Understanding the Impact and Potential of Big Data in Tourism

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Big Data Guy
WHO AM I

- Harro M. Wiersma
- born 1976 in Groningen, the Netherlands
- Master of Science – University of Phoenix (AZ) Computer Information Systems
- past: contractor (DBA / Project Management / Team Management)
  - Manager Database IKEA / Technical Lead Infrastructure Engineering Sunrise /
  - Department Head Service Engineering Opitz Consulting CH
  - Head of IT Data Warehouse at PostFinance
- current: Big Data Guy – per 01/01/2013 for PriceWaterhouseCoopers
  - main focus area ‘s: Telecom, Finance and Retail.
  - hobby ‘s: golf, whisky, freelance sound engineer and tv producer.
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"Why big data is a big deal"  
*InfoWorld*

"The challenge—and opportunity—of big data"  
*Mckinsey Quarterly*

"Ten reasons why Big Data will change the travel industry"  
*Tnooz*

"Keeping Afloat in a Sea of 'Big Data"  
*ITBusinessEdge*

"Getting a Handle on Big Data with Hadoop"  
*Businessweek*

"The promise of Big Data"  
*Intelligent Utility*
WHAT MAKES DATA BIG DATA

VOLUME

VELOCITY

VARIETY

VERACITY

WHAT MAKES DATA BIG DATA

MAIN PROBLEM – A CLEAR VIEW

how can we prevent to get different results from different systems about how can we use our own data to support our operational processes? the same KPI’s?
KEEP A STRAIGHT FOCUS
I’m not interested in technology.

I’m not interested in data.

I am interested in translating data into information for decision making.

It’s not technology, it’s what you do with it.
MORE DATA, WAY MORE DATA

Exabyte Age
Transactions

Zettabyte Age
Interactions

One Zettabyte (ZB) = 1,000,000,000,000,000,000,000,000,000,000,000 bytes = $10^{21}$ bytes.
Based on IDC data growth estimates.
TRACK TWEETS ...
TRACK EMOTIONS ...

Anger  Disgust  Fear  Happy  Sadness  Surprise

roll=0.233275deg
v qw=-1.968889deg
pitch=181.865deg

TRACK MOVEMENTS ...
Innovation effort

Volume of innovation efforts
Last 10 years

Source: Doblin, Chicago

vs. value creation

Cumulative value creation—
Last 10 years

as Mr. Pareto already mentioned in 1897:
**Less than 2% of projects produce more than 90% of value...**

Source: Doblin, Chicago

NEW POSSIBILITIES

calendar combined with open data about traffic gives Google Now the option to alert me when I need to leave for my next appointment
Leveraging untraditional sources, social media and transactional data to gain the elusive 360 degree view your guests and your business.
The Future of Decision Making

DECISION-MAKING STYLE

DATA-DOMINATED

HiPPO-DOMINATED

VOLUME OF DATA USED

PATH FOR FUTURE SUCCESS

CURRENT PRACTICE

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Many hoteliers and industry partners can’t rely anymore on the data provided by their destination management organizations (DMO) since it’s often a couple of months old by the time it gets to them.

With last-minute booking becoming the norm, intelligence therefor requires a near-real-time aspect in order to be usefull for a restaurant owner or hotelier.
The challenge facing the business today is the ability to influence the buyer decisions in a window of opportunity that does not last long. The analytics available at a personalization level drives the buyer whether it is choosing a Doctor or booking a hotel.

To compete in this new era, businesses need to be driven by data and analytics, which are largely different from traditional transactions and campaigns!

Both the “Generation Z” and “Millennial Generation” of buyers will not be swayed by traditional engagement models of selling products and services!
Joan806, General Manager at Ramada Saskatoon, responded to this review

November 22, 2011

I would like to personally apologize for the series of unfortunate incidences that you experienced during your stay with us. We continually try to do our very best for all of our guests, but unfortunately, sometimes we do fail.

I will look into each issue that you have noted, in an attempt to correct and improve our hotel policies.

I would invite you to contact me personally at 306-931-3013 (direct line), to discuss this with you further. (email is murray.waters@saskramada.com)

Regards,

Murray Waters

3 traveler photos

18 reviews from our community
THE AMADEUS CASE - TICKET PRICING I
THE AMADEUS CASE - TICKET PRICING III

- **Do not** try to implement without integration in your current landscape

- Find some easy targets, for example your **data-archive**

- **Collaboration** is key! Learn from other industries

- Create **cross-functional teams**: IT – Analysts – Business

- Champion **business value**: a ROI is there!

- Organizations that don’t leverage the big data that they have, risk **losing ground** to their competitors

- Get on it, now!
Big Data is a Game Changer

This is the moment...

Are you ready?
QUESTIONS & ANSWERS

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REFERENCE CASE I - LOGISTICS

REFERENCE CASE II - FINANCE

- no fixed card-limit
- active transaction monitoring based on:
  - customer profile
  - credit rating firms (4! in the USA)
  - active balance
  - payment history
- result: lower security: payment in profile: only signature,
  otherwise: pincode or direct contact by phone with AmEx
- result: less reversed transactions (<3%) -> lower costs!
- result: better insight in customers spending -> predictive analytics!