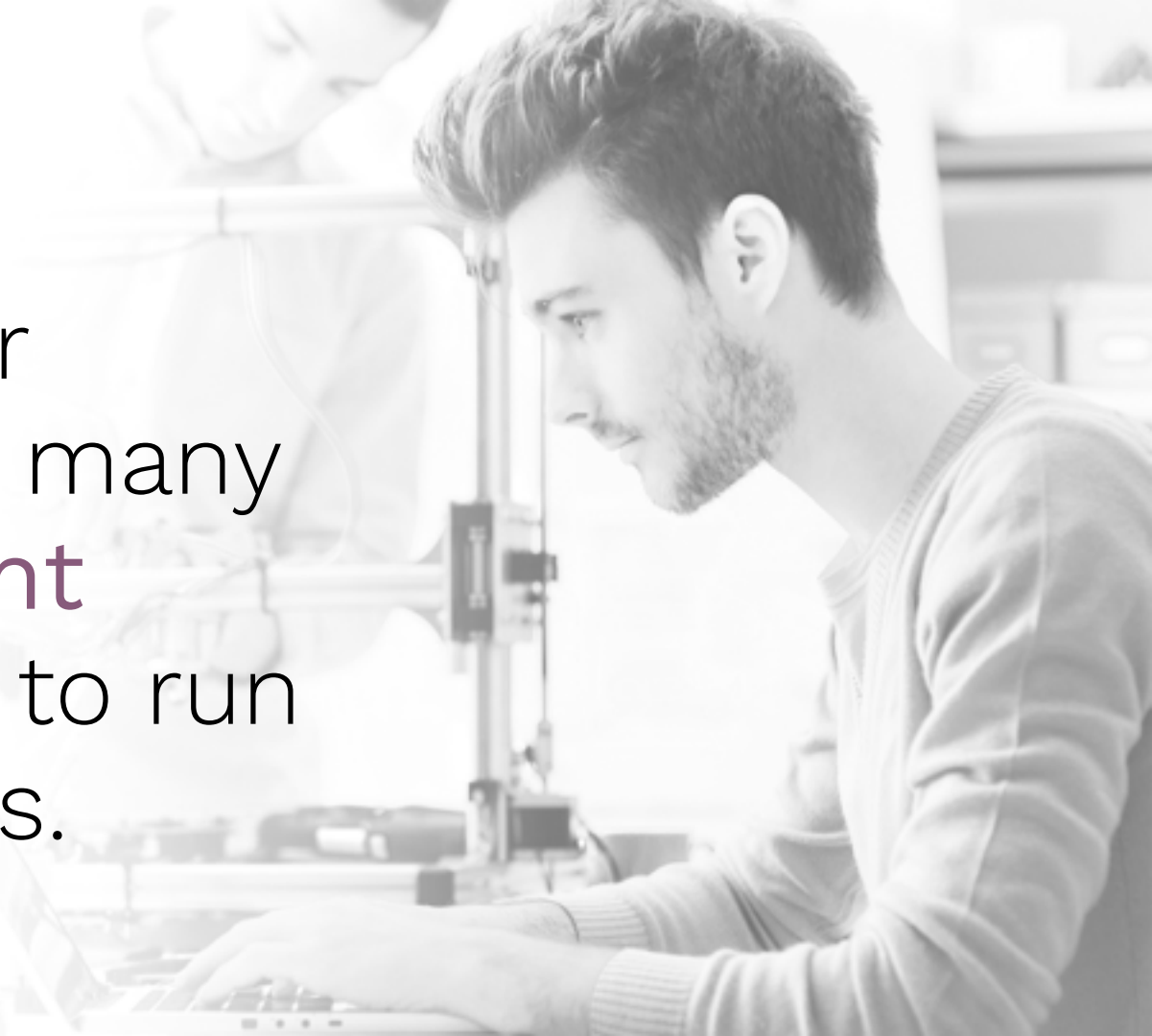


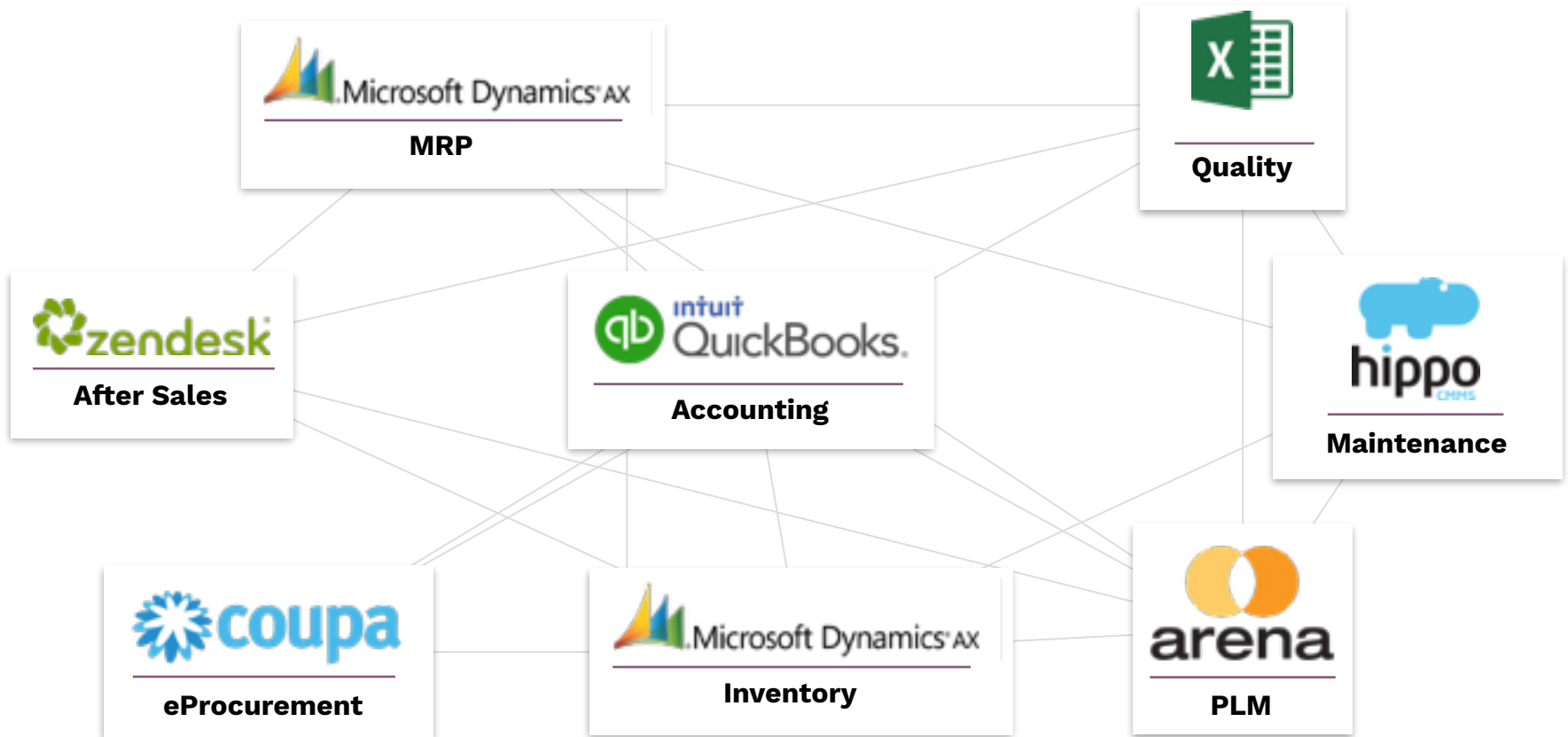


MRP, PLM, Quality & Maintenance
Together at last!

The average manufacturer might use as many as **10 different applications** to run their business.



A typical IT stack.





Planning &
Scheduling



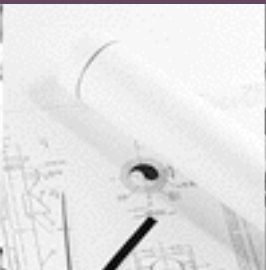
Procurement



Logistics



Quality



Production
Controlling



Maintenance
Management



Industrial
Engineering



Asset
Management



IT

Integrating different
platforms is
**expensive, time consuming,
and inefficient.**



Next Generation MRP Software

Keep IT Simple



All you need in a single software

Easy + Powerful = Lean

Engineering

- PLM
- Bill of Materials
- Versioning

Manufacturing Engineering

- Routings
- Worksheets

Manufacturing

- Planning
- Control Panel
- Work orders

Supply Chain

- MPS
- Routes
- Procurement Rules

Quality

- Control Points
- Checks (SPC)
- Alerts

Maintenance

- Equipment Management
- Maintenance Requests

MRP

Plan

Manufacture

**Check
Quality**

Quality

Alert

**Analyse
Root Cause**

**Define
Quality
Control Plan**

PLM

**Define
ECO**

**Approve
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Plan

Automate scheduling:

- Master Production Schedule (MPS)
- Minimum Stock Rules
- Make-to-Order

Manage planning:

- Gantt Chart
- Capacity planning and adjustments

MRP II

Planning:

(manufacturing orders)

- Based on customer promises
- Using average lead times
(manufacturing, purchases, etc)



Result:

Manufacturing Orders by priority
(expected date)

Scheduling:

(work orders)

- Schedule work orders
(massively or manually)
- Using operation time &
workcenter capacities
(MRP II)



Result:

Gantt chart of work orders

Scheduling

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(manufacturing orders)

- Based on customer promises
- Using average lead times
(manufacturing, purchases, etc)



Result:

Manufacturing Orders by priority
(expected date)

Scheduling:

(work orders)

- Schedule work orders
(massively or manually)
- Using operation time &
workcenter capacities
(MRP II)



Result:

Gantt chart of work orders

Operation Durations

Set time manually:

(industry standard)

- Requires time clocking every operation
- Static, does not evolve with the process

Compute real times:

(Odoo innovation)

- No time clocking needed, evolve with the process
- Based on average & standard deviation

Operation

Manual Assembly

Work Center

Assembly Station 1

Duration Computation

☒ Compute based on real time

☐ Set duration manually

Based on

last 10 work orders

Default Duration

60:00 minutes

Create MOs directly from the MPS

Manufacturing Dashboard Operations Planning Master Data Reporting Configuration

Master Production Schedule

[Save](#) [Discard](#)

Ice Cream by kg	Week 10	Week 11	Week 12	Week 13	Week 14	Week 15
Starting Inventory	10.00	45.00	45.00	45.00	45.00	45.00
- Demand Forecast	50.00	40.00	50.00	10.00	50.00	10.00
- Indirect Demand	0.00	0.00	0.00	0.00	0.00	0.00
+ To Produce set min-max	85.00	40.00	50.00	10.00	50.00	10.00
= Forecasted Inventory set target	45.00	45.00	45.00	45.00	45.00	45.00

Air Flight by Unit(s)	Week 10	Week 11	Week 12	Week 13	Week 14	Week 15
Starting Inventory	10.00	24.00	24.00	24.00	24.00	24.00
- Demand Forecast	10.00	10.00	40.00	30.00	40.00	30.00
- Indirect Demand	0.00	0.00	0.00	0.00	0.00	0.00
+ To Produce set min-max	24.00	10.00	40.00	30.00	40.00	30.00
= Forecasted Inventory set target	24.00	24.00	24.00	24.00	24.00	24.00

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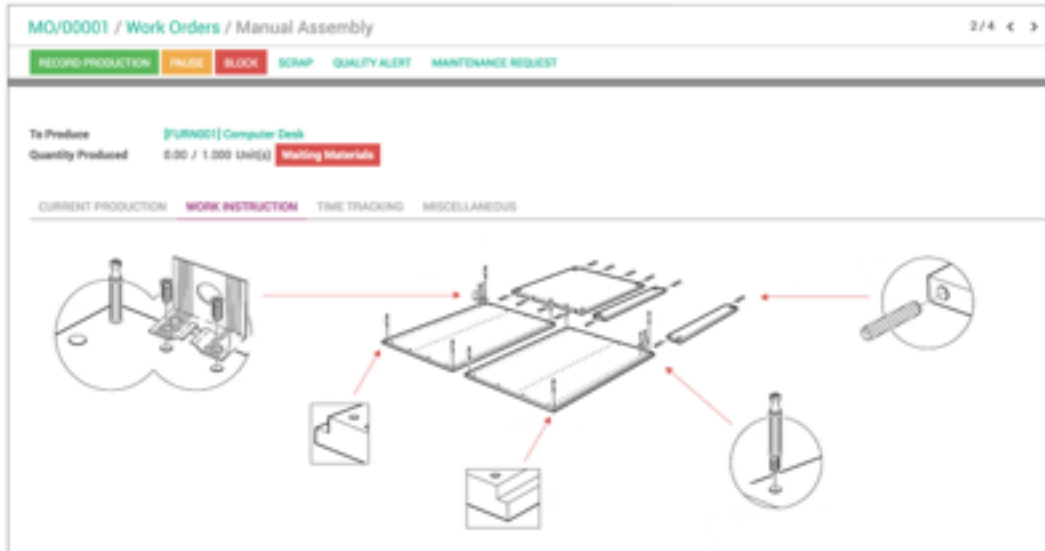


Manufacturing

Record work operations on tablets:

- Record productions
- Display worksheets
- Time tracking
- Quality control
- Barcode support
- Trigger issues

Workcenter Control Panel



- ✓ Track Time
- ✓ Display Worksheets
- ✓ Register Production
- ✓ Integrate Quality checks
- ✓ In Process Alerts
- ✓ Record Serial/lot number

A worker triggers a
quality alert



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OEE

Overall Equipment Effectiveness	Recommended Six Big Losses
Availability Loss	Unplanned Stops
	Planned Stops
Performance Loss	Small Stops
	Slow Cycles
Quality Loss	Production Rejects
	Startup Rejects
OEE	Fully Productive Time



Recorded from
operations on
the work center
Tablet

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Engineering Change Orders

Approvals: (manufacturing orders)

- By role
- Comment or blocking

Customizable workflow

- NPI
- Worksheet updates

Deploy easily

- Versioning
- Trigger alerts for the manufacturing (next MO)

PLM Dashboard / Engineering Change Orders

Search...



CREATE

IMPORT



New



Engineering



Re-tool Machinery



Effective



REFUSED (2)

ECO0002

BoM: [E-COM07] iPad Mini



ECO0003

BoM: [FURN001] Computer Desk



ECO0007

BoM: [HDD-SH1] HDD SH-1



ECO0001

BoM: [E-COM05] Bose Mini Bluetooth Speaker



ECO0004

BoM: [PCSC234] Computer SC234



ECO0010

BoM: [E-COM12] Self Build Kit



ECO0006

BoM: [E-COM08] Apple In-Ear Headphones



ECO0009

BoM: [LAP-ES] Laptop E5023



ECO0011

BoM: [HDD-SH1] HDD SH-1



ECO0012

BoM: [HDD-DEM] HDD on Demand



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Efficient BoM and routing version management



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Quality Control Plan

Checks at:

- Intake
- In-process
- Post-process

Communicate efficiently

- Send Alerts to Workers
- At Inventory & manufacturing level



Next Generation MRP Software

And much more...

Fully integrated with

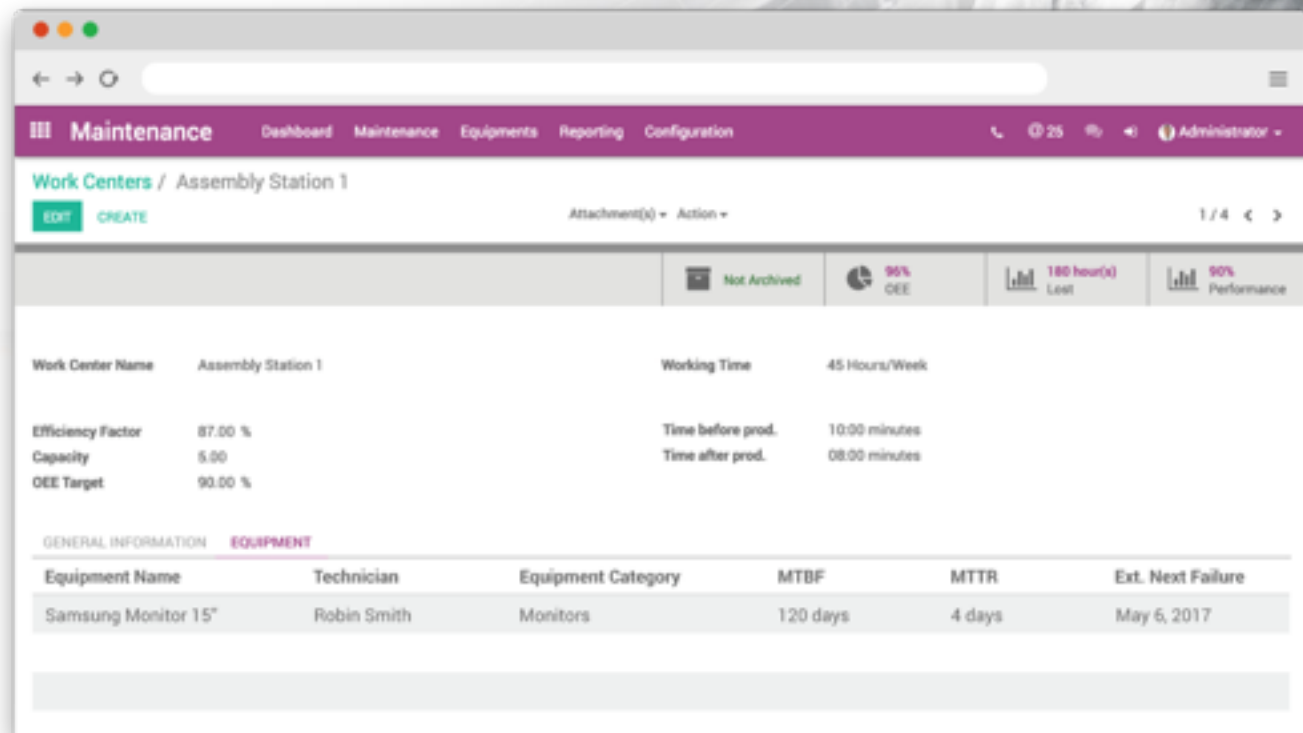

- Maintenance & Repairs
- Supply Chain
- Communication Tools
- Sales
- etc...



Maintenance Requests

Maintenance software

For modern manufacturers.



The screenshot displays the 'Maintenance' software interface. The top navigation bar includes 'Maintenance', 'Dashboard', 'Maintenance', 'Equipments', 'Reporting', and 'Configuration'. The user is logged in as 'Administrator'. The main view is titled 'Work Centers / Assembly Station 1'. It features a summary section with 'Not Archived', '90% OEE', '180 hour(s) Lost', and '90% Performance'. Below this, a table lists work center details: Assembly Station 1, 45 Hours/Week working time, 87.00% efficiency factor, 5.00 capacity, and 90.00% OEE target. It also shows production times: 10:00 minutes before and 08:00 minutes after. At the bottom, an 'EQUIPMENT' table lists a 'Samsung Monitor 15\"

Equipment Name	Technician	Equipment Category	MTBF	MTTR	Ext. Next Failure
Samsung Monitor 15"	Robin Smith	Monitors	120 days	4 days	May 6, 2017

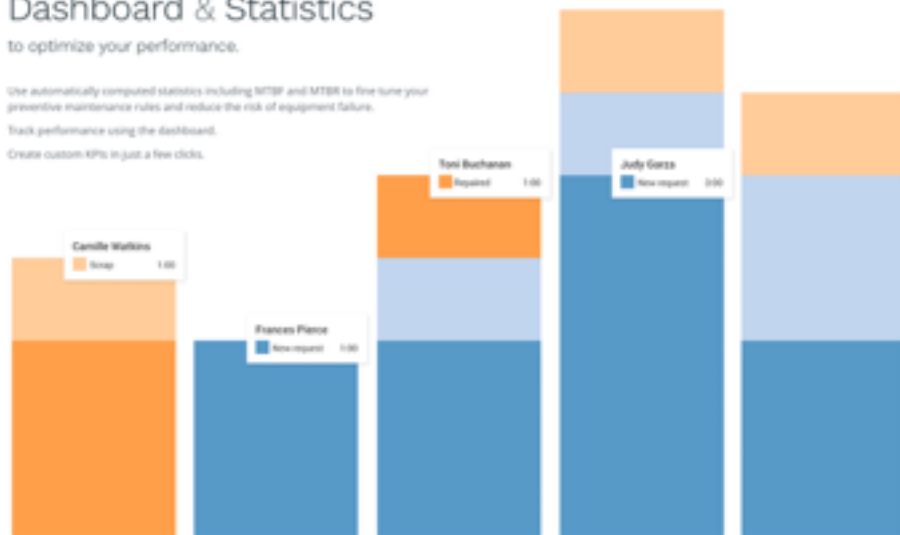
Dashboard & Statistics

to optimize your performance.

Use automatically computed statistics including MTBF and MTBR to fine tune your preventive maintenance rules and reduce the risk of equipment failure.

Track performance using the dashboard.

Create custom KPIs in just a few clicks.



And great reports...

MRP

- Costing
- Traceability
- Time Tracking
- Inventory Forecast

Maintenance

- Overall Equipment Efficiency
- Mean Time Before Failure
- Mean Time to Repair

Quality

- Statistical Process Control
- Root Cause Analysis
- APQP
- PMEA

PLM

- ECO Statistics
- Versions Control (e/m-BoM)

Other improvements

Multi-level Variants Management

Communication mechanism

Supply Chain:

- Blanket Orders
- Purchase Tender & Agreements

Inventory Operations:

- Alerts
- Quality Tests



Next Generation MRP Software



Used and Loved By



Want to use it?

ETA:

- August 2016: Available in Odoo Online
- October 2016: Odoo 10 Release for on premise

Partners & Odoo Online customers can join the beta tester program. [mail to: jco@odoo.com](mailto:jco@odoo.com)