Daten als Gold der Moderne
Optimierung von Informations- und Entscheidungsprozessen mittels Big Data

Albert Weichselbraun
Agenda

Introduction
  • Challenges
  • Technology stack

Research projects
  • Process optimizations (IMAGINE)
  • Product innovations (DISCOVER, Job Cockpit)
  • Visual analytics (SNF Medienkritik)
Introduction

Technical challenges (Text & Data Mining)
• Application of statistics, natural language processing and machine learning
• Knowledge poor, but predictable, well described methods
• Data quality, reliability

Economic & domain-specific challenges
• Business process and product design
• Research questions, data-driven decision making
• “enabling sciences” → support domain experts in creating more efficient processes and new innovative products
Introduction | Technology Stack

- **Visual analytics**
- **Dashboard & user interface**
- **Data enrichment**
- **Classification**
- **Clustering**
- **Named Entity Recognition**
- **Geo-Tagging**
- **Sentiment Analysis**
- **Named Entity Linking**
- **Sentiment Analysis**
- **Privacy aware knowledge extraction**
- **Locality sensitive hashing**
- **Phrase extraction**
- **Data Acquisition**
- **Text pre-processing**
- **Deep Web Mirroring**

**Logos:**
- Imagine
- Discover
- JobCockpit
- Web Lyzard
- Wisdom Project
- Comet
- RMCS
Process Optimizations
In this image taken from video a camera drone crashes into the snow narrowly missing Austria's Marcel Hirscher during an alpine ski, men's World Cup slalom, in Madonna Di Campiglio, Italy, Tuesday, Dec. 22, 2015.
Product innovations
Knowledge discovery, extraction and fusion for improved decision making

**Study ID:** NCT03164772  
**Title:** mRNA Vaccine in ...  
**Condition:** Metastatic Lung Cancer  
**Phase:** Phase 1; 2

**Company:** Lantern Pharam  
**Address:** 211 N Ervay St, Dallas, TX 75201, USA  
**Phone:** +1 515-231-2065  
**CEO:** Arunk K. Asaithambi, PH.D.  
**CSO:** Peter Narad, D.V.M., PH.D.
Web analytics, data enrichment and predictive analysis for improved recruitment and career management processes

We are an independent engineering, planning and consulting company

We develop pioneering solutions for extensively used spaces. Specialists from over 30 disciplines work together to achieve this goal. Our joined-up thinking and our competency to see the big picture characterize our work.

Knowledge Extraction

Privacy aware knowledge extraction

Job Cockpit API

Semantic search

Anonymized job profiles + context

MATCHIX domain ontology

Construction engineer
15 km from Zurich
Specialization: ...

Branche: Engineering
Education: ETH Zurich
Certificates:
Project manager: 2a
Lead: 5a
...

Eric Jaquier
Mitglied der Geschäftsleitung, Leiter Niederlassung Murten
Murten
+41 26 672 99 77

Sylvia Jaus
Projektleiterin
Esslingen
+41 44 387 12 69
E-Mail

Peter Jost
Leiter Sicherheit
Zürich
+41 44 387 13 91
E-Mail

MATCHIX
Visual Analytics
Thank you for your attention!

Platform Description
www.weblyzard.com

Web Intelligence
http://htwchur.ch/?id=web_intelligence

Contact
Albert.Weichselbraun@htwchur.ch