

Personal Data Business Models

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Mitgliederkonferenz:
Datengetriebene Geschäftsmodelle - auf dem Weg zur Personal Data Economy?

München, 13. November 2013

Introduction

My personal experience with personal data



Introduction

My personal experience with personal data



Images: www.dcrainmaker.com

Recorded personal data:

- Training Time data
- Heart Rate data
- Training Distance data
- Training Speed data
- Position data
- Elevation data
- Temperature data
- Fitness Status data

Introduction

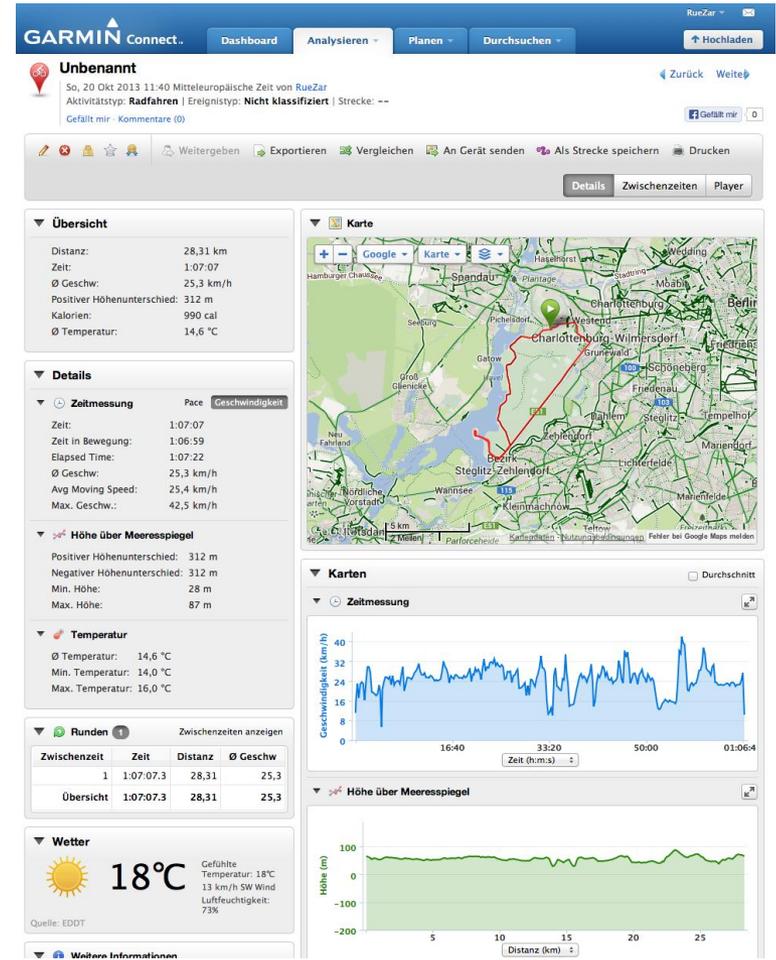
My personal experience with personal data

■ Data aggregation and analysis

www.polarpersonaltrainer.com



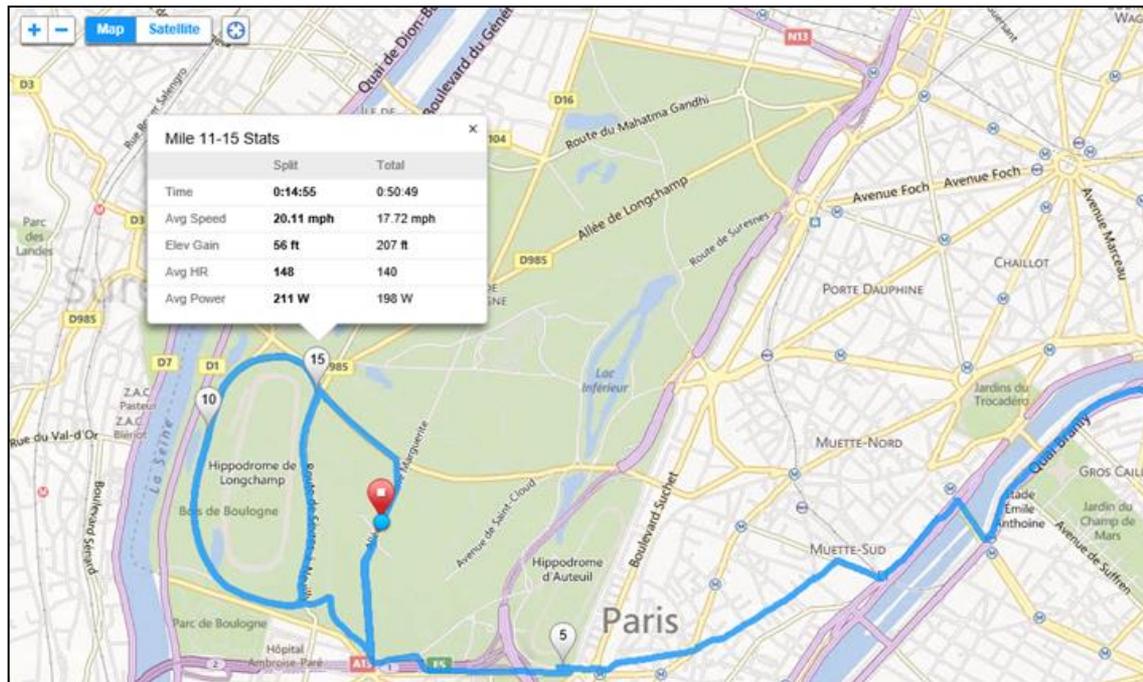
connect.garmin.com



Introduction

My personal experience with personal data

■ Live Tracking



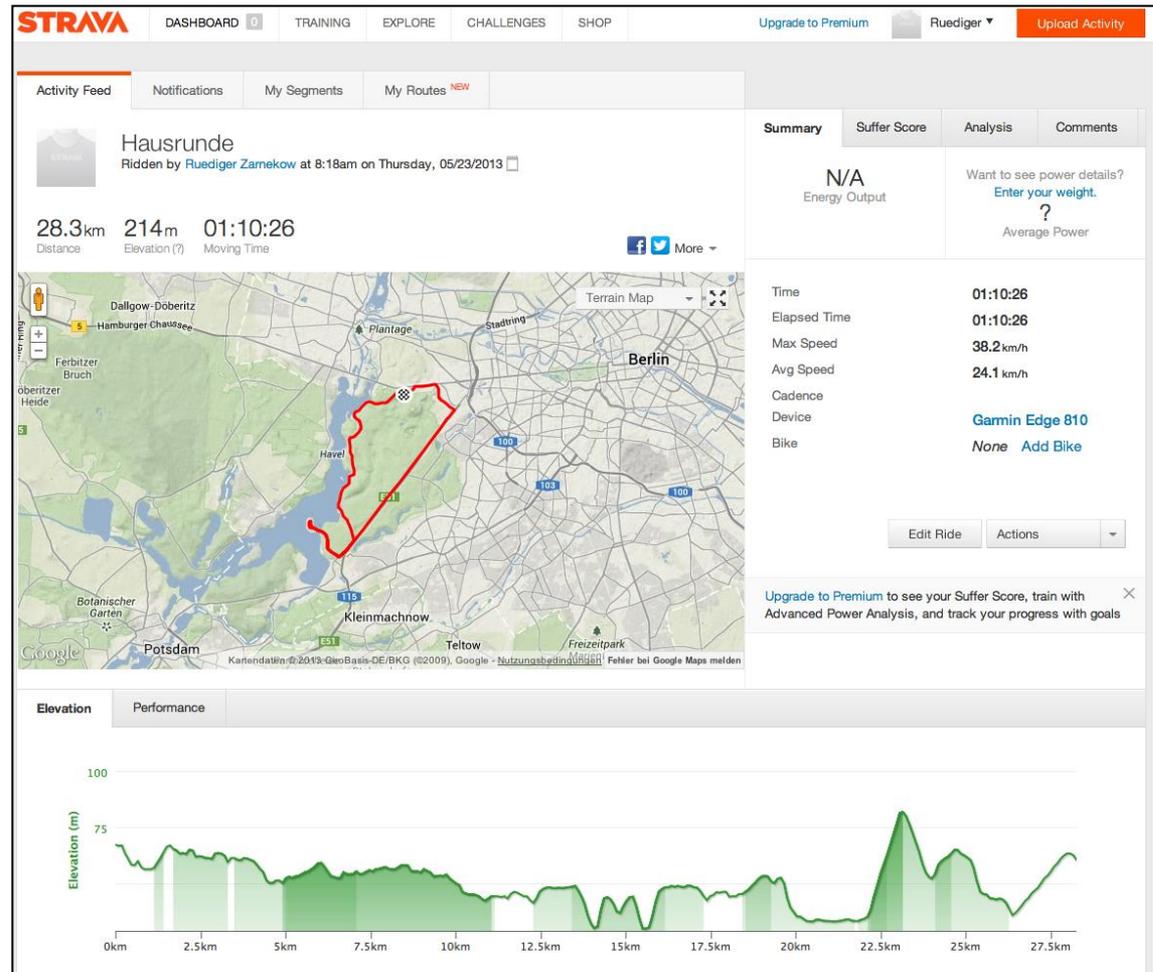
www.garmin.com/livetrack



Introduction

My personal experience with personal data

■ Data sharing



www.strava.com

Introduction

My personal experience with personal data

■ Data sharing

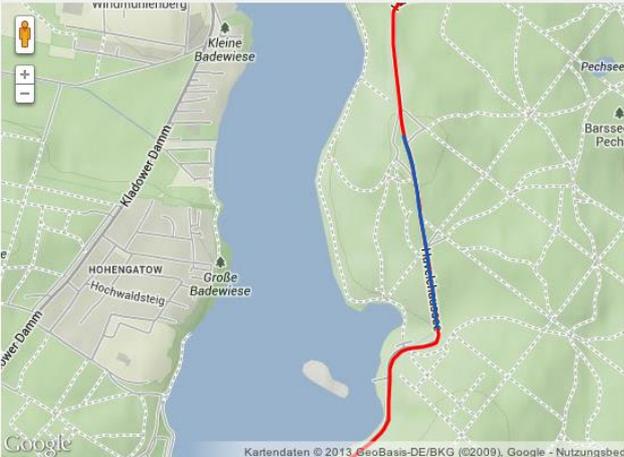
STRAVA DASHBOARD TRAINING EXPLORE CHALLENGES SHOP Upgrade to Premium Ruediger Upload Activity

Activity Feed Notifications My Segments My Routes NEW

Hausrunde
Ridden by Ruediger Zarnekow at 8:18am on Thursday, 05/23/2013

28.3km 214m 01:10:26
Distance Elevation (?) Moving Time

Col de Willy (A) [Go to segment page >](#)



Full Leaderboard

My Results
People I'm Following

By Age Group

- 24 and under
- 25 to 34
- 35 to 44
- 45 to 54
- 55 to 64
- 65 and over

By Weight Class

- 54 kg and under
- 55 to 64 kg
- 65 to 74 kg
- 75 to 84 kg
- 85 to 95 kg**
- 95 kg and over

Leaderboard // Overall

MY CURRENT PLACE: 271st / 305
MY BEST TIME: 3:57

All-Time Men and Women

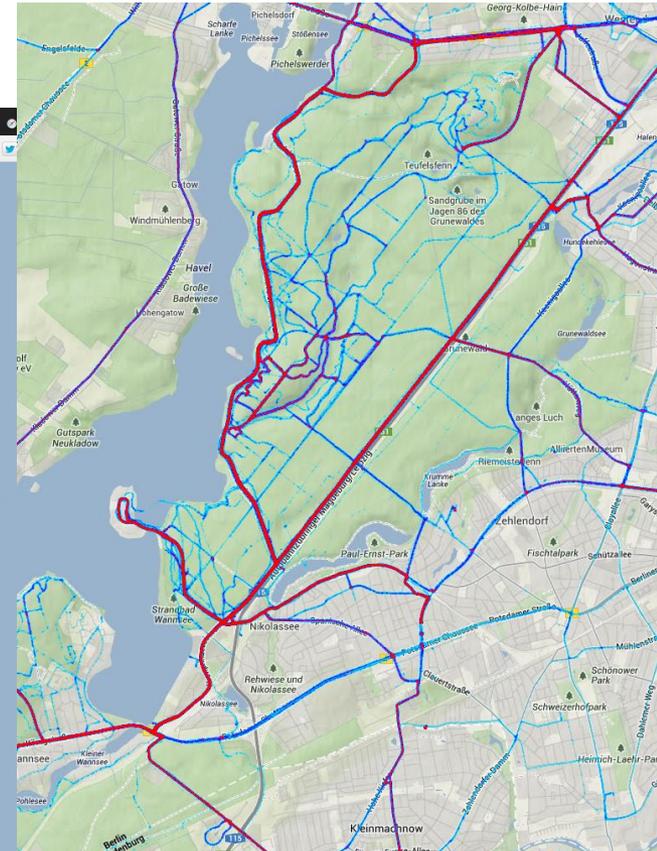
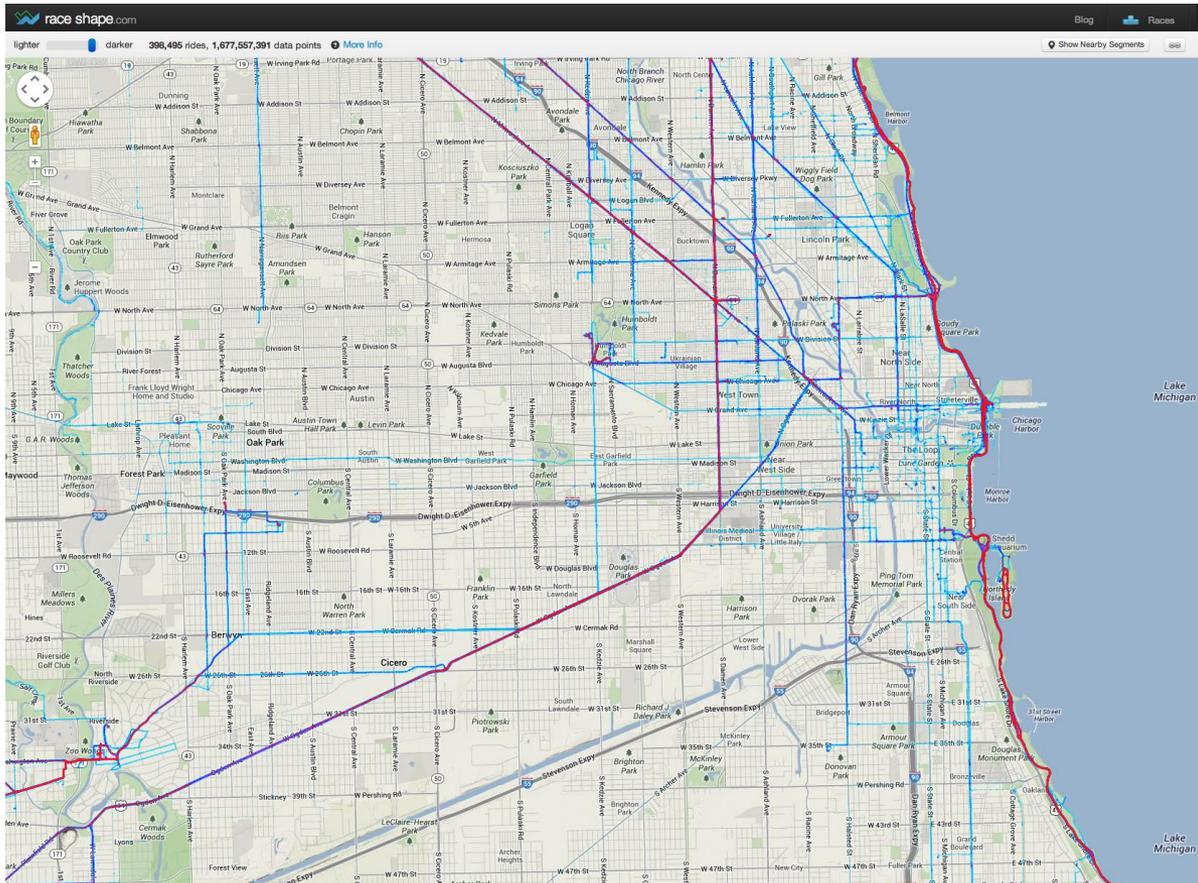
Rank	Name	Date	Speed	HR	Power	VAM	Time
1	 Hendrik V.	Aug 18, 2013	36.3 km/h	161 bpm	428 W	-	1:42
2	Lorenz Wi	May 29, 2012	33.9 km/h	188 bpm	477 W	-	1:49
3	Painin Theass	Jul 23, 2013	33.0 km/h	-	489 W	-	1:52
4	Frederik Wilde	May 24, 2012	32.4 km/h	-	441 W	-	1:54
4	Ronald Ottotrainerierteinmalprowoche	Jun 4, 2013	32.4 km/h	-	-	-	1:54
6	Martin P.	Sep 1, 2011	31.6 km/h	-	441 W	-	1:57
7	Henrik M.	Jul 23, 2013	31.3 km/h	-	445 W	-	1:58
8	Christian Willenbrock	Jul 2, 2013	31.1 km/h	189 bpm	400 W	-	1:59
8	Ma Rc	Jul 23, 2013	31.1 km/h	186 bpm	459 W	-	1:59
10	Lars Vandam	Jul 23, 2013	30.6 km/h	184 bpm	487 W	-	2:01

www.strava.com

Introduction

My personal experience with personal data

Route planner via Global Heatmap



www.raceshape.com

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Business model fundamentals

2

Personal Data Ecosystem

3

Business model redesign with Personal Data

4

New Business models with Personal Data

5

Conclusion

There is no common definition or understanding of the term “Business Model”

“A business model is an architecture for the product, service and information flow, including a description of various business actors and their roles and a description of the potential benefits for the various business actors and a description of the sources of revenues.”

(Timmers 1998)

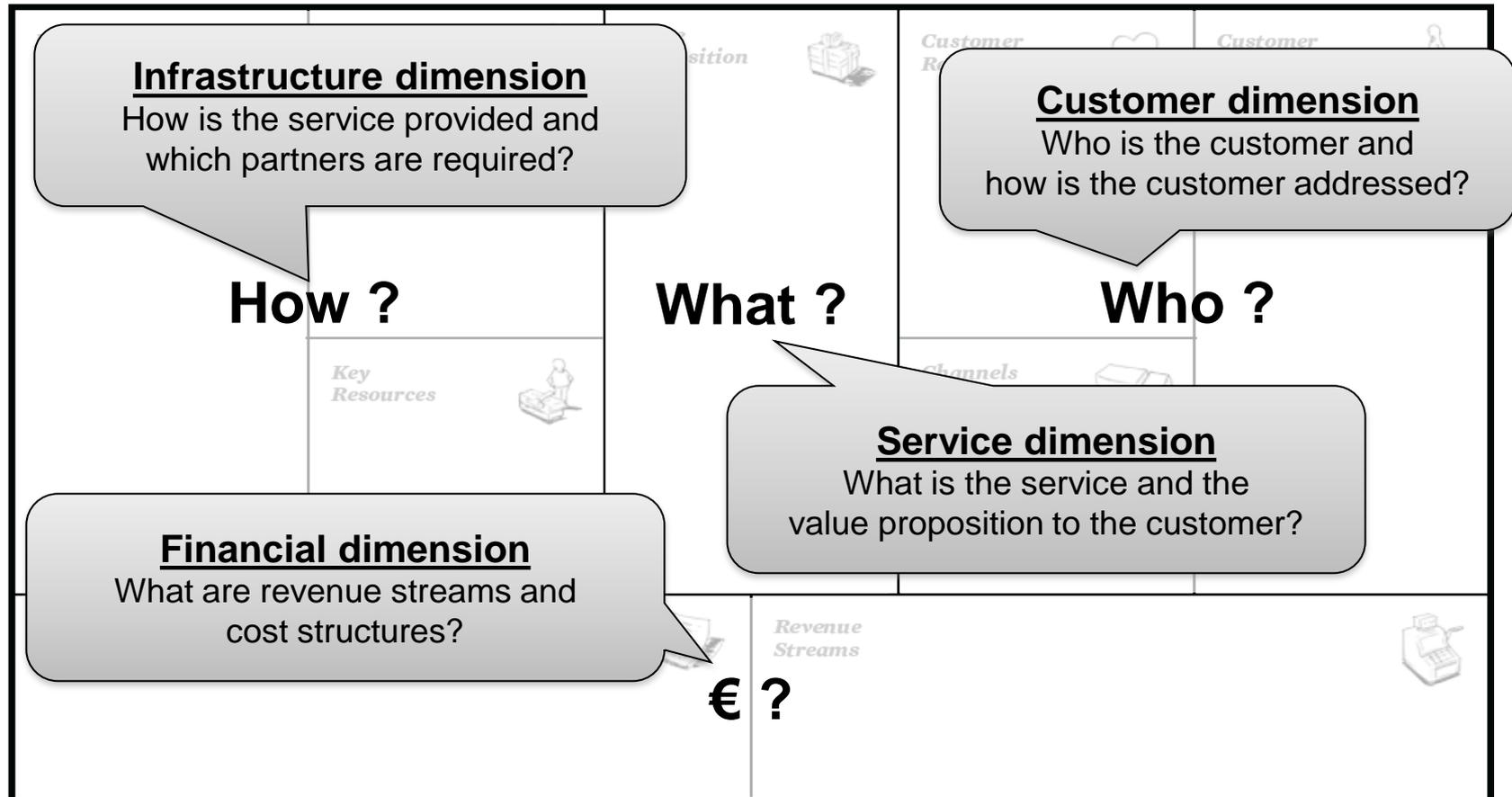
“In the most basic sense, a business model is the method of doing business by which a company can sustain itself -- that is, generate revenue. The business model spells-out how a company makes money by specifying where it is positioned in the value chain.”

(Rappa 2010)

“Business model is nothing else than a representation of how an organization makes or intends to make money”

(Osterwalder 2005)

According to Osterwalder a business model needs to address 4 central questions



(Osterwalder et al. 2005)

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The traditional business view on personal data is shifting towards a new perspective

TRADITIONAL APPROACH

Data actively collected with user awareness

Definition of personal data is predetermined and binary

Data collected for specified use

User is the data subject

Individual provides legal consent but is not truly engaged

Policy framework focuses on minimizing risks to the individual

NEW PERSPECTIVE

Most data from machine to machine transactions and passive collection – difficult to notify individuals

Definition of personal data is contextual and dependent on social norms

Economic value and innovation come from combining data sets and subsequent uses

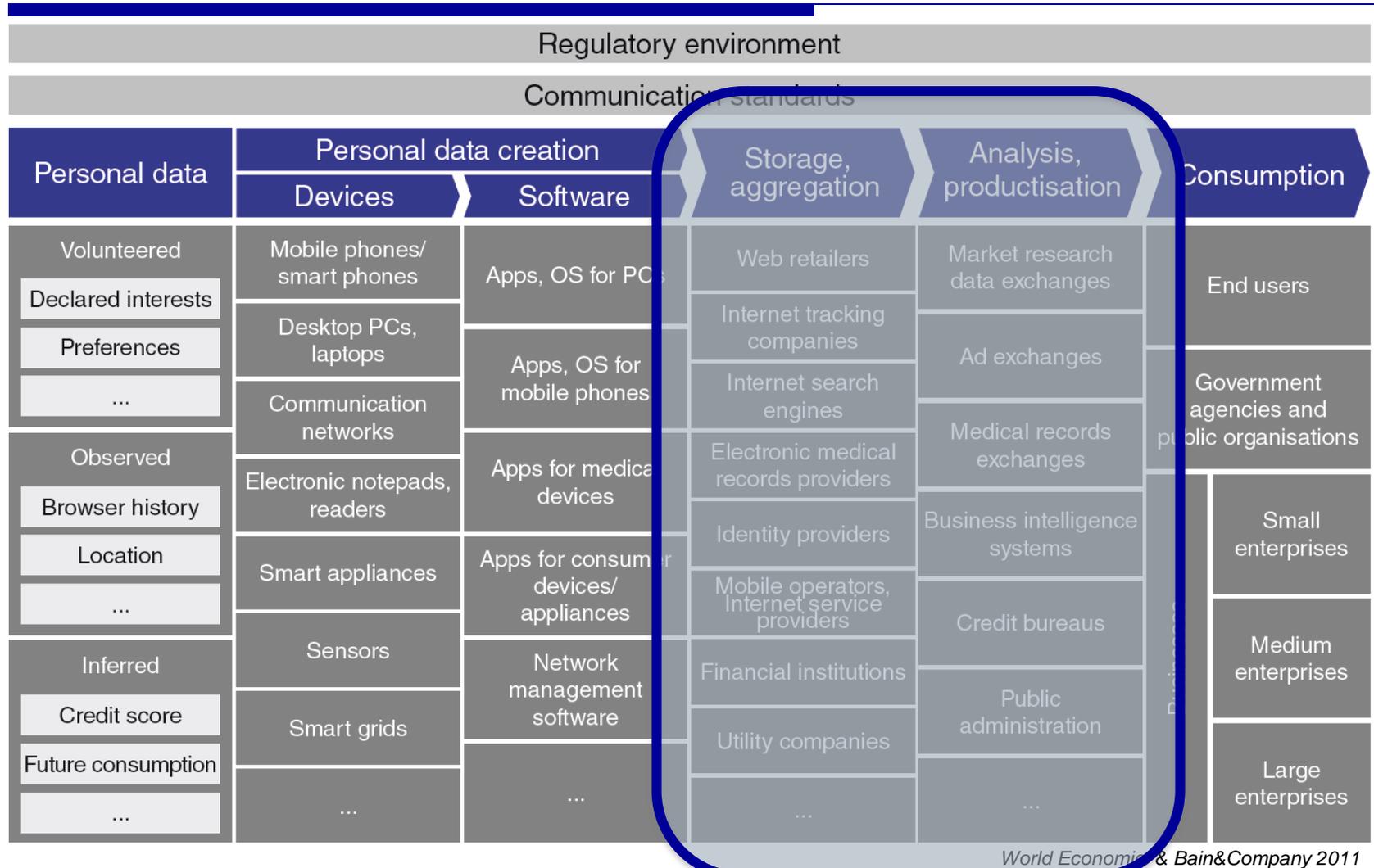
User can be the data subject, the data controller, and/or data processor

Individuals engage and understand how data is used and how value is created

Policy focuses on balancing protection with innovation and economic growth

World Economic Forum & BCG 2013

In a complex value chain from data creation to data consumption numerous business opportunities evolve



Generic classification of business models along the personal data value chain

Business Model Class	Properties
Storage, Aggregation	<ul style="list-style-type: none">• Access to large amounts of personal data within a specific domain• Consolidation with data from other domains• Data preparation for analysis, productisation and consumption
Analysis, productisation	<ul style="list-style-type: none">• Infer new information from aggregated or large individual data sets• Development of product or service ecosystems around analysis tools

Personal data consumption
enables

1. Innovation within existing business models (Business Model Redesign)

Personal data consumption is a complementary business activity to existing key activities

(e.g. Insurance companies, Banks, advertising agencies, ...)

2. New business models (Business Model Creation)

Key business model value propositions are generated through personal data consumption

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The Progressive insurance company tracks your driving behavior in order to calculate your personal discount rate



Great drivers get
GREAT RATES with
Snapshot®



- Initial discount is calculated during first 30 days
- In the next 6 months the discount is adjusted according to:
 - Car usage time
 - Driving Speed
 - Breaking intensity
- Possible discounts of up to 40 % for save driving
- ***Personal data category: Observed***

Progressive's Personal Data business model redesign

■ Value Proposition

- Quicker rate adjustment based on individual behavior
- Less cross-subsidization of poor drivers

■ Customer segments

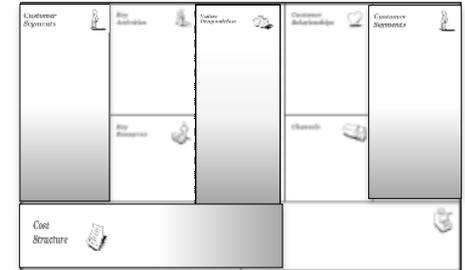
- New customers: Adaptive discount rates make it less risky to accept customers with a higher statistical risk for accidents

■ Key Partners

- Tracking device manufacturers
- Software providers for data analysis

■ Cost structure

- Awareness about personal tracking device results in change of driving behavior and results in less accidents



BankToTheFuture.com provides a safe trading environment for entrepreneurs and investors

BANK TO THE FUTURE .COM

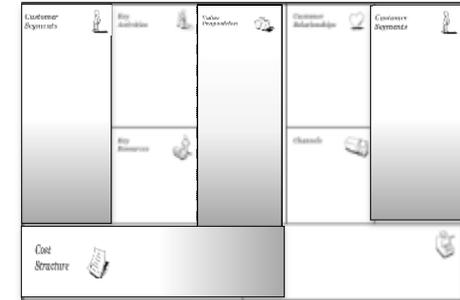


- Entrepreneurs and crowd investors are rated with a Social Capital score
- The Social Capital score builds upon traditional credit scoring by using data from social networks like LinkedIn, Facebook, Twitter and Google+
- ***Personal data category: Inferred***

BankToTheFuture.com Personal Data business model change

■ Value Proposition

- Increase trust between platform members
- Reduced risk of fraud and potential losses
- Reduced transaction costs and bureaucracy for investors



■ Key activities

- Offering a platform for crowd funding, crowd loans and crowd investment
- Creating a Social Capital score for entrepreneurs and investors

■ Key Partners

- Social networks, rating agencies, identity providers

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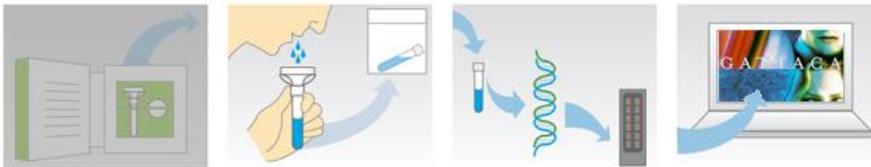
Conclusion

23andMe provides people with personal health and genetic information based on DNA analyses



99\$ DNA analysis claims to provide personal information on:

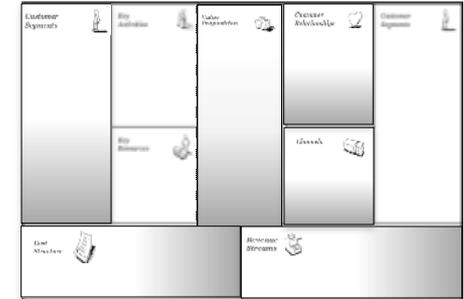
- Carrier status
 - Genetic health risks
 - Drug response
- ***Personal data category: Volunteered***



23andMe new business model with personal data

■ Value Proposition

- Better insight into genetic predispositions
- Active management of health risks
- Detailed information on drug response for doctors
- Calculation of genetic probability of personal attributes of potential parents



■ Key activities

- Personal DNA analyses
- Statistical analyses with DNA and health databases

■ Revenue and cost structure

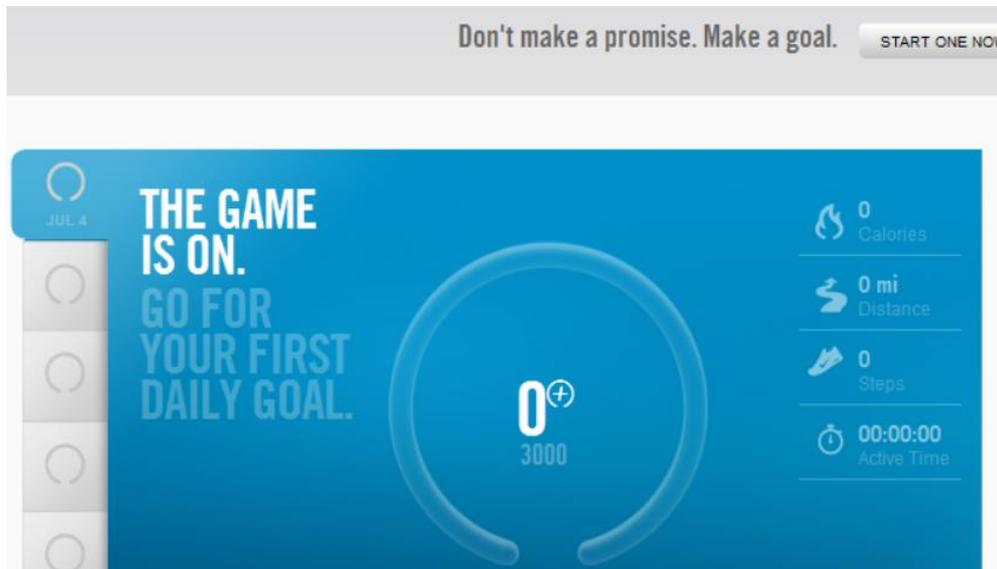
- DNA analyses are highly standardized and automated and can be offered for a very competitive price

Nike+ products enable the digital measurement and online sport activities



- Over 2 million users
- Online services offered to users:
 - Set personal goals
 - Train smarter
 - Find a better Route
 - Share Success
 - Challenge Friends

➤ **Personal data: Volunteered**



Nike+ new business model with personal data

■ Value Proposition

- Increased attractiveness of brand products through gamification of sportive activities
- Improved personal performance measurement

■ Customer relationship

- Improved information about product usage

■ Channels

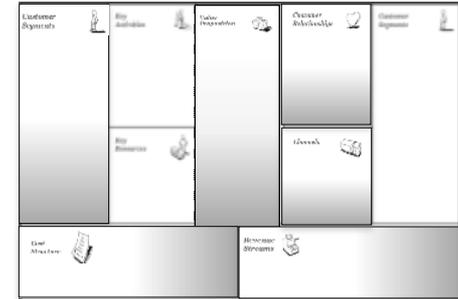
- Online community enables Nike to take advantage of network effects

■ Key Partners

- Tracking device manufacturers
- Software providers for data analysis

■ Revenue and cost structure

- Additional revenues and costs from Nike+ products



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Personal Data can broadly effect generic business model elements

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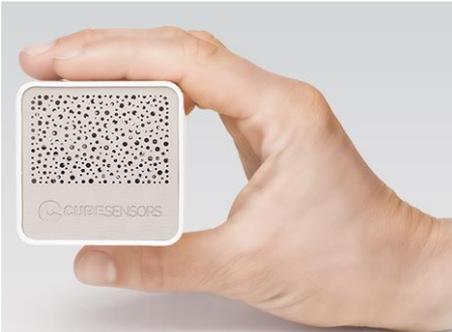
Existing business models

- Additional value propositions
- Change of cost structures
- Enhance customer experience

New business models

- Novel value propositions
- New customer segments and sources of revenues
- Effective cost structures

What will the future bring?



CubeSensor Room Monitor



HappiFork



Muse
Brain Sensing
Headband

Beddit Sleep Tracking



Memoto
Narrative Clip



LUMObac



In Flow mood tracker



Kapture Audio

Thank you for your attention !

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