

Kuala Lumpur 24-26 Sept 2019







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#### APAC IoT INNOVATION SUMMIT

#### Session 3: IoT Capability Beyond Connectivity



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#### Session 3: Smart Agriculture



Group Head Enterprise Product & Marketing PT XL Axiata **Tommy Wattimena Widjaja** CEO PT Pierad Produce





The Role of XL Axiata in supporting Industry 4.0 (Smart Poultry) in Indonesia

Sharif Lukman Mahfoedz Group Head –VP Enterprise Product & Marketing

# Our Mission is ... WE HELP YOU GROW



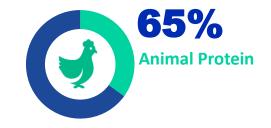
#### IoT will & enhance touch all sectors







Market that is
Growing, however
there are
challenges











2%

Adopting IoT / Automation



**8%** Average Mortality Rate



#### Padang Restaurant still number (1)

But KFC came strong 2nd









#### *INFRASTRUCTURE*

Growing Industry is critical for the nation and WITHOUT infrastructure it is impossible to grow ....



12th

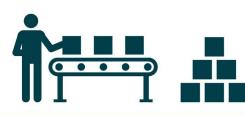
**Broiler Producer** 

Telecoms play pivotal role in enabling Industrial Revolution 4.0 with new connectivity technologies



#### **INDUSTRY 1.0**

Mechanization, steam power, weaving loom



#### **INDUSTRY 2.0**



#### **INDUSTRY 3.0**

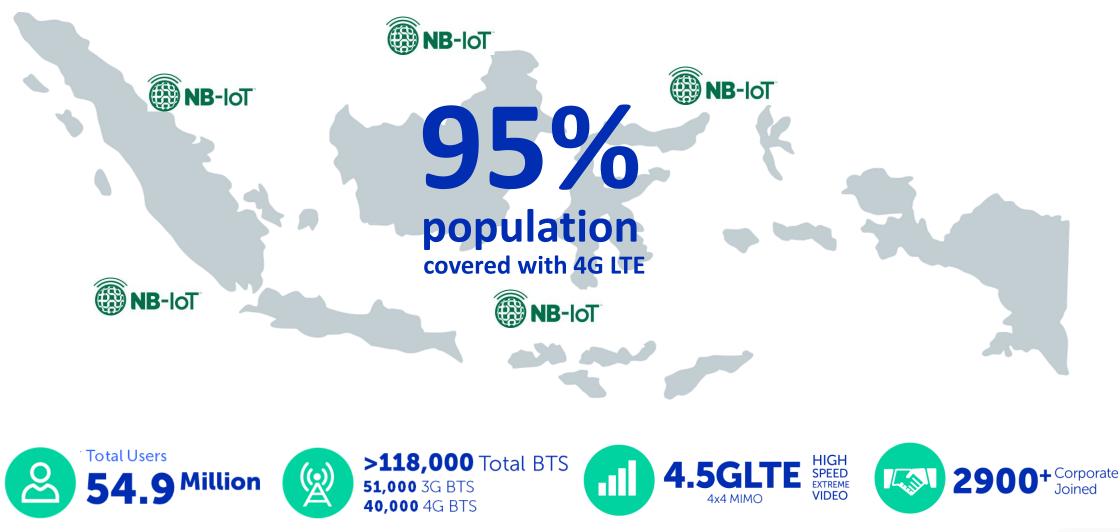


#### **INDUSTRY 4.0**

Mass production, assembly line, electrical energy Automation, computers and electronics Cyber Physical Systems, internet of things, networks

#### Fast, reliable nationwide data network, NB-IoT in 31 cities!







Enabling Digitalization

> Moving beyond Connectivity



#### DIGITALIZATION

To provide an automated monitoring system to cater "manual processes" and to minimize "human intervention"

**FOOD** Water & Food Intake

Environment

NH3, Temp, Humidity

Welfare

Nutrition, Weigh Monitoring





### Working with













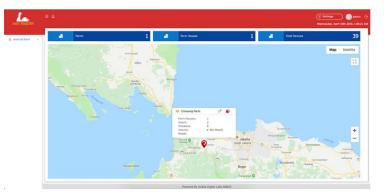
Analytics					
Farms	Efficiency (FCR, IP, Mortality, etc.)				
Controlling	Automation				
Fans Controller	Heater & Cooling Automation				
Monitoring					
Chicken Food Level	Water Consumption Chicken Weight				
	Environmental Parameters				
Intake Efficiency	Increased Survival Efficiency				

Life Commercial
Projects with more
than 250K chickens
planned





Login screen



Location Map



Historical Report

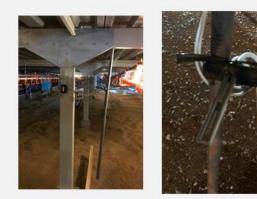
stemal Farm 🔺	Daily liquet Fam Operations Scenes Devices History						
Cimaung Farm A	Population	FCR 1.39 1.321	Avg Body Weight N/A # 1186 #	Effective Temperature 32.7 °C 27 °C	Fans Edit Cuitoahei Adjusted 60% Not Set%	Intensity 9.0 10 <sup>-1</sup>	
floor1	Depletion 2.57 % 2.31 %	1P 211.87 365	Daily Water Intake ml Chrises 0.00 3311	Temperature Indoor Outdoor 31.8 ℃ 33.5 ℃	Wind Speed and And And And And And And And And And A	co2 525.0 mm 3000 m	
floor2	Cumulative Daily Feed Cumulative Daily Feed Clocker 1007.15.552	Daily Feed Intake gClubbe N/A 130	FE 71.99 % 75.9 %	Humidity Inform Outloar 70.09 % 55.03 %	иня 159.33 160	NH3 Normal 10 =	
	Farm Timeline				0		

Dashboard monitoring



 150+ sensors and to be upgraded to NB-IoT





Wind sensor



**NH3 Sensors** 



**Inverter Panel** 



**Digital Scale Devices** 





#### UNLOCK FUTURE ECONOMY

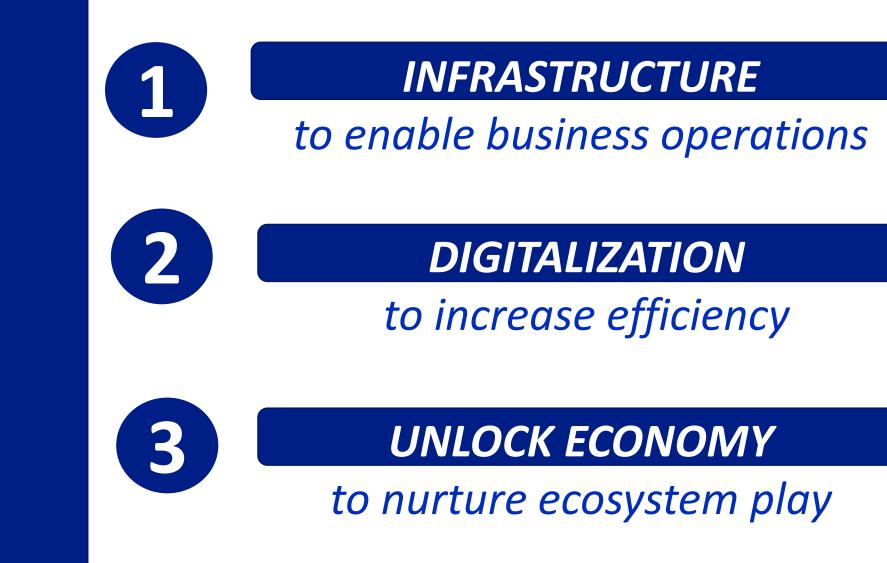
A system without future economy use case will just be a theory. It is our duty to further enhance it together with all stakeholders





3 highlights on IoT in Smart Poultry

Beyond Connectivity









xl.co.id





## Pak Tommy Wattimena (CEO Sierad Produce)

# **SieradProduce**







