

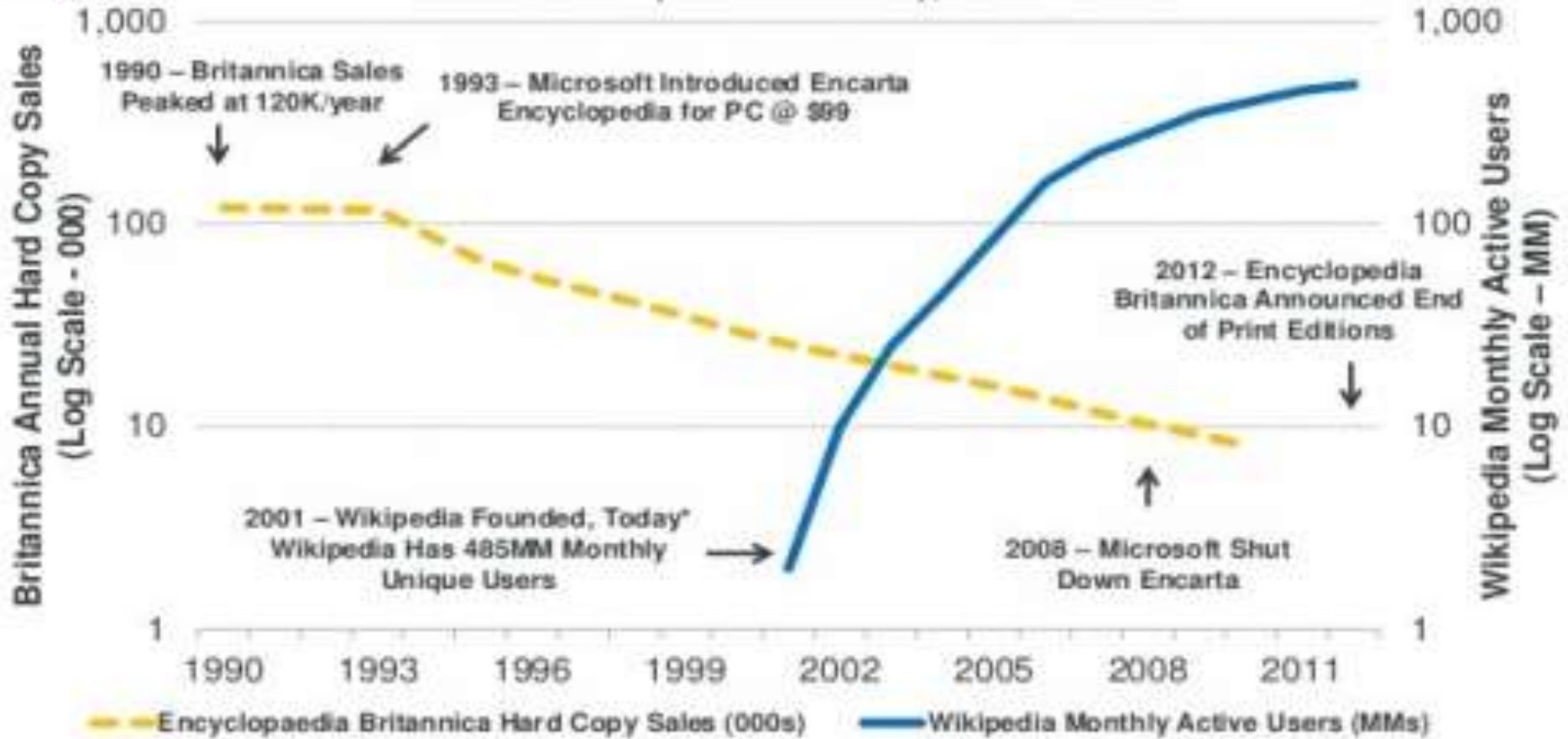
Agenda

1. When Giants Fall
2. Five forces drive the near future
3. How incumbents can survive digital disruption
4. Pitfalls

1. When Giants Fall



Encyclopedia Britannica Hard Copy Sales vs. Wikipedia Monthly Active Users (Different Scale), 1990 – 2012



KPCB

Source: Kellogg School of Management, Stuart Greenstein and Michèle Desreux, "The Crisis at Encyclopedia Britannica,"

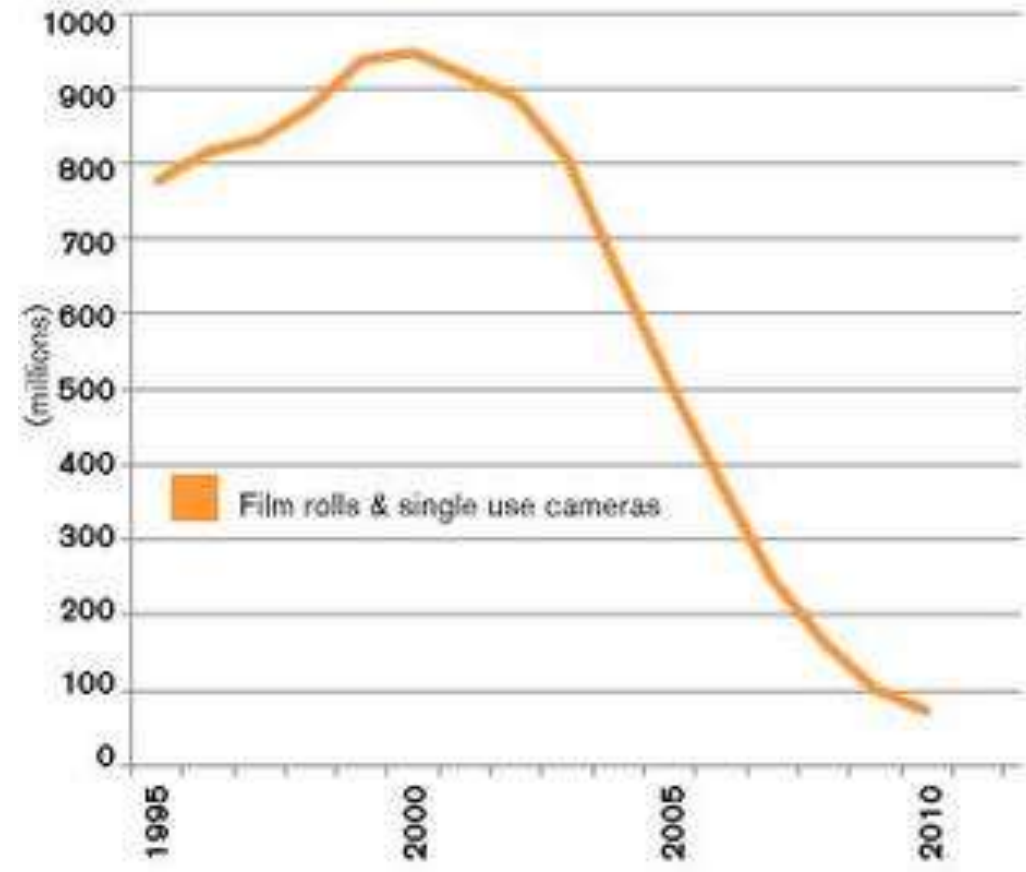
Note: *as of 9/12, per comScore global data.

30

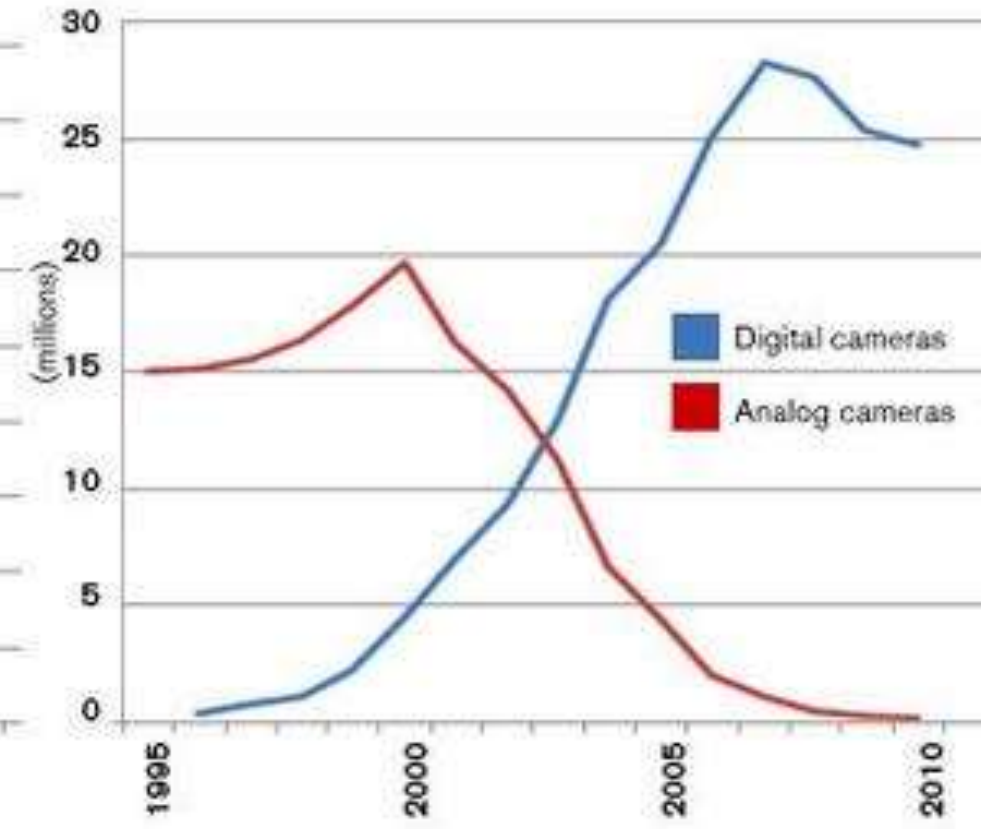


Decline of Film

Film rolls sold

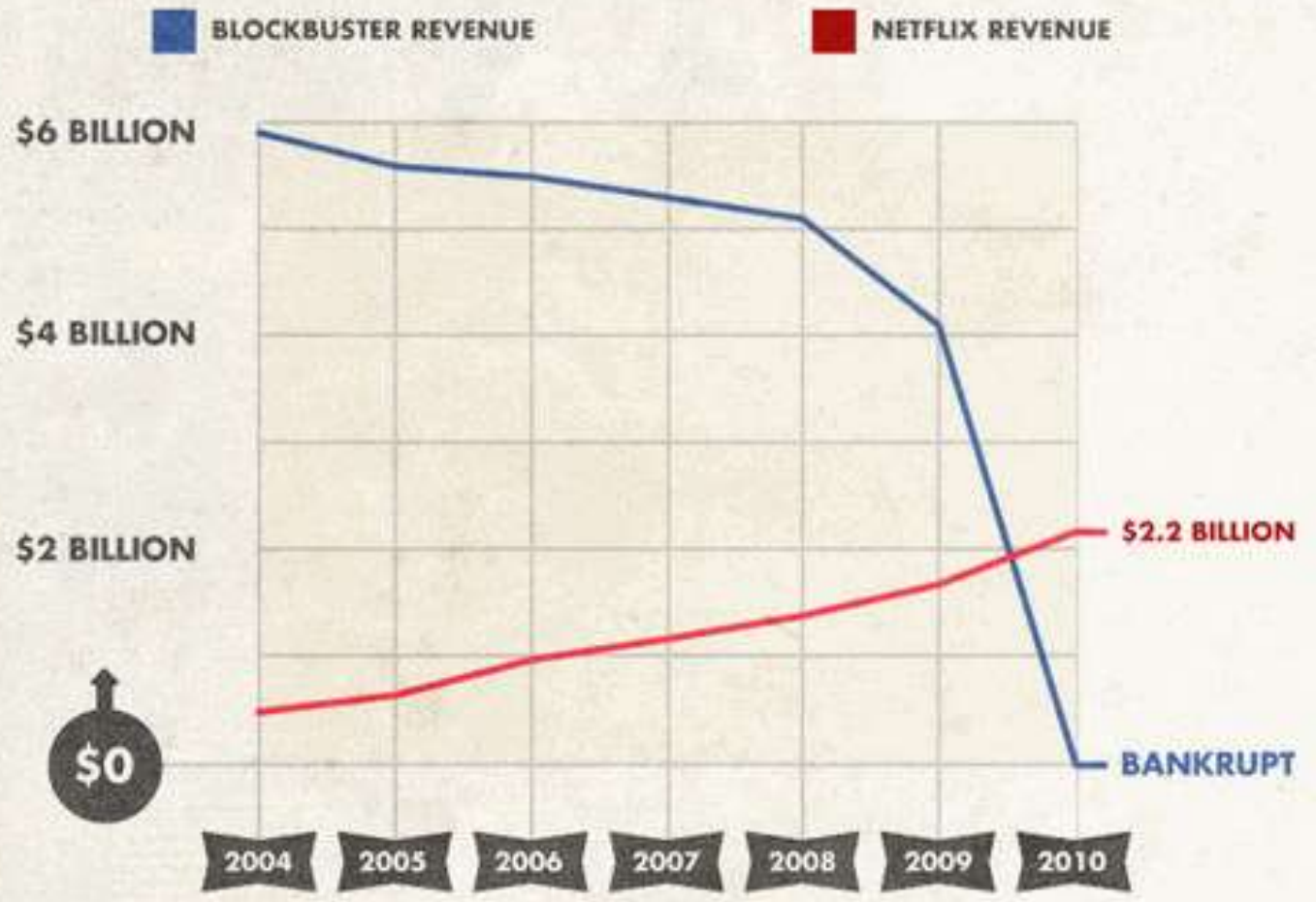


Camera sales



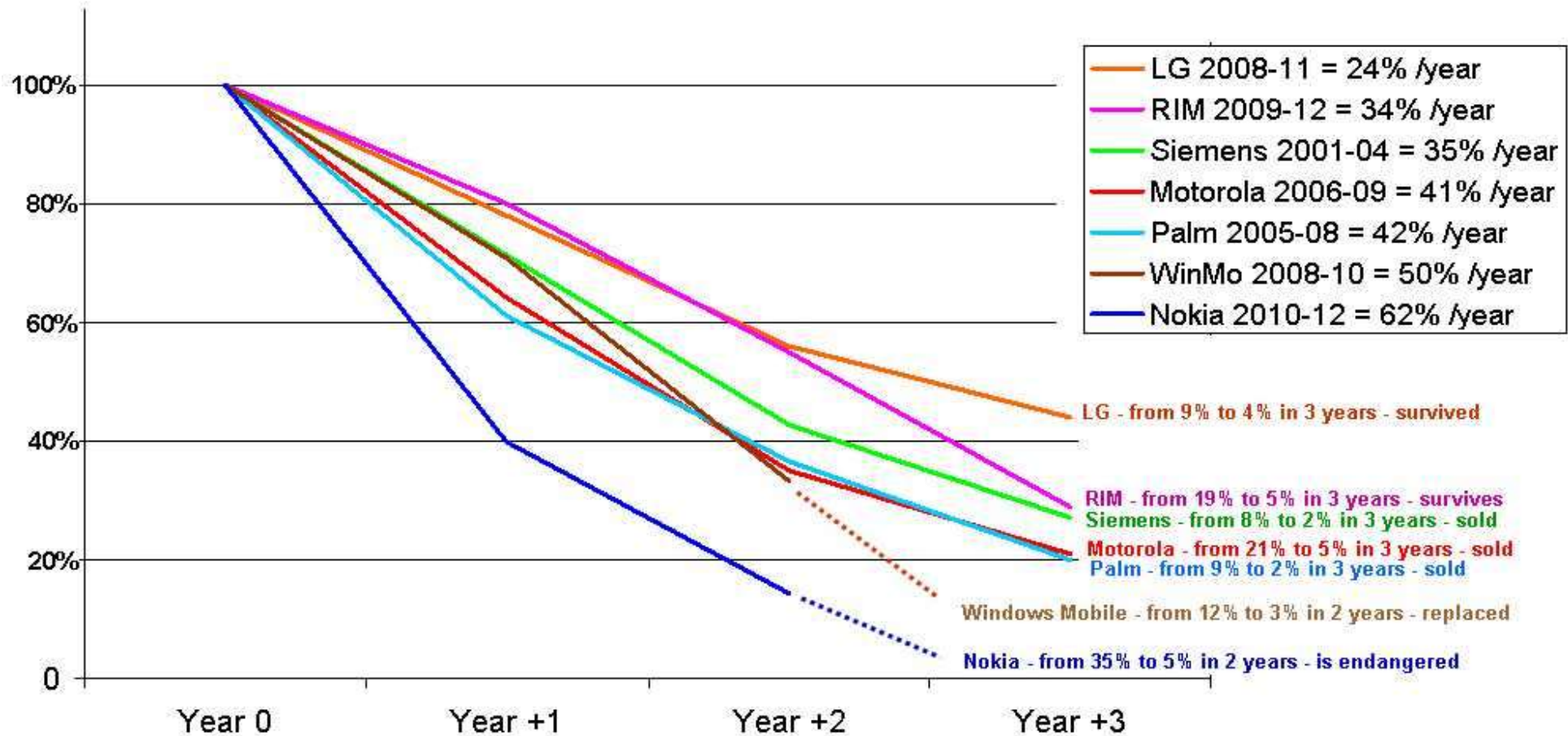


NETFLIX VS. BLOCKBUSTER (2004-2010)



Seven Fastest Collapses of Market Share in Mobile Handset History

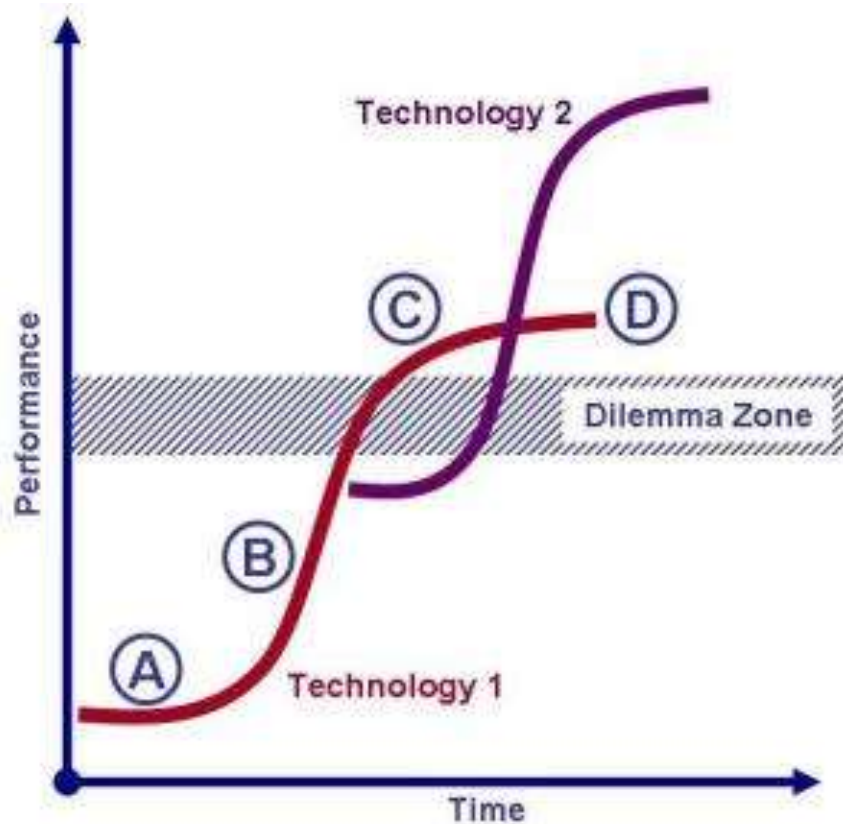
Nokia sets new world record for fastest collapse in history of mobile phones, falling 62% per year
(previous record was 50% per year: Microsoft Windows Mobile from 2008 - 2010)



Source: TomiAhonen Consulting Analysis January 2013, based on company and industry market data



1. When Giants Fall

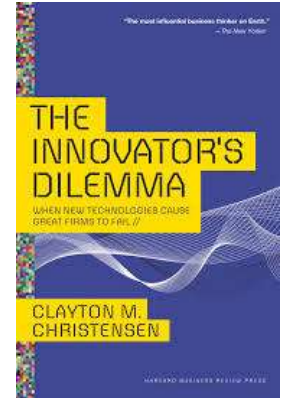


Why they failed?

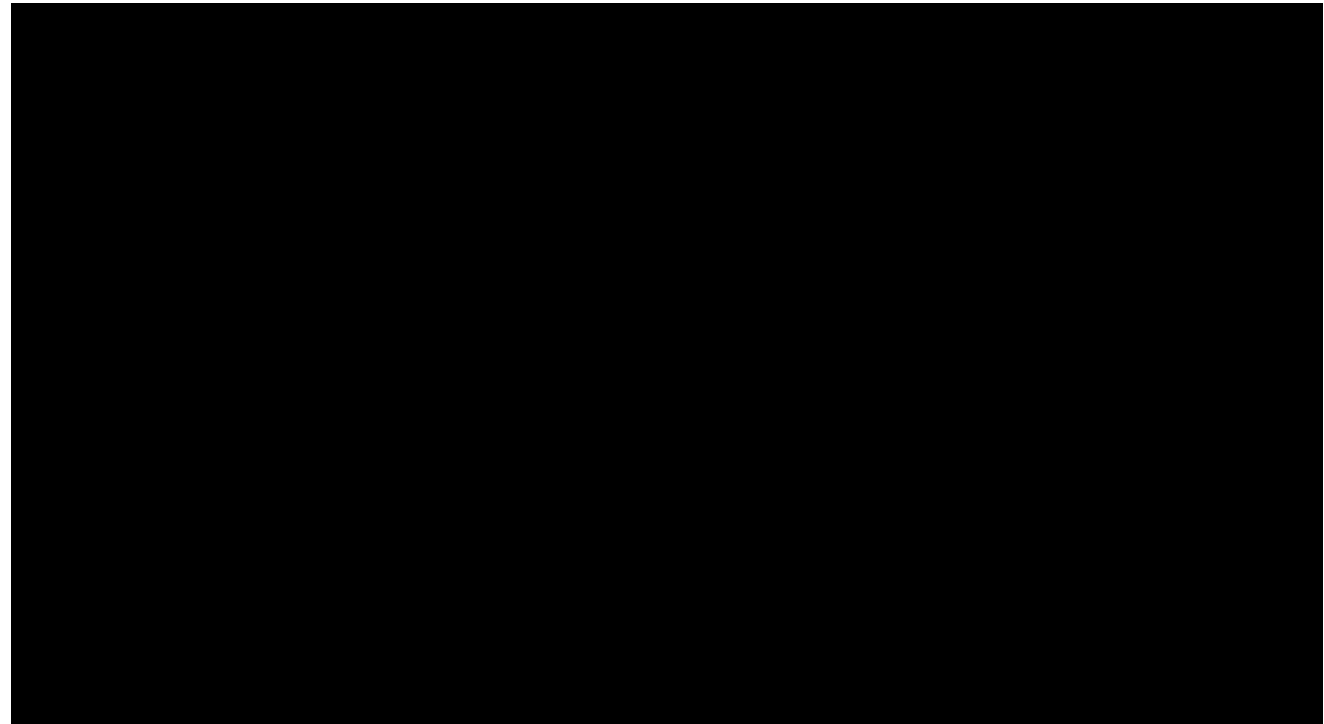
1. They were making a lot of money
2. Changing competitive landscape
3. Operating model implications
4. Failure to recognize timing

Lessons learned

- Currently unattractive opportunities can become very attractive opportunities in our changing world.
- Current success is easily distracting and can blur vision when considering new opportunities or threats.
- Transformation can happen very quickly, and if you miss it, it can be very unforgiving.
- Brand strength and/or past successes are not enough to compete against new digital transformers.



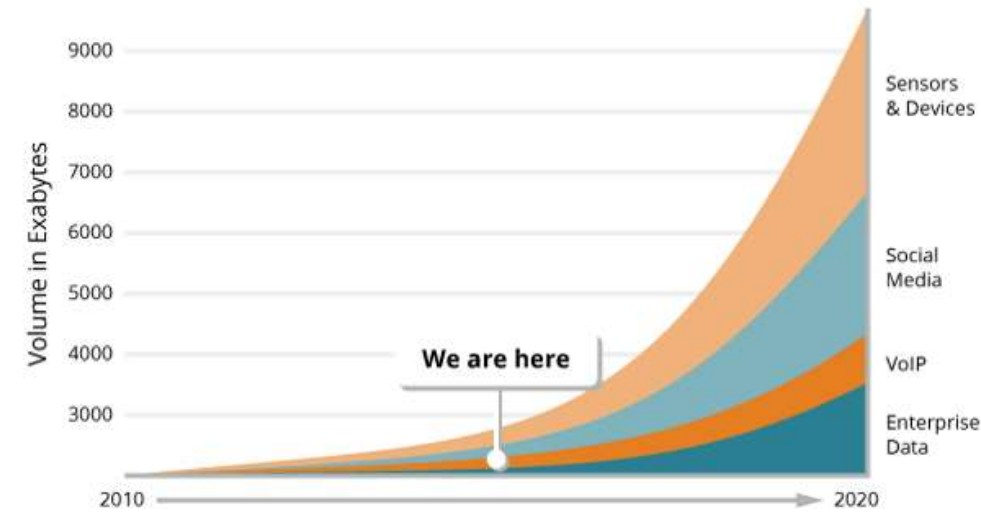
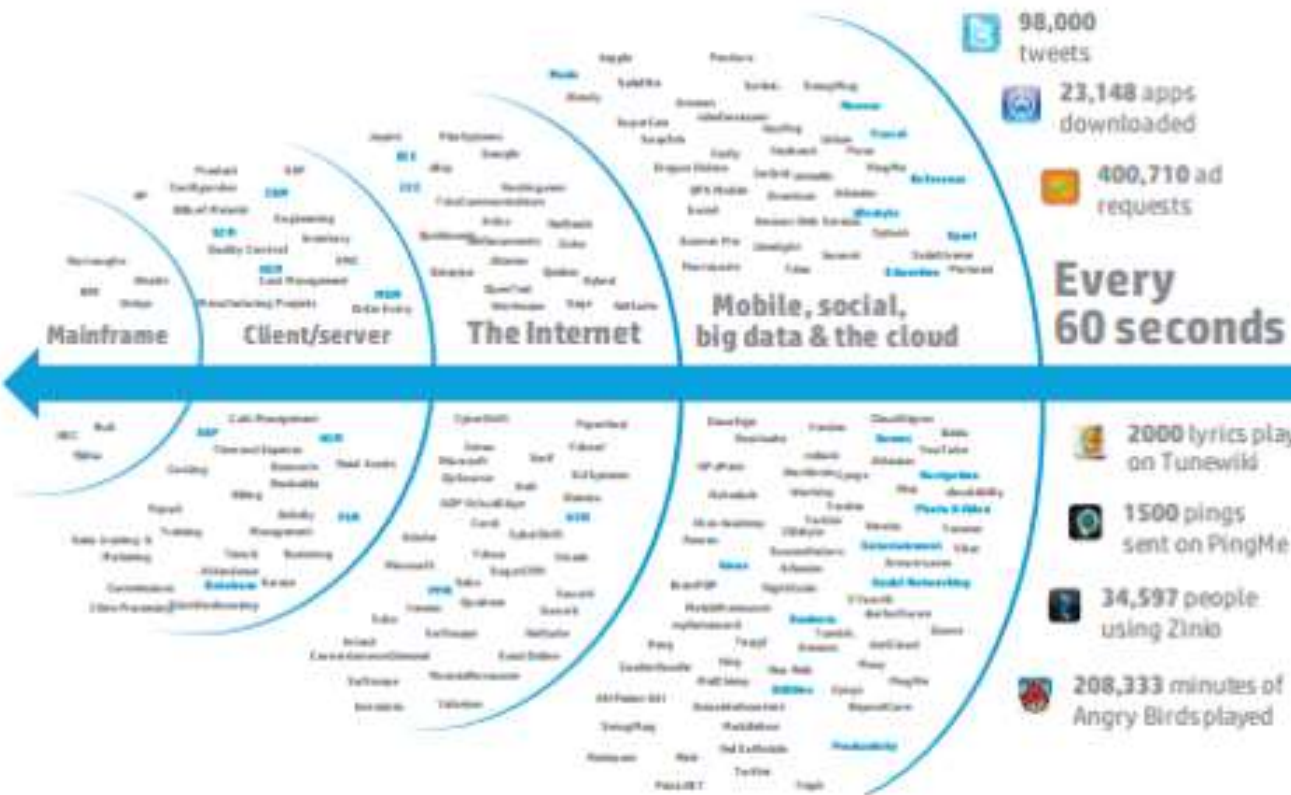
1. When Giants Fall – New disruptions



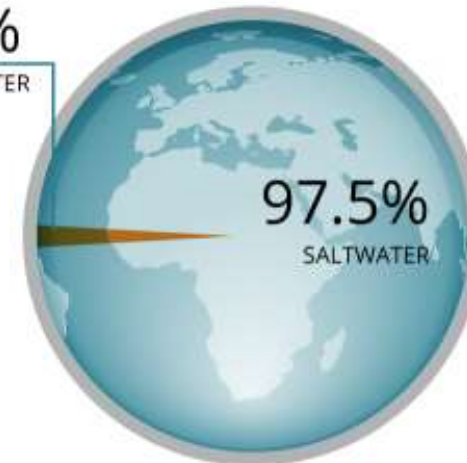
2. Five forces drive the near future



2. Five forces drive the near future



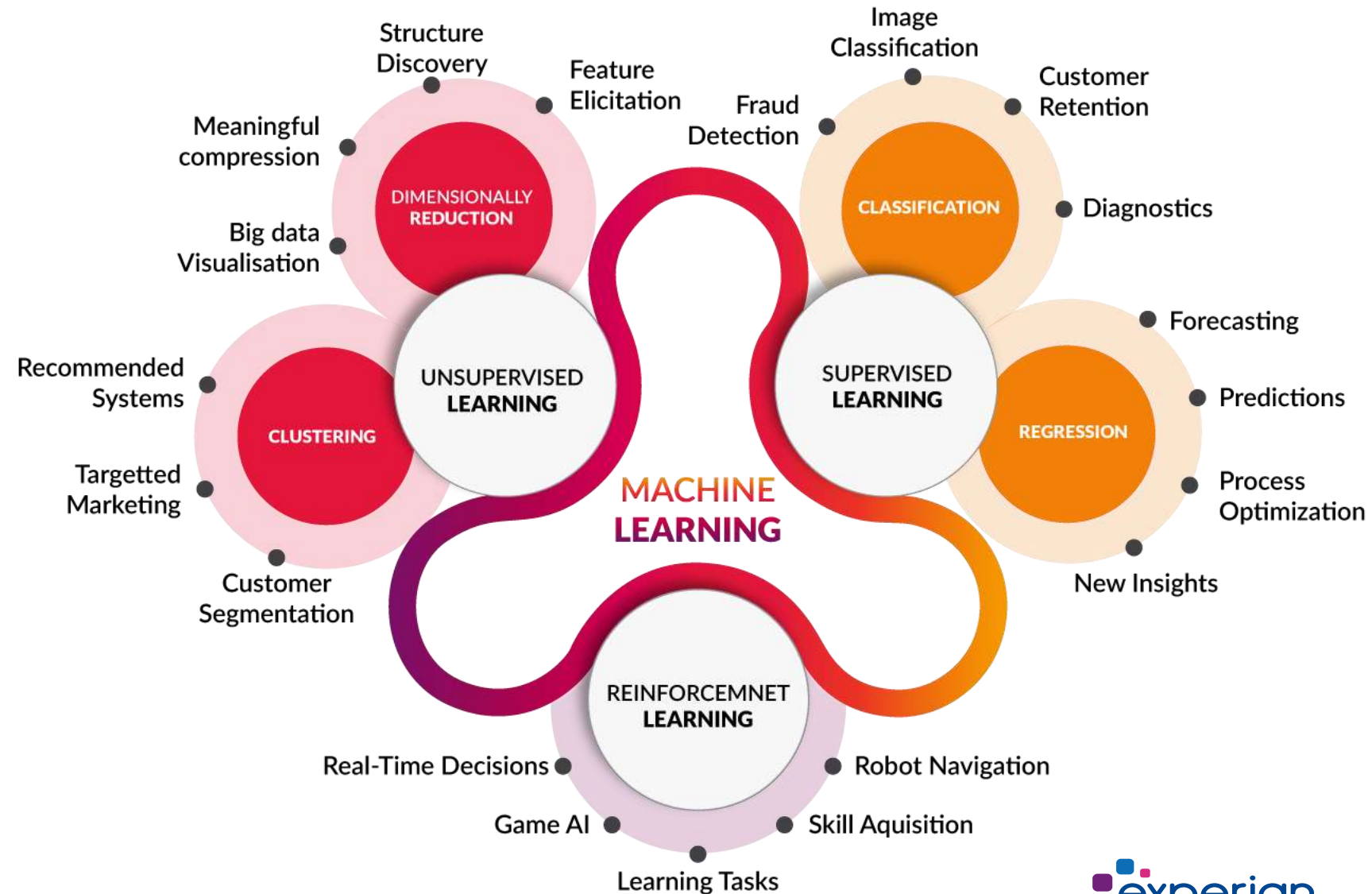
2.5%
FRESHWATER



2. Five forces drive the near future – IA

Intelligent Behavior:

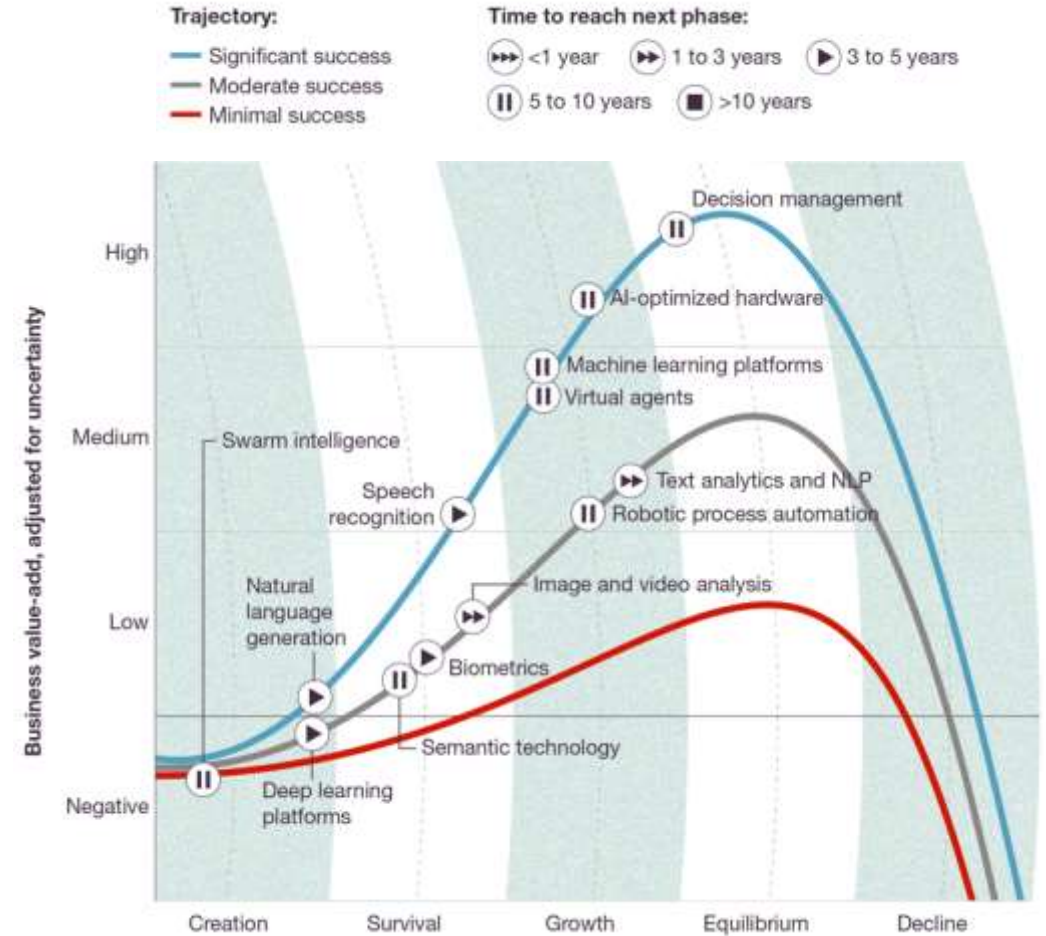
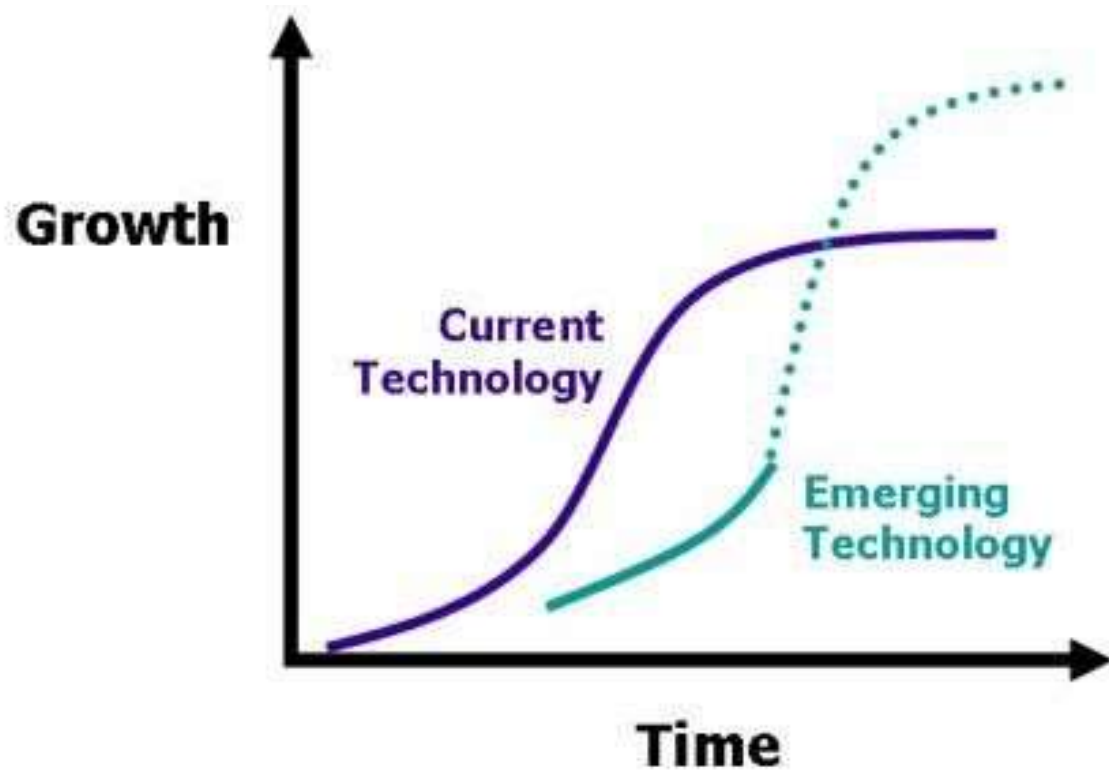
- Learn from experience
- Apply knowledge acquired from experience
- Handle complex situations
- Solve problems when important information is missing
- Determine what is important
- React quickly and correctly to a new situation
- Understand visual images
- Process and manipulate symbols
- Use heuristics
- Be creative and imaginative*



3. How incumbents can survive digital disruption



3. How incumbents can survive digital disruption



Experian DataLabs

~60 data scientists, technologists and industry experts focused on innovation

North America

San Diego, CA - Opened 2010



UK and EU

London, England – Opened 2014



South America

Sao Paulo, Brazil - Opened 2015



Purpose

- Innovation with new data sources and technology
- Emphasis on financial services, retail, telecom and healthcare
- Safe and secure environment to innovate with Experian and partner data assets

Approach

- Hypothesis driven problem solving
- Direct client engagement
- Tackling new, currently unsolved industry and client issues



Experian DataLabs

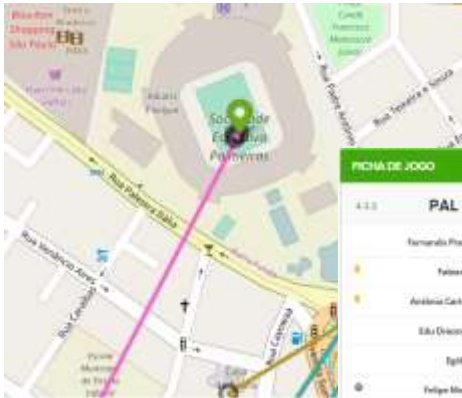
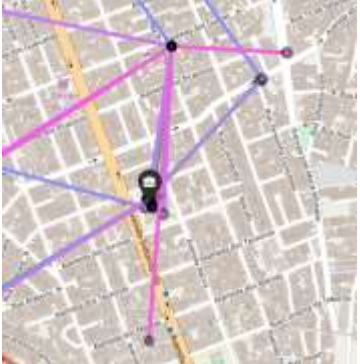
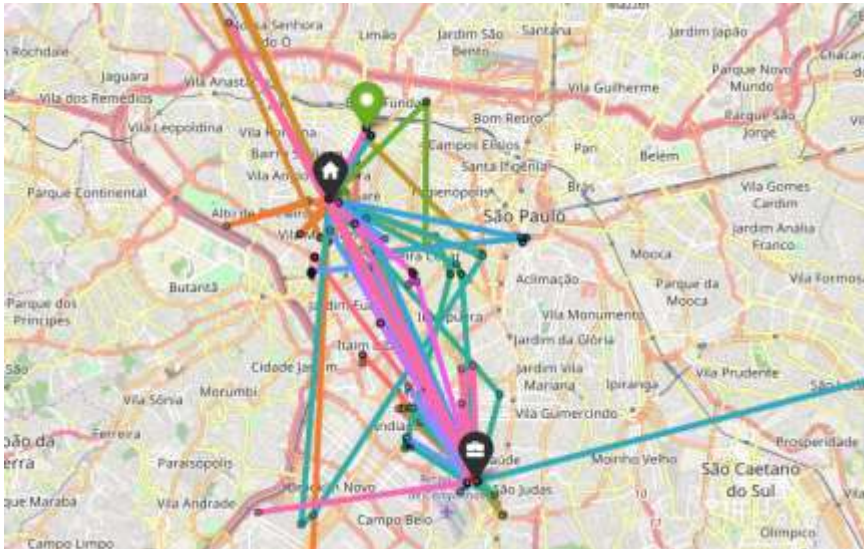
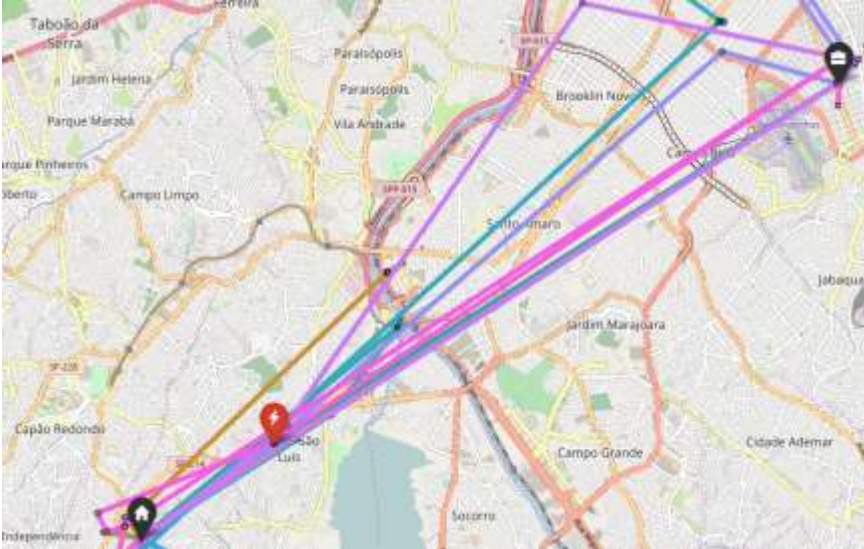




Use Case: RWA – Real World Audience



Mobile data capabilities



id	stay_begins	stay_ends	stay_centroid_lng	stay_centroid_lat	tag	
287	745ca35eace05f40	2017-03-22 20:07:04	2017-03-22 20:23:06	-46.67838	-23.527720	stadium
288	745ca35eace05f40	2017-03-22 20:44:57	2017-03-22 20:52:57	-46.67835	-23.527670	stadium
289	745ca35eace05f40	2017-03-22 21:56:11	2017-03-22 22:25:13	-48.67847	-23.527878	stadium
290	745ca35eace05f40	2017-03-22 22:59:56	2017-03-22 23:11:18	-46.68906	-23.545260	home

FICHA DE JOGO

4.4.3 **PAL** **MIR** 4.4.1

Fernando Pinho Douglas Dias

Falcao Tony

André Carlin Willian

Eliv Donizete Wallace

Egídio Edson She

Felipe Melo Raul

Robson Figueira Marcos Paulo

Vitorino Bruno Sales

Michel Bastos Paulinho





Use Case: ecommerce fraud prevention



Billing:

N Wappel Dr.
Columbia, MO 65203

Shipping:

Nieman Rd Apt 20
Overland Park, KS 66210

Amount:

\$220.93

Date / time:

10/6/15 | 3:34 AM



Billing:

N. Carmelina Ave.
Los Angeles, CA 90049

Shipping:

Chris Ave., Apt. 1
Hawthorne, CA 90250

Amount:

\$231.99

Date / time:

10/13/15 | 6:51 PM

Fraud!!!



Use Case: ecommerce fraud prevention



Billing:
Burshire Drive
Plainfield, IL 60586

Shipping:
Burshire Drive
Plainfield, IL 60586

Amount:
\$126.48

Date / time:
9/23/15 | 6:15 PM

SKU:
3267268



Billing:
Pudong, Shi Wan Zhen
Hang Cheng 4 Lu, Shanghai

Shipping:
NE Airport Way, C/O DLOORZC
Portland, OR, 97230

Amount:
\$99.99

Date / time:
12/23/15 | 9:42 PM

SKU:
1870073

Fraud !!!

Use Case: ecommerce fraud prevention

99 million transactions
80+ merchants



Cross-session
behavior

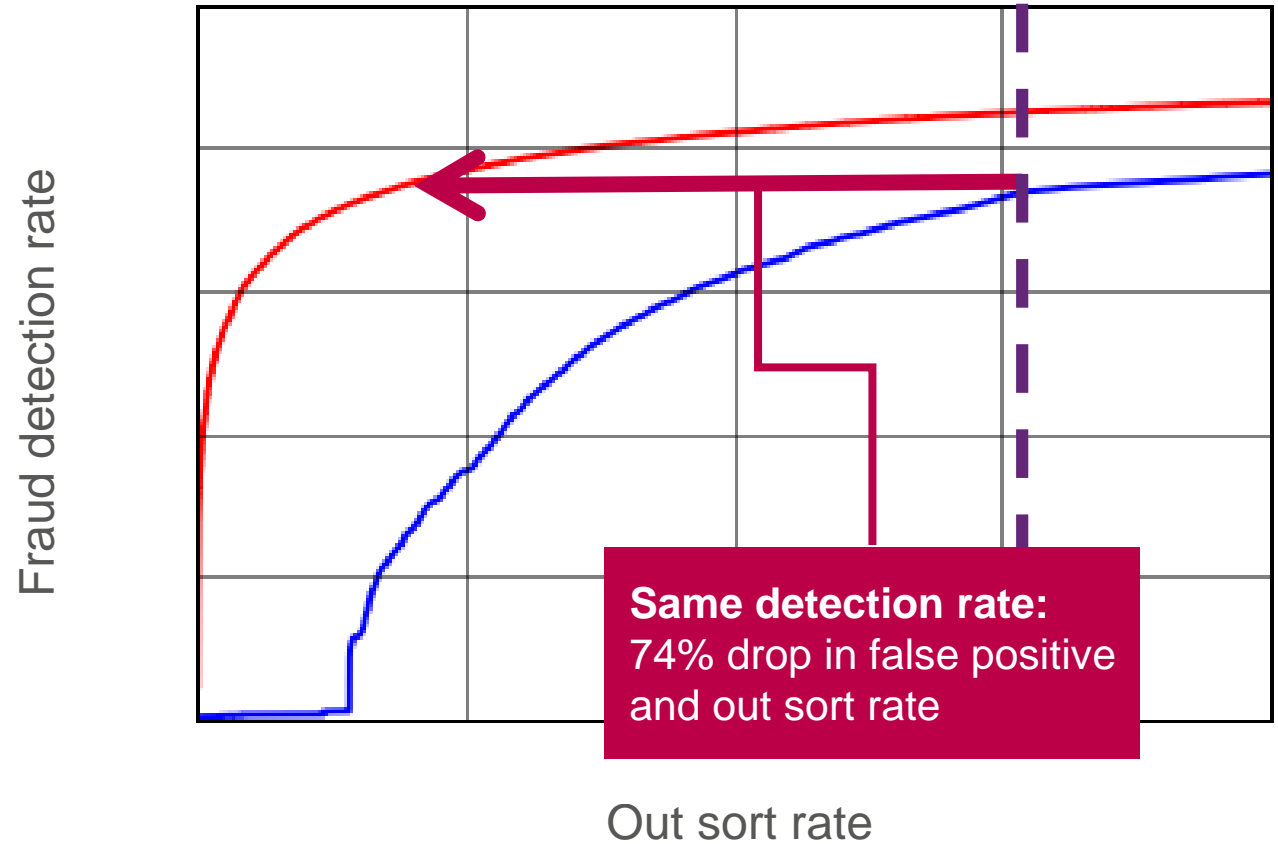
Session behavior

Cross-customer
behavior

Use Case: ecommerce fraud prevention

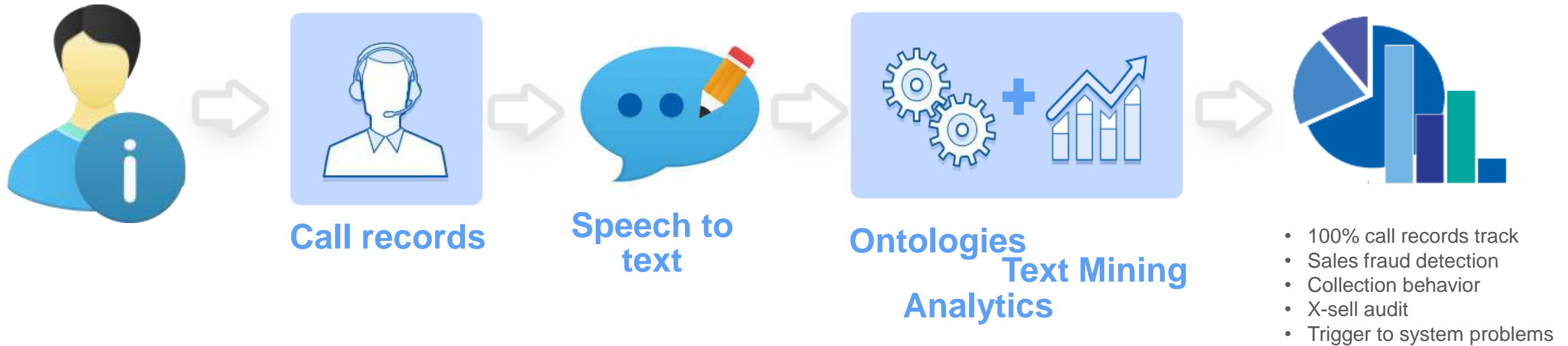
- Session-based**
 - Mining of Textual Information
 - Mining of Device/Session Information
 - Mining of risky session behavior
- Cross-Session based**
 - Entity Linkage at multi-level
 - Cross-session behavior profile
- Cross Customer-based**
 - Neural Embedding of SKU, Location, customer, etc.
 - Peer comparison
 - Leveraging Experian CRDB, consumerView
- Dynamic Risk Update**
 - Dynamic risk tables
 - Dynamic volume tracking
- Modeling Techniques**
 - Ensemble of models

Holdout dataset evaluation





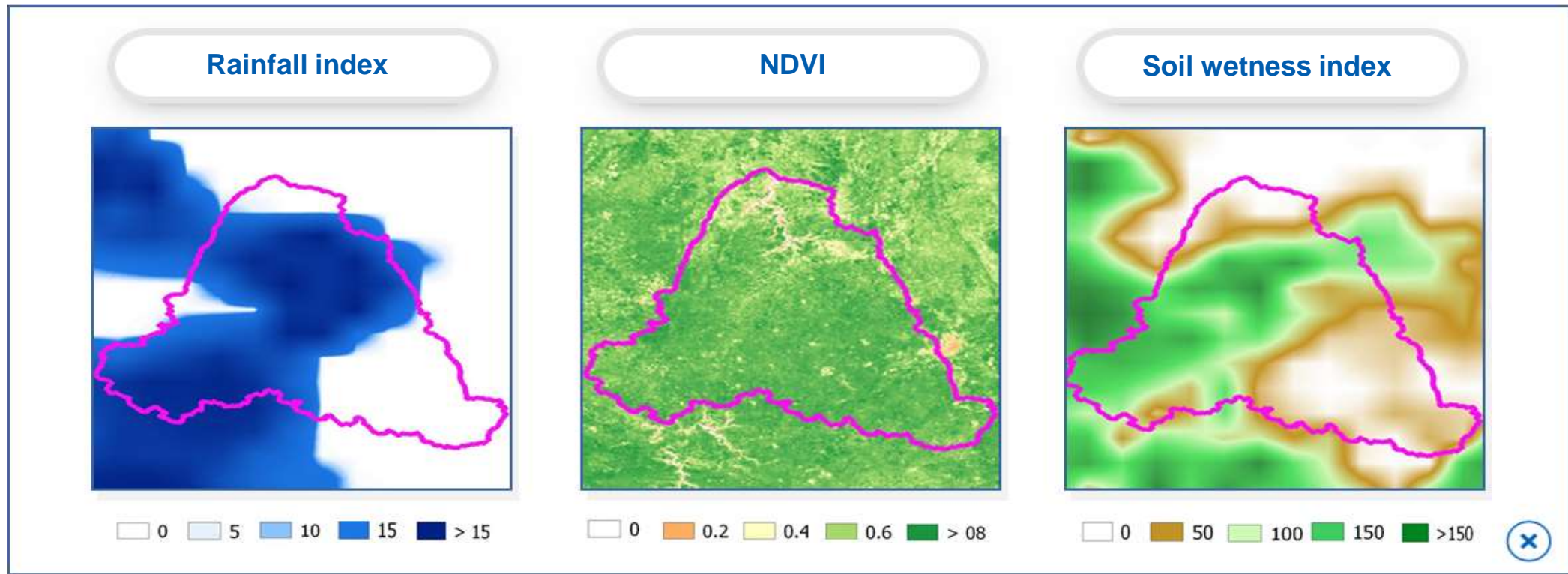
Use Case: Voice of Customer



New frontiers: Conversational assistant for financial management and voice commerce



Prototype: Image processing for agribusiness

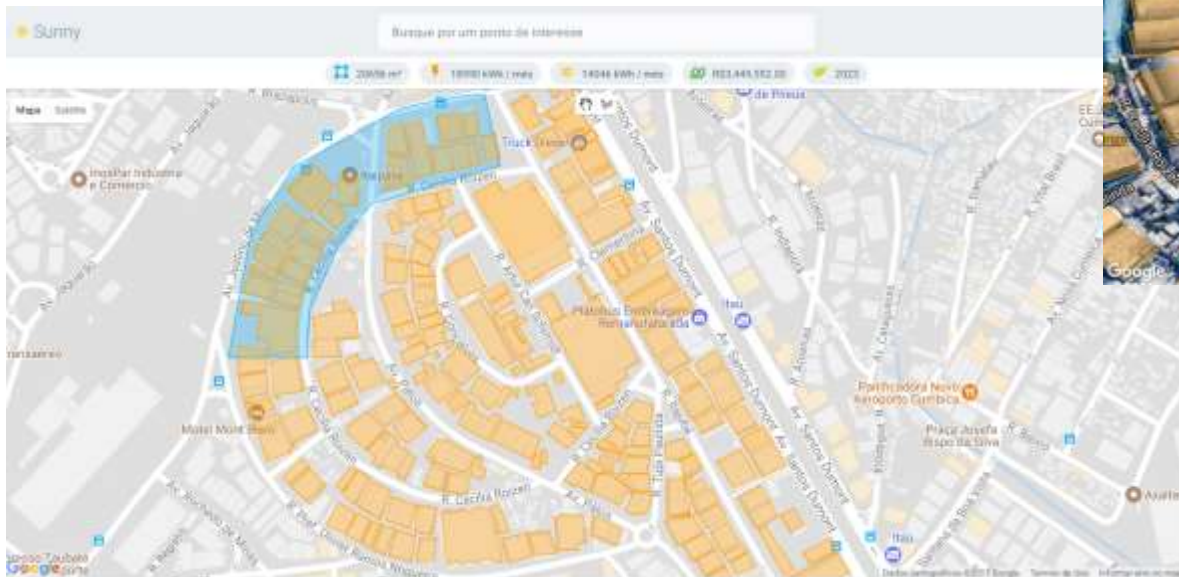




Prototype: Image processing for green insights

Key capabilities:

- Best areas/customers for photovoltaic installation
- Power generation potential
- Cost of electric energy consumption
- Value of investment
- Payback Time



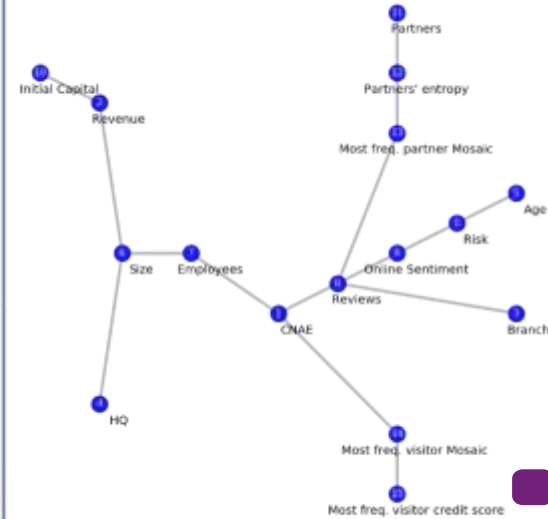
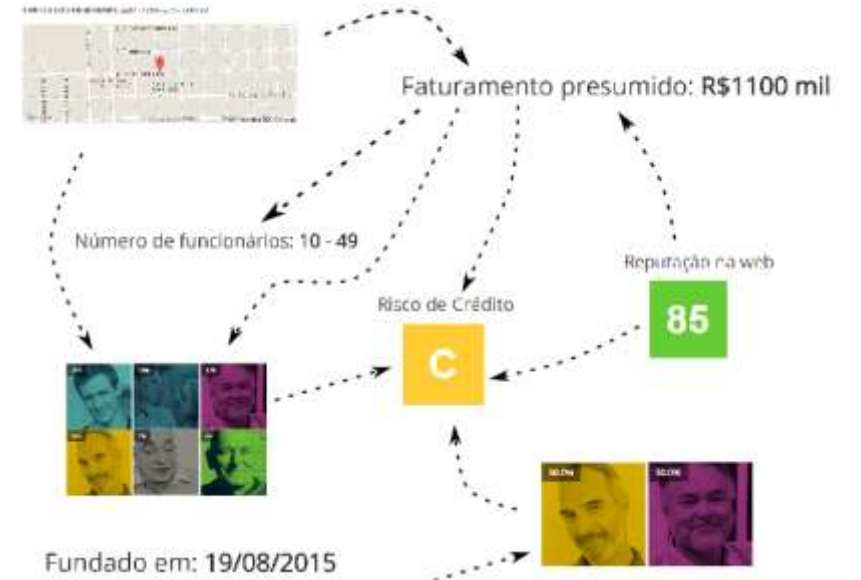
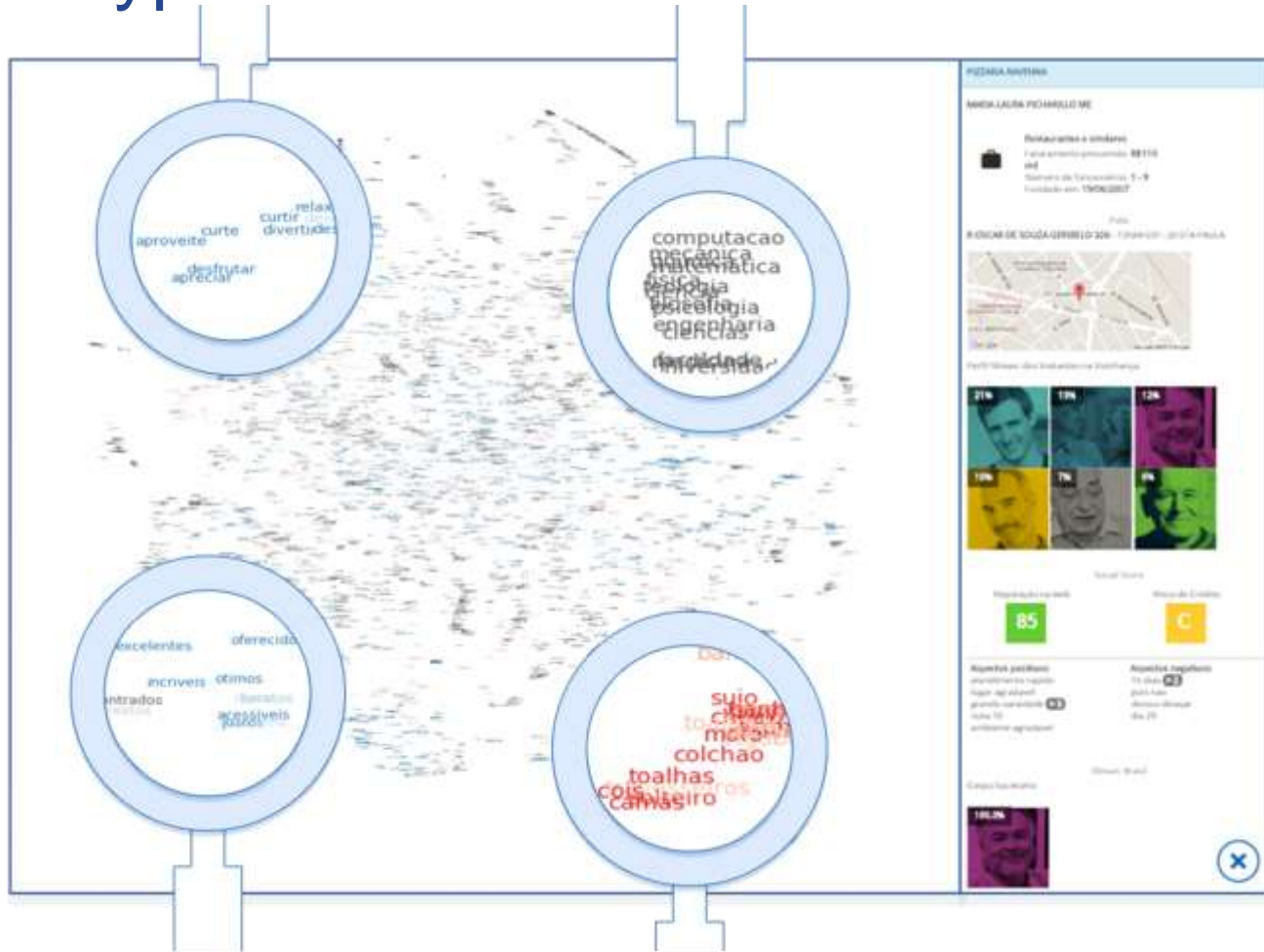
Other analysis:

- Interest groups (condominiums, bakeries, drugstores, etc)
- Credit Risk
- Loans auctions





Prototype: Social network for credit score



4. Pitfalls





4. Pitfalls

- Predictive models are never neutral but reflect the goals and ideology of those who create them. They also tend to load the dice against poor people, reinforcing inequality in society.
- The filter bubble is the universe of information individualized for each one of us. It is completely individual, transparent and out of our control. Through decreased exposure to unfiltered information, the filter bubble would reduce creativity and learning.
- The big brother really is watching, and won't be stopping anytime soon. But at least if you're aware of the facts you make better decisions about how much you, at least willingly, share
- Everybody loves the cheap and powerful digital devices. But these devices were never designed with privacy in mind; they spew personal data like carbon monoxide from a tailpipe. And downwind, inhaling our secrets, are businesses, criminals, and police agencies.

