

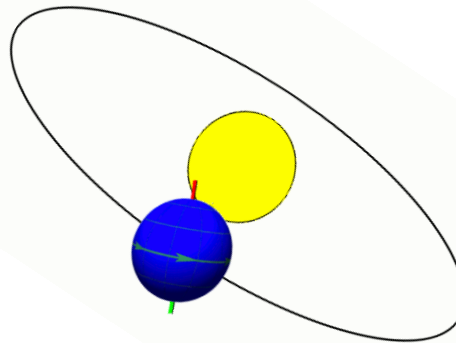
Piloting Regular Desludging in Balikpapan City, Indonesia

From Planning to Implementation.....

By : Haidir Effendi

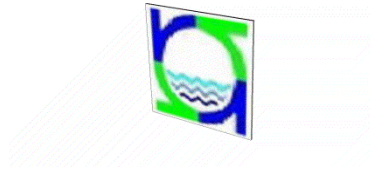
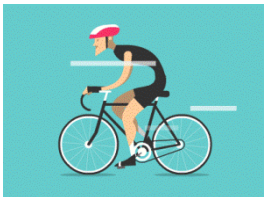


BALIKPAPAN CITY GOVERNMENT



Background

- **City population** : 664,600 inhabitants (132,919 households)
- **City water utility (PDAM)** currently serves 76 % of households with piped water
- PDAM manages **piped water** and **domestic waste water** (off-site and on-site systems) since :
 - 2006: Sewerage system with capacity of 5000 house connections (currently connected to 1300+ HCs)
 - 2016 : Fecal Sludge management



Activities for piloting regular desludging

- **Teams established** to develop preparatory work and bridge the process :
 - **PDAM special team**
 - **City promotion team**
- **New local laws** on domestic wastewater
- Set **Tariff and payment mechanism**
- Select **pilot area** and conduct **on-site sanitation census** using android application
- Develop Information and communication technology applications to **support FSM**
- **Promotion** for regular desludging in pilot area



New Regulations on Domestic wastewater

- **Local Law No. 10 2014** : PDAM is appointed to manage wastewater – off-site system and FSM, besides piped water
- **Local Law No. 8 /2016** :: Integration of off-site and on-site systems
- **Mayoral Decree No. 24 / 2016** : implementing regulation:
 - defining the responsibilities of city government, PDAM, private operator and households
 - On-site system in one of requirement in building permit
 - Regular emptying every 4 years
 - mandatory to provide access lid
- **Tariff regulation** : in process....



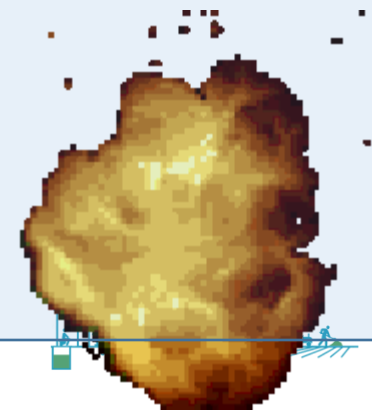
Tariff for regular desludging

- Tariff is set lower (USD 34) than on-demand emptying (USD 43)
- Monthly payment of USD 0.71 for over four years
- Charges in monthly water bill
- Using existing payment mechanism

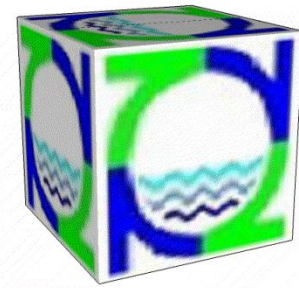
PEMBAYARAN REKENING AIR PDAM KOTA BALIKPAPAN
LOKET : BLF0153/PP BERMAK 6

NO SAMBUNGAN :	01050040284	BL/TH :	JUNI12
NAMA :	HERMANSYAH	STAND KINI :	000024
GOLONGAN :	32	STAND LALU :	000018
ALAMAT :	JL. SEPINGGAN BARU RT.06/27 A	PELAYAN :	6
TEL. BAYAR :	20/07/2012 09:34:42		
RET. IPAL :	Rp. 0,00	ANSURAN KE 0 :	Rp. 0,00
HARGA AIR :	Rp. 37.555,00	DENDA :	Rp. 0,00
BIAYA BUKTI :	Rp. 0,00	ADMIN PPDG :	Rp. 1.600,00
RET. KEBERSIHAN :	Rp. 2.750,00		
JUMLAH :	Rp. 41.305,00		
TOTAL BAYAR :	Rp. 42.905,00		

PDAM KOTA BALIKPAPAN MENYATAKAN STRUK INI SEBAGAI BUKTI PEMBAYARAN
000202/CA/20072012/093442/INI146-BLPO153 web kami di www.pdam.kota-balikpapan.go.id 22/03/2014 10:57



Partnerships with Private Operators



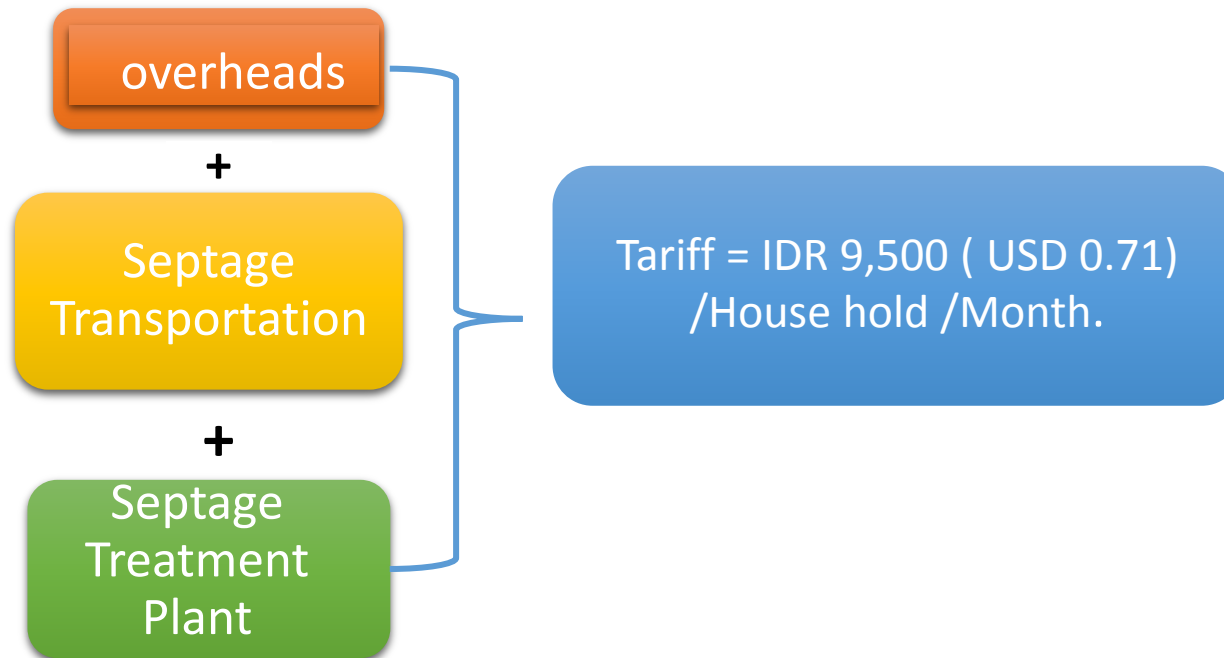
- Regular and on-demand emptying will be served by **private companies**
- PDAM not to provide vehicles → **reduce capital investment**
- PDAM provides **initial budget** to fund private companies
- Piloting of regular desludging is included in PDAM **business plan 2017**



Tariff components



- Tariff calculation for **regular emptying** - all expenses :

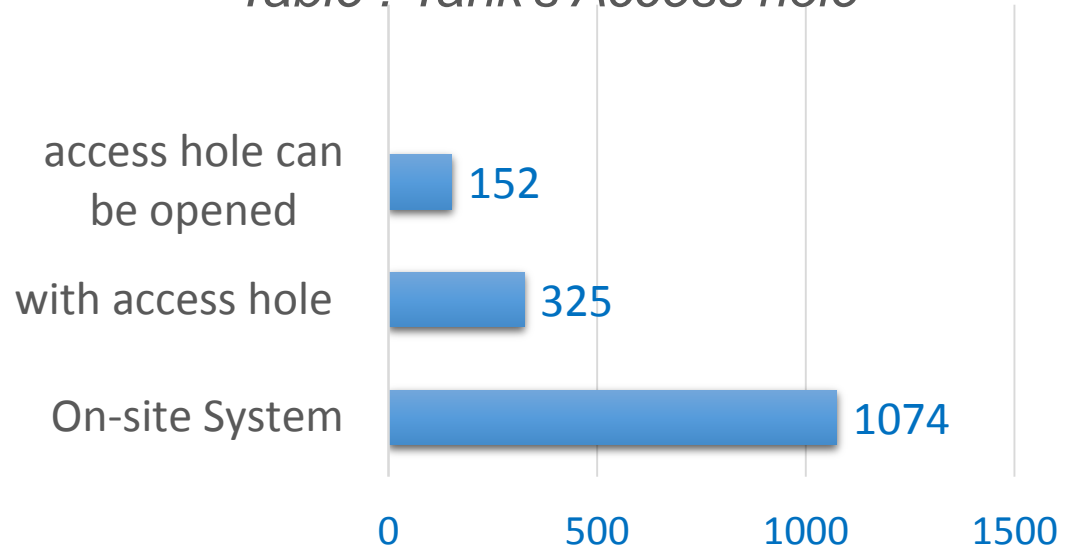


- Fees for private operator is included in the tariff

E-census in selected pilot area for regular desludging

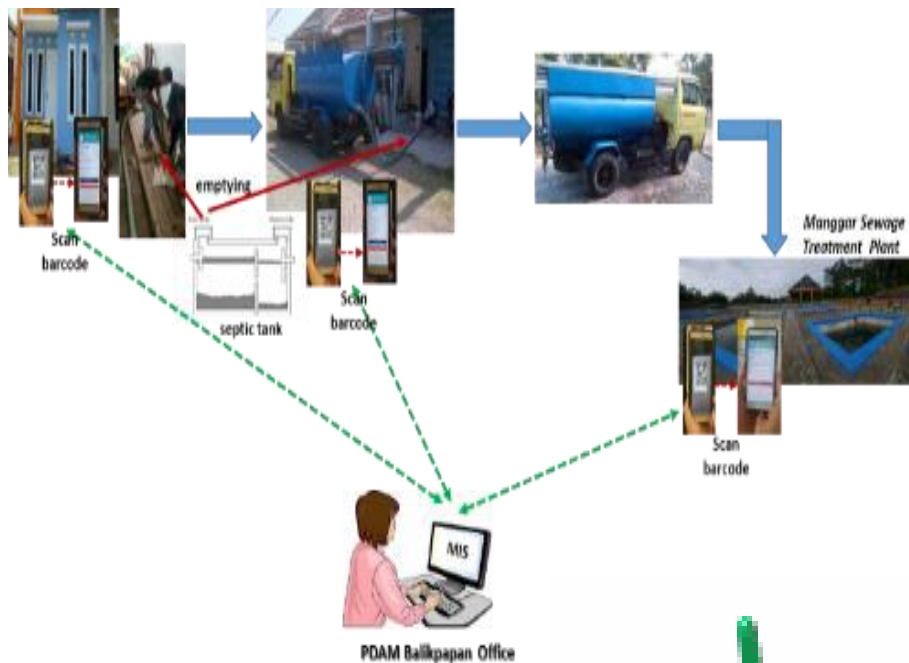
- Census for on-site system conducted in selected area covering 1100 households
- The results:
 - ❑ 98.5 % (1085) PDAM customers for piped water
 - ❑ 99 % (1074) had on-site system
 - ❑ Only 30 % (325) had access lid

Table : Tank's Access hole



Information and Communication Technology applications to support operation

Mobile and Web-based system



- To support the **operation services**, **track** and monitor and **scheduling** plan
- Two emptyings per trip with total volume of 1.5 m³/location
- **Trial test** conducted in 8 locations



PROMOTION activities

Using the “ 10- step toolkits promotion” method

KICK OFF
WORKSHOP
INVOLVING
STAKEHOLDERS

FORM A
PROMOTION
TEAM

TRAINING AND
PRACTICE

The promotion team involving communities in the pilot area in **designing and testing the promotion products**



Media campaign Products



public service announcements Vid



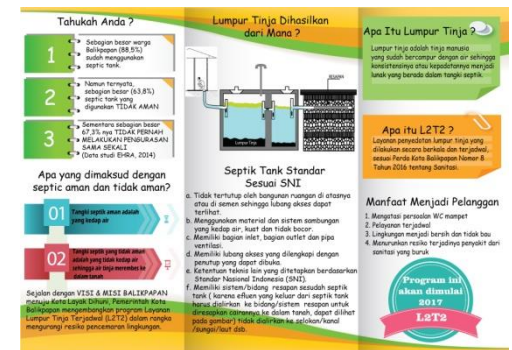
Banner For on-demand emptying service



Balikpapan Sanitation Spot Vid



Brochure for regular emptying service

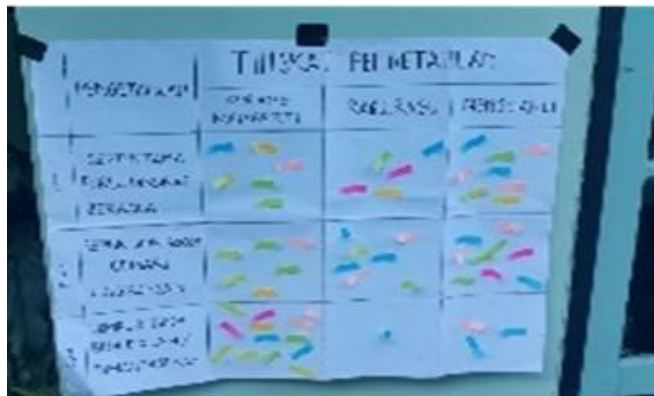


Promotion Implementation and evaluation

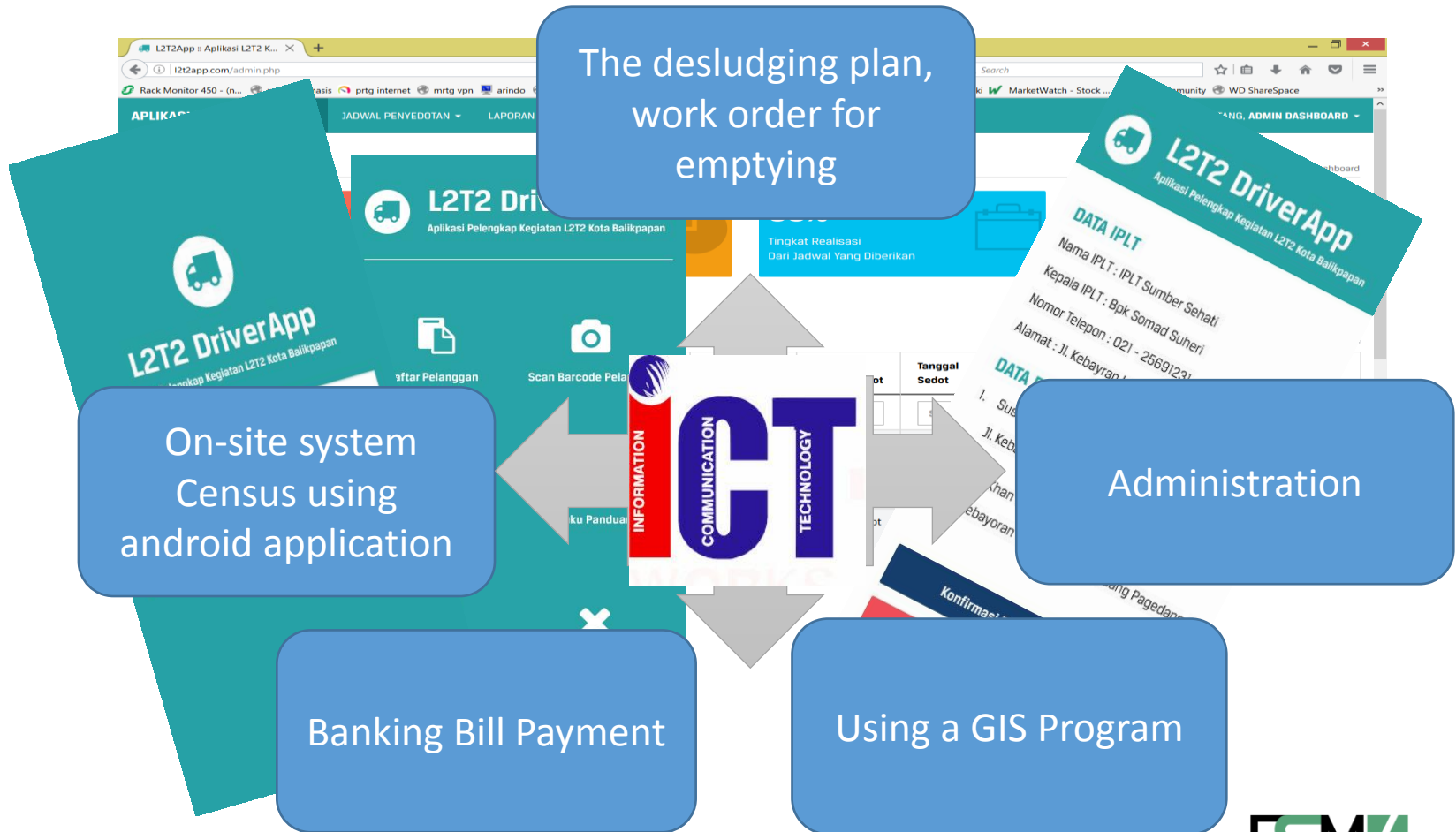


The results:

- Understanding of regular desludging : 92 %
- Willingness to be a customer : 70 %
- Willingness to pay USD 0.71/mo : 63 %
- (through city water utility's billing system)



Integrating septage management into PDAM System



Lessons learned /Recommendations

- ✓ City promotion team to develop **promotion strategy** to households **have no access to their tanks**- for next batch
- ✓ Census results will be used together by other city agencies to develop **city integrated sanitation program**
- ✓ PDAM will need **training program** for staff to support existing wastewater division for operation, planning and scaling up
- ✓ Inclusion of **FSM** into tasks of **PDAM's Customer Services**
- ✓ FSM **Standard operating procedures** are required



The City Team Activities



One of training sessions for Promotion Team



One of Workshops : Sharing progress and experience with other cities



Promotion implementation



Training of using e-census application



Create media campaign



Simulation Process using ICT application





L2T2 YES !
THANK YOU

