



Mike Dillon and Ilham

IMPROVING PRODUCTIVITY AND COMPETITIVENESS



SEKOLAH TINGGI PERIKANAN

creating young samurai !

- ❑ Established in 1962
- ❑ Based in Jakarta
- ❑ Vocational HE, managed by KKP
- ❑ 4-year Diploma
- ❑ Offers Fishing Technology, Fisheries Engineering, Fish Processing Technology, Aquaculture, Aquatic Resource Management, and Fisheries Extension
- ❑ 10,000 graduates
- ❑ 10000 Samurai if we use them !!



Indonesia challenges ? ...

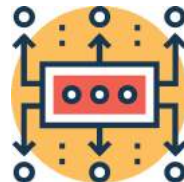
COVID



Low productivity

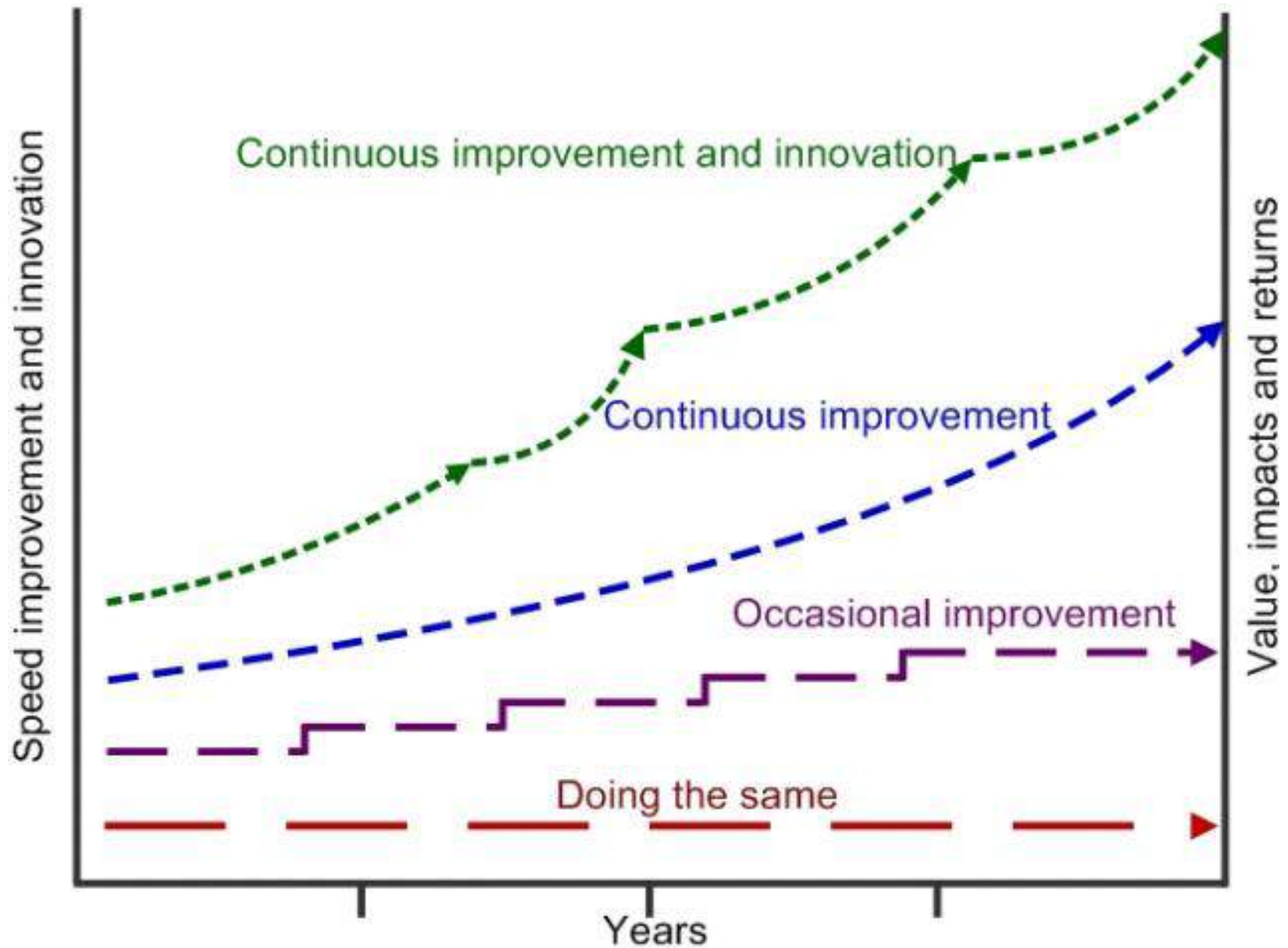


Poor innovation

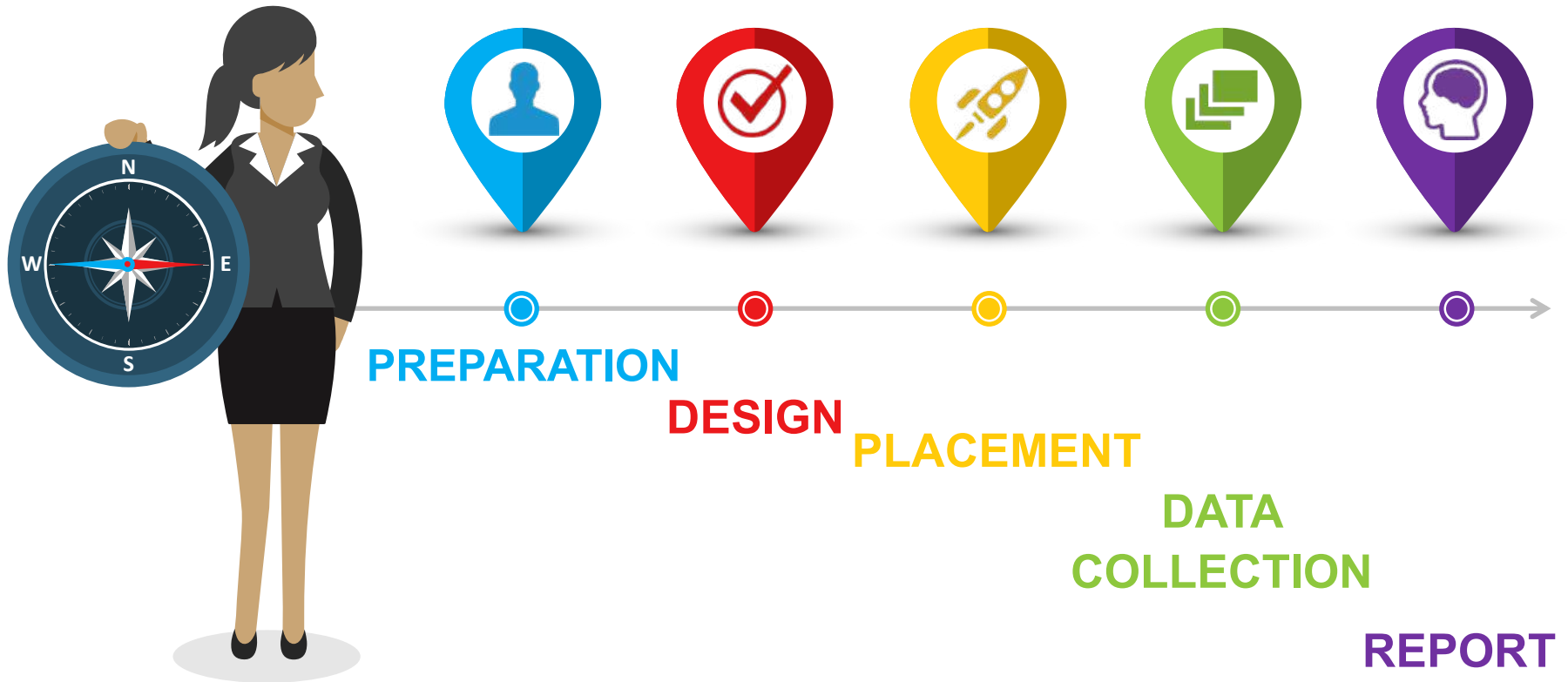


little Work with industry

The relative value from continuous improvement and innovation as versus occasional improvement and doing the same as usual



STP Internship – under SMART-Fish support

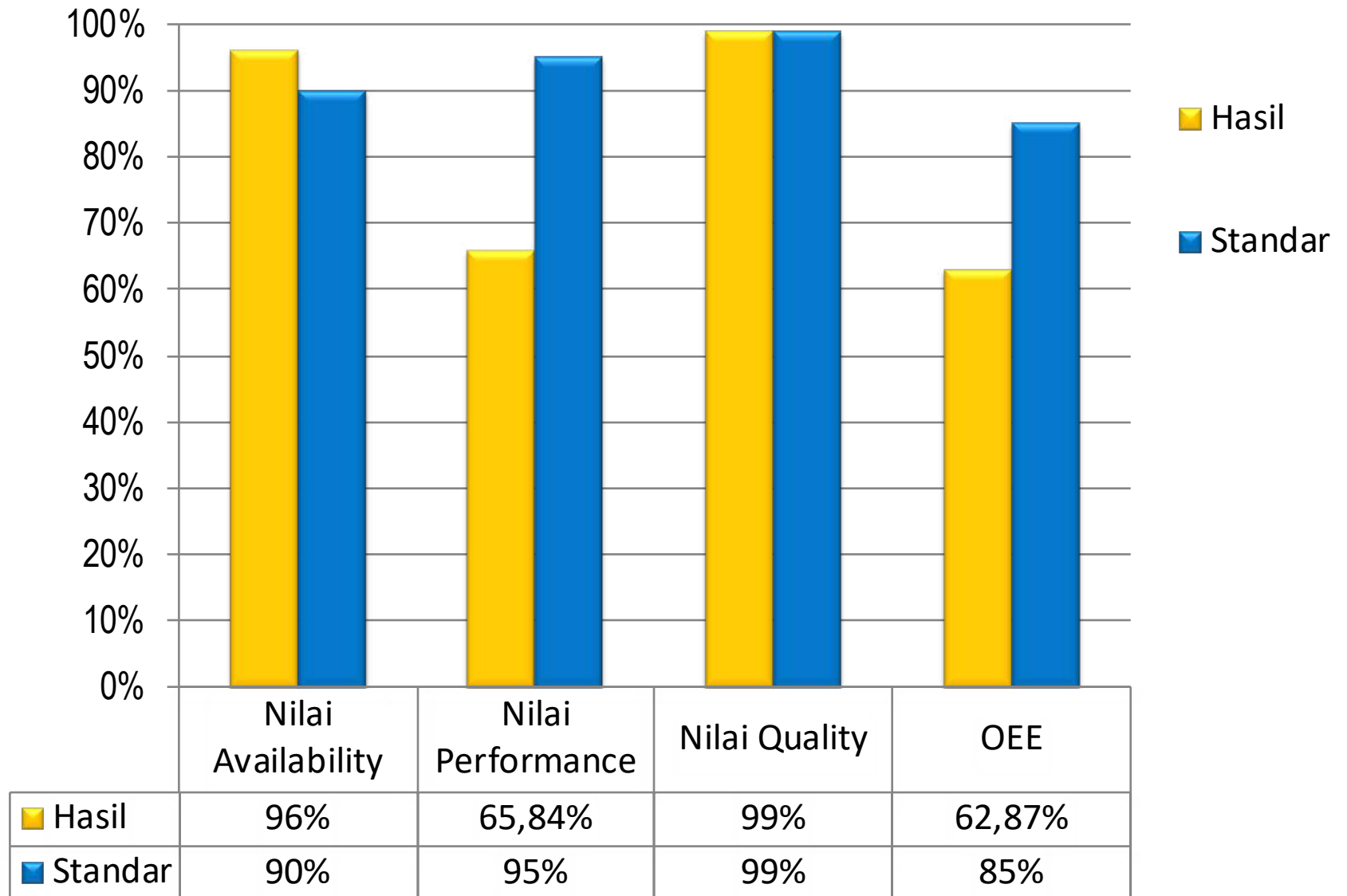


Naufal Fakhri – OEE

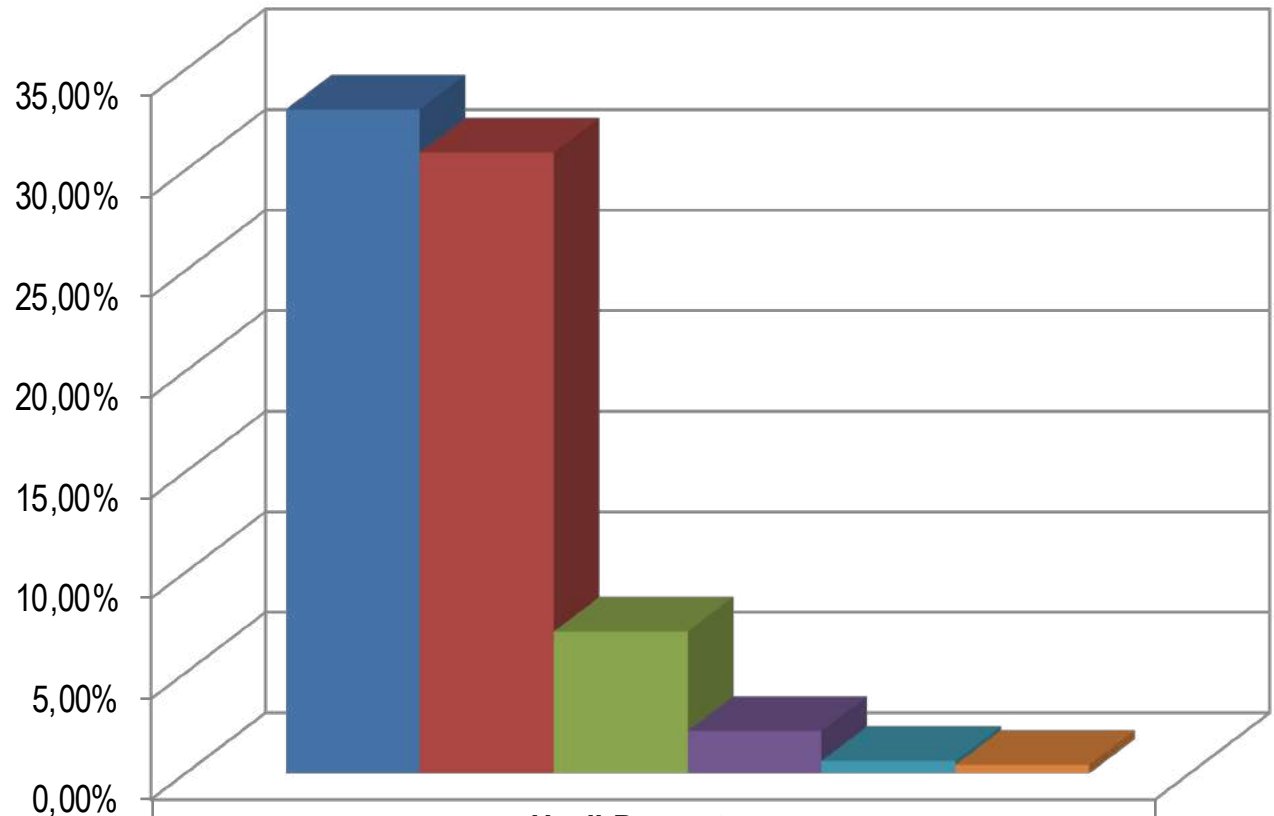
- ❑ PT Panca Mitra Multi Perdana, Situbondo, East Java
- ❑ OEE (Overall Equipment Effectiveness) analysis to improve the effectiveness of the performance of vanammei shrimp freezing machine



OEE



Six Big Losses



	Hasil Persentase
Idle and Minor Stoppage Loss	33,02%
Reduce Speed Loss	30,87%
Setuo and Adjusment Loss	7,05%
Equipment Failure Loss	2,11%
Deffet Loss	0,62%
Reduce Speed Loss	0,43%

Potential loss from electricity usage

Diketahui: Kerugian waktu : 3 jam

Kwh : 100

Biaya listrik : 1.467,28

Ditanyakan : Kerugian dalam jangka panjang?

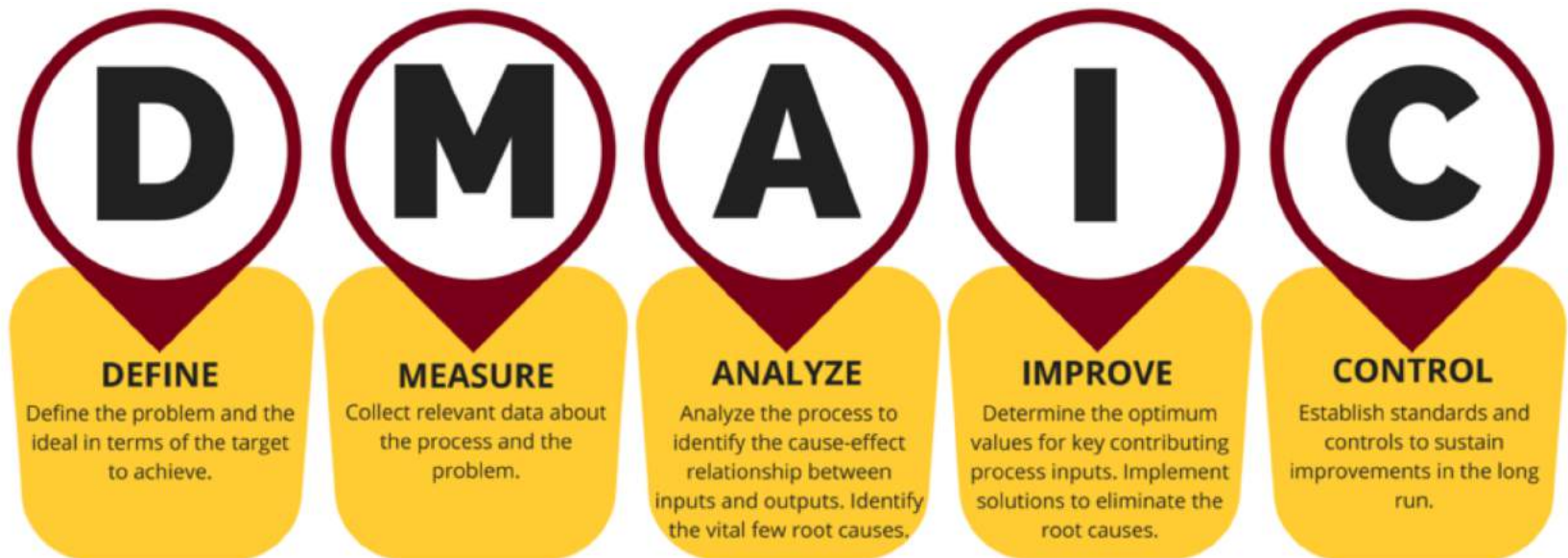
Jawab:

$$1 \text{ hari} = 3,4 \times 100 \times 1467,28 = \text{Rp } 440.184$$
$$1 \text{ minggu} = 6 \text{ hari kerja} \times \text{Rp } 440.184 = \text{Rp } 2.641.104$$
$$1 \text{ bulan} = 25 \text{ hari kerja} \times \text{Rp } 440.184 = \text{Rp } 11.004.600$$

1 tahun = 300 hari kerja x Rp 440.184 = Rp. 132.055.200

Rekha Riani Samura – Kaizen

- ❑ PT Expravet Nasuba, Medan, North Sumatera
- ❑ Improvement of transportation technique of harvested Pangasius





Harvesting

Loading



ROOT CAUSE ANALYSIS WITH THE “5 WHY’S”

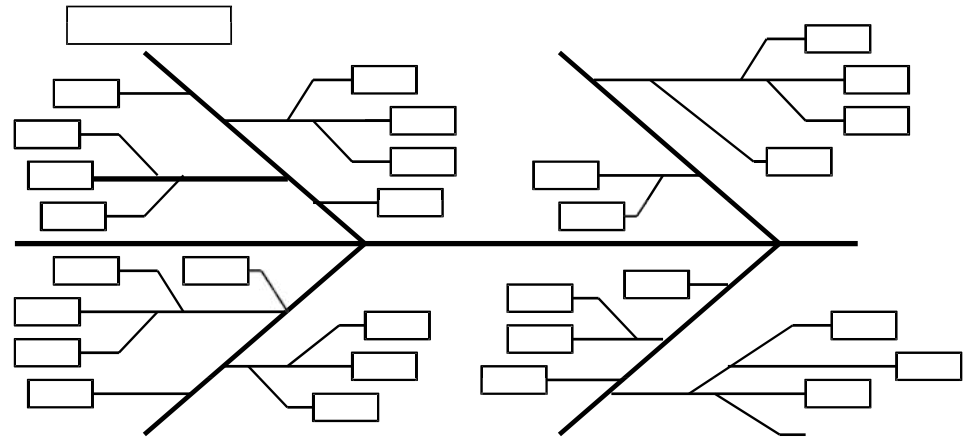
1. **Why** did the yield/product quality is low? – Fish quality is poor!

2. **Why** is the fish quality poor? – Has too many fish died!

3. **Why** too many fish died? – A shortage of oxygen during transport

4. **Why** shortage of oxygen occurs? – The water tank is not aerated!

5. **Why** is the water tank is not aerated? – No blower, never proposed to the management office



Root cause of
the problem



Impacts of live vs dead fish



Yield

1

Broken products

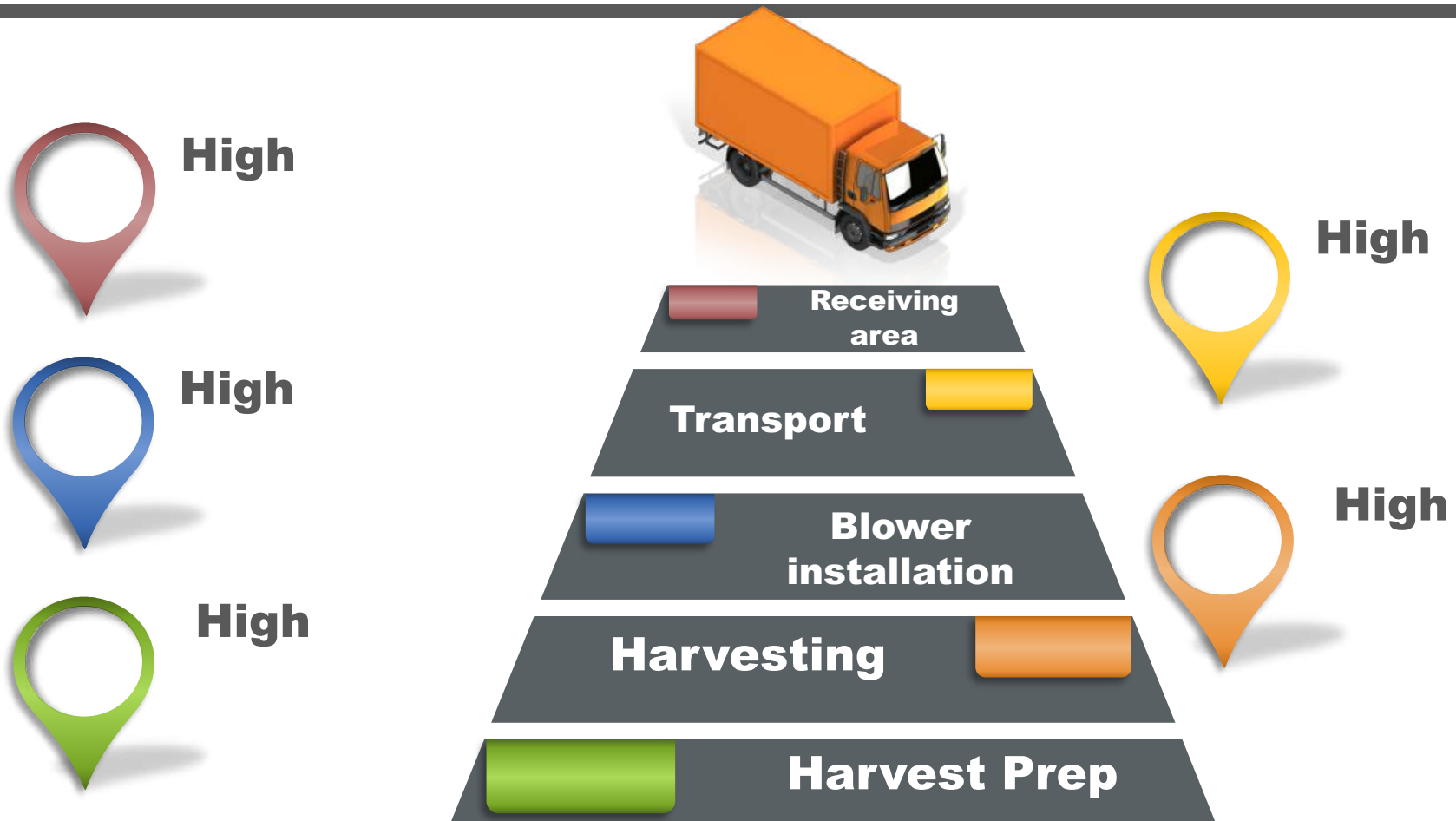
2

\$\$\$

3

Project Title	Reducing the dead fish % being processed through the factory		
Project Information	Leader : Charles – Farm Manager		
Team Members	1. Joni – Processing Section Head 2. Josef Tobing – Animal Health & QC Supervisor 3. Rekha Riani Samura – intern student		
Project Start Date	February/March 2018		
Project Completion Date	May 2018		
Cost Impact of Failure	>42% mortality without blower		
Project Goals	Reducing the % of dead fish arriving in the factory from 42% to 10%		
Measurement of success	Percentage of fish deaths decreased		
Process problem steps		Importance in relation to Project	Process Measurement
Less of oxygen; installing air blower in fish container		High	1. Measurement DO in fish container 2. Water circulation
Harvest time		High	Measure harvest time
Unloading time		High	Measure unloading time
Project Milestone	Measure DO inside container with and without blower	Measure harvest and unloading time	Water circulation and cause analysis with Kaizen team
Date	Every harvesting	Every harvesting	Every container

Process steps and importance in relation to project



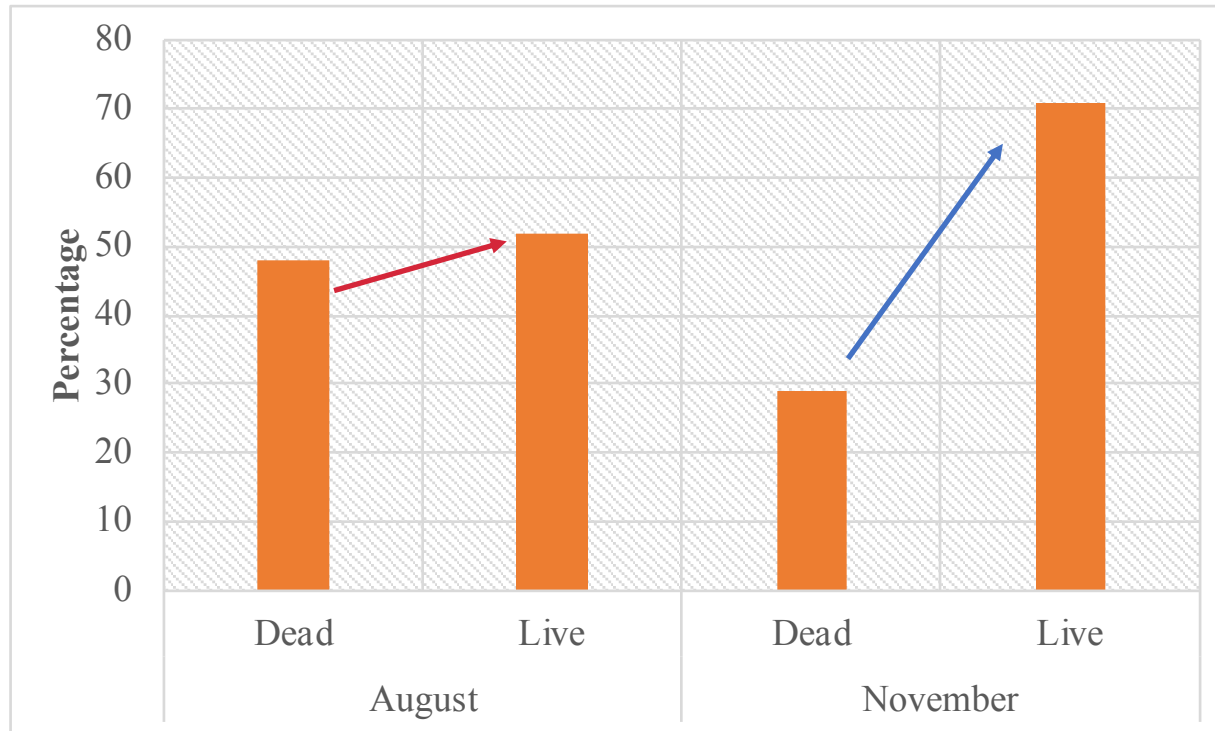


Without intervention

SMALL intervention



Improvement



Impact on economic performance (ie. Filleting yield)

0.65%
Gain

6.5 gr/kg

Rp260/kg



50,000kg x
260



Rp
13,000,000/
wk



676 juta/tahun =
USD 48,285/year

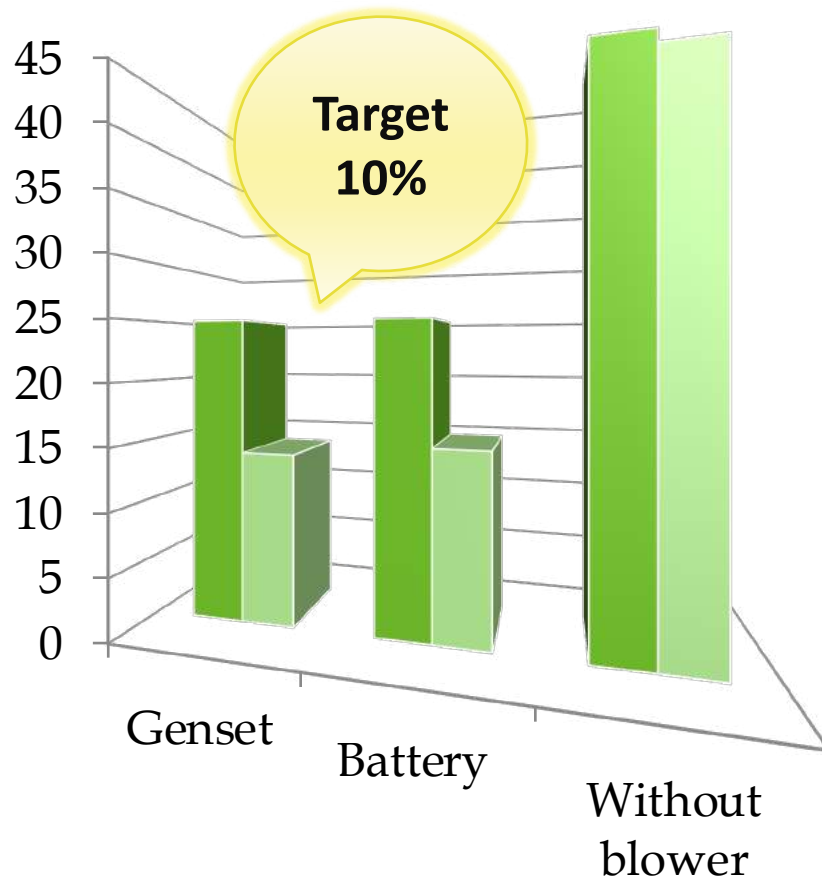
Harvesting and Blower Installation



Receiving Area



Fish mortality level - 2018



■ March
■ April



MABAR PT. EXPRAVET NASUBA

VISI:

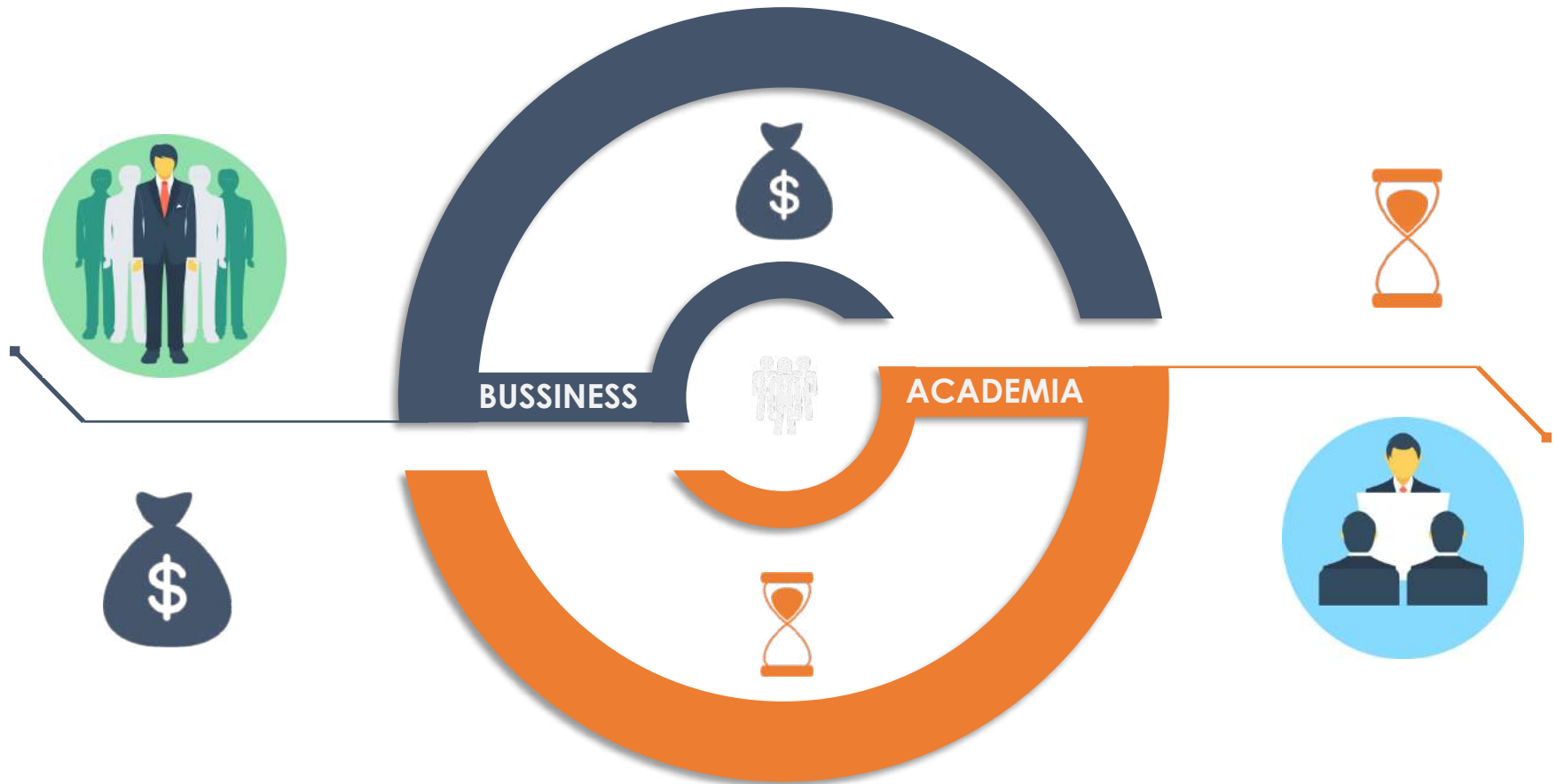
BERPARTISIPASI PEMENUHAN GIZI NASIONAL

MISI:

MENINGKATKAN GIZI MASYARAKAT MELALUI PROTEIN HEWANI DAGING AYAM



BUSSINESS VS ACADEMIA- getting samurai trained



Higher Education Institution and Industry should collaborate



- **Improving productivity and competitiveness needs smart thinking**
- **We need young samurai to set up better systems**
- **Institute of Productivity work with IPRIDE4FISH to help make this happen**
- **Lets Help Indonesia Compete by using best ASSET#**
- **Her People !!**