

USER'S MANUAL

Company credit profile, cognitive services application

May, 2016

Revision Sheet

Release No.	Date	Revision Description
Rev. 0	25.05.2016	User's Manual initial version

1.0 GENERAL INFORMATION

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Currently information about any given company is readily available from proprietary sources in a structured way. However there is a lot of information available externally in an unstructured way (for example news, tweets, etc). The goal of the project would be in structuring of the external data in a way that can be used to enrich the data factors available in proprietary sources helping in creating credit profile of a company. Ultimately in future the results of the project will be used for automation of process of corporate risk assessment, support knowledge workers, take out cost of the process, bring out the knowledge about a company in the right time for credit decision making. The project aim would be to develop a web service using the IBM Bluemix platform. The cognitive services of Watson would be used for accessing the unstructured data , which can be used or mapped with proprietary sources of structured data to provide insightful information .

2.0 GETTING STARTED

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2.1 Logging On

To log in into the application can be accessed via the following link:

<https://osr-amos.cs.fau.de/ss16/proj9/>

After following the link, the following screen will be shown. These input fields are intended for entering IBM services credentials, which are used in the application.

Login

Alchemy API-Key

Toneanalyzer Username Toneanalyzer Password

Twitter Consumer Key Twitter Consumer Secret Twitter Token Twitter Token Secret

The credentials mentioned in this screen can be obtain via <http://www.ibm.com/cloud-computing/bluemix>.

For twitter –related credentials, please refer to <https://dev.twitter.com/>.

2.2 Exit System

To exit the system, the button “Log out” at the bottom of the home screen should be used.

3.0 USING THE SYSTEM (ONLINE)

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This section provides description of system function available to the user.

3.1 Search company by name

The “Search company by name” function allows inputting any company name into the input field to then ask a question on this company. The field is being validated, e.g. after input of the company name a user will get proposals for the valid company names [source: DBpedia].

Company Profile

Company Name

Microsoft

Microsoft Corporation Industry(Alchemy/Home page/Taxonomies)?

☐ What is the company main product(Alchemy/Home page/Entities)?

☐ What are the company competitors(DBpedia/Industry)?

☐ What are the company competitors(Alchemy/News)?

☐ What are the company news sentiment(Alchemy/News)?

☐ What are the company products(DBpedia/Category)?

☐ What are the company products(Alchemy/Home page)?

☐ What are the company competitors products(DBpedia/Category)?

☐ What are the company competitors products Sentiment(DBpedia/Category)?

Ask Advanced options

3.2. Ask the question

After input of company name, the user can choose any of the pre-defined questions as depicted on the following screenshots.

After pressing the “Ask” button, the user will receive the answers to the predefined question relevant to the inputted company inputted.

Company Profile

Company Name

Capgemini

- ☐ What is the company industry(Alchemy/Home page/Taxonomies)?
- ☐ What is the company main product(Alchemy/Home page/Entities)?
- ☐ What are the company competitors(DBpedia/Industry)?
- ☒ What are the company competitors(Alchemy/News)?
- ☐ What are the company news sentiment(Alchemy/News)?
- ☐ What are the company products(DBpedia/Category)?
- ☐ What are the company products(Alchemy/Home page)?
- ☐ What are the company competitors products(DBpedia/Category)?
- ☐ What are the company competitors products Sentiment(DBpedia/Category)?

Ask Advanced options

Company competitors(DBpedia)

IONA Technologies, Inc., Revolution Networks, Bain & Company, PicNet, LMI Government Consulting, Ciklum, Charles River Associates, EMP Trust, Kepner-Tregoe, Inc., LIVECODING.TV, Indra Sistemas, S.A., PwC - Diamond Advisory Services, FDM Group, Training Camp, Sia Partners, Tefen Management Consulting, Orange Business Services, IBM Global Services, Infosys Ltd, NICE Systems, Limited, SmithStreetSolutions, Seize the Day Inc., Grants India, Tech Mahindra, Whittman-Hart INC

Company Profile

Company Name

puma

- ☒ What is the company industry(Alchemy/Home page/Taxonomies)?
- ☐ What is the company main product(Alchemy/Home page/Entities)?
- ☐ What are the company competitors(DBpedia/Industry)?
- ☐ What are the company competitors(Alchemy/News)?
- ☐ What are the company news sentiment(Alchemy/News)?
- ☐ What are the company products(DBpedia/Category)?
- ☐ What are the company products(Alchemy/Home page)?
- ☐ What are the company competitors products(DBpedia/Category)?
- ☐ What are the company competitors products Sentiment(DBpedia/Category)?

Ask Advanced options

Main industry(Alchemy)

/style and fashion/footwear/shoes

Company Profile

Company Name

- ☒ What is the company industry(Alchemy/Home page/Taxonomies)?
- ☐ What is the company main product(Alchemy/Home page/Entities)?
- ☐ What are the company competitors(DBpedia/Industry)?
- ☐ What are the company competitors(Alchemy/News)?
- ☐ What are the company news sentiment(Alchemy/News)?
- ☐ What are the company products(DBpedia/Category)?
- ☐ What are the company products(Alchemy/Home page)?
- ☐ What are the company competitors products(DBpedia/Category)?
- ☐ What are the company competitors products Sentiment(DBpedia/Category)?

Main industry(Alchemy)

/technology and computing

3.3. Categorization of competitors by industry

When choosing the question “What are the company competitors?” the user can get competitors categorization by industry by clicking “Advanced options” button.

A screen will appear with the list of industries of competitors.

Company Profile

Company Name

- ☐ What is the company industry(Alchemy/Home page/Taxonomies)?
- ☐ What is the company main product(Alchemy/Home page/Entities)?
- ☒ What are the company competitors(DBpedia/Industry)?
- ☐ What are the company competitors(Alchemy/News)?
- ☐ What are the company news sentiment(Alchemy/News)?
- ☐ What are the company products(DBpedia/Category)?
- ☐ What are the company products(Alchemy/Home page)?
- ☐ What are the company competitors products(DBpedia/Category)?
- ☐ What are the company competitors products Sentiment(DBpedia/Category)?

Write company name to analyze twitter

Advanced Options

- Computer hardware
- Software
- Consumer electronics

By choosing the industry and clicking “Ok” button, the list of competitor companies working in the specified industry will be shown.

Company Profile

Company Name

Microsoft Corporation

☐ What is the company industry(Alchemy/Home page/Taxonomies)?

☐ What is the company main product(Alchemy/Home page/Entities)?

☒ What are the company competitors(DBpedia/Industry)?

☐ What are the company competitors(Alchemy/News)?

☐ What are the company news sentiment(Alchemy/News)?

☐ What are the company products(DBpedia/Category)?

☐ What are the company products(Alchemy/Home page)?

☐ What are the company competitors products(DBpedia/Category)?

☐ What are the company competitors products Sentiment(Alchemy/News)?

Ask

Advanced options

Write company name to analyze twitter |

submit

Average Twitter Posts sentiment value:

Write text to analyze tone

Text: IBM is great

submit

Advanced Options

- M-Systems
- Lowry Solutions
- American Megatrends, Inc.
- u-blox Holding AG
- GELID Solutions Ltd.
- Corona Data Systems
- Packard Bell B.V.
- Chieftec Industrial Co., Ltd.
- Console Inc.
- Information International, Inc.

Ok

Cancel

3.4. Tone analysis

To analyze the tone of the text, the user may use the tone analyzer function. There is an input field for the text. After clicking “submit” the qualitative characteristic will be returned, for example emotion (anger, disgust, fear, joy and sadness), social propensities (openness, conscientiousness, extroversion, agreeableness, and emotional range), and language styles (analytical, confident and tentative).

Write text to analyze tone

Text: IBM is great

submit

Tone results:

3.5. Twitter posts analysis

To get an insight on the twitter posts, a user can use the twitter posts analysis function. In the input field, the company name should be inputted. After pressing the “submit” button, the top tweets will be returned. The amount of tweets returned depend on the possibilities of credentials the user inputted in the log in page.

Write company name to analyze twitter posts sentiment

Average Twitter Posts sentiment value:
-0.05592097500000001

- + Tweet from User Security Testing
- + Tweet from User NetSec Expert
- + Tweet from User Damien Pollet
- + Tweet from User Foosball ICC A'dam
- + Tweet from User Patrice Beauvillain
- + Tweet from User Elizabeth Kvedar
- + Tweet from User Pablo Sanchez
- + Tweet from User Andreas HT
- + Tweet from User Alejandro Borbolla
- + Tweet from User Darya
- + Tweet from User Zirigoza
- + Tweet from User IBM News
- + Tweet from User IBM News
- + Tweet from User DIGITAL Enterprises

RT @TheIBMSPTeam: Visualising your data findings has never been easier thanks to #IBM #Watson #analytics <https://t.co/rW5fyqv4NL> <https://t.co/rW5fyqv4NL>

- + Tweet from User DIGITAL Enterprises

Additionally, the user gets information on the sentiment of the twitter posts (in the screen example it is negative, -0.05). Another possibility is to click on the “+” sign which will open the expandable window with the content of the particular tweet.