

TIM Brasil Day in NY

Nov 13, 2017

Chief Strategy Officer
Luis Minoru Shibata

TSU
LISTED
NYSE

 **TIMP3**
NOVO
MERCADO
BM&FBOVESPA

 **TIM**







Following the customer lifecycle

Search, understand, monitor, learn and act

CUSTOMER JOURNEY



CUSTOMER VOICE & USE

SURVEYS	Relational "Cold"	 201K interviews/yr	 137 surveys/yr
	Transactional "Hot"	 11.3MM interviews/yr	
CONTACTS	Call Center	 118MM human agent/yr	 239MM IVR + AI/yr
	Digital	 408MM interactions/yr	
USAGE	External	Anatel Speedtest	Social Networks Procons Others
	Internal	 8 Billion records/day all customer base	

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CUSTOMER VOICE & USE

SURVEYS

Relational
“Cold”



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interviews/yr



137
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Transactional
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USAGE

External

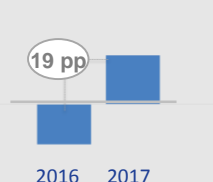
Anatel Social Networks
Speedtest Procons Others

Internal

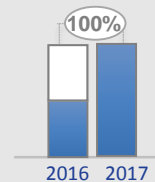


8 Billion records/day
all customer base

Net Promoter Score
Postpaid HU



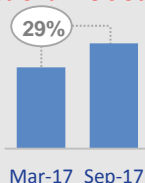
Satisfaction (CSI)
Perceived Values - Mobile



Net Promoter Score
Fixed Broadband



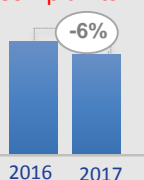
Satisfaction
Direct Channels Store



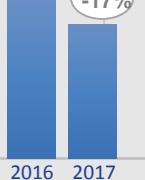
Satisfaction
Mobile Call Center



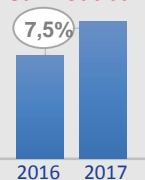
ANATEL
Complaints



PROCON



Throughput
Fixed Broadband



Note: Surveys (jul-17, YoY) – NPS (ago17vs jul-16), Others (set-17, YoY).

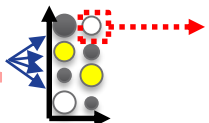
Leveraging Real Time Big Data

Search, understand, monitor, learn and act

Real Time Decision supporting caring and marketing

1 Segmentation

Profiling



Monetization

Cost Reduction

Relationship

Retention

2 Lifecycle

Up/Cross Sell

Churn

Relat.

Top Up



Recharged

localization

Drop Call

Portability

Social

No invoice mailing

Bad debt

3 Offers

Upgrade

Enable

✓

Probab

80%

Pot (ARPU)

R\$ 13

Priority

1°.

Additional Data Packet

✓

30%

R\$ 4

3°.

VAS – TIM Music

✓

70%

R\$ 3

2°.

Tailor Made offer

x

05%

-

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Customized Channel Message

“John, you’re a TIM Digital Client. You’ve got a Special Bonus to use on Mobile Internet service. Enjoy your **1Gb**!”

Real Time Analytics driving new business opportunities

Framework



Tracking



Location



Mobile Insights



Outdoor Media



Digital Media



Fraud Prevention



Financial Score

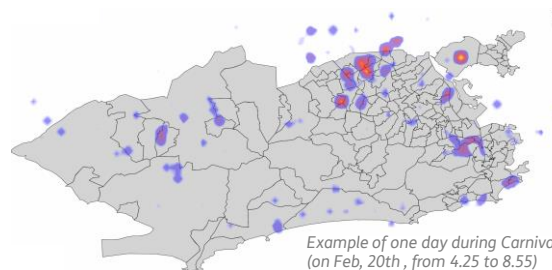


Smart Cities



Smart buildings

Real Case: Rio's Heat 1Map



Example of one day during Carnival
(on Feb, 20th, from 4.25 to 8.55)



Opportunity: Go beyond connectivity

New value from data when combining connectivity with software and analytics

TIM BD & Analytics



8 Bi CDRs/daily

12.4 TB/daily



> 41K RBS

Active sites at Sep-17



34 Petabytes/mo

Network traffic at 3Q17



59 MM subscribers

Mobile lines at Sep-17



1,920 CPUs

7 TB RAM

Processing capacity



Brazil: IoT National Plan



IoT National Plan to be released by Regulator and Minister



McKinsey&Company

Expectation

- Public-private partnerships
- Platform to increase productivity and modernization of public administration
- Less taxation & Financing



TIM's Effort

M2M/IoT Analytics "Startup"

- Connectivity + Services
- "Industrialize" proven cases
- NB-IoT/LTE-M

Fostering New Business Model

- Data monetization through partnerships
- Context based content delivery

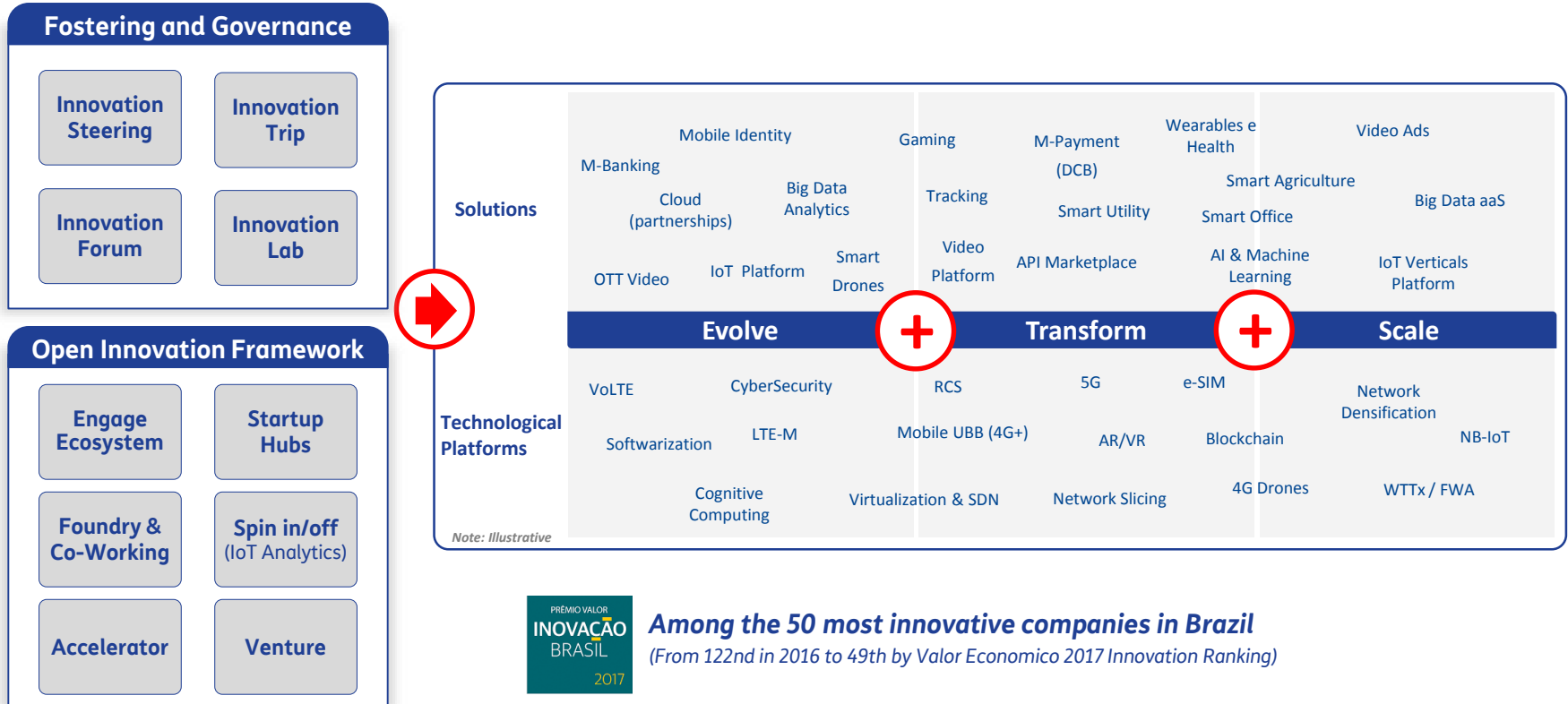
DIGITAL DNA



- Think Big, Start Small
- Make & Learn Fast

Our Innovation framework: Selective approach

Process to filter effort, focus on exponential technologies and business models





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