THE IMPORTANCE OF BACK-END DATA IN AMI PROJECT

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Introduction

 TNB is embarking into AMI by establishing two-way communication between a smart utility meter with an IP address and TNB. The pilot project was launched in 2015 for 1,000 customers in Melaka and Putrajaya, and the full deployment of 1.5 million smart meter units has started in Melaka and Klang Valley for the period of 2018-2020.



Journey of AMI Project



Overview of AMI Architecture System



Smart Meter Data Profiling





Behavioural Activities at the Level of Customer

Project Pipeline under AMI Projects

2019	-	2020	2021	2022	
SBAST		Smart Meter Forens	sic		
Phase 1 Data Propagation		Analysis Analysis			
Data Fieparation	Phase 3 Product Change	Device Connectivity Analysis Smart Meter Health	Distributi Analytics	Distribution Network	
	Phase 2 Identification of electricity	Assessment Smart Meter Tempering Analytics	Demand Response Management		
	iraud activities	Cybersecurity Defense Analysis	Outage M Analytics	lanagement &	
		Natural Disaster Recovery Analysis			
		Customer Experience –	erience - RE & Energy		

Trading Customer Experience – Careline

Customer Analytics – Home security

Data analytic initiatives

Smart Billing Development Architecture and Software Toolset (SBAST)



Data analytic initiatives

Smart Billing Development Architecture and Software Toolset (SBAST)



1st Assessment of SBAST on Smart Meter Data for 2018

Total customer: 45,180

No	Description	No of detection
1	Possible Electricity Fraud	921
2	Product Change	31

Conclusion

- 1) The System Integration is the key elements in the implementation of AMI project.
- 2) The back-end data is the product of System Integration in AMI project.
- 3) Smart Meter Data Profiling is based on the customer load profile and smart meter event list, which is used to the behavioural activities at the level of customers and smart meter.
- 4) The back-end data is the key ingredient to the following initiatives:
 - a) Smart Billing Development Architecture and Software Toolset (SBAST)
 - b) Smart Meter Forensic Analysis
 - c) Customer Experience
 - d) Distribution Network Analytics

