



Industrie 4.0 in the fabric industry

Paradigm shift in customer relation through digital
business models

AMAP Kolloquium

25.02.2016



Quelle: allaboutjass.com



Quelle: srf.ch



Quelle: www.youtube.de

How about the fabric industry? Three company types



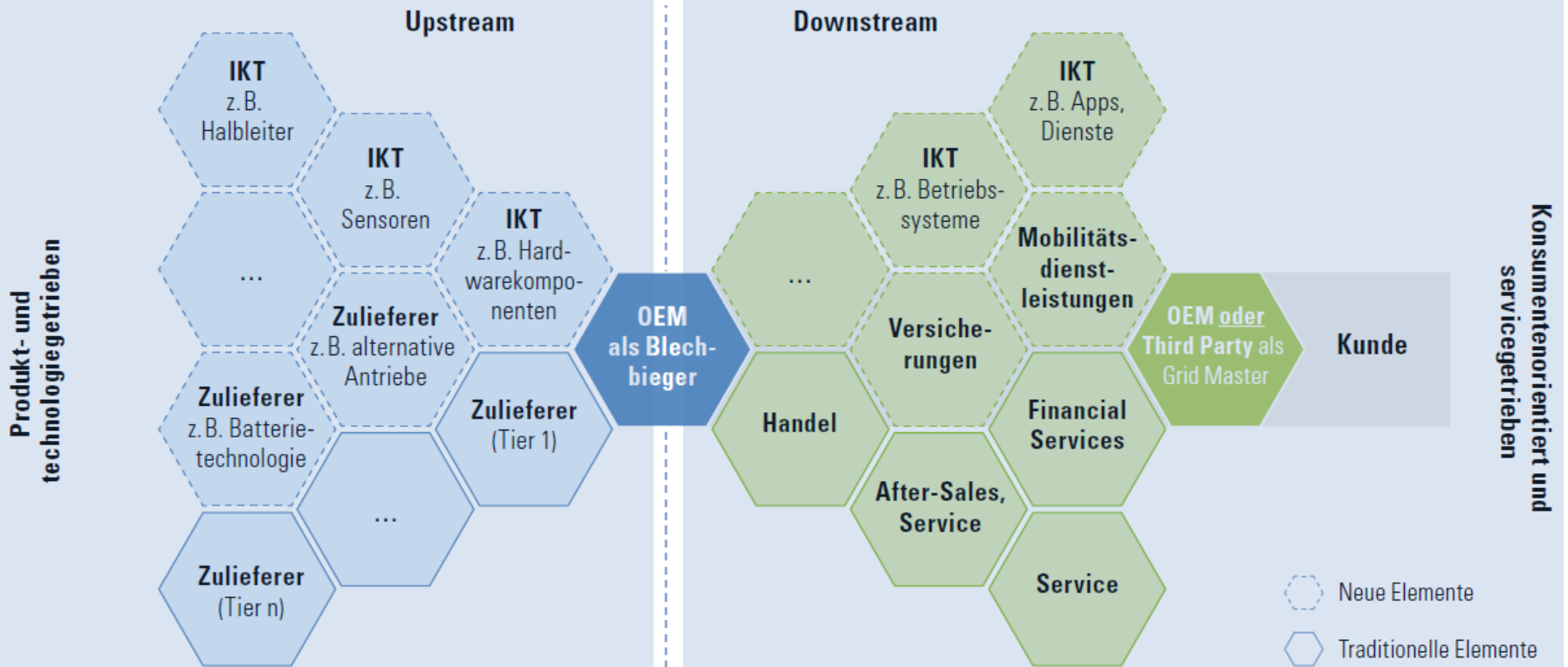
Frank-Typ



Joris-Typ



Jasmine-Typ



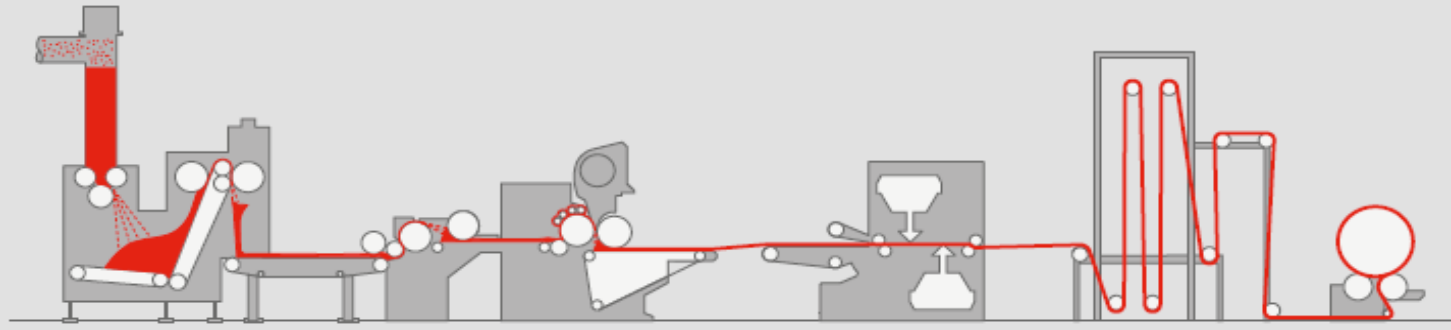
Quelle: KMPG Trendanalyse 2015 - Blechbieger oder Grid Master?

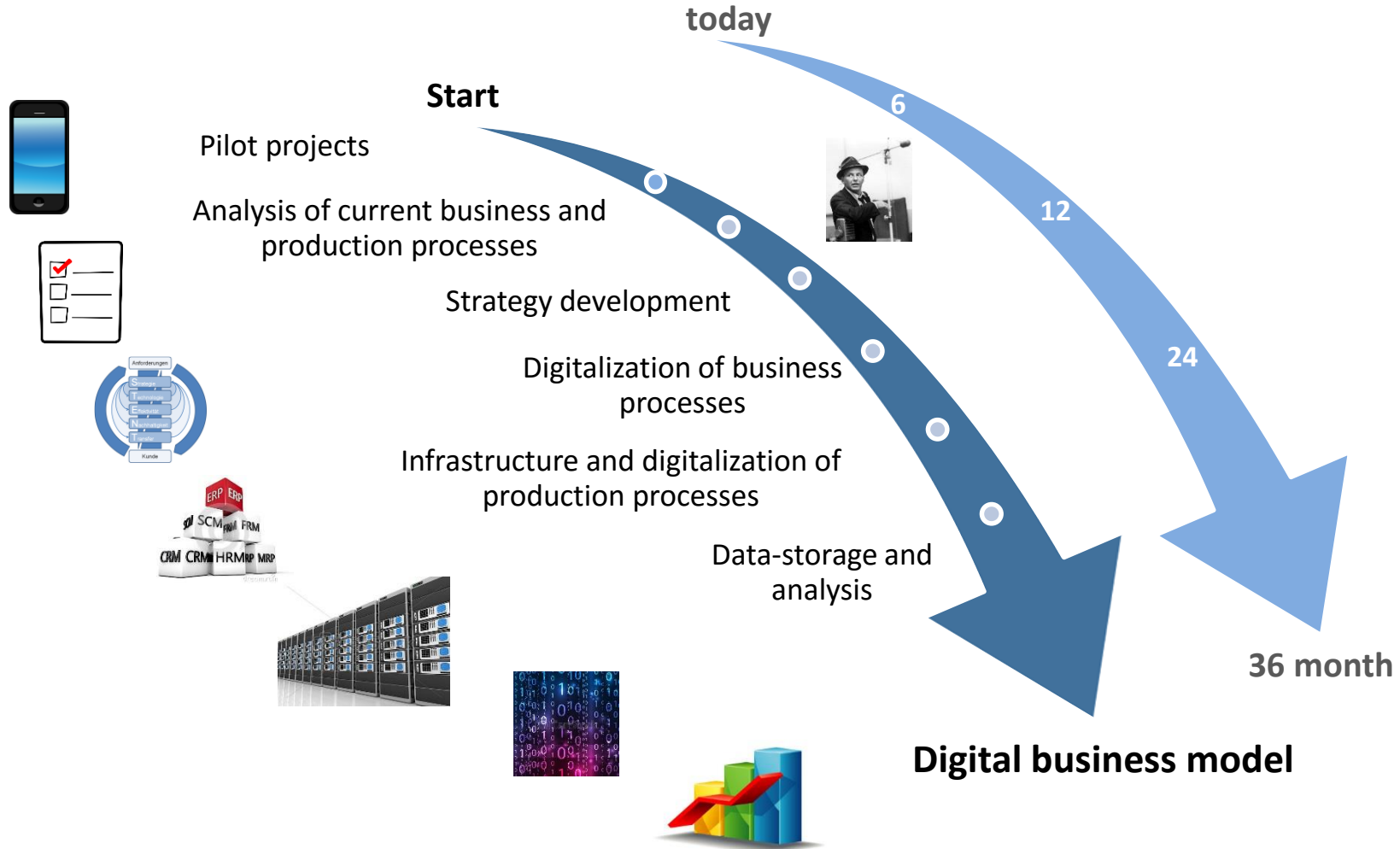


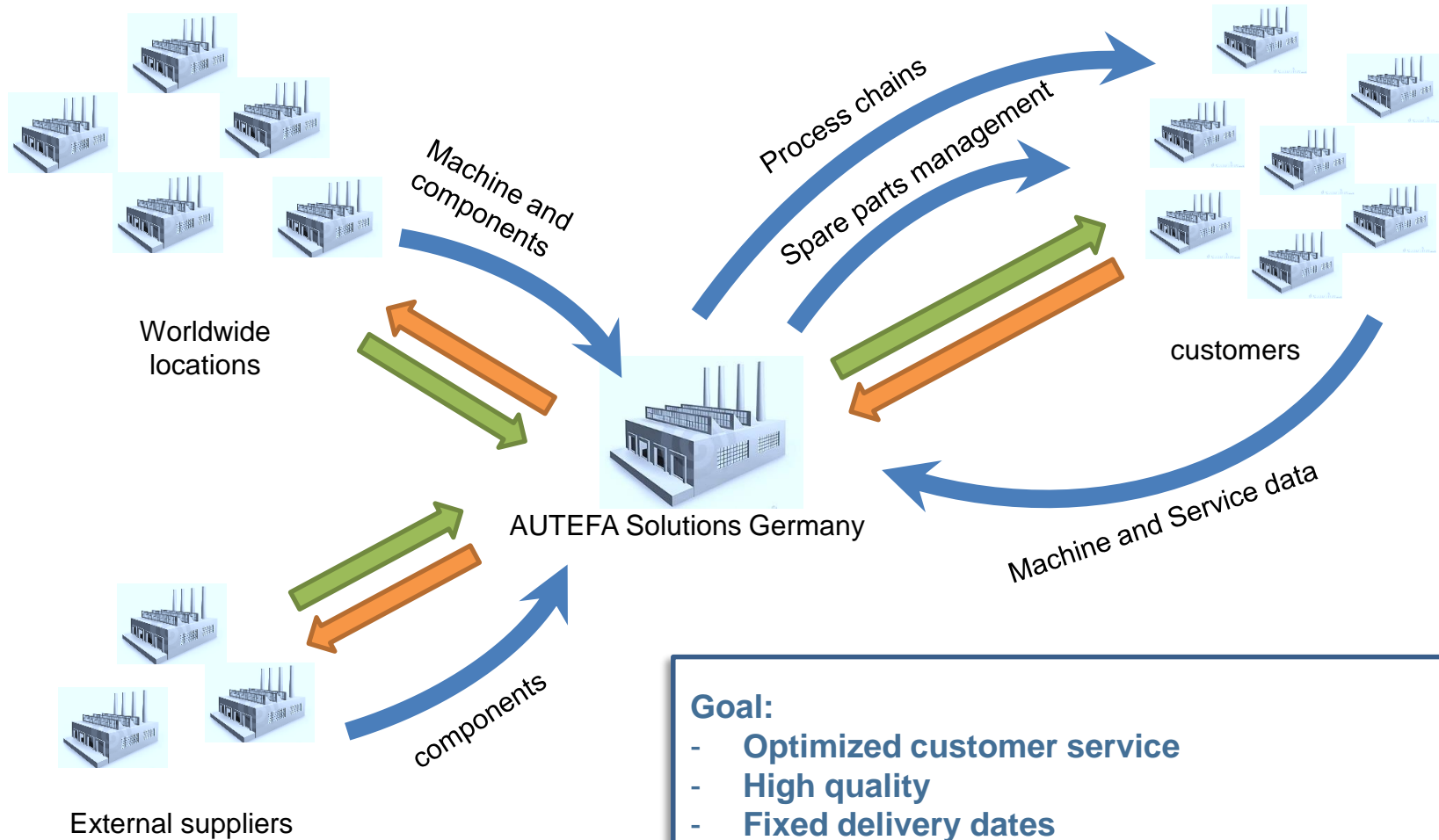
The „Frank-Type“



08 AUTOMOTIVE "SUBSTRATES" AND NOISE ISULATION FELTS / AIR







Goal:

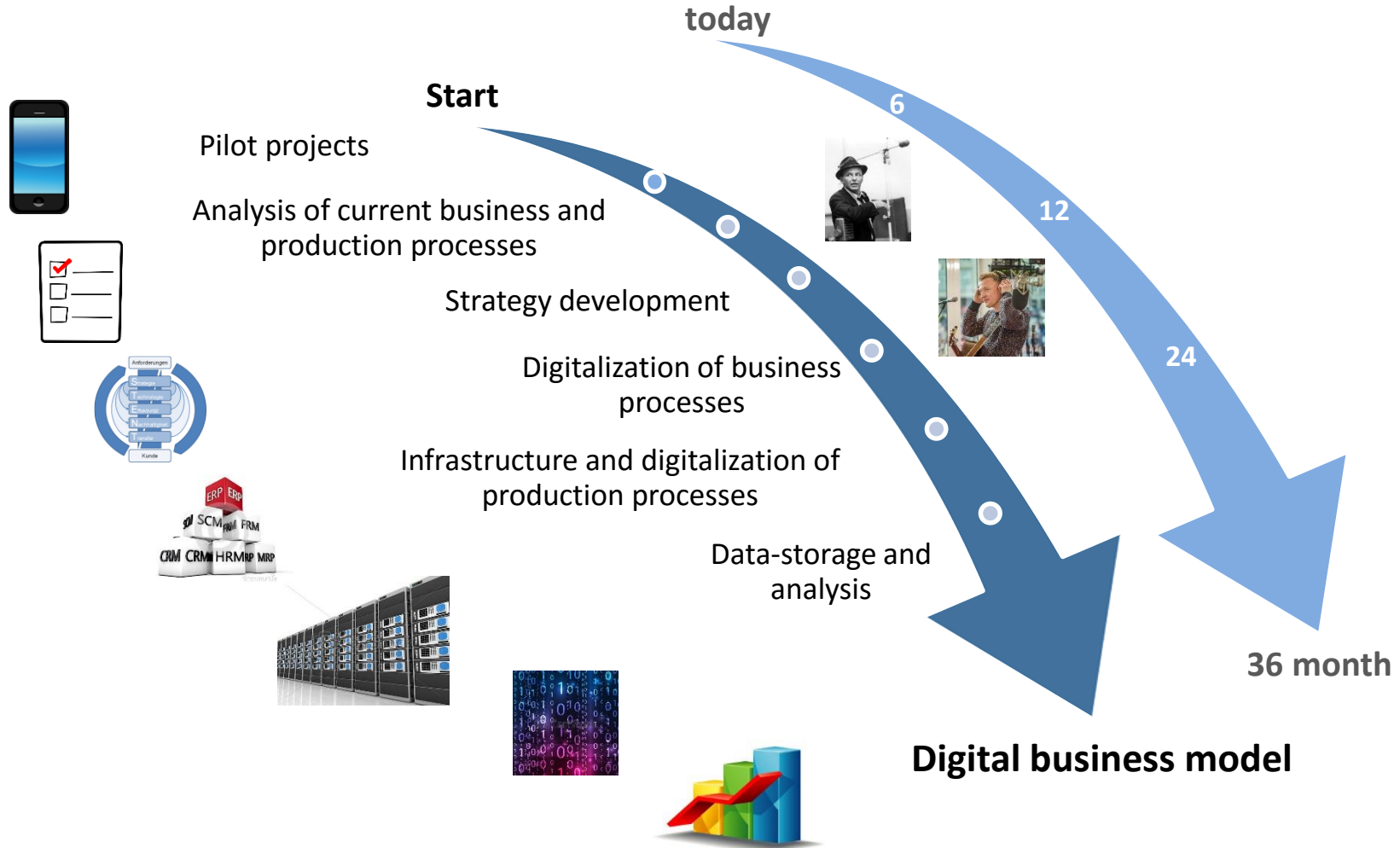
- Optimized customer service
- High quality
- Fixed delivery dates

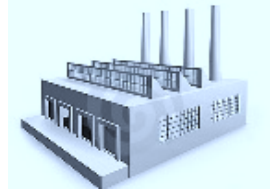
=> Future vision: guaranteed machine runtime

Order
 Date of delivery

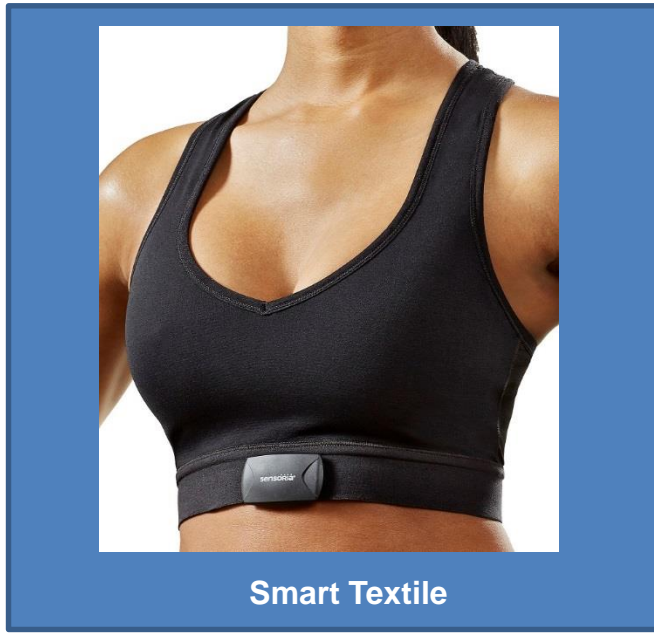


The „Joris-Type“





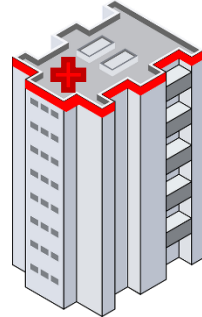
Manufacturer



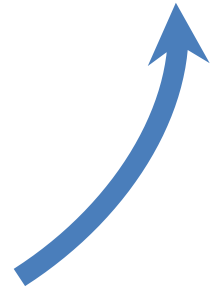
Patient

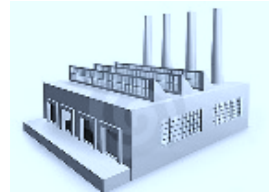


Distributor

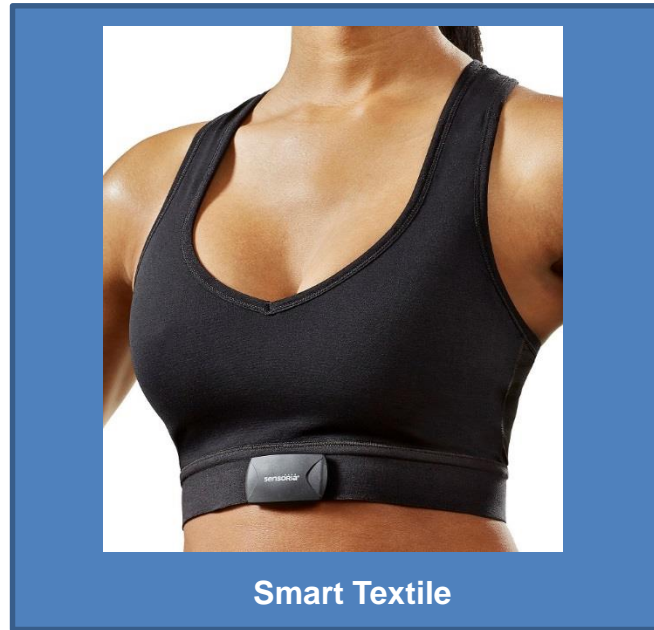


Hospital





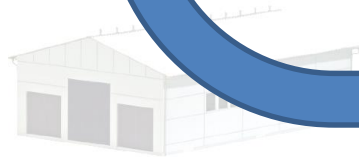
Manufacturer



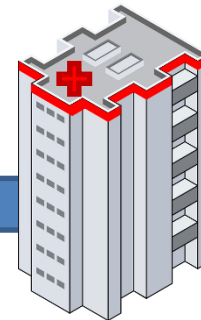
Smart Textile



Patient



Händler
Medizinprodukte



Hospital



- Monitoring of actual performance time
 - Hourly billing
 - Billing directly to the insurance company
 - Collecting of data
 - Improving the product
 - Future customer services
 - Discovering new medical correlations
- Direct customer relation and adjusting products to actual customer needs**



Embedded Device

The „Jasmine-Type“

Are we willing to learn from others?



Quelle: stratasys.com

„3-D-Drucker kehren die Digitalisierung der vergangenen Jahrzehnte um, wandeln eine Datei in ein physisches Objekt, machen aus Bits Atome.“

Spiegel Online - 2015



Quelle: localmotors.com

„...der gesamte Herstellungsprozess eines Autos [wird] komplett auf den Kopf gestellt...“

Audi Werkzeugbau – Mobile Geeks - 2015



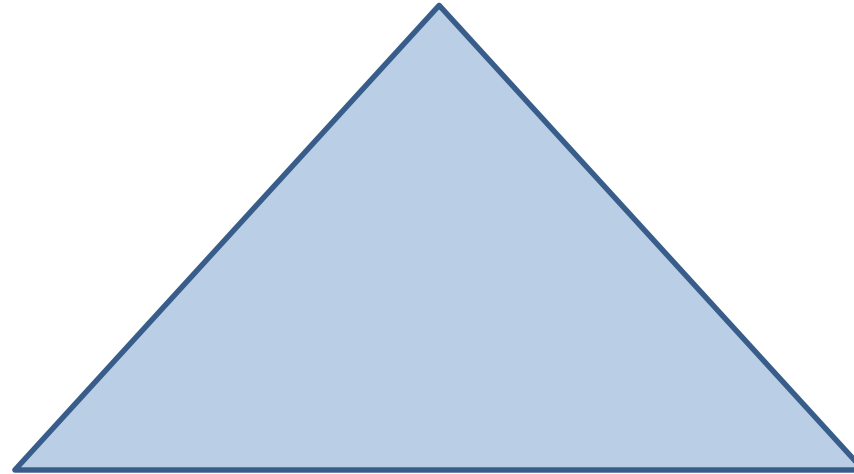
Quelle: google.com

„2018 werden Teslas alleine von New York nach LA fahren.“

Tesla-Gründer Elon Musk - 2016



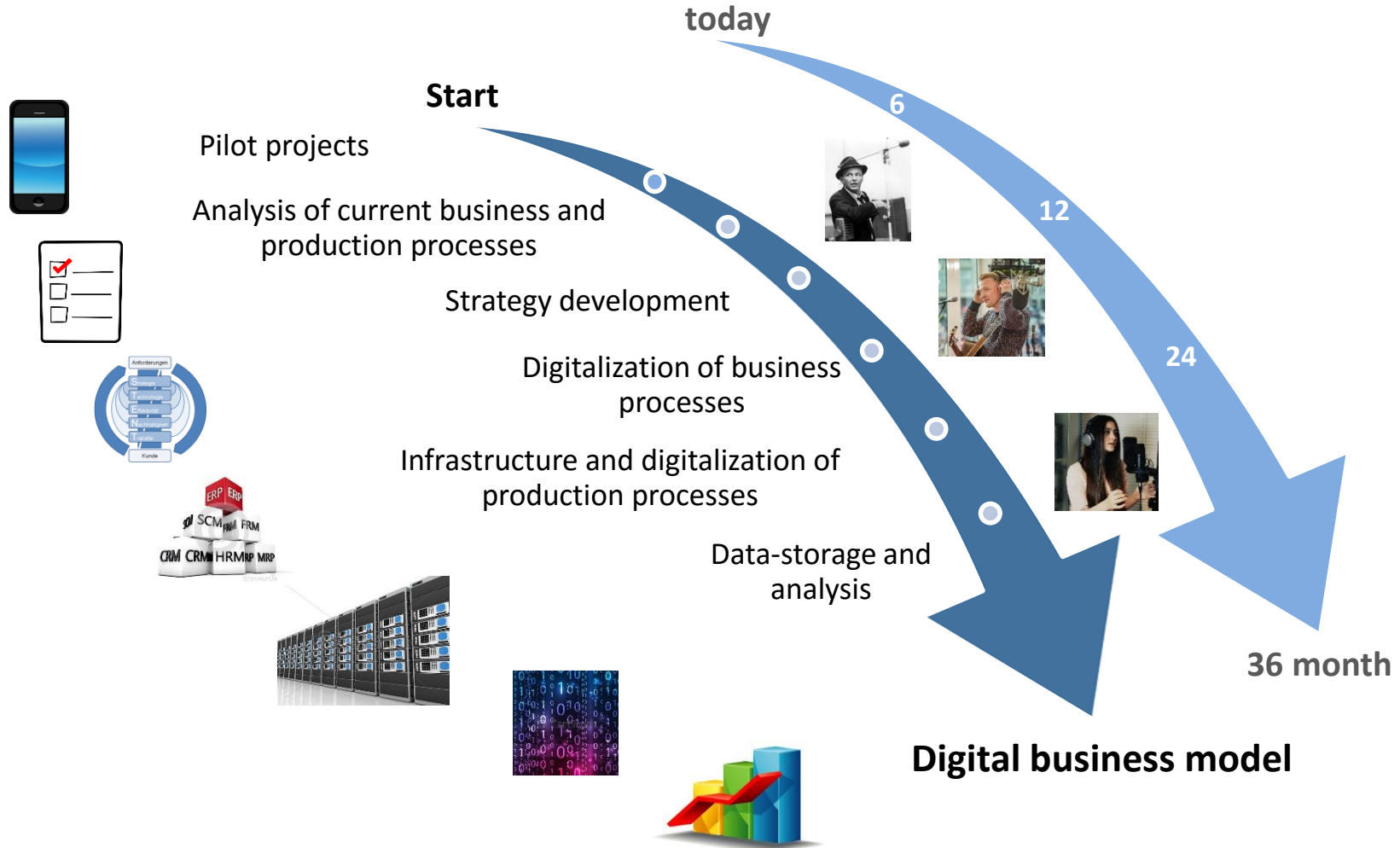
Machine manufacturer



Producer



Service company





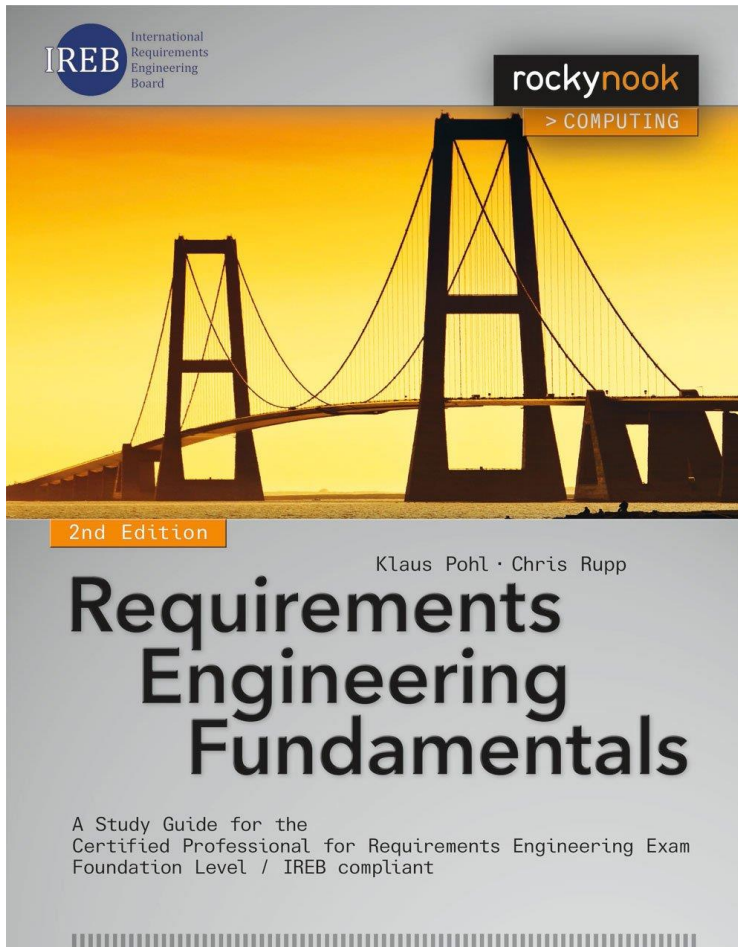
How do we change our mindset?

Incubating Innovations!

Why Aachen for an incubator?



Quelle: RWTH Aachen – Campus Melaten





Ing.gate



Quelle: Linemetrics



Quelle: exceed



Quelle: Weitblick Systems



Quelle: Intel



Quelle: iTAC



Quelle: ark|group



Maschinen



[Einstellungen](#) [Hilfe & Kontakt](#) [Ausloggen](#)

Neuigkeiten

Meine Maschinen

Meine Prozessketten

Maschinen finden

Aufträge

Prozesskette 1: CFK Crashabsorber



Favimat Robot 2



Umspulautomat SPA 320/80

(Fremdanbieter)



Radialflechter RF 1/128-100



RTM-Unit

Interessante Maschinen



Greiferwebmaschine
Typ: P1
Hersteller: Dornier
Baujahr: 05/2013



Wirkmaschine
Typ: DG508
Hersteller: LIBA
Baujahr: 01/1999

Gesponsorte Links



Ing.gate | textile

Ing.gate | agro

Ing.gate | tooling

Ing.gate | energy

Ing.gate | automotive



Maschinen

my

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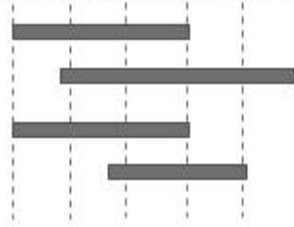
Neuigkeiten **Meine Maschinen** Meine Prozessketten Maschinen finden Aufträge

Radialflechter RF 1/128-100
August Herzog Maschinenfabrik & Co. KG
Baujahr: 06/2008



Belegungsplan

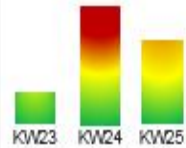
8:00 9:00 10:00 11:00 12:00 >



Nächste Wartung

11/2014

Auslastung



Interessante Maschinen



Greiferwebmaschine
Typ: P1
Hersteller: Dornier
Baujahr: 05/2013



Wirkmaschine
Typ: DG508
Hersteller: LIBA
Baujahr: 01/1999

Gesponsorte Links



4. - 7.5.2015, Frankfurt am Main



ITMA 2015 12 - 19 November 2015 • Fiera Milano Itc • Milan, Italy

Ing.gate | textile

Ing.gate | agro

Ing.gate | tooling

Ing.gate | energy

Ing.gate | automotive



- Patented technology
- 100% developed in Germany
- 100% manufactured in Aachen
- Collecting data:
 - M2M-Device
 - Plattform-interface
 - Self-learning software





Suppliers



Cafés



Consumer

verocolata

Hot drinking chocolates: 200ml 300ml 400ml

White chocolate	2,50	3,00	4,00
Brown chocolate	2,50	3,00	4,00
Dark chocolate	2,50	3,00	4,00

extrés:

Café	normal	double
Espresso	2,00	2,50
Latte	2,10	3,10
Cappuccino	3,20	4,20

Partner:



That is the current
and future
customer!



Be creative!

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