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2019.08.14

How to solve the low utilization rate of Alibaba business intelligence

CLASS-6 | Mingyuan Zhu | Carl | 2019040934

Low utilization

- ▲ Little changed in business results (**BI lack of impact**) (Greenwood, 2017)
- ▲ Most time for **unstructured data** (Delic and Riley, 2013; Maheshwari, 2015)



Business Intelligence Department

Background

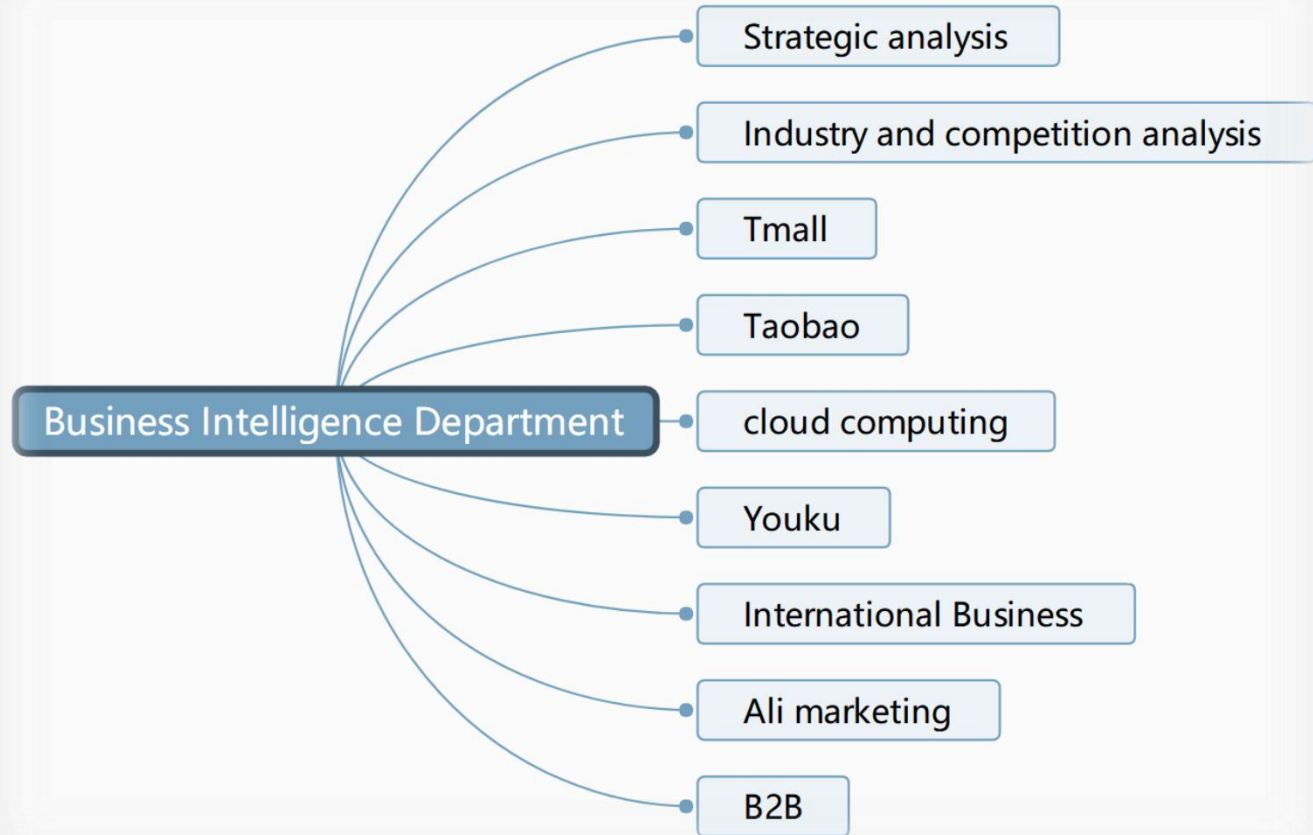
Overview

Problem

Solution

Conclusion

Reference



Overview

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Reference

- ▲ The problem of low utilization and Alibaba BI data
- ▲ The solution to the problems
- ▲ The evaluation of the solution
- ▲ Conclusion

Problem 1: lack of impact

Background

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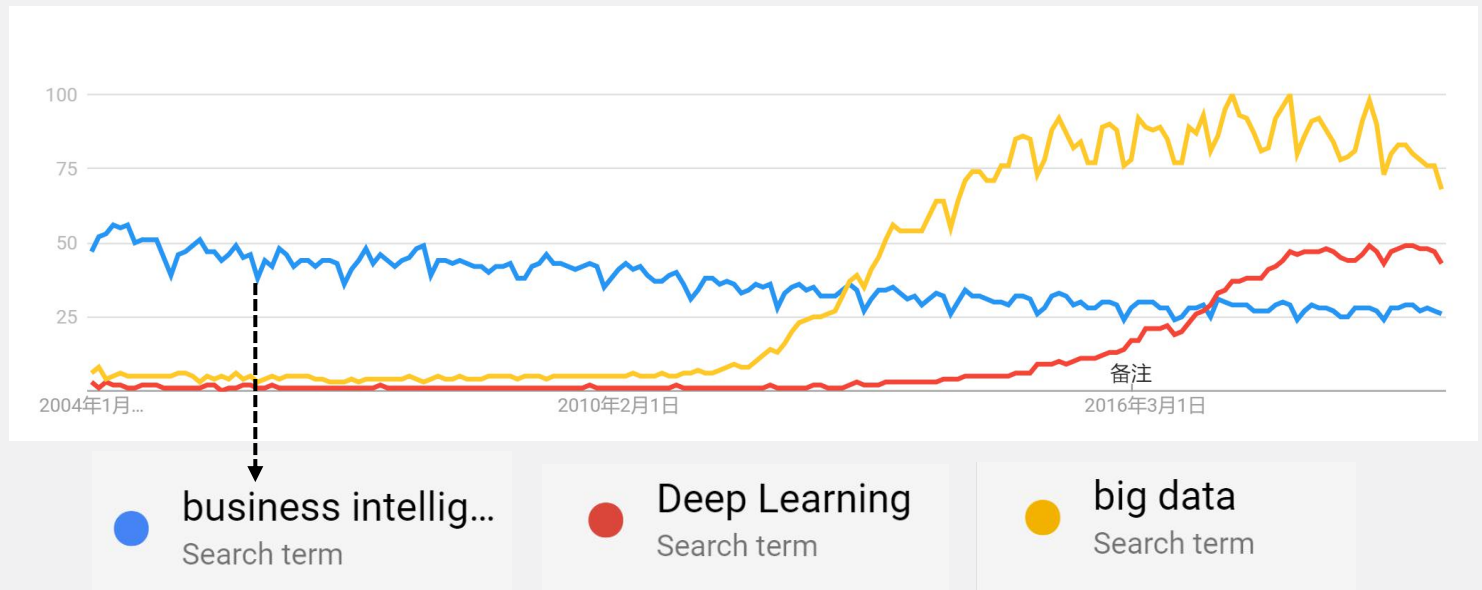
Conclusion

Reference

▲ From Google searches

- BI decrease

(trends.google.com, 2012)



Problem 1: lack of impact

Background

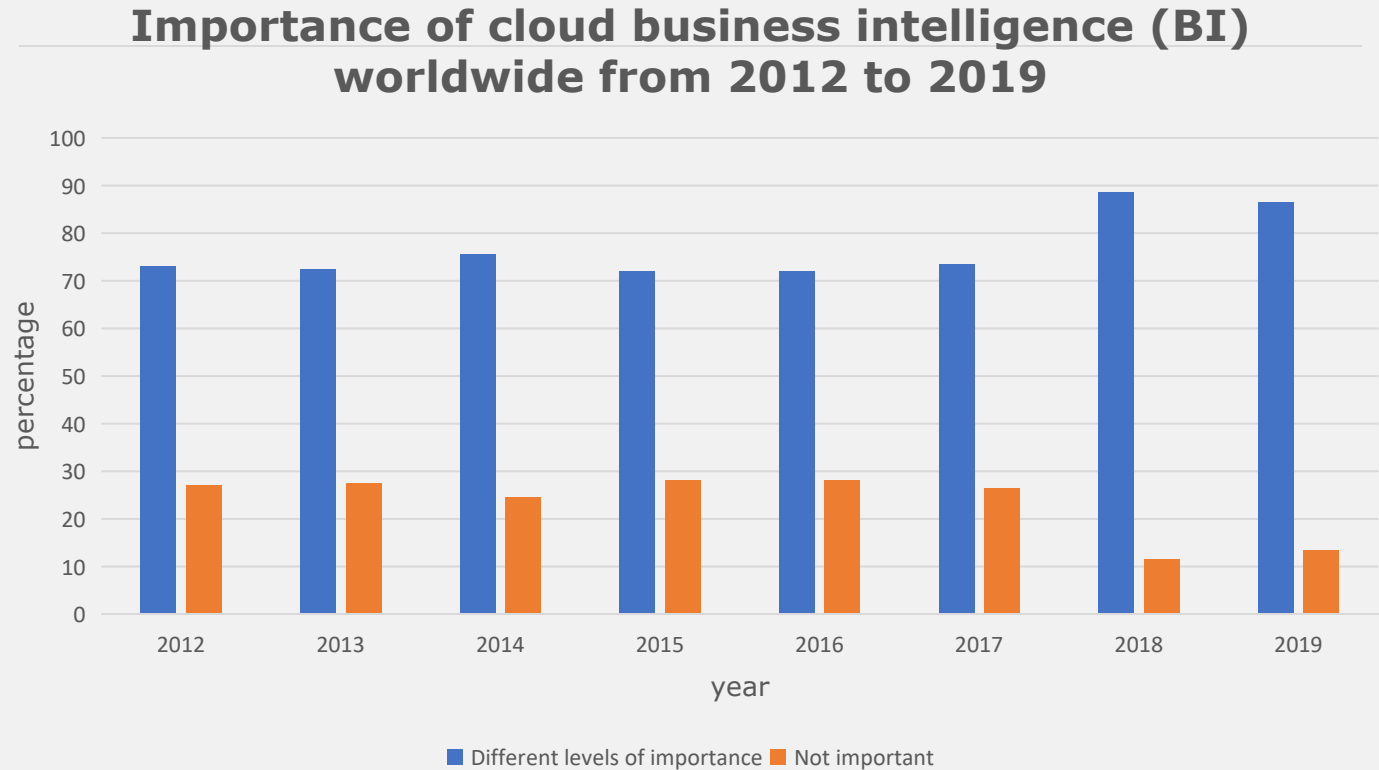
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(Statista Research Department, 2019)

Solution1: Data Science for Everyone

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Reference

▲ Data scientist participant in decision making & executive accessible to the data (Işık, Jones and Sidorova, 2012)

- + **SCIENTIFIC**: Decision making scientific
- **LACK TALENT**: Hard to master both of them

Solution2 : Visualization

Background

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Reference

▲ Present data in visuals ways: figure

✗ Not excel

(Işık, Jones and Sidorova, 2012)

+ **TRUST**: Data is more trustworthy

- **COST**: Special tools | tableau- **too expensive !!!**

Problem 2: Unstructured data

Background

Overview

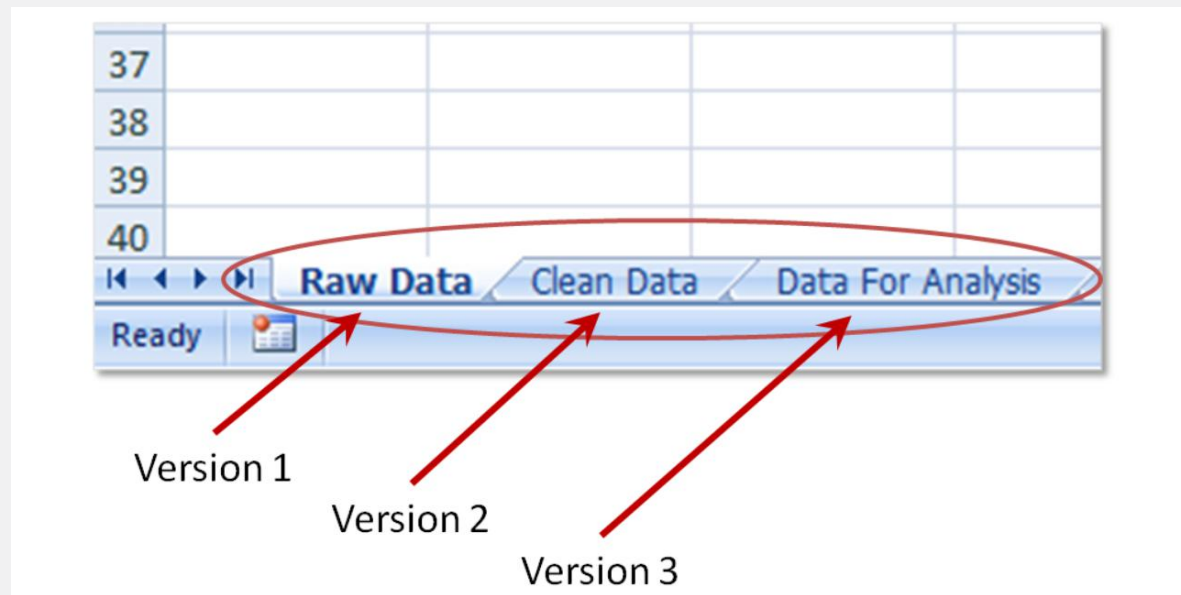
Problem

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- ▲ Data more than one source (picture, voice, text..) for Alibaba's business
- ▲ feature → format (Corbitt, 2003)



Solution 3 Clean data effectively

Background

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Reference

▲ Using mart BI remove unwanted observations (Greenwood, 2007; Ohlhorst, 2012)

▲ Packages in R and Python (Ganti and Das, 2013; Struhl, 2015)

+ **EASY**: follow the data clean task (Greenwood- Nimmo and Shields, 2017)

- **NEW DESIGN**: special toolkits

Solution 3 Clean data effectively

Background

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Conclusion

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▲ Concept of BI and low utilization

▲ Two main problems:

- lack of impact
- unstructured data

▲ Proposed solution

- Data scientist participant in decision & executive accessible to the data
- Visualization
- Clean data effectively with smart BI

Reference list

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Reference

Corbitt, T. (2003) 'Business intelligence and data mining', *Management Services*, 47(11), p.18.

Delic, K. & Riley, J. (2013) 'Current and future trends in AI. 2013 XXIV International Conference on Information', *Communication and Automation Technologies (ICAT)*, pp.1–4.

Ganti, V. & Das Sarma, A. (2013) *Data cleaning: a practical perspective*. Calif: Morgan & Claypool

Greenwood- Nimmo, M. & Shields, K. (2017) 'An Introduction to Data Cleaning Using Internet Search Data', *Australian Economic Review*, 50(3), pp.363–372.

Maheshwari, A. (2015) *Business intelligence and data mining*. New York: Business Expert Press.

Ohlhorst, F. (2013) *Big data analytics: turning big data into big money*. Hoboken: N.J.

Işık, Jones & Sidorova. (2012) 'Business intelligence success: The role of BI capabilities and decision environment', *Information & Management*, 50(1), pp.13–23.

Struhl, S.M. (2015) *Practical text analytics: interpreting text and unstructured data for business intelligence*. London: Philadelphia.

Statista Research Department (2019) *Importance of cloud business intelligence (BI) worldwide from 2012 to 2019*. Available at: <https://www.statista.com/statistics/1012845/worldwide-cloud-business-intelligence-importance>(Accessed: 22 August 2019)



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Q&A

Thank you for listening

CLASS-6 | Mingyuan zhu | Carl