



# Catch Documentation and Traceability Technologies



#SAFETCONF2019

Jirawat Eauchai

**TRINITY  
ROOTS**

passion  
innovates  
excellence



“Building Better Living, Economy and Society  
through information, innovation and technology “

# Jirawat Jay Eauchai



## Qualification

- MBA - New Technology Venture - CMMU
- Bsc – E-Business; ICT – Mahidol University

## Working Experience

- Special Lecturer: Mahidol University, Kasertsart University
- Project Manager - Port-in Port-out System, e-License, Seabook
- Project Manager - Odoo ERP Projects
- Project Manager - Mobile Banking Application & SMS Services - Citibank (Thailand)

# Team Experiences



Fishing  
Info



DOF  
PIPO



e-LICENSE  
ระบบการออกใบอนุญาตทำการประมง



ระบบออกหนังสือคนประจำเรือ  
สำหรับแรงงานต่างด้าว





# Our Partners



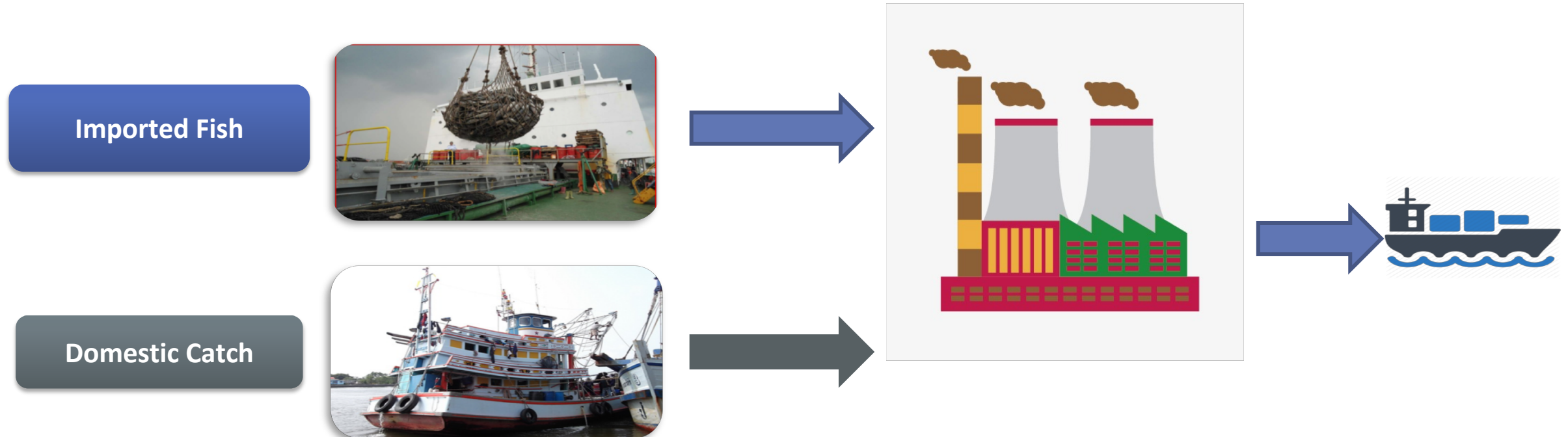
Integrated Monitoring



The Global Language of Business

# Seafood Traceability in Thailand

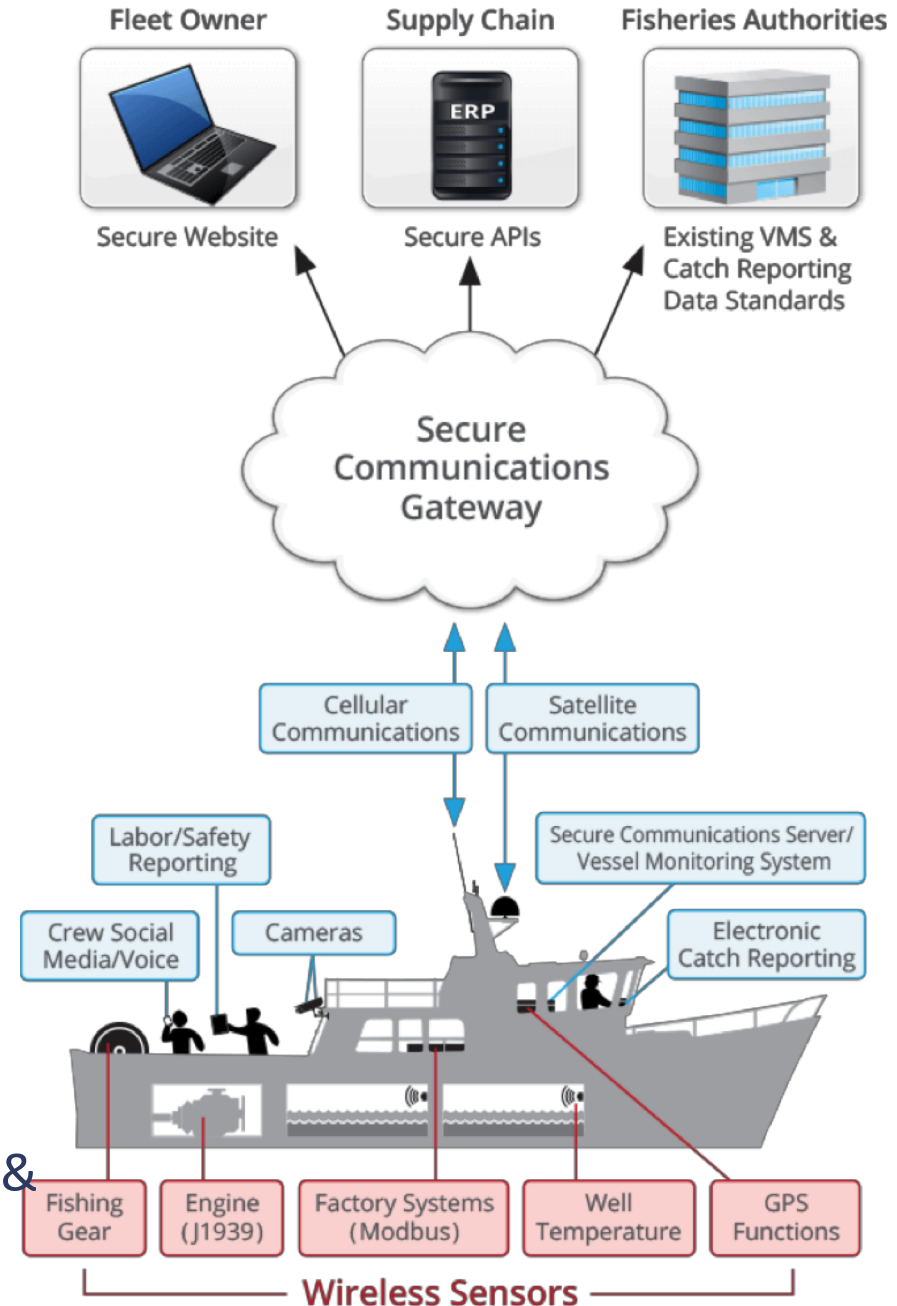
- Traceability for Imported Fish
  - Importation point to processing plant
- Traceability for Thai Flagged Vessel
  - Landing point to processing plant



# Concept



A single system meeting all Industry, Regulator & Supply-chain needs



# Key Features of

1. Electronic Reporting System
2. Electronic Monitoring
3. Crew Survey and Activity Records
4. Vessel Monitoring System

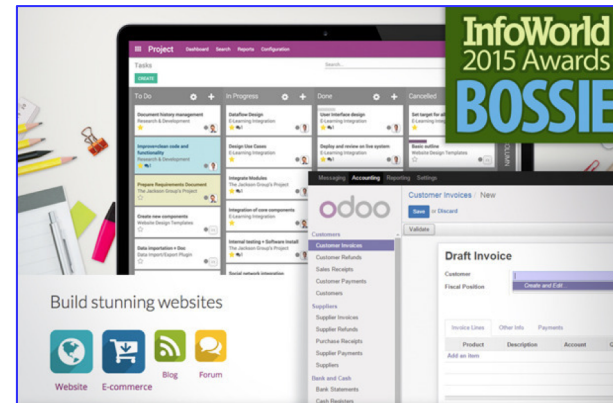
# Framework Technology



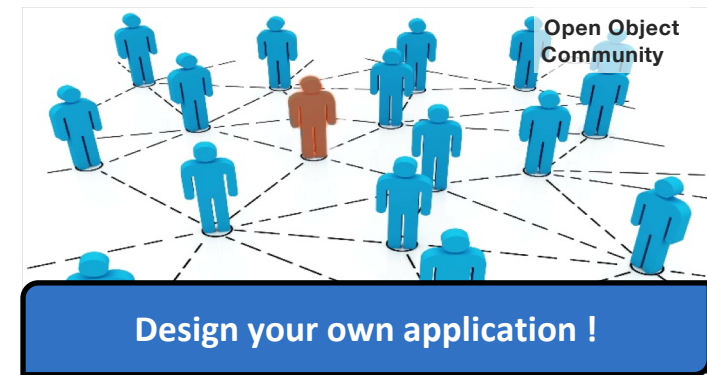
The Python-based Web application

Odoo ERP is known to be very complete and extremely modular, with **8,000+ modules** and features

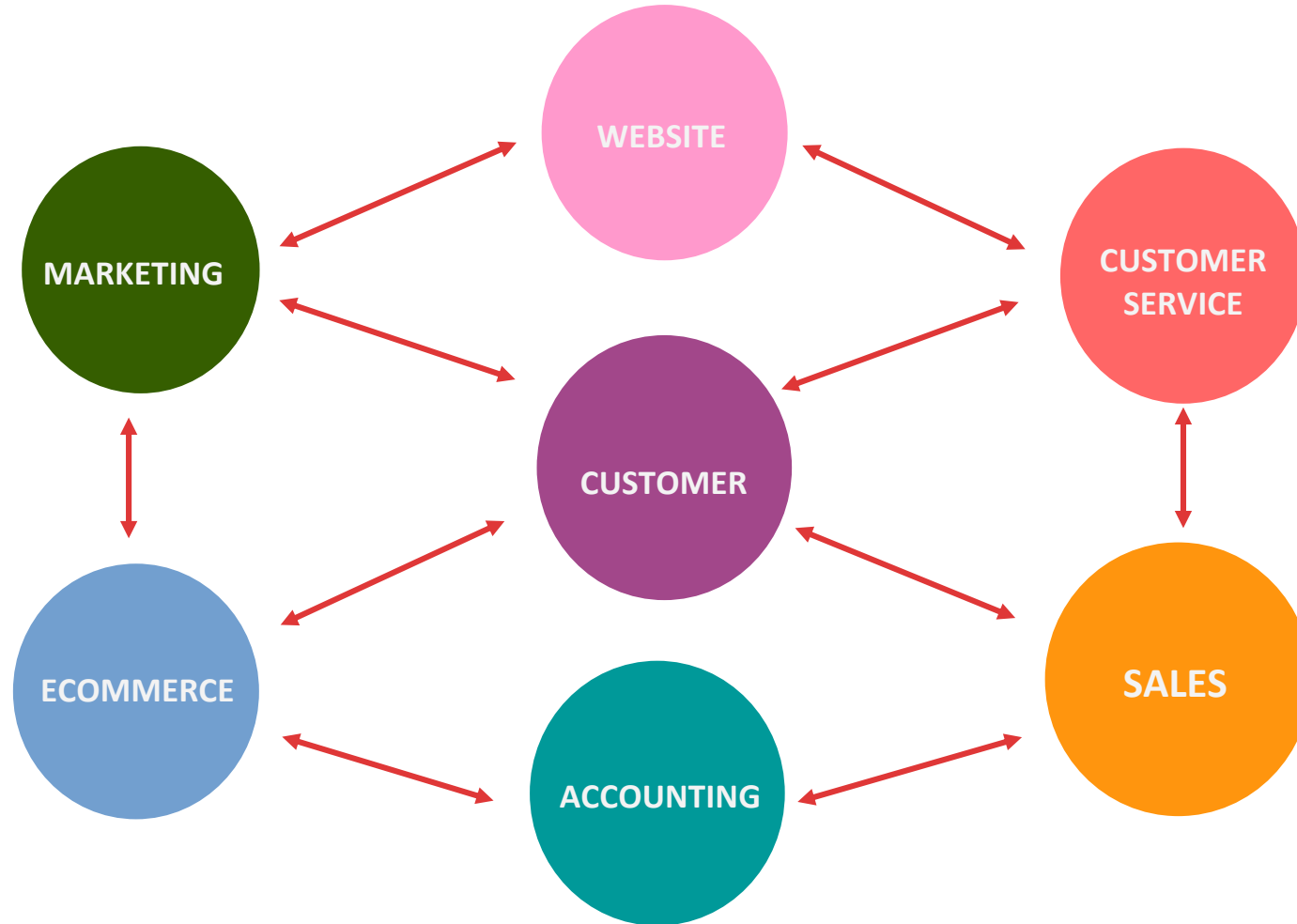
**“The best open source applications “- Bossie Awards**



# Why Odoo?



# Principle of Modern ERP



**Modern Companies are Customer Centric!**

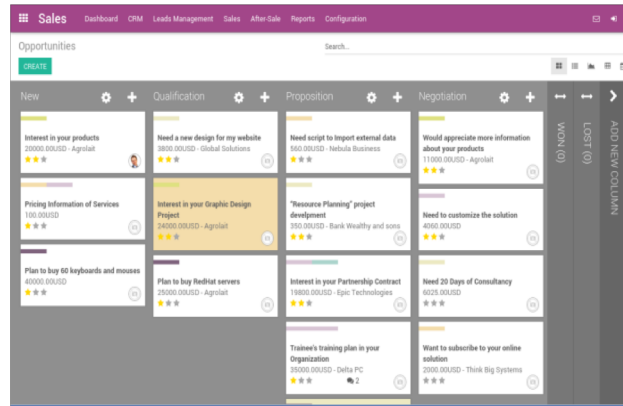


# Frontend / Backend Integration





# Integrate ALL Channels



CRM / Contacts

odoo



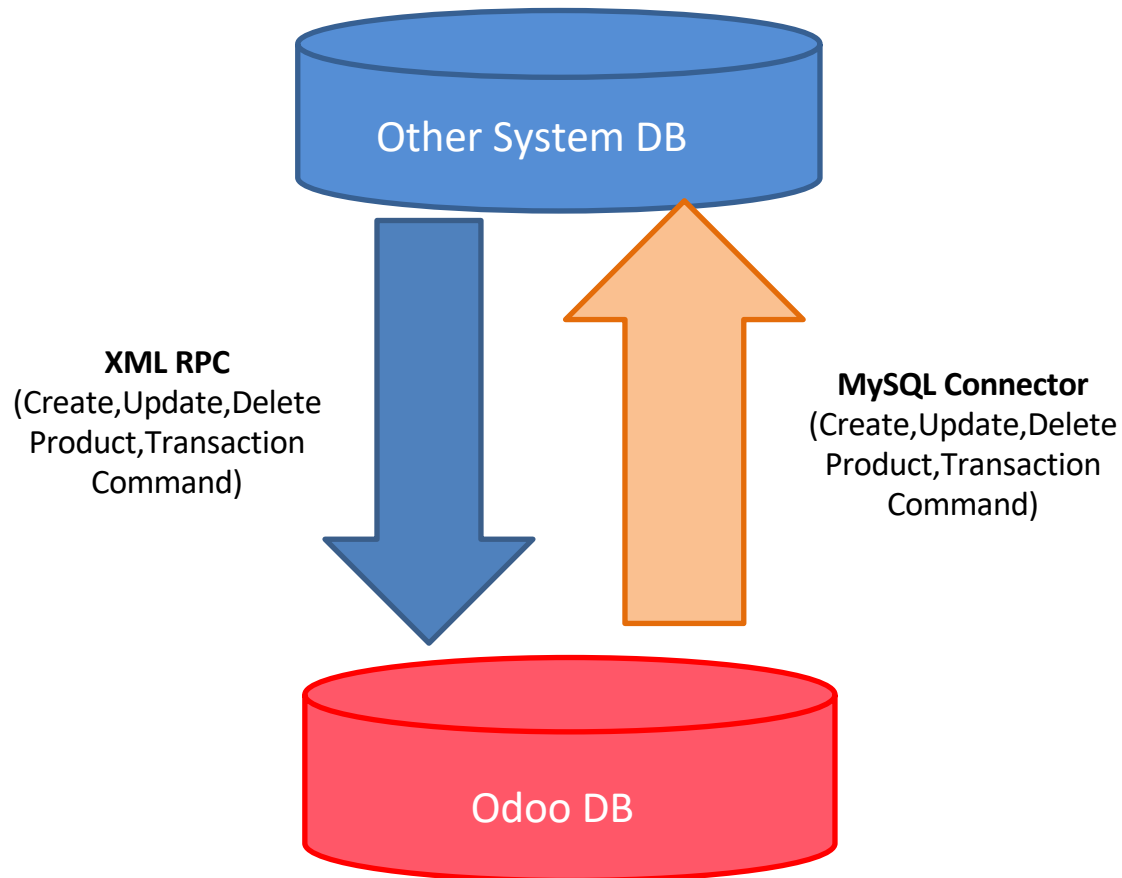
Point of Sale



e-Commerce

# Synchronization

Integration to Other System via XML-RPC Web Service



opencart

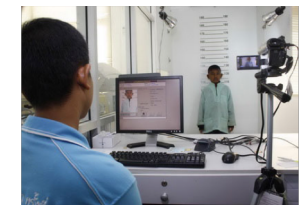
Data to be Synchronize Example

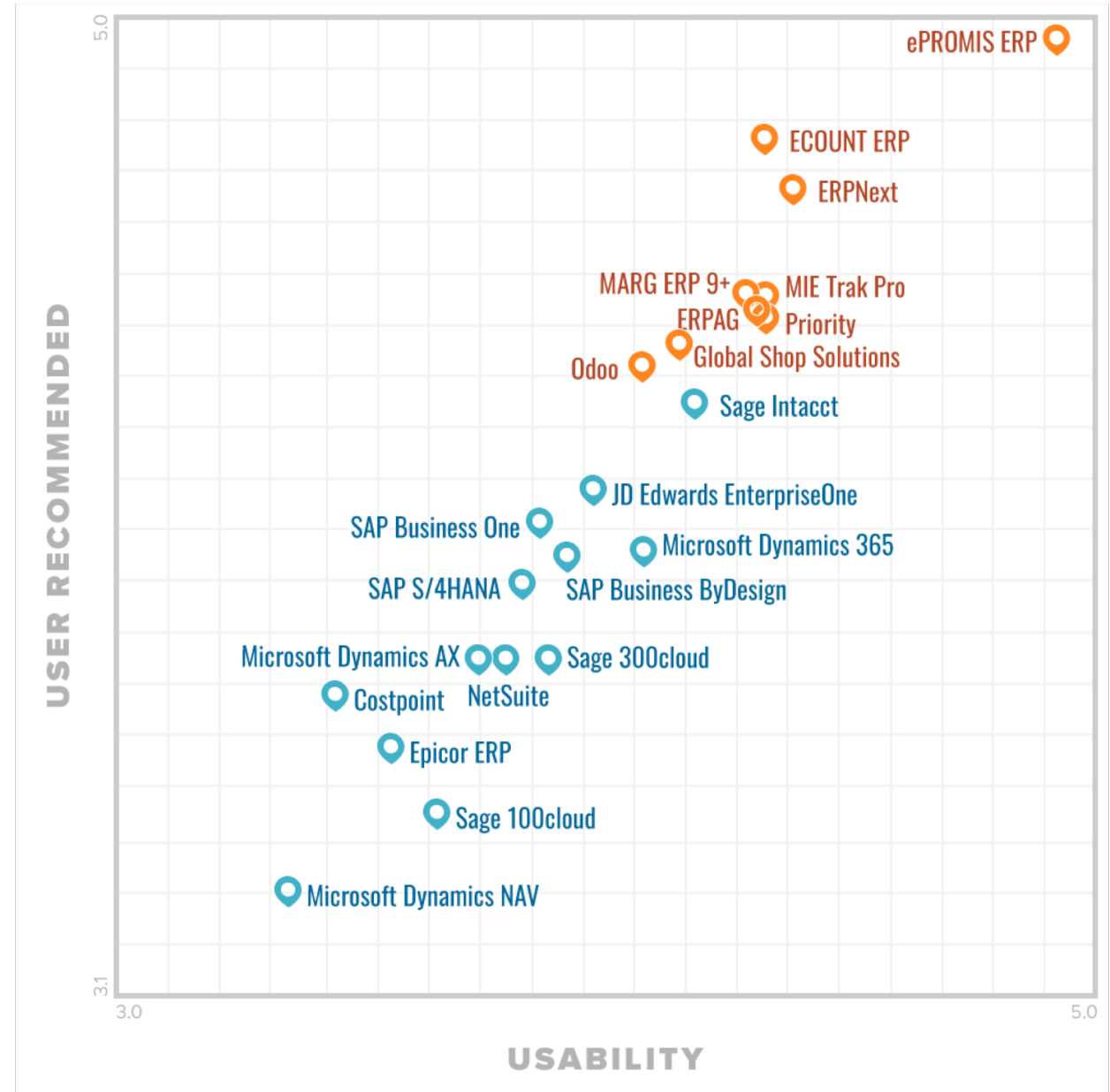
- Online Order
- Products Sync
- Stock Level

# Connect to Devices

- Integration to Hardware Solution

- Scanner / Printer
- Wifi Router
- Tablet / PC / Mobile Device
- CCTV Camera
- Fingerprint Scanner
- Satellite
- ETC.







Friendly UI

**Fishing Trip** Fishing Trip

Search...

CREATE IMPORT

1-20 / 20 < > [List Icon] [Grid Icon] [Print Icon]

<input type="checkbox"/> PIPO Number	PO Fishing Port	PO Center	PI Center	Fishing Vessel	Ship Name	PO Objective	PI Objective	PO Date	PI Date
<input type="checkbox"/> 6100020	Port of Jacksonville	Houston Center	Houston Center	449000017	Western Pacific	Fishing	Raise fish	03/27/2018 20:00:00	04/03/2018 22:00:00
<input type="checkbox"/> 6100019	Port of Boston	Greenville Center	Greenville Center	600003054	Marina	Fishing	Raise fish	03/25/2018 10:00:00	03/26/2018 10:00:00
<input type="checkbox"/> 6100018	Port of Houston	Victoria Center	Victoria Center	297435272	Cape Ferrat	Fishing	Raise fish	03/22/2018 08:00:00	03/23/2018 14:00:00
<input type="checkbox"/> 6100017	Port of Boston	Houston Center	Houston Center	449000017	Western Pacific	Fishing	Raise fish	03/23/2018 07:00:00	03/25/2018 12:00:00
<input type="checkbox"/> 6100016	Port Newark	Greenville Center	Greenville Center	261031650	Brittany	Fishing	Raise fish	03/19/2018 11:00:00	03/21/2018 15:00:00
<input type="checkbox"/> 6100015	Port of Houston	Houston Center	Houston Center	600003054	Marina	Fishing	Raise fish	03/20/2018 19:00:00	03/24/2018 20:00:00
<input type="checkbox"/> 6100014	Port Newark	Nashville Center	Nashville Center	449000017	Western Pacific	Fishing	Raise fish	03/21/2018 10:00:00	03/22/2018 10:00:00
<input type="checkbox"/> 6100013	Port of Boston	Greenville Center	Greenville Center	260845014	Tidelands	Fishing	Raise fish	04/01/2018 08:00:00	04/02/2018 08:00:00
<input type="checkbox"/> 6100012	Port of Boston	Greenville Center	Greenville Center	261031650	Brittany	Fishing	Raise fish	03/16/2018 10:00:00	03/18/2018 10:00:00
<input type="checkbox"/> 6100011	Port of Boston	Greenville Center	Greenville Center	600003054	Marina	Fishing	Raise fish	03/14/2018 02:00:00	03/18/2018 03:00:00
<input type="checkbox"/> 6100010	Port of Boston	Greenville Center	Greenville Center	297435272	Cape Ferrat	Fishing	Raise fish	03/14/2018 16:00:00	03/22/2018 15:00:00
<input type="checkbox"/> 6100009	Port of Houston	Victoria Center	Victoria Center	449000017	Western Pacific	Fishing	Raise fish	03/15/2018 16:00:00	03/20/2018 15:00:00
<input type="checkbox"/> 6100008	Port of Houston	Nashville Center	Nashville Center	260845014	Tidelands	Fishing	Raise fish	03/13/2018 01:00:00	03/31/2018 02:00:00
<input type="checkbox"/> 6100007	Port of Jacksonville	Houston Center	Houston Center	600003054	Marina	Fishing	Raise fish	03/10/2018 06:00:00	03/12/2018 20:00:00
<a href="https://trinityroots-dev-175404.dev.odoo.com/web#">https://trinityroots-dev-175404.dev.odoo.com/web#</a>	South Louisiana Center	261031650	Brittany	Fishing	Raise fish	03/11/2018 17:00:00	03/16/2018 01:00:00		

Data Integrated

**Fishing Trip** / 6100020

EDIT CREATE

1 / 20 < >

**Trip Number**  
6100020

**Fishing Vessel**

Fishing Vessel	449000017	Ton Gross	141.00
Ship Name	Western Pacific	Expire Date	04/02/2018

**Fishery License**

Fishery License	6189917391	Fishing Tool Type	Beam Trawl
Making No	A1453	Fishing Tool Quantity	2.00
		Fishing Tool Length	150.00
		Fishing Tool UOM	Unit

**Port Out - Port In**

Area: East Coast

**Port Out**

PO Number	PO Date	03/27/2018 20:00:00
PO Center	PO Fishing Port	Port of Jacksonville
PO Objective	Port License No	

**Port In**

PI Number	PI Date	04/03/2018 22:00:00
PI Center		
PI Objective		

**Port PI(X)**

Fishing Port Name	License No.
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**Send message Log note**

**Yesterday**

Note by **YourCompany, Administrator** - 1 day ago

- Expire Date: April 2, 2018
- Fishery Licenses Expire Date: March 31, 2018
- Ton Gross: 141
- PI Center: Houston Center
- PPO Number: 6100020
- Fishing Vessel: 449000017
- Ship Name: Western Pacific
- PO Date: March 27, 2018 8:00 PM
- Area: East Coast
- PO Center: Houston Center
- PI Date: April 3, 2018 10:00 PM
- PO Fishing Port: Port of Jacksonville

Note by **YourCompany, Administrator** - 1 day ago

PPO Document created

Tracking Activity

**Fishing Record** / 6100001 (2018-03-08 13:00:00)

EDIT CREATE

1 / 16 < >

**Start Fishing** 03/08/2018 20:00:00 **Latitude** 32.84

**End Fishing** 03/08/2018 23:30:00 **Longitude** -78.07

**Period (Hours)** 3.30

**Fishing Record Route**

Fishing Datetime	Latitude	Longitude

**Fishing Record Catching**

Fishing Species	Weight
Peruvian Anchoveta	20.00
Greenland cod	28.00
Japanese Anchovy	40.00
	88.00

**Scrap Weight** 0.00

Rare Sea Animal

Integrating all the functions

**Fishing Record** Fishing Record Catching

Search

MEASURES: line area bar pie

Legend:

- Grouped
- Stacked
- Peruvian Anchoveta
- Greenland cod
- Japanese Anchovy
- Squid
- Blackfin Tuna
- Yellowfin Tuna
- Sockeye Salmon
- Albacore Tuna
- Whiting Shrimp
- Atlantic Bluefin Tuna...
- Scallop
- Crab
- Atlantic Salmon
- Chinook Salmon
- Bigeye Tuna
- Longtail Tuna
- California Anchovy
- Mackerel Tuna
- Pacific Bluefin Tuna

Year	Species	Measure
20	Grouped	1.00
25	Grouped	1.00
30	Grouped	1.00
35	Grouped	1.00
40	Japanese Anchovy	2.00
45	Grouped	1.00
50	Grouped	1.00
55	Grouped	1.00
60	Grouped	1.00
65	Grouped	1.00
70	Grouped	1.00
75	Grouped	1.00
80	Grouped	1.00
85	Grouped	1.00
90	Grouped	1.00
95	Grouped	1.00
100	Grouped	1.00
105	Grouped	1.00
110	Grouped	1.00
115	Grouped	1.00
120	Grouped	1.00
125	Grouped	1.00
130	Grouped	1.00
135	Grouped	1.00
140	Grouped	1.00
145	Grouped	1.00
150	Grouped	1.00
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175	Grouped	1.00
180	Grouped	1.00
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195	Grouped	1.00
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210	Grouped	1.00
215	Grouped	1.00
220	Grouped	1.00
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400	Grouped	1.00
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420	Grouped	1.00
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620	Grouped	1.00
625	Grouped	1.00
630	Grouped	1.00
635	Grouped	1.00
640	Grouped	1.00
645	Grouped	1.00
650	Grouped	1.00
655		

# Online Dashboard

# Supply Chain Traceability



The Global Language of Business

- Support GS1 seafood traceability
  - Lot number
  - Net weight
  - Species code / name
  - Barcode GS1 Datamatrix



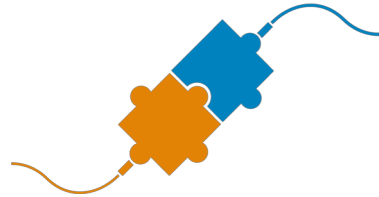
# Benefits



Fast Setup and Install



Continuous Addition of  
New Capabilities



Integrating all the  
functions



Lower total cost  
of ownership



Economize / Worthy



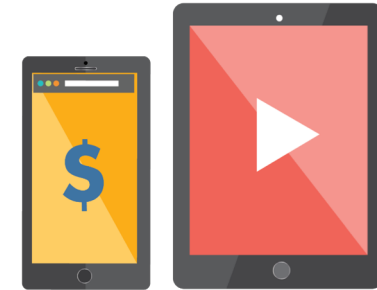
Lower IT Costs



Scalable



Save Time



Mobile and highly  
comprehensive



Customizable

**Better Living**  
**Better Economy**  
**Better Society**

**TRINITY  
MARITIME**  
passion innovates excellence



**Please Contact Us for more detail**

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**For a Live Demonstration –**  
**Please visit the Trinity Maritime booth! (A11)**