ROLE OF DATA ANALYTICS

Luc van Wijngaarden
Zight – transit | data | intelligence

BUSINESS INTELLIGENCE (BI)

Applications, infrastruc-ture, tools & best practices that enable access to and analysis of information to improve decisions & performance.

[Gartner IT Glossary]

KEY ITEMS

1. What is the power of data analytics?
2. How to get from data to results?
3. Why do projects fail?
4. Six tips for success

ZIGHT – INTRODUCTION

zight

transit | data | intelligence

Luc A.F. van Wijngaarden
Director

+31 (0)6 51 57 31 68
l.v.wijngaarden@zight.nl

Zight B.V.
Breestraat 59
2311 CJ Leiden
The Netherlands
+31 (0)71 8 200 208

www.zight.nl

selection of clients

nutricious data is **wasted**

EACH SOURCE ADDS VALUE

Fleet management
Planning
Ticketing
Asset mgmt
Fuel mgmt
Rostering
Maintenance
Payroll system

Passenger counting
ERP system
ITCS/ RTPI
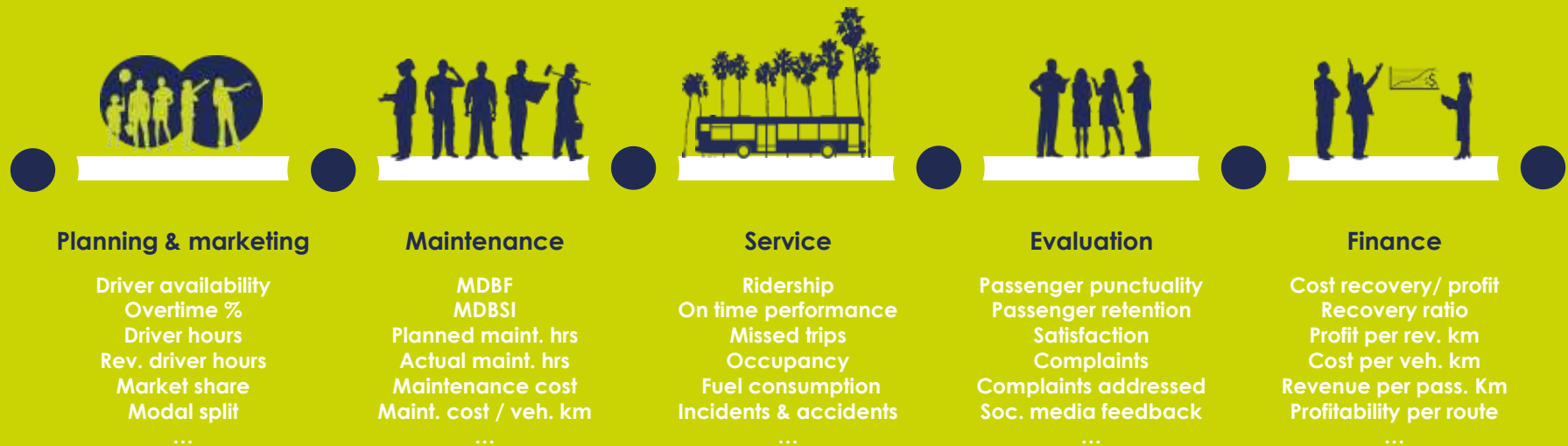Control
Dispatching
Finance
Weather
Social media

There is so much data … with so much potential.

UITP

DATA FLOW

blend data from all transit systems

enrich & manipulate the data

load data into a BI-system (like Zight)

YOU CAN MONITOR IT ALL

Planning & marketing

Driver availability
Overtime %
Driver hours
Rev. driver hours
Market share
Modal split
…

Maintenance

MDBF
MDBSI
Planned maint. hrs
Actual maint. hrs
Maintenance cost
Maint. cost / veh. km
…

Service

Ridership
On time performance
Missed trips
Occupancy
Fuel consumption
Incidents & accidents
…

Evaluation

Passenger punctuality
Passenger retention
Satisfaction
Complaints
Complaints addressed
Soc. media feedback
…

Finance

Cost recovery/ profit
Recovery ratio
Profit per rev. km
Cost per veh. km
Revenue per pass. Km
Profitability per route
…

Top to bottom; planning to satisfaction.

UNLIMITED FUNCTIONALITY

You can unlock information in **spectacular visuals.**

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We help people move

UITP – DIMTS Bus Seminar
11-12 May 2018, Delhi

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USAGE-ANALYSIS FROM WIFI
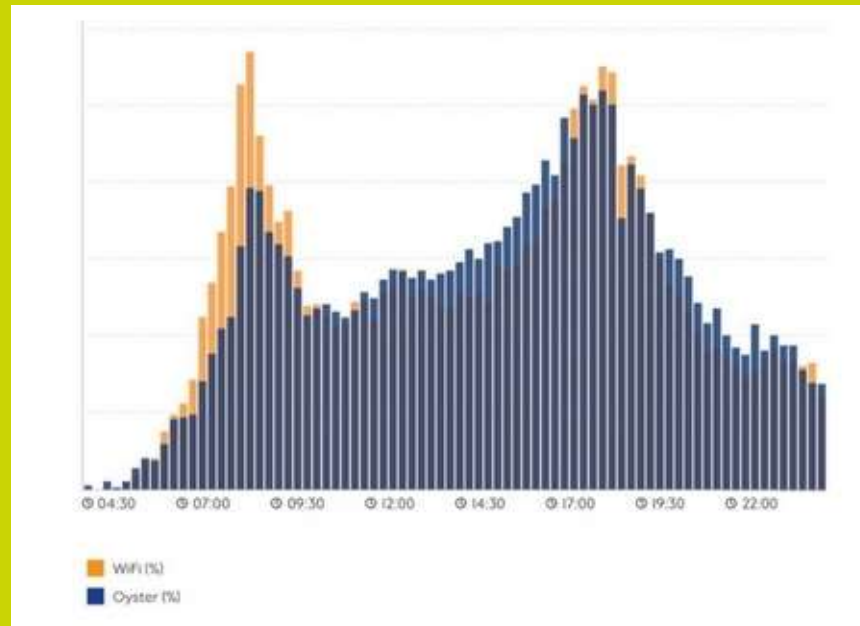
Analysis can be done upon 'odd' data.

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BUT WHAT IS THE ROLE OF DATA ANALYTICS?

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INTELLIGENT OPERATORS

Intelligent operators …

- Make the best use of information for **strategic, tactical, and operational** needs.
- Provide people with **information, support and governance** to do their jobs more effectively and efficiently.
- Perform better.
- Are more profitable.
- Have happier employees & passengers.
- Manage their work better.
- Are more innovative.
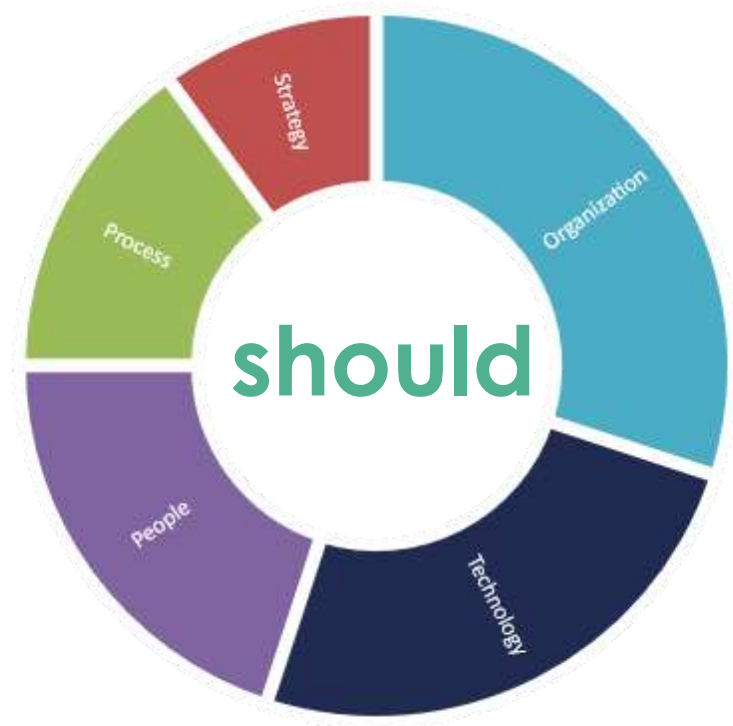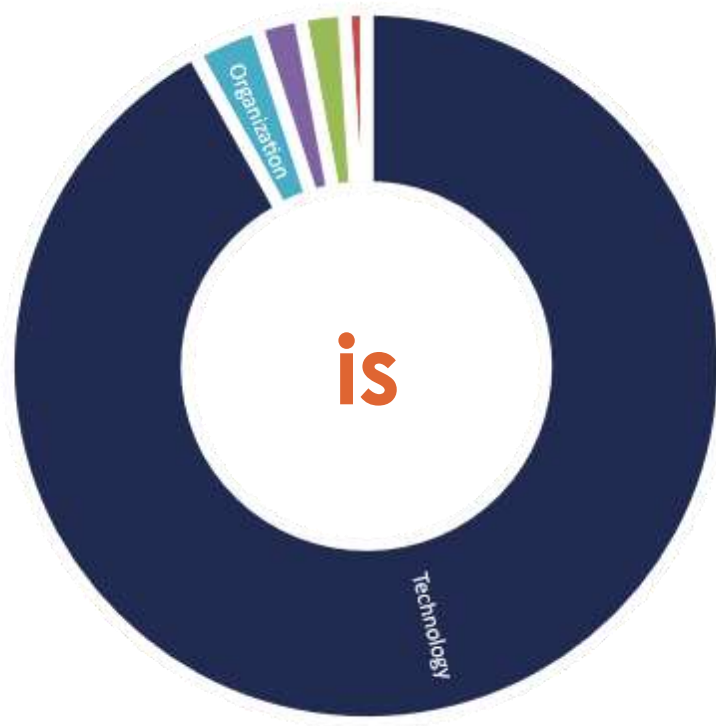
WHAT IF ALL IS AVAILABLE?

		Current	Expectation	Potential	Delta	
Cost	Salary	10.00 M	−7,5%	9.25 M		
	Fuel	10.00 M	−7,5%	9.25 M		
	Maintenance	10.00 M	−10%	9.00 M		
	Other direct	5.00 M	0%	5.00 M		
	Indirect	10.00 M	0%	10.00 M		
	Total cost	45.00 M		42.50 M	−2.50 M	−6%
Revenue	Consumers	20.00 M	+5%	21.00 M		
	Business	4.00 M	+20%	4.80 M		
	Total revenue	24.00 M		25.80 M	1.80 M	+8%
Cost recovery		53%		61%		+14%

* based upon surveys in Amsterdam, Bangalore, Brussels, Dubai, Istanbul, Stockholm & Kuala Lumpur

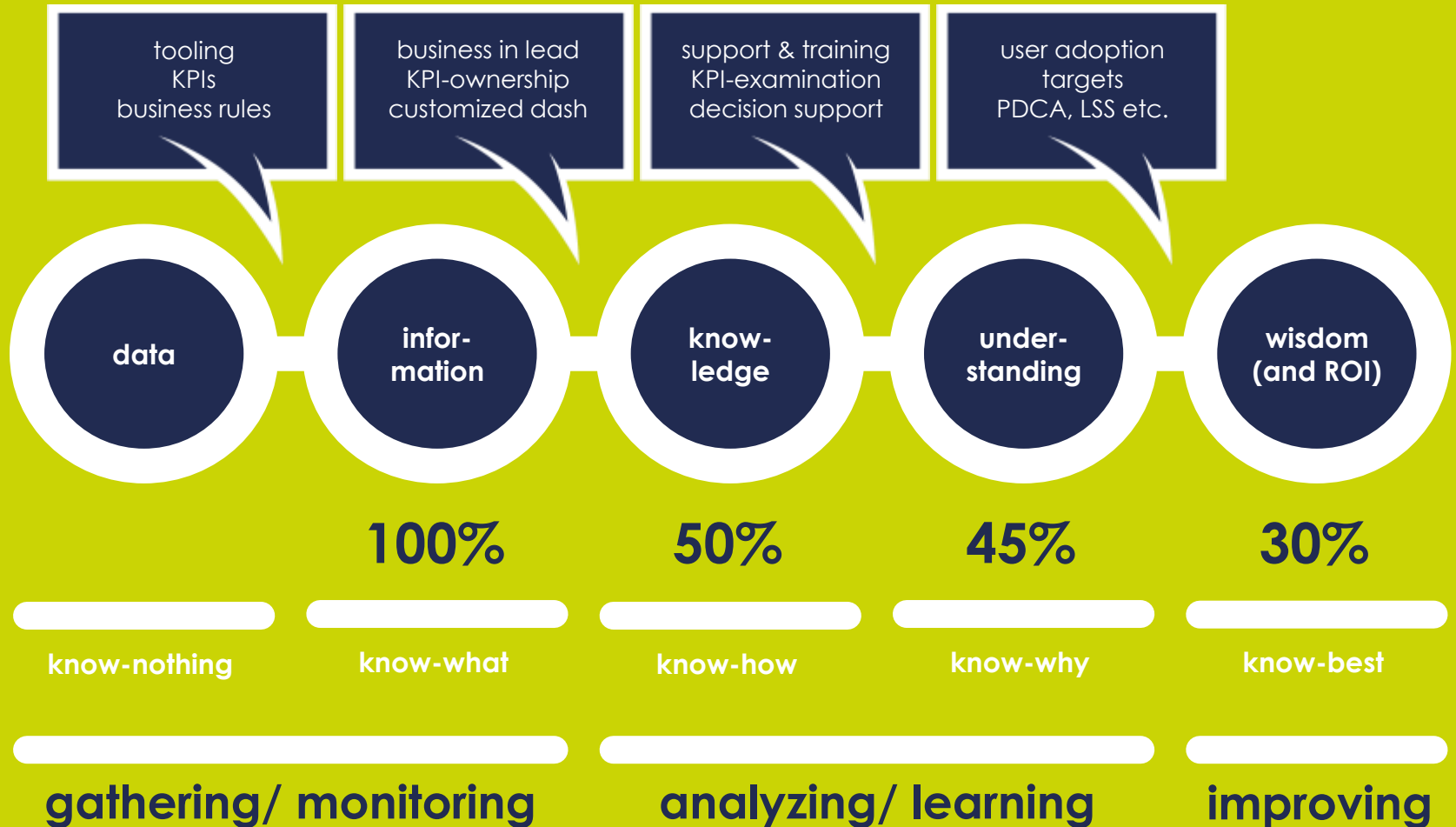# 70% of all BI-projects fail to meet expectations.

[Gartner]

WHY DO PROJECTS FAIL?

Organization
Technology
is

Strategy
Process
Organization
People
Technology
should

IBM survey, 2015

DATA ANALYTICS IS CRUCIAL

| tooling KPIs business rules | business in lead KPI-ownership customized dash | support & training KPI-examination decision support | user adoption targets PDCA, LSS etc. |

| data | infor-mation | know-ledge | under-standing | wisdom (and ROI) |

| | 100% | 50% | 45% | 30% |

| know-nothing | know-what | know-how | know-why | know-best |

| gathering/ monitoring | | analyzing/ learning | | improving |

6 TIPS FOR BI-SUCCESS

1. Put business in the lead.
2. Align KPIs with your strategy and processes.
3. Make sure KPIs are owned, examined & managed.
4. Deliver self-service, and empower users.
5. Deploy BI thouroughly (PDCA, LSS, …).
6. Make ROI the final deliverable … not the system.

THANK YOU!!

Luc van Wijngaarden

l.v.wijngaarden@zight.nl
+31651573168