

# Innovation strategies of selected German multinationals in India

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Talk at the Event “German-Indian-Roundtable”

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Research Project “Global Innovation”

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Institute for Technology & Innovation Management

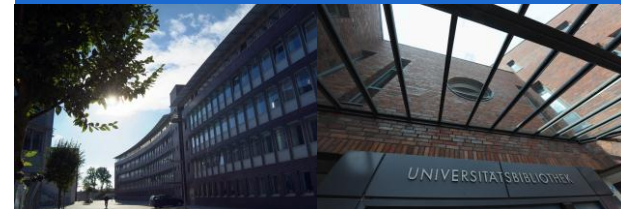
Schwarzenbergstr. 95, 21073 Hamburg

### Four major research projects:

- Open Source Innovation
- Global Innovation
- Green Innovation
- Aging Market

### Head of the Institute:

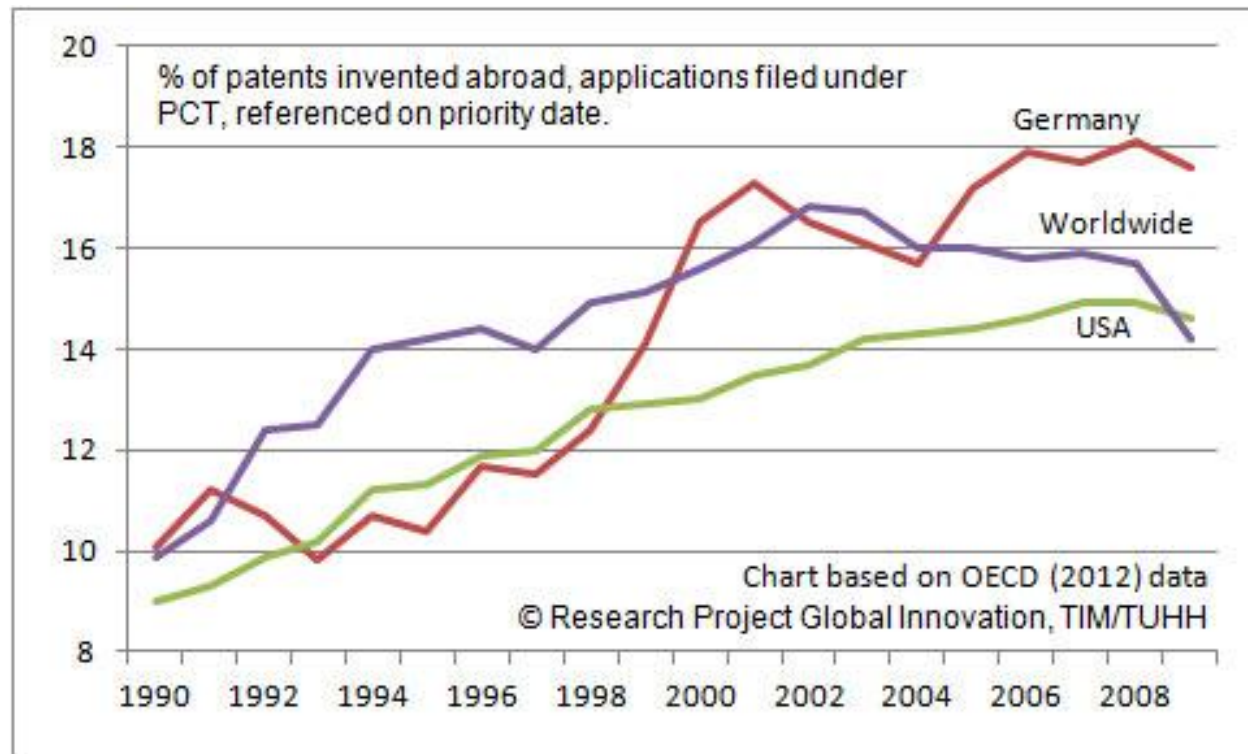
Prof. Dr. oec. publ.  
Cornelius Herstatt



### *Research project:* *“Global Innovation”*

Research in the field of  
globalization of  
innovations with special  
focus on India.

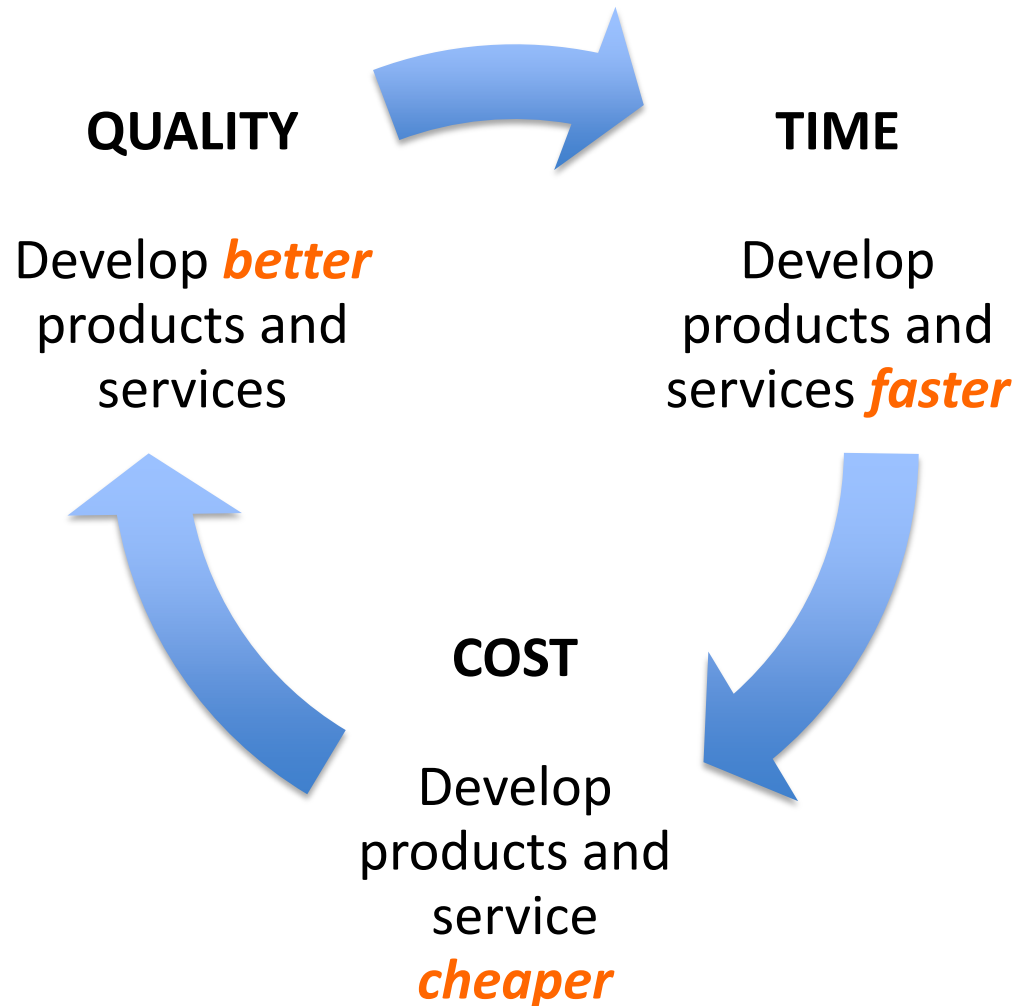
# Increasing Globalization of R&D



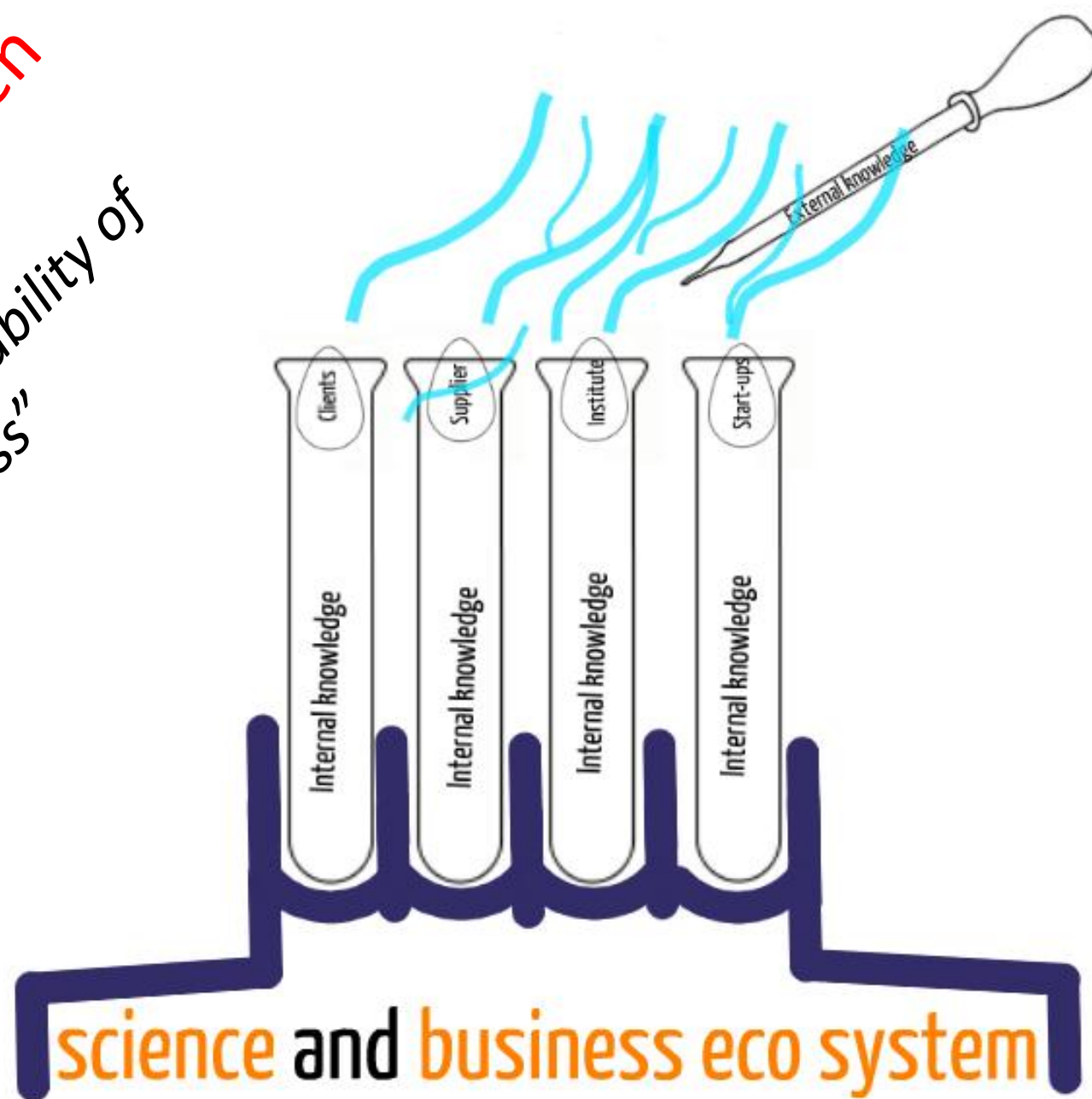
Affiliates of German companies spent €11.2 billion on R&D activities overseas in 2009. This amounts to 27.2% of the overall R&D expenditure.

# Why Global Innovations?

*“Enhance profitability, strengthen stability”*



For what reason **Open**  
**Innovations?**  
“Increasing probability of  
success”



# What we examined?



- Are these companies operating any kind of branches in India?
- Do these branches have R&D functions/responsibilities?
- Do they innovate with local Indian partners; and if yes, then to what extent?
- Are there any open innovation projects?

The study was conducted as part of a project seminar during the winter semester 20011/12 and supervised by Rajnish Tiwari (Research Associate at the TIM@TUHH). All information concerning the examined companies based on secondary sources such as press releases, literature and annual reports.

- since 1943 in India
- approx. 2,000 employees
- One **regional R&D center** in Mumbai one **technical development center** Mangalore and several **technical labs**
- R&D expenditures rose from Rs. 14 million in 2001/02 to Rs. 105 million. Rs on 2010/11
- “Generate innovations with customers”



# Selected project of **BASF** India



Source: BASF Samruddhi Project

## Samruddhi Project

Start: 2006

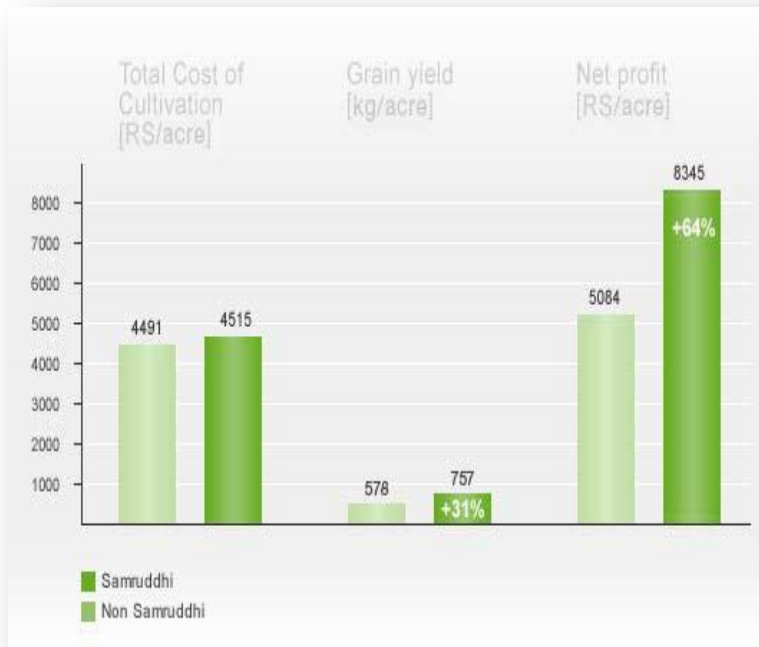
Aim: Gaining larger market share in India's farming sector

Via: Consulting and training selected farmers who **have to use BASF products** in exchange

2006: approx. 30.000 farmers

2010: approx. 170.000 famers





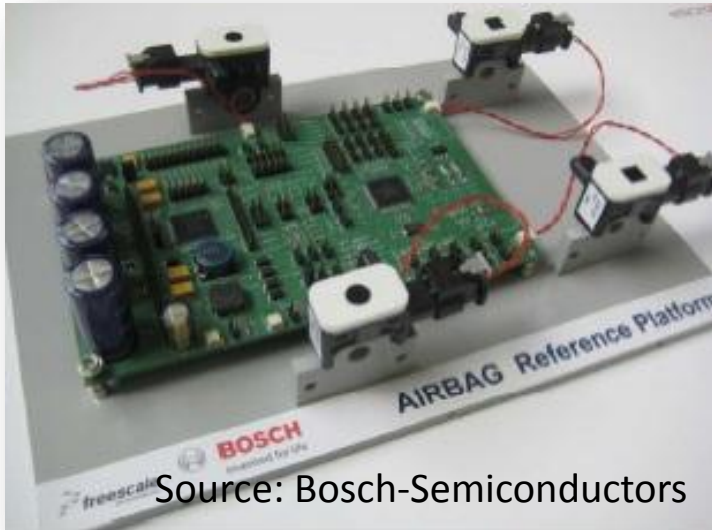
Source: BASF Samruddhi Project

- **Collaboration** with the **farmers** is over the entire year
- Selection of the farmers **according to their farm size**
- The project covers soy, tomato and onion farmers
- BASF dispatches educated Trainers to the farmers to provide know-how in handling plant productions products
- The farmers also receive economic training

*"[...] largest development center, outside Germany"*

- Since 1922 in India
- approx. 22,500 employees
- 3 development locations
- Technical Center India [Bangalore]
  - approx. 250 engineers
  - "it works in tandem with the automotive industry to develop products to match specific needs"
  - global responsibility for certain products like single cylinder pumps, multi-cylinder pumps and mechanical distributor pumps
- Largest Software development location outside German
  - "Center of Competences" for ECU diagnostics and Service Information Systems in the Asia/Pacific area

# Selected projects of **Bosch** India



Source: Bosch-Semiconductors

## Airbag reference platform

Presentation: III.Q 2011

Aim: Development and production of a standardized platform for airbag systems

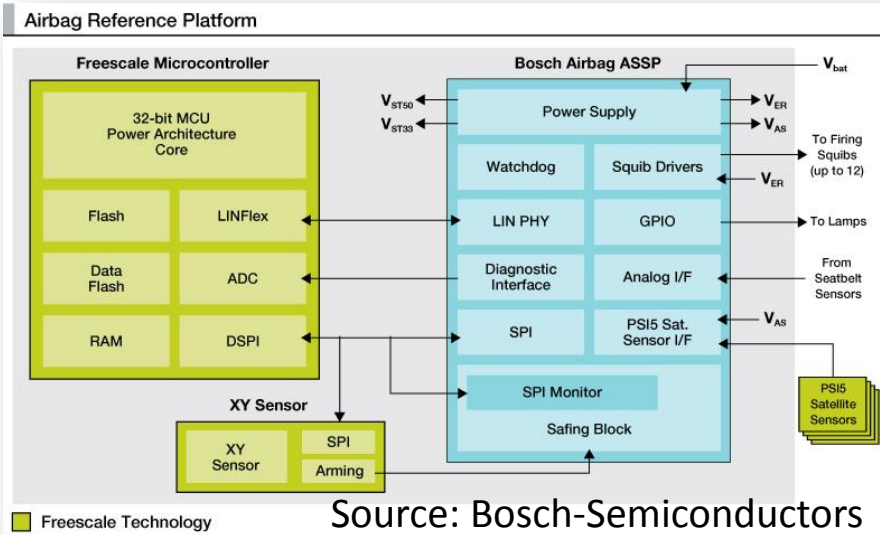
## Robert Bosch IISc Center

Start: 2011

Aim: Support young scientists tracking future topics



Source: Criterion Systems



- Product **specially designed for developing countries** and the rising need for automobile safety solutions
- Both partners **brought in (and combined) technology** and know-how to accelerate the time to market and to secure a larger market share

- Development cooperation with **Freescale**
- Presentation during the Freescale Technology Forum in Bangalore (2011)

- Since 1954 in India
- Mercedes-Benz Research and Development location in Bangalore
  - approx. 500 employees
  - Largest R&D centrum outside Germany
  - Specialized in Electrical/Electronics and IT-Services
- Mercedes-Benz development side in Pune
  - Main focus: interior design
  - Specialized in seat and door panels



# Selected projects of **Daimler** India



Source: ATZ-Online

## **Jatropha Biodiesel**

Start: 2010

Aim: Production of biodiesel made of Jatropha planted on fallow agricultural

## **BharatBenz**

Start: 2006

Aim: Development of light, medium and heavy trucks for the Indian Market



Source: BharatBenz

# Daimler India

## *Project: Jatropha Biodiesel*

### What is it about?

#### **Cooperation partners:**

Rural farm communities  
Bayer Cropsience AG  
Deutsche Investitions- & Entwicklungsgesellschaft

#### **Social context**

Collaboration with the farm communities create „economic prospects for socially weak areas“  
(Herbert Kohler, Daimler)

#### **Political context**

Indian government demands 20% Biofuel in all fuels from 2017  
Jatropha gets support from the Indian government

#### **Technological context**

Bayer delivers the knowhow for pesticide and on sustainable farming  
Daimler delivers the engine knowhow



### WIN-WIN-Situation?

#### **Daimler**

Competitive advantages for the case of the selection of Jatropha for Biofuel

Better brand perception by Indian customers

#### **Partner**

Daimler's commitment to purchase the whole harvest provides the farmers economic security

Bayer gets access to new processes (farming methods, synthesizing,...)

# What is it about?

## Cooperation partners:

Close interaction with truck drivers and various stakeholders in India

**“Our aim is to sell trucks that are made in India, for India and by Indians”  
(Marc Llistoella, CEO DICV)**

## Project background:

Close Interaction with Indian stakeholders was motivated by the high differences in the usage (e.g. overloading) and to some extent in sales practices (e.g. without truck body)

Overall 6 years of cross-linked development in India and other Daimler development locations (Japan, USA, Germany) was necessary to get a competitive truck for the Indian market.

- Since 1924 in India
- approx. 18,000 employees
- Corporate Technology India
  - Corporate Development Center India:
    - 3,200 employees, 5 locations
    - Develops software for the next generation products for the Industry, Energy and Healthcare Sector
  - Corporate research and technology center
    - 100 researchers
    - developing business relevant technologies for the ‘unserved’ population (S.M.A.R.T – Products)

- **S**imple, **M**aintenance-friendly, **A**ffordable, **R**eliable and **T**imely-to-market
- 40 to 60 per cent cheaper
- S.M.A.R.T is **made for the low- and mid-level** technology markets like India or China
- fully designed, manufactured and marketed locally
- “SMART **is not cheap, stripped down products** ...it means matching technical aspirations at prices that are affordable.”  
(Armin Bruck, Siemens India Managing Director)

# Selected projects of **Siemens** India



Source: Siemens

## Community Health Information system

Start: 2009

Aim: Gaining know-how for the development of S.M.A.R.T Products aiming the rural Indian sector

## X-ray machine “Multix Select DR”

Presentation: II.Q 2011

Aim: Development and production of an affordable x-ray machine aimed at developing countries



Source: Siemens



- Cooperation between Siemens, Christian Medical College and ASHAs
  - Piloting in the federal state **Tamil Nadu**
  - Project intended to cover 83 villages
- 
- ASHAs collect patient data and transmit them with the help of modern information technology to the medical college
  - The system provides more accurate health data and promises medical attention for a larger rural area

ASHA: Accredited Social Healthcare Activist





- WIN-WIN-Situation for all partners
- India gets support for the objective to **provide medical attention to more people**
- NGOs get **support by equipment**
- Siemens **gets valuable knowledge** how to design products for rural areas in developing countries
- This kind of products have especially to be simple, maintenance friendly, affordable, reliable, timely to market (S.M.A.R.T)
- First products of this kind are for example: "Fatal Heart Rate Monitor"



- Since 1996 in India
- approx. 4,900 employees
- SAP Labs India is involved in the Research & Breakthrough Innovation, Product Development, Global Services & Support and Customer Solutions & Operations

# SAP India

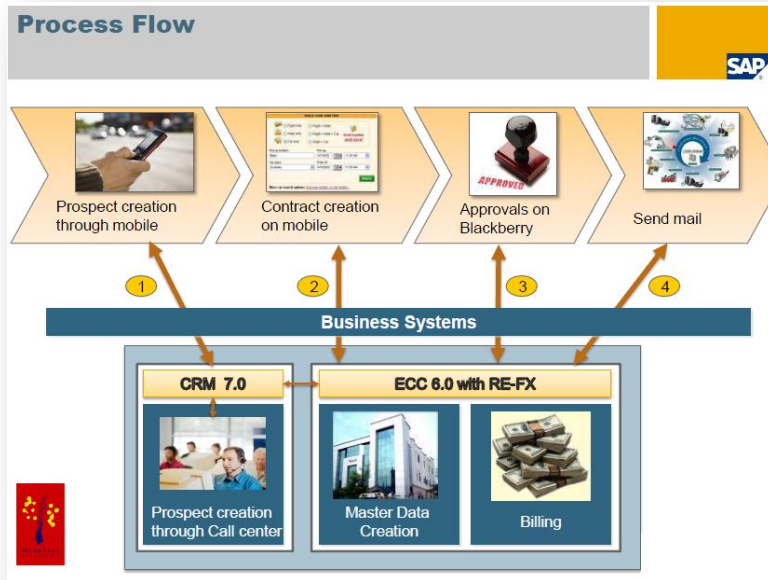
## *Co-Innovation Lab (COIL)*



### **Selected Two Projects** realized via the Co-Innovation Lab India

1. “Tenancy & Lease Management on Mobile”
2. “Wipro Forms Factory”

- Part of the **SAP Global Ecosystem**
- Provide an **Open Innovation environment** for SAP and his partners to create solutions for current and future customers
- Aimed **and facilitating innovation projects** between SAP and his partners with the help of predefined processes, infrastructure and technical expertise



Source: SAP

- Aim:  
**Reducing the time** between a query and the contract conclusion
- Realized through:
  - providing of all necessary data via mobile distribution systems (APPs)
  - Objects are reservable and contract preparations are possible via the APP

# Summary

## *Reasons behind Global/Open Innovations strategies*

- Countries like India require products and services **designed for the special market circumstances**
- Tailor made products for the low and midlevel markets have **to take into account the very price sensitive customer needs and the user environment**
- Local R&D efforts in close partnership with locals could **help to development suitable products** and to **exploit new market opportunities** in India and other developing countries as well in markets like Europe

**Thank you** for your attention

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