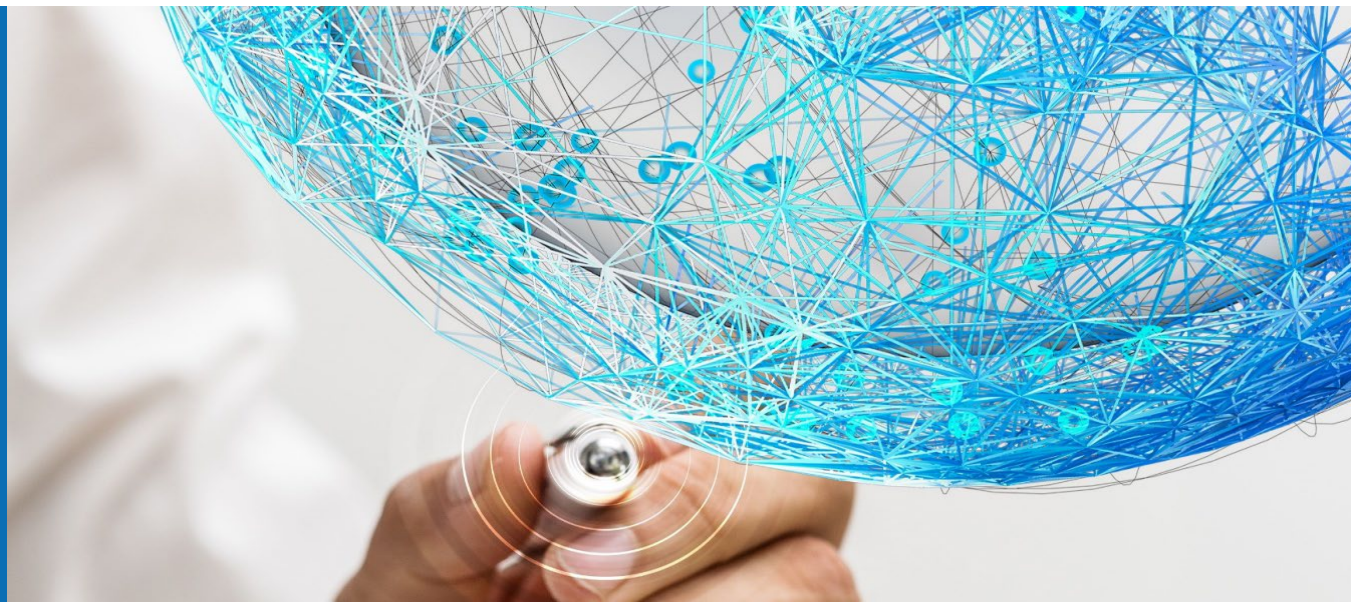
# Lernreise i4.0 BSH digital

Data driven Business Models
Thomas Salditt (GDT-BE)
Munich, November,  11th, 2020



# Data Driven Business Models

Content


1 **Digital Transition and Change**

2 „Attract Consumer“ Consumer Journey Management

3 “Understand Consumer” Consumer Relationship Management

4 “Monetize Consumer” Data Driven Business Models

# Pleasure to meet you, my business can’t be disrupted…

# Quelle did not die because of Otto

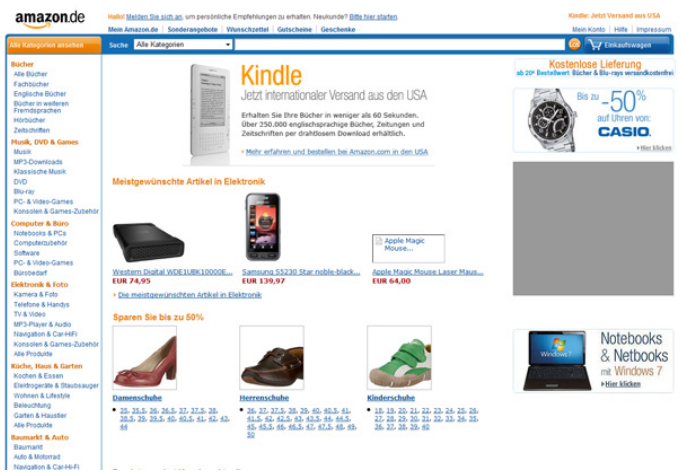
**Always looked at…**

B/S/H/

# Quelle did not die because of Otto

Always looked at…

And then…






B/S/H/

# Fressnapf’s business is not threatened by Garten Dehner

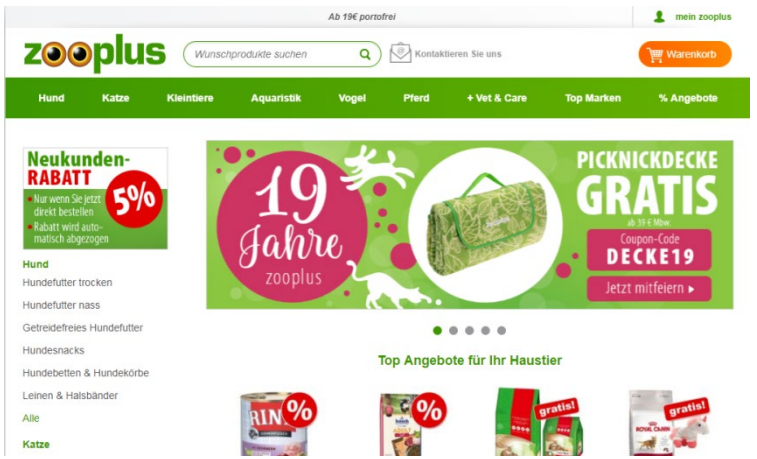
**Always looked at…**

B/S/H/

# Fressnapf’s business is not threatened by Garten Dehner

Always looked at…

And then…






B/S/H/

# ProSieben is not loosing viewers to RTL

ProSiebenSat.1
TV Deutschland

**Always looked at…**

RTL
TELEVISION

# ProSieben is not loosing viewers to RTL

ProSiebenSat.1 TV Deutschland

Always looked at…

RTL TELEVISION

And then…

# So, to whom do we need to look out for?

B/S/H/

**Always looked at…**

Whirlpool® HOME APPLIANCES

## So, to whom do we need to look out for?

B/S/H/

**Always looked at…**

Whirlpool® HOME APPLIANCES

**And then…**

# ??????

**“so, are we undisruptible…”**

# Big disruptions in consumer need of storing „fresh“ food

| 1810: Age of cans | 1860: Age of ice blocks | 1920s: Age of fridges |
|---|---|---|
| | | |



**How many can producers moved to ice blocks?**
**How many ice block producers moved to fridges?**



B/S/H/

# Disruption?

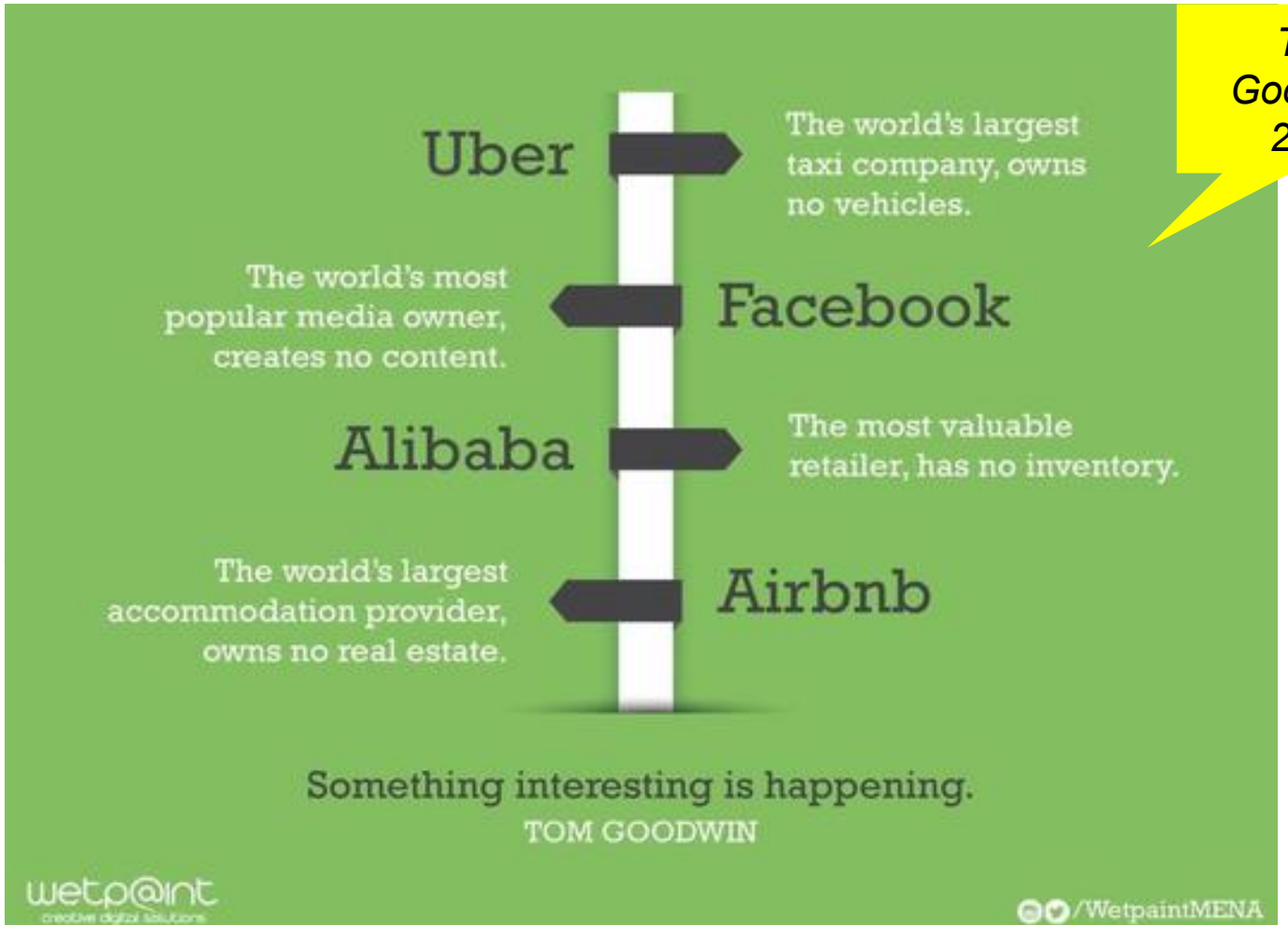
| 1940 | 1980 | 2015 |
| --- | --- | --- |
| | | |



B/S/H/

# This definitely would be a disruption…

# So what made all the digital unicorns so disruptive?




*Tom Goodwin, 2015*

# Interestingly, something is happening…

ALIBABA already invested >12,2bn USD in brick&mortar retail

UBER just ordered 24.000 Volvo SUVs

DELIVEROO not only has its own delivery fleet but also now buys its own mass kitchens

DIDI is currently setting up charging network in China for e-vehicles

AIRBNB is building its own apartment complex in Florida

FACEBOOK is spending in 2018 >1bn USD for tv-shows and just offered 600mn USD for Cricket broadcasting rights

AMAZON bought Wholefoods for 14bn USD

# Interestingly, something is happening…

ALIBABA already invested >12,2bn USD in brick&mortar retail

UBER just ordered 24.000 Volvo SUVs

DELIVEROO not only has its own delivery fleet but also

“+Hardware” is happening to digital stars

e-vehicles

ng its own apartment complex in Florida

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# +Hardware… that sounds very familiar….

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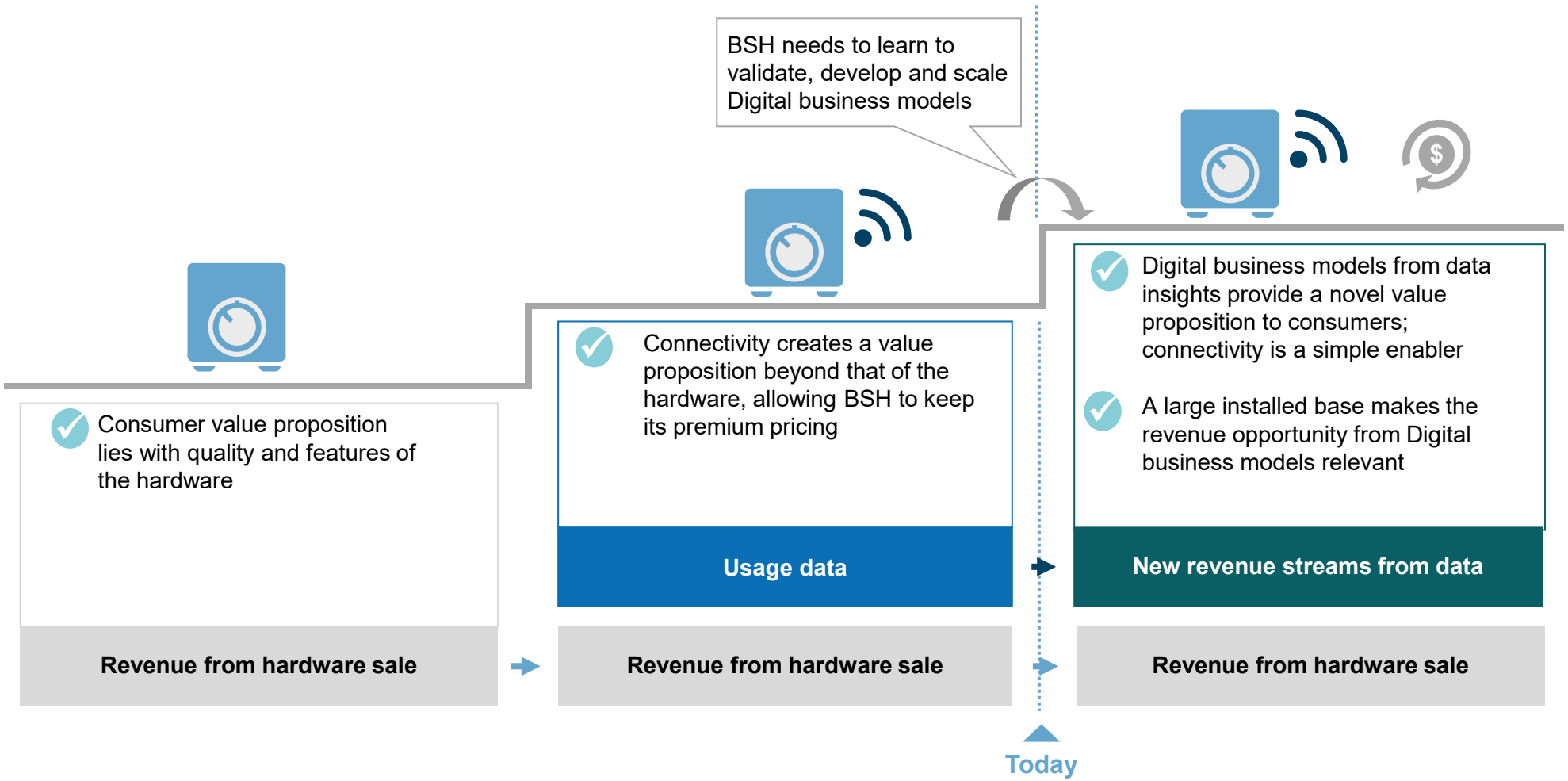




B/S/H/

“Companies need to develop **digital capabilities** if they are to survive the digital revolution”

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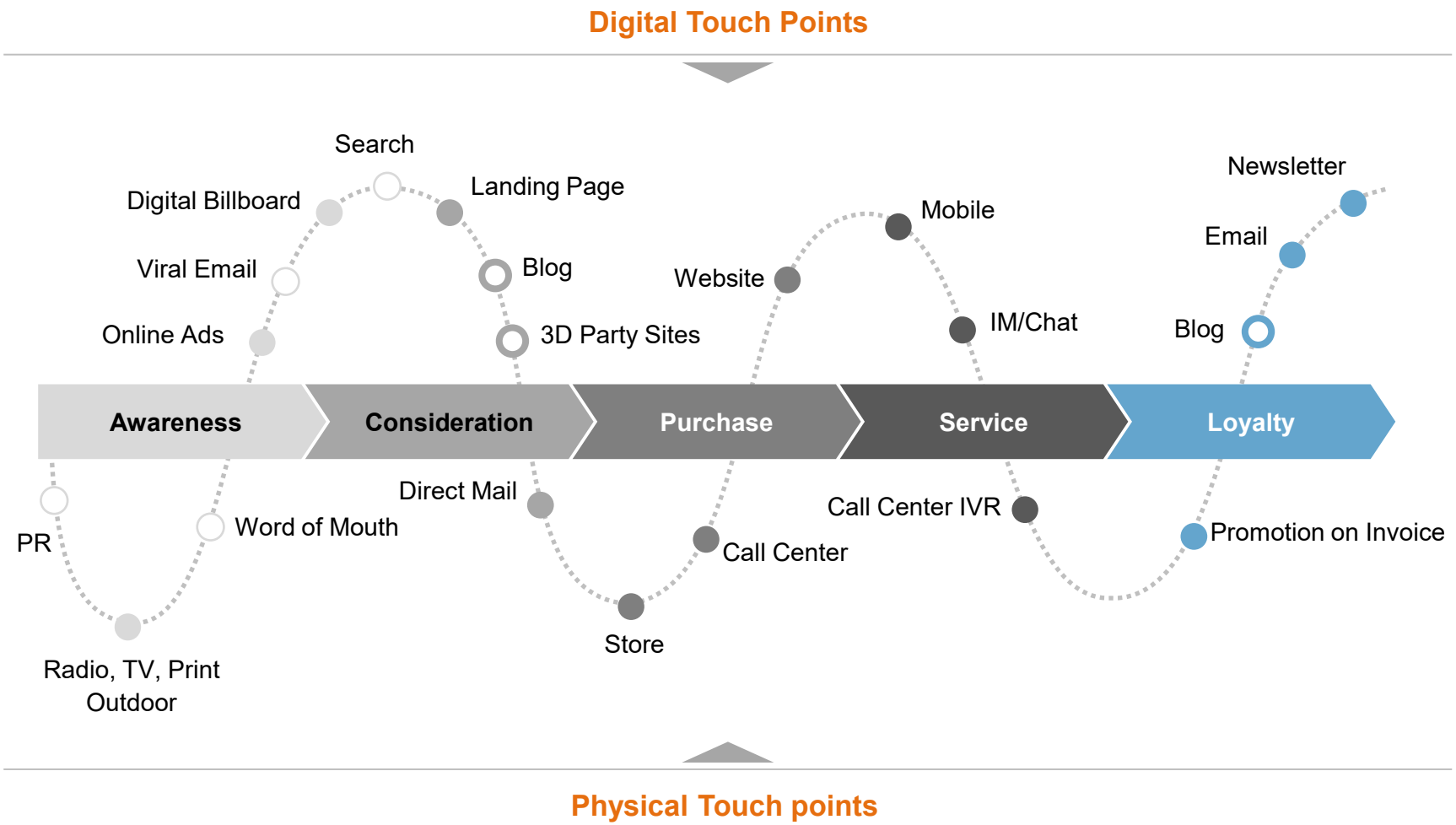
# Consumer Experience goes digital



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# Objectives of Consumer Journey Management

- Evaluation of all consumer touchpoints.
- Consumer journey conceptualization and analysis.
- Formulation and measurement of conversions from one touchpoint to the next.
- Attribution of conversions at different touchpoints to marketing channels and activities.
- Evaluation of cross-channel marketing strategy due to conversion effects.
- Optimization of marketing budget allocation.
- Achieve maximum output with given resources.

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# CRM in Research

- Key hypothesis:
  Better relationships lead to an increase in sales
  and a decrease in marketing and sales costs.
- Firms possess substantial information about consumers, which are used to manage relationships.
- CRM is a process that entails the systematic and proactive management of relationships as they move from beginning (initiation) to end (termination), with execution across various consumer touchpoint.
- Specifically, firms seek to leverage consumer information in order to maximize consumer lifetime value (CLV) and the resulting consumer equity.
- In detail, firms maintain a database of consumers and prospective consumers, segmented according to various characteristics, and target different marketing activities to different segments.

# Essentials Elements of CRM

## The CRM house

**Organizing People**

- Skills
- Culture
- Operations

**Level of Engagement**

**Acquire**

**Maintain**
(retain, cross-sell, up-sell, churn prevention)

**Terminate**
(churn prevention, reactivation, termination)

**Measuring Outcomes**

**Understanding Consumers and Deriving Insights**

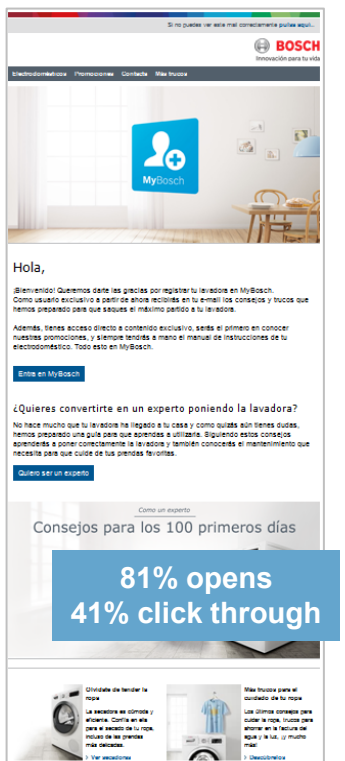
**Data and Information Technology**

Source: Malthouse et al. (2013)

# Time-triggered automatic emails after product registration in MyBosch

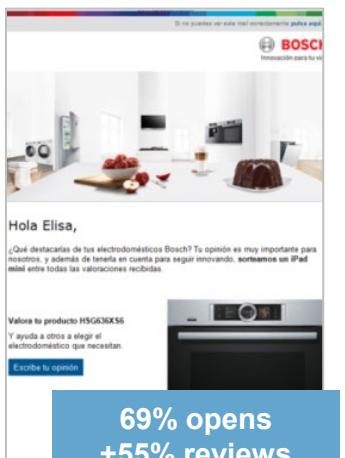
BSH Example

## 1 day
What is MyBosch




81% opens
41% click through

## 1 week
Review your product



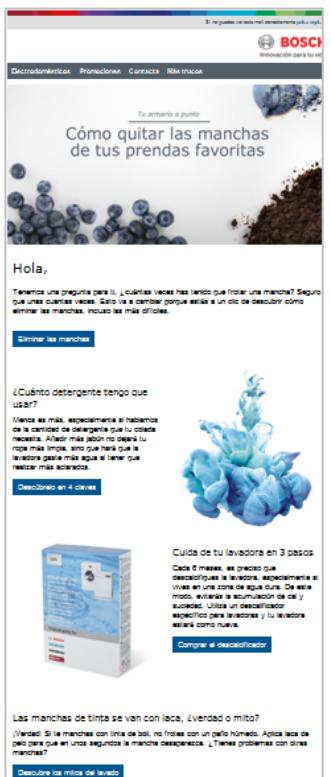

69% opens
+55% reviews

## 1 month
Washing programs

78% opens
27% click through

## 3 months
Tips & tricks

## 6 months
Difficult stains



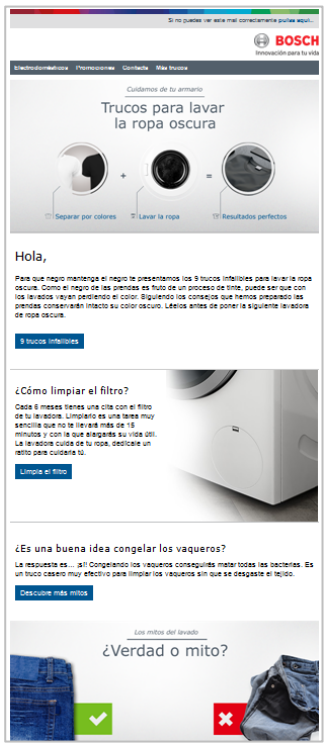



B/S/H/

# Time-triggered automatic emails after product registration in MyBosch

BSH Example

## 9 months
Dark garments




## 12 months
Anniversary

63% opens
32% click through

## 15 months
How to …

## 18 months
Pets

## 21 months
Extend you warranty

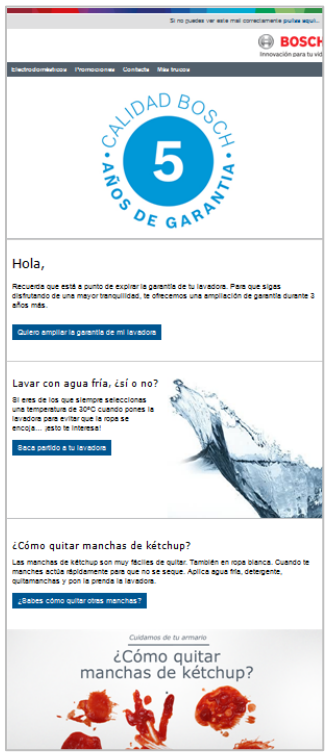
B/S/H/

# Time-triggered automatic emails after product registration in MyBosch

BSH Example

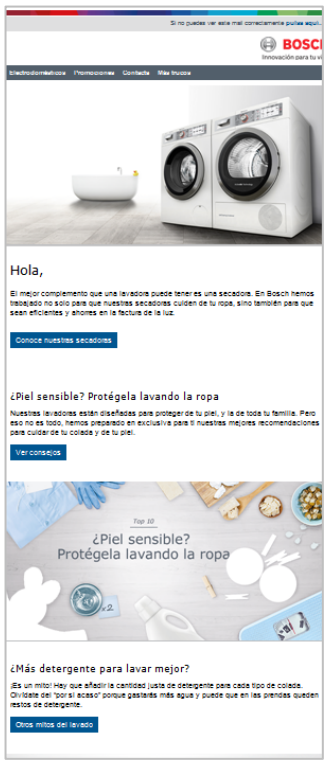
## 23 months

Extend you warranty



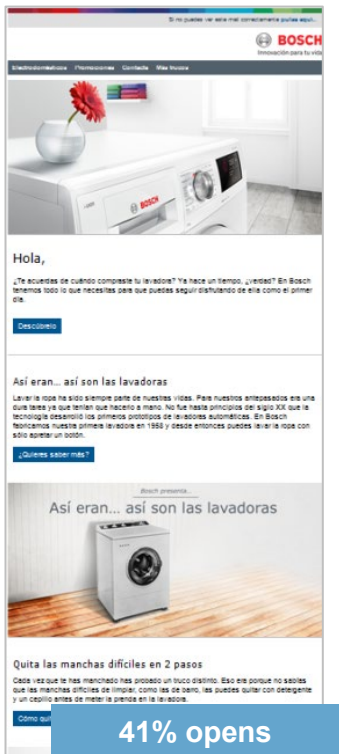

## 30 months

Our tumble dryers




## 36 months

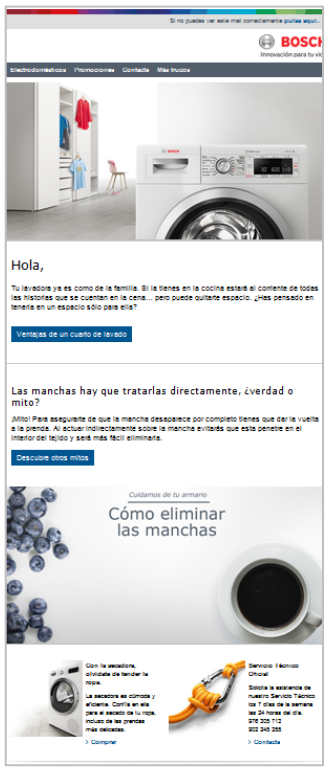
History of washing




**41% opens**
**12% click through**

## 42 months

Your laundry room




## 58 months

Bosch Official Service

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# Time-triggered automatic emails after product registration in MyBosch

BSH Example

## 54 months

Download your manual

## 66 months

Dosing with i-DOS

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# Turning Big Data to Smart Data

- New business models
- Improved customer experiences
- Differentiated products and services
- Improve operational efficiency
- Increased workforce productivity



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# New ownership models have implications on the future of BSH's distribution concept

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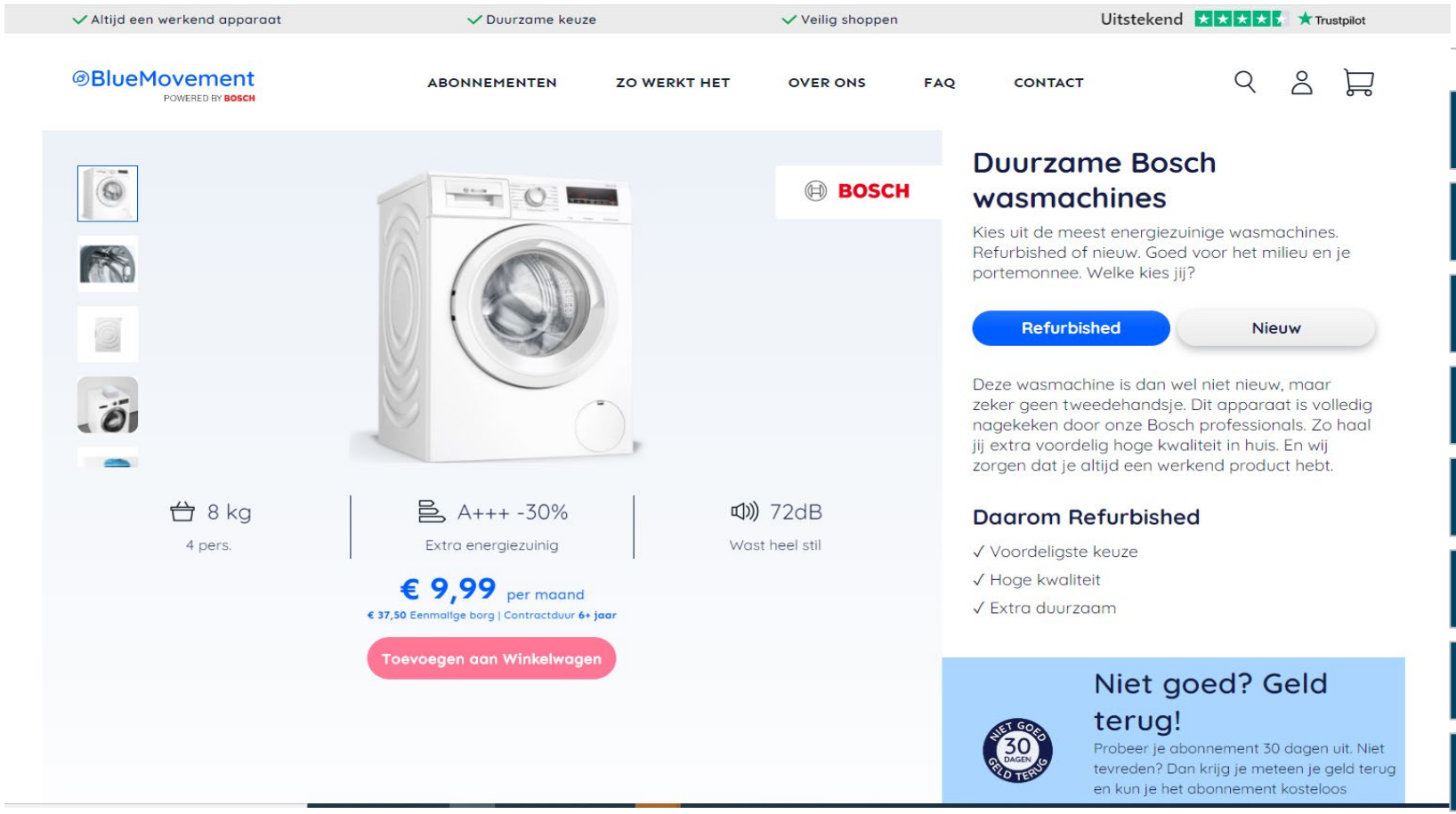
# BOSCH BlueMovement proposition in NL




- Washing machine
- Dryer
- Fridge
- Freezer
- Dishwasher
- Cooking machine
- Vacuum cleaner
- Smart Grow

Source: BSH NL



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# Home Connect will offer users new comfortable ways to supply with consumables for home appliances

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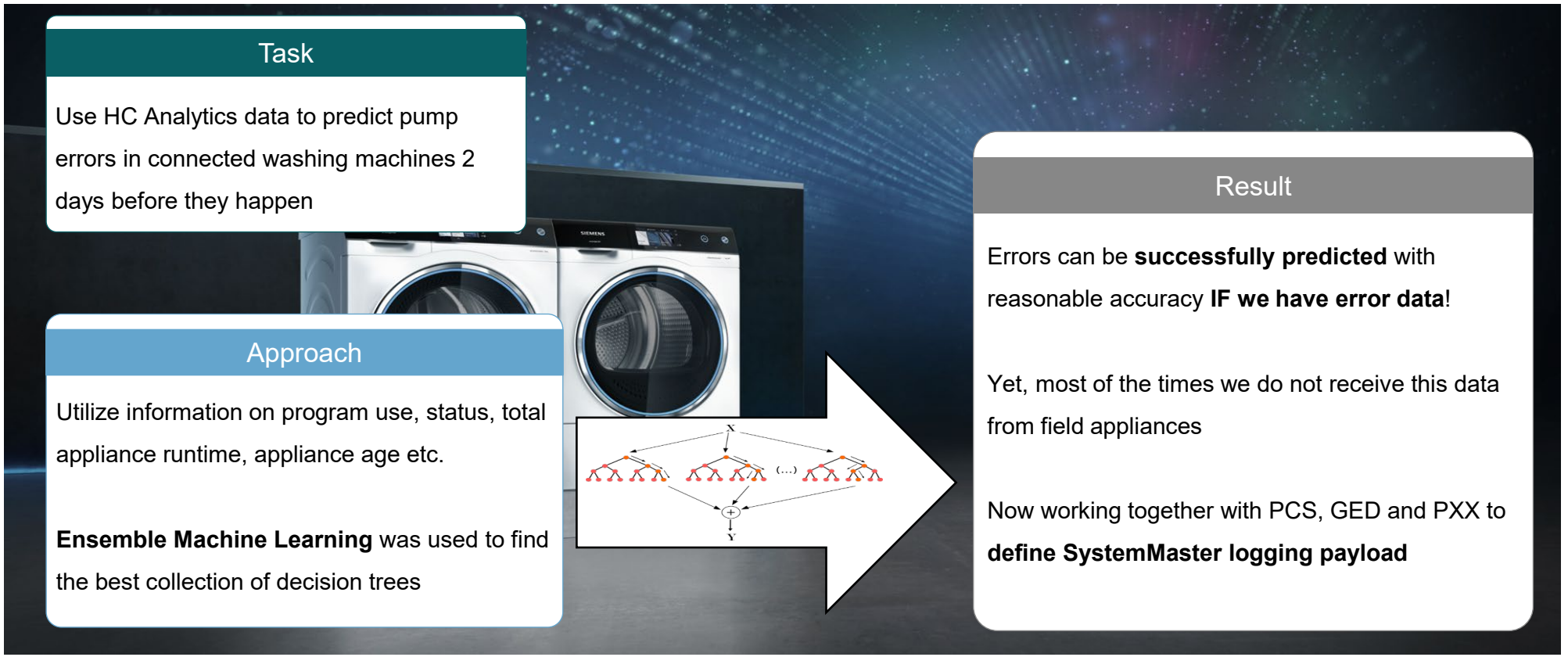
# Predictive Maintenance PoC



## Task

Use HC Analytics data to predict pump errors in connected washing machines 2 days before they happen

## Approach

Utilize information on program use, status, total appliance runtime, appliance age etc.

**Ensemble Machine Learning** was used to find the best collection of decision trees

## Result

Errors can be **successfully predicted** with reasonable accuracy **IF we have error data**!

Yet, most of the times we do not receive this data from field appliances

Now working together with PCS, GED and PXX to **define SystemMaster logging payload**



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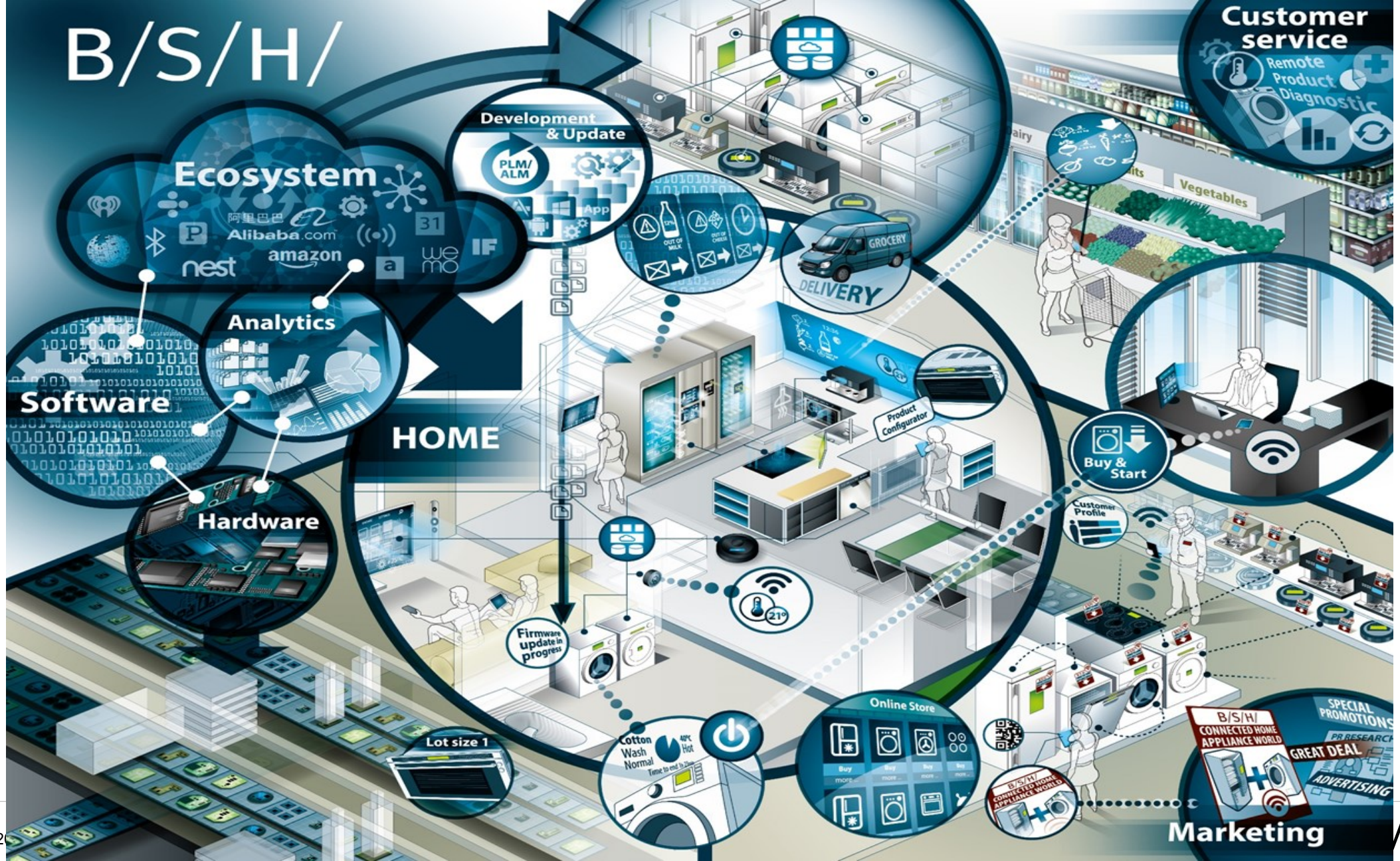
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Ecosystem
Alibaba.com
amazon
nest
IF
Development & Update
PLM/ ALM
App
Customer service
Remote Product Diagnostic
Analytics
Software
Hardware
HOME
GROCERY
DELIVERY
Vegetables
Product Configurator
Buy & Start
Customer Profile
Firmware update in progress
Lot size 1
Cotton
Wash
Normal
Online Store
Buy
B/S/H/
CONNECTED HOME APPLIANCE WORLD
SPECIAL PROMOTIONS
GREAT DEAL
ADVERTISING
Marketing