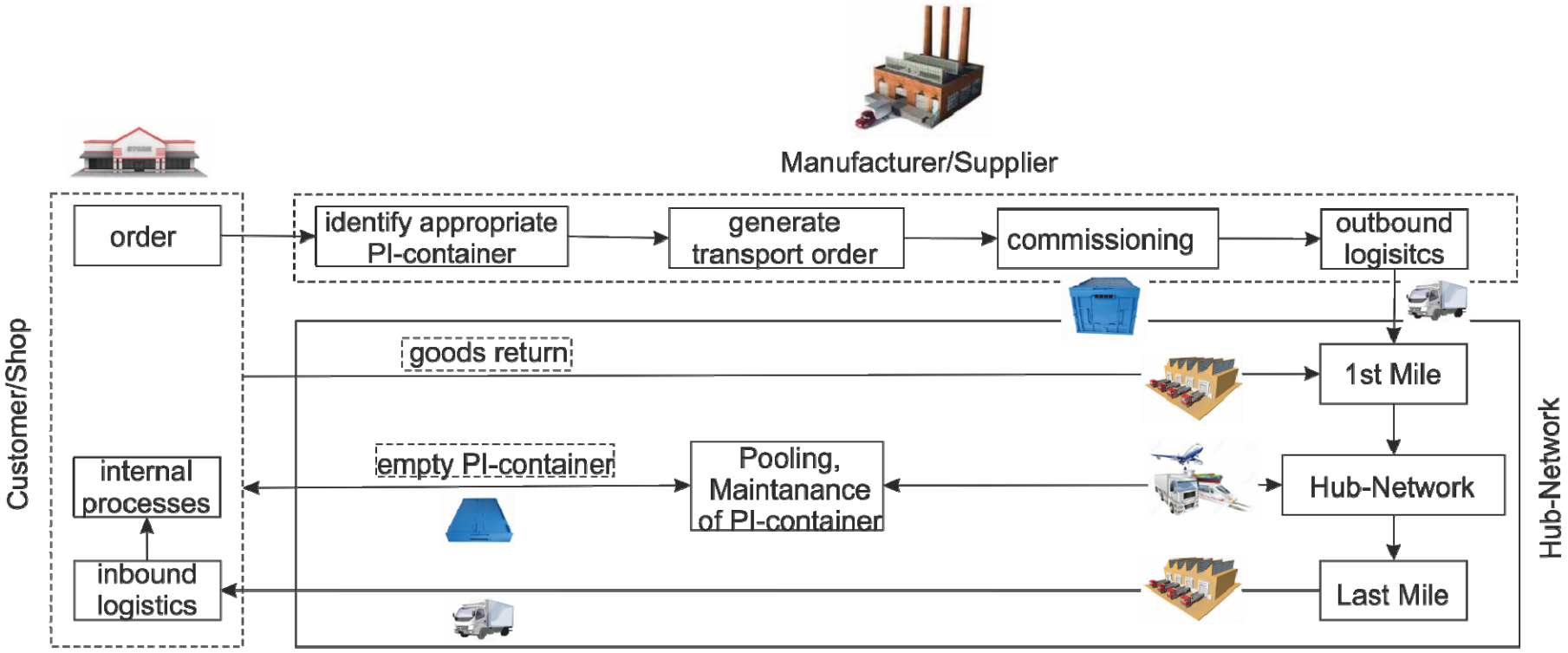
Go2PI

Practically proved steps to implement the Physical Internet

Proposed PI-standard process

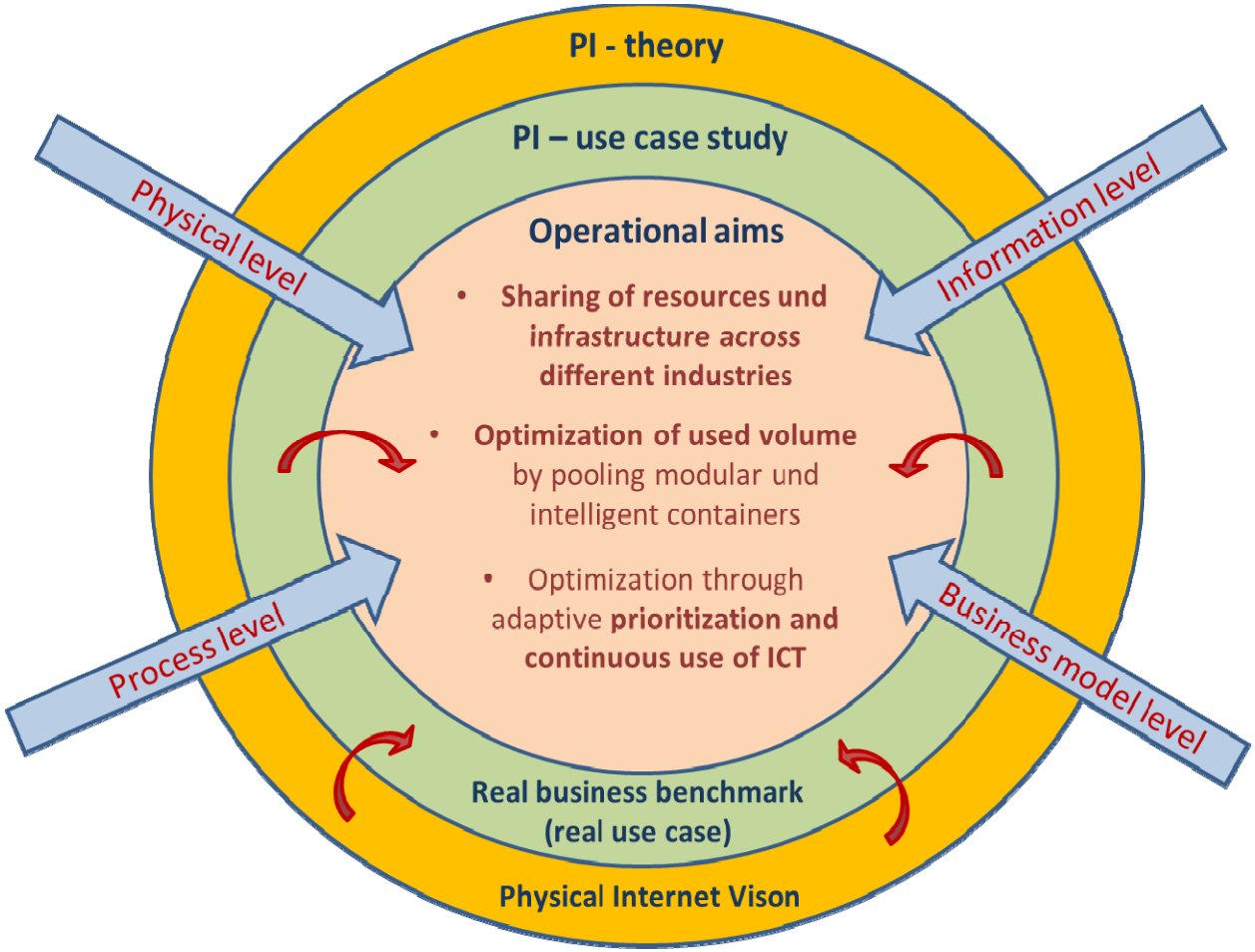


proposed standard process for B2B in a future PI

The Austrian project Go2PI

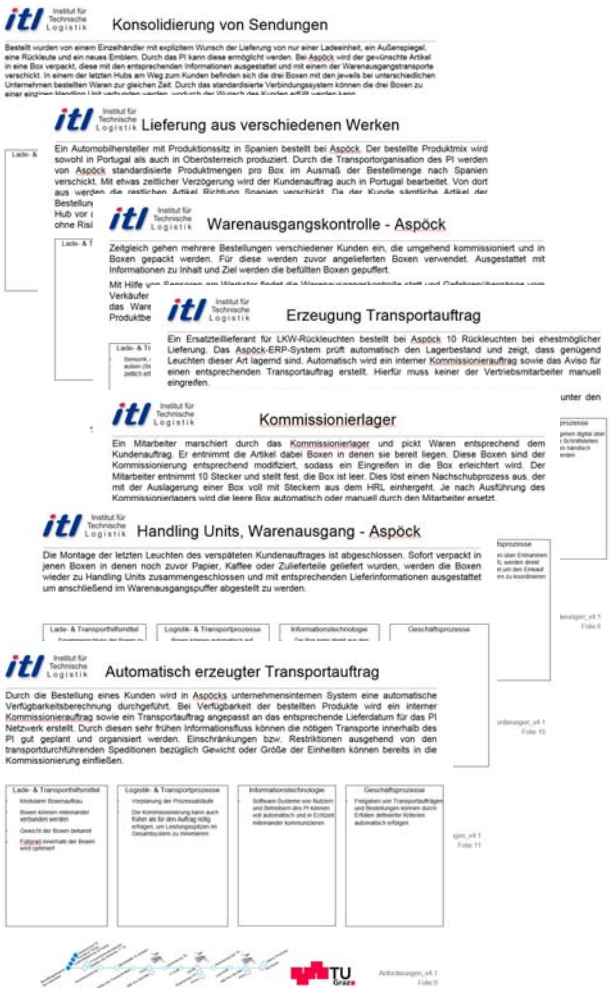
- Case study:
  - Austrian automotive company
  - criteria and guidelines regarding aspects of technical and information systems as well as processes
  - identify implementation criteria for a neutral and open PI- based business model
- roadmap to successful PI services:
  - use of future PI – loading and transport devices
  - PI-ICT

Go2PI – partners and approach



Scope of the Go2PI project

Use case szenarios



- 28 different scenarios
- Deriving requirements on 4 different levels
  - Physical level
  - Process level
  - Information level
  - Business model level
- Monitor gaps to todays situation
- Monitor potential and short term possibilities

Identified steps to implement PI ideas

3. Standardization of financial clearing
   → fair business models

2. Standardization of logistics operation
   → flow of data & consignments

1. Education and Conviction
   → The vision for „coopetition“ has to be spread

Spreading the vision for „coopetition“

- **“Cooperation” with Competitors** is seen very critical
  - Protection of customers is main topic
- **Sharing of monetary benefits** via a set of fair rules and regulations
  - Operational savings must be visible

- **Addressing the Legal questions**
  - Clear responsibilities and liabilities are requested
  - (e.g. who is contract partner, where have claims to be cleared?)

Standardization of logistics operation

Standardization is necessary to identify, analyze and consolidate freight from different service providers

- Standardization of ICT – first steps
  - pallet (probably plastic)with QR-Code
  - mobile devices for identification
  - IT-integration of PI-partners
    design and operation of SW interfaces
- Automated information feeding for shipments and free transport capacities to a PI – hyper system

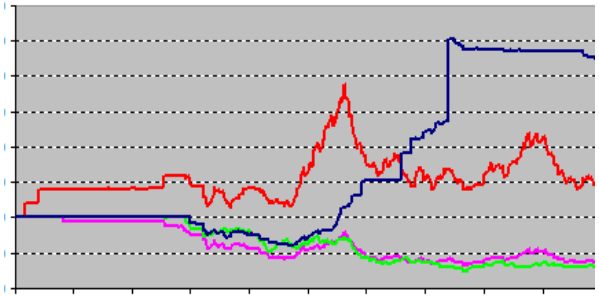
Elements of the focused PI-solution

The PI - hyper system coordinates:

- Transport orders (on unit level)
- Resources of service providers (used and free capacities of hubs and trucks)
- Financial clearing of service providers

Standardization of financial clearing models

- **Benefit sharing model** for profits resulted from consolidation
- **Flexible pricing models** according to demand and capacities and actual reoccurring costs
  - No long contracts with fixed prices
  - Motivation for senders to adjust shipping dates to a day where there is spare capacity
  - Is the market willing to accept uncertainty for gaining possible benefits?



Project specific aspects – SME

The focus on SME:

- Long-lasting customer/supplier relationships
  - direct contact persons, trust
- Possible problems in virtualizing this supplier relationship
  - probably regional service provider fixed for first mile or last mile and consolidation within the open network for main runs
- Lack of preliminary time for organizing consolidation
  - lack of information about what is going to be sent
  - lack of consistent data

Future research questions

- **The PI – hyper system**

  (or PI Management Systems)

  = platform to plan, consolidate and controls
  single unit loads of all partners cross-business-wide

  - integrating existing ERP or transport management systems

  ? Who organizes and creates this integrative platform

  ? Who is allowed to use the data within the PI?

- **Qualification Process** for PI Service Providers

Further information

Published work:

Gasperlmair A., Graf H.C., Hörtenhuber S.T., Ehrentraut F., Lanschützer C. (2016 - in print): Go2PI – Practically proved steps to implement the Physical Internet, 3rd International Physical Internet Conference, Atlanta.

Ehrentraut F., Landschützer C., Jodin D., Graf H.C., Gasperlmair A. (2016 – in print): A case study derived methodology to create a roadmap to realize the Physical Internet for SME, In: 3rd International Physical Internet Conference, Atlanta

Contact:

Andreas Gasperlmair

University of Applied Sciences Upper Austria – Logistikum

Wehrgrabengasse 1-3, 4400 Steyr, Austria

004350804/33457

andreas.gasperlmair@fh-steyr.at

Florian Ehrentraut

Graz University of Technology – Institute of Logistics Engineering

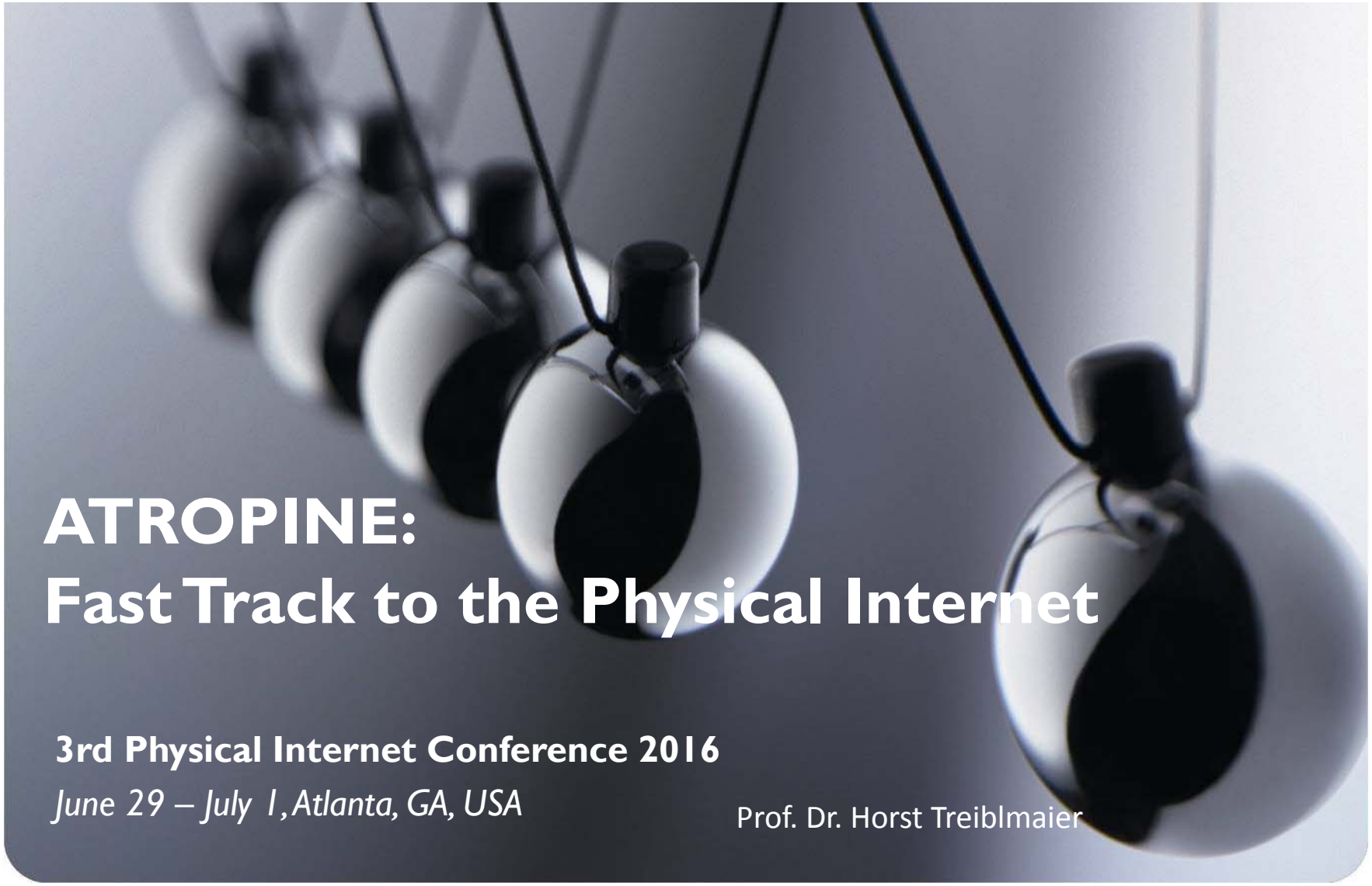
Kopernikusgasse 24/I, Graz, Austria

0043 316/873 7326

florian.ehrentraut@tugraz.at

LOGISTIKUM Steyr
University of Applied Sciences Upper Austria

UNIVERSITY OF APPLIED SCIENCES UPPER AUSTRIA



ATROPINE: Fast Track to the Physical Internet

3rd Physical Internet Conference 2016

June 29 – July 1, Atlanta, GA, USA

Prof. Dr. Horst Treiblmaier

ATROPINE

- **„ATROPINE“** (2016-2017) supported by

- **Aim:** Establishing a PI model region in Upper Austria

- **Goal:** Triggering the innovation chain along industry, education and research by bringing key elements of the Physical Internet to life in real business environments.

ATROPINE: Research Partners

LOGISTIKUM Steyr
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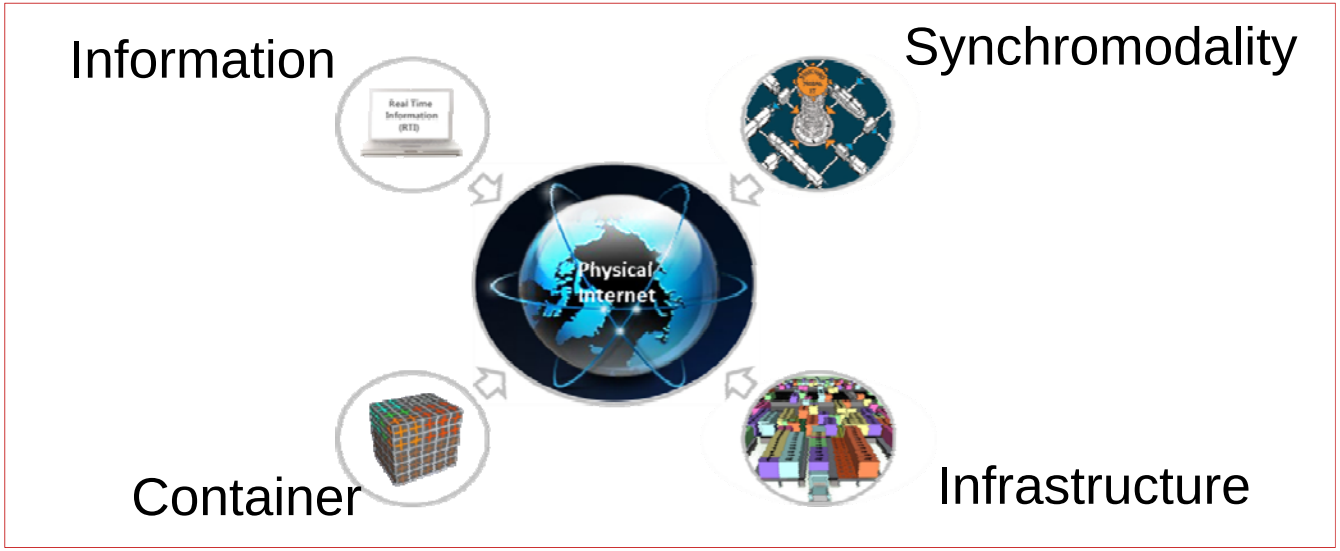
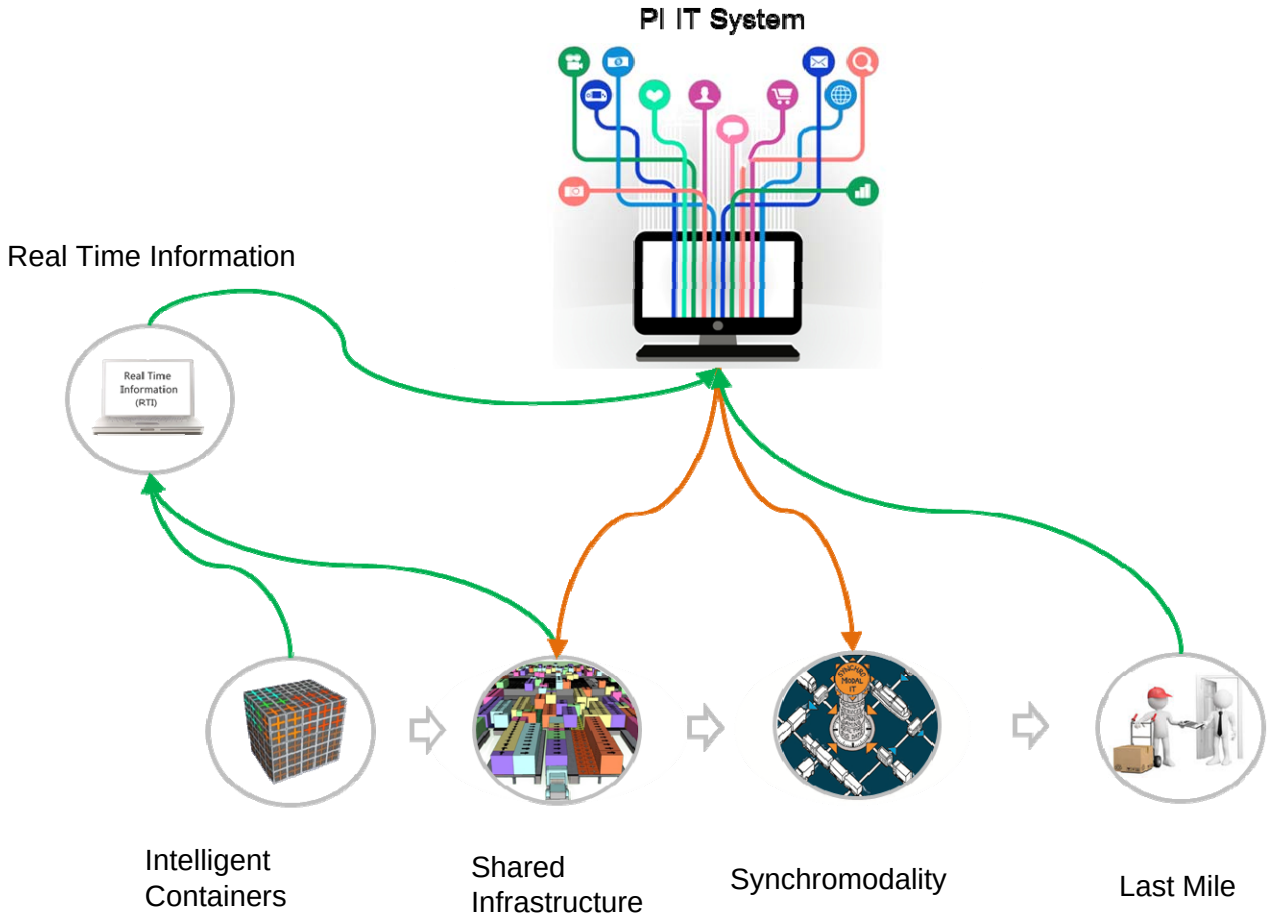


PI Business Models
Awareness

Service Design & Engineering
Human-Machine-Interface

ATROPINE

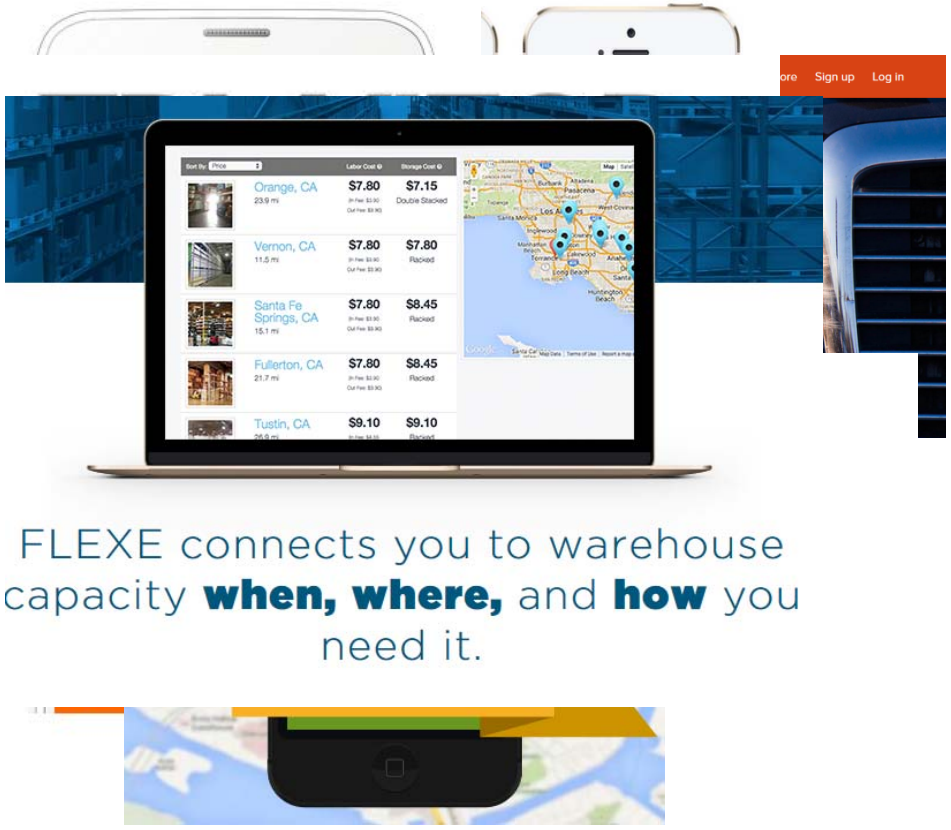

PI IT System
Real Time Information
Real Time Information (RTI)
Intelligent Containers
Shared Infrastructure
Synchromodality
Last Mile

State of the Art / Best Practices

ATROPINE
Fast Track to the Physical Internet

More than 200 examples for the 13 characteristics of the PI (Montreuil, 2011)

Source: http://www.adamsofineti.com/photography/people/



Stakeholder Dialog Workshop 1

- 40 Participants from ~ 25 companies
- Open discussion
  - Transcripts
  - Content analysis
- Five major discussion topics
  - PI transport
  - PI inventory network
  - PI contract
  - PI transport units and information exchange
  - PI inbound / outound

Stakeholder Dialog Workshop 2

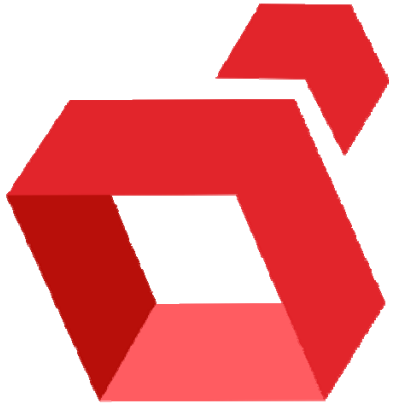
- 7 July 2016
  - Peer groups with specific tasks
  - Research questions for partners
  - Four tasks groups

http://www.continental-corporation.com/www/csr_com_en/themes/general_information/stakeholder_dialog.html

Contact Information

Prof. Dr. Horst Treiblmaier | horst.treiblmaier@fh-steyr.at
Prof. Dr. Oliver Schauer | oliver.schauer@fh-steyr.at

Logistikum | Wehrgrabengasse 1-3 | A-4400 Steyr
Tel.: +43 (0) 50804-33210 oder -33224
www.logistikum.at



Taking Logistics To The Next Level

LOGINEXT

Taking Logistics to Next Level

Manisha Raisinghani

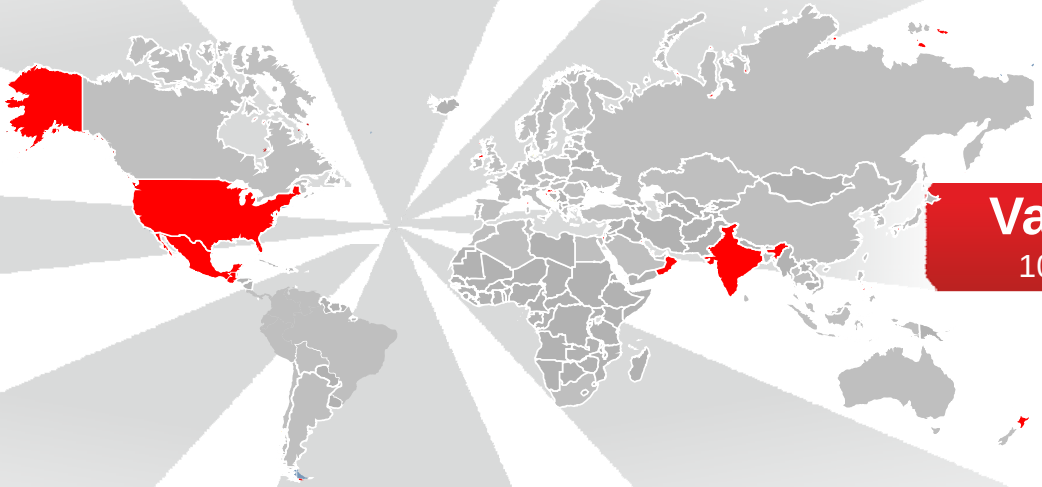
Co-founder and CTO

LOGINEXT: SOME KEY FACTS

100%
MoM Growth Revenues

Big Data
Expertise

75
Clients World Wide



Venture Funded

Valued at
100M+ USD

Act 2013
Compliant

100
People lean team

Top 10 B2B
Start-ups in India

SOME OF OUR HAPPY CLIENTELE

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3PLs	Retail	Service	Manufacturing &Distribution
GoJaVAS	Myntra.com	ammi's BIRYANI	Berger
Reliance Logistics (P) Limited	snapdeal.com	JOE HUKUM CONSIDER IT DONE	Dalmia Cement TRUSTED BY EXPERTS
Mahindra LOGISTICS	Paytm	FreshMenu	MARUTI SUZUKI Way of Life!
Kelvin Cold Chain	DMart	group SER Velocity Redefined	Pernod Ricard
Scorpion Containers Pvt Ltd	grocermax		PharmEasy
FLYKING			

INTER-CITY PRODUCTS

LINEHAUL TRANSPORT

Our matchbox sized trackers carried with your shipment bags, manifests or vehicles and locate them as they change hands across surface, rail and air transport.

KEY FEATURES

- Real-time Tracking for Surface, Rail and Air
- Co-loader Performance and SLA Measurement
- Automated Alerts When Shipments Pass by Airports/Stations

ANALYTICS

- Delay Density Bubble Maps and Charts
- Zone-wise Reports and Control Room Set-ups
- Delay Heat Maps for Every Delivery Routes and Areas

Bag Off-loading Alerts.

Automated Geo-fencing.

Heat Maps Analysis.

SLA and ETA Trends Analysis.

INTRA-CITY PRODUCTS

LAST MILE DELIVERIES

30% of the logistics cost is spent on last mile deliveries. We help you reduce this cost with our smart mobile apps and cloud based planning and optimization engine.

KEY FEATURES

- Real-time Communication With Delivery Boys
- Electronic Proof of Delivery as Signature, Scans & Images
- Real-time Analysis of Missed, Pending, Delivered Orders

ANALYTICS

- Delivery Location Clustering Based On Dynamic Capacity
- Delivery Planning With Preferred Time Window Per Order
- Predictive Delay Alerts And Real-time ETAs Updates

Real Time Visibility.

Delivery Management.

Big Data Analytics.

All On The Cloud.

FOR ON-DEMAND DELIVERIES & SERVICES

POINT-TO-POINT LOGISTICS

With the surge in on-demand and hyper-local economy, an even bigger need for technology has emerged. If you are running a food, grocery, taxi, medicine, laundry or any express delivery service, (A.K.A. “Uber for X”) then we have something interesting for you.

KEY FEATURES

- Location based resource allocation
- Electronic Proof of Delivery as Signature, Scans & Images
- Real-time Analysis of Missed, Pending, Delivered Orders

ANALYTICS

- Delivery Location Clustering Based On Dynamic Capacity
- Delivery Planning With Preferred Time Window Per Order
- Predictive Delay Alerts And Real-time ETAs Updates

Automated Scheduling.

Route Optimization.

Real-Time Notifications.

On Time Deliveries.

END-TO-END LOGISTICS SOLUTIONS

REVERSE LOGISTICS

With change in focus on product lifecycle management, companies are designing products with end-of-life processes in mind. They're also rethinking the processes associated with returning and disposing of goods.

KEY FEATURES

- Real-time Tracking and Notifications to Merchant
- Electronic Proof of partial / non-Delivery as Signature, Scans & Images
- Automated Rescheduling of Undelivered Items

ANALYTICS

- Customer Satisfaction Root Cause Analysis
- Categorization of Customer Locations & Behavior
- Projection on Cost Savings

Real-Time Visibility.

Intermediate Scheduling.

Load Balancing.

Reduced Cost.

AWARDS AND PARTNERSHIPS

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Aegis Graham Bell Awards

Location Partners

CIO choice Awards 2015 & 2016

B2B top 30 startups - 2014

Acceleration Partner

Investment Partner

Cloud Host Partners

NASCOMM Top 30 startups - 2015

Smartphone Partners

Cloud Tools Partners

Investment Partner

Traffic information Partner

Top 30 Tech startups - 2014

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Registered Office :
9th floor, A wing, Supreme Business Park, Kensington Rear Exit Road,
Hiranandani Gardens, Powai, Mumbai – 400072|
Andheri East, Mumbai – 400053
Phone : 022 67411156 | email – admin@loginextsolutions.com