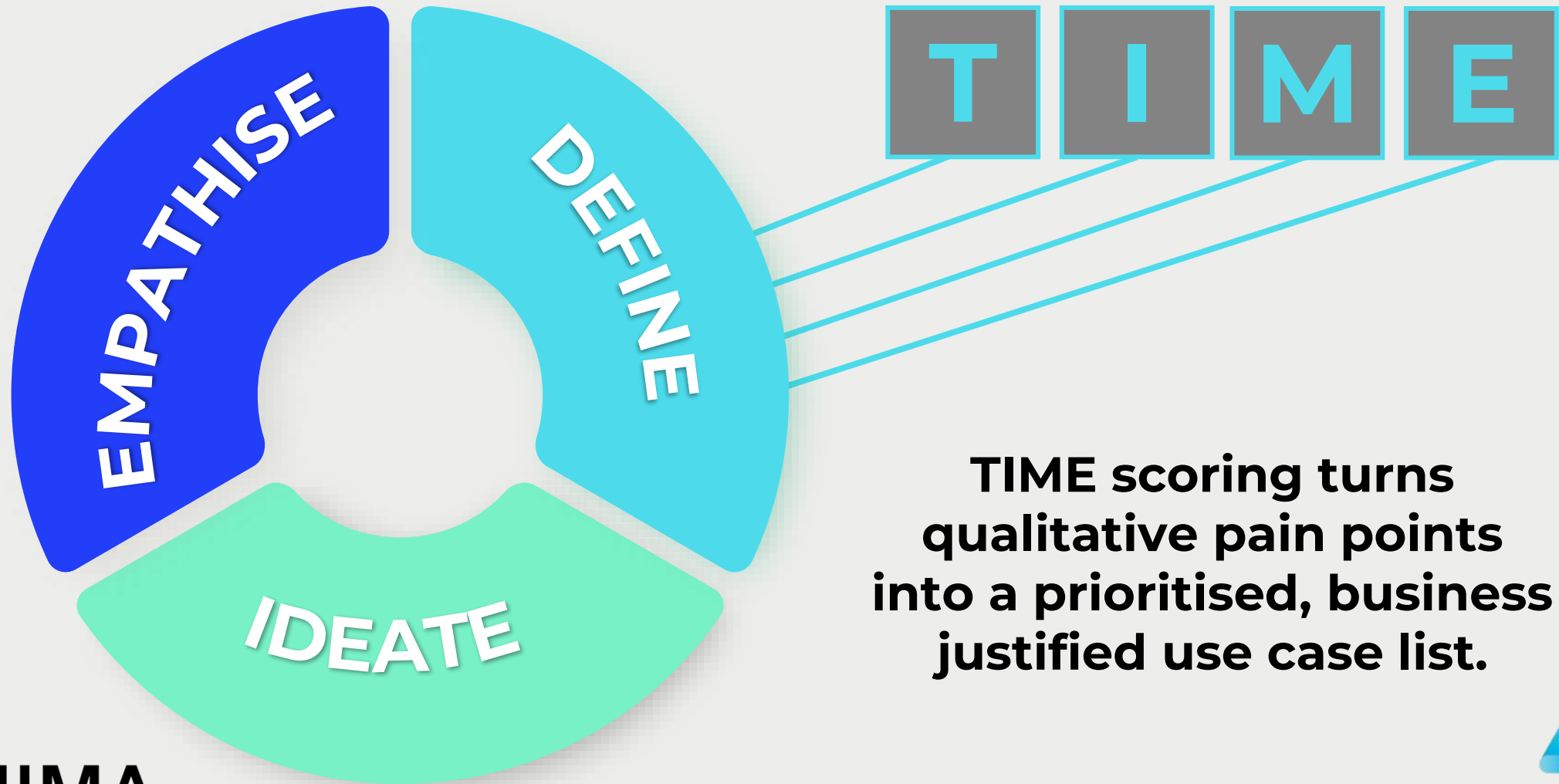


# How To Identify & Justify Where To Focus Time & Investment

# Koshima Method

## Design Thinking x TIME

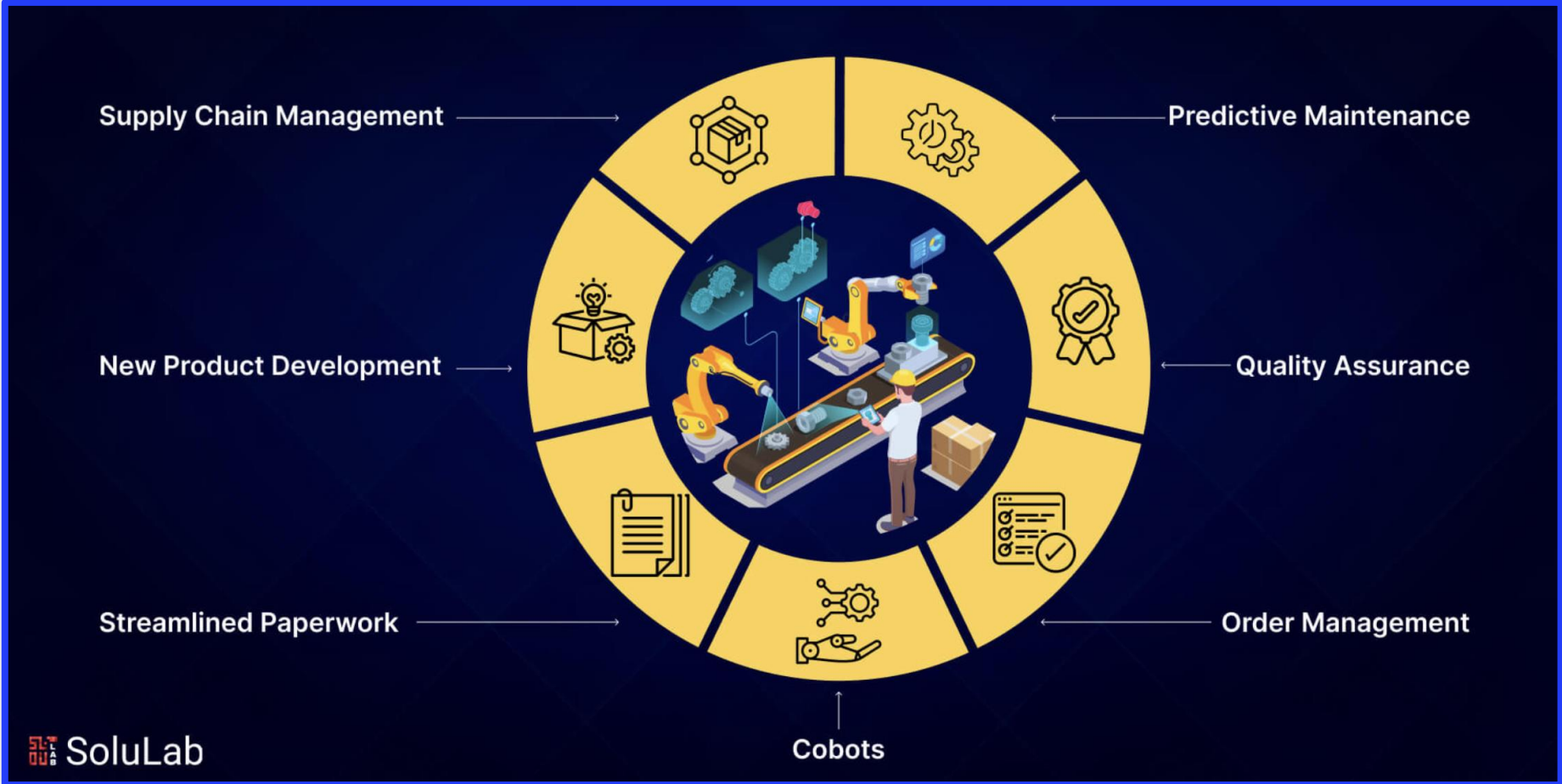
# A Proven Framework to Find AI Gold Before Anyone Writes a Single Line of Code



# Putting Data Centre of Direction **TIME Framework**

<b>TIME</b>	<b>How is time spent across various tasks &amp; processes?</b>
<b>INVESTMENT RESOURCES</b>	<b>What is your allocation and use of resources?</b>
<b>MONEY</b>	<b>Where is money made and where it is spent?</b>
<b>EXPERIENCE</b>	<b>Internal &amp; external experiences related to tasks performed?</b>

# This Is How To Identify **Where To Focus**



# How Do We Move Forward?

# Your Steps To Identifying How Your Business Can Leverage AI To Gain An Advantage

<b>STEP 1</b>	<b>Book your Free 1 Hour AI Awareness Workshop</b>
<b>STEP 2</b>	<b>Involve Your Dept &amp; Function Leaders</b>
<b>STEP 3</b>	<b>Fill Out Pre-Workshop Questionnaire</b>

RAKEZ VAS - AI Awareness  
Workshop Registration



**LOCATION**

Compass Coworking Centre  
Or Your Company Offices



**PLEASE PARTICIPATE IN  
OUR FEEDBACK SURVEY**

THANK YOU