# European Cycle Logistics Federation

## Digital Innovation

- **Jamie Cudden**
- **Ivor Chomacki**

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**ECLF Conference Dublin**

# Who are we?

**Jamie Cudden**
> **Smart City Programme Manager, Dublin City Council**

**Ivor Chomacki**
> **Development Director, European Cycle Logistics Federation**

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**Agenda:**

**Let's sort out Last Mile Delivery**

# Longer Agenda:

- **Overview of developments for Last Mile logistics**
- **Develop Opportunity Statements**
- **Identify the business processes and "vital signs"**
- **Find the sweet spots**
- **Develop the roadmap**

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# Digital Innovation: Towards A Smarter Last Mile

**The list of new developments for last mile is long and growing**

- **Crowd-sourced delivery**
- **Standard delivery info (SSCC, Exaactly.com)**
- **Frictionless trans-shipment and containerisation**
- **Physical Internet**
- **Drones and other autonomous vehicles**
- **Smart lockers, locks, doors and boots**
- **Smart bike/van/bus lanes, virtual loading bays**

**No single one of these is a "magic bullet"**

**They are not all "plug and play"**

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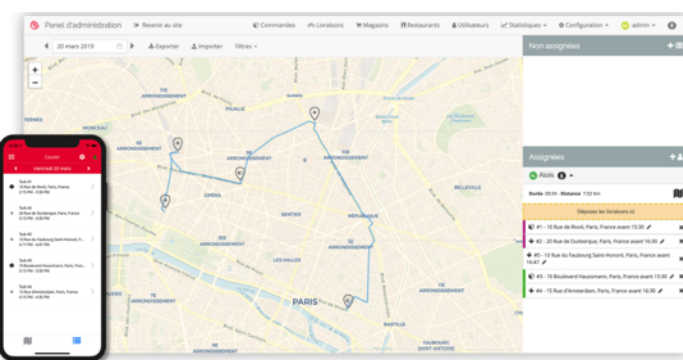
# Cycle Logistics and Digital

- "Last Mile" - specifically logistics AKA goods and services in busy city centres
- It's a complex puzzle – a system of systems
- Many stakeholders – some actors take multiple roles
- No magic bullet, but a multi-part solution
- Cargo bikes are a key *part* of any solution
- …just like all those digital innovations
- And to be most effective they need to fit into a flexible context-specific framework
- Frameworks like SULP / SULPITER / ENCLOSE
- Diverse systems and stakeholders working collaboratively

**SULP PORTFOLIO**

Sustainable Urban Logistics Plan developed by 9 European Cities for enhancing the Sustainable Urban Mobili

*Including the methodology/guidelines for developing the SULP in your city*

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# Aside: What's this "Digital" thing?

- "Digital Innovation" versus plain, old Information Technology.  Who cares?
- McKinsey sets Digital apart, defining as:
  - *Creating value at new frontiers* (new business model)
  - *Creating value in core businesses* (this process works so much better now)
  - *Building foundational digital capabilities* (we could use this for lots of things)

See https://www.mckinsey.com/industries/high-tech/our-insights/what-digital-really-means

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# Challenge / Opportunity Statements

As a (insert stakeholder type here)
I Want / Don't Want …
So That (insert desirable outcome here)

<u>As a</u> retailer
<u>I Want</u> orders to my customers to be delivered on time
<u>So That</u> my customers are happy and loyal

<u>As a</u> citizen
<u>I Don't Want</u> delivery vehicles blocking routes
<u>So That</u> I can get to work on time

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**Group Work:
What are the challenges
and opportunities in Last
Mile Logistics?**

# Service Types

a. Ad-hoc/Messenger (point to point delivery)
b. Contracts/Consolidation
c. Last mile
d. First mile
e. Other services
    - Mail
    - Food delivery
    - Bike/Train combination
    - Advertising

*(From CCCB Startup Workshop)*

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# Key Business Process (sample)

**Delivery of an order**

- **Quotation**
- **Booking**
- **Planning/Assignment**
  - ➢ **I work out which rider will carry that consignment (and how?) on the agreed date and tell them.**
  - ➢ **The rider confirms they can do it.**
- **Pick Up**
- **Transport**
- **Delivery**
- **Billing**
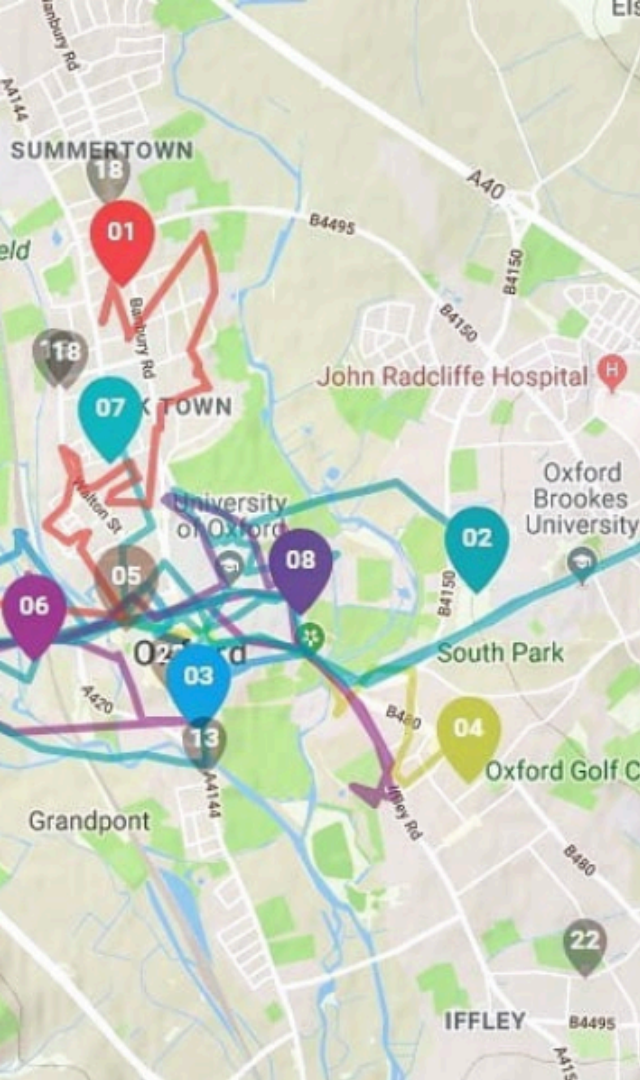
Each step involves action(s) that result in a change
Description is "tool neutral" – No letter, phone or email; notepad, typewriter or laptop; no ledger, rolodex, filing cabinet, spreadsheet or database.

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# Vital Signs for Key Business Processes

- **How often does it run?**
- **How long does it take end to end?**
- **Who/what is involved?**
- **Who employs/owns them?**
- **What are these people/things doing and for how long?**
- **What gets changed or recorded as part of the process?**
- **How do we know it has finished successfully? (Happy Path)**
- **What value does it generate?**
- **What can go wrong? How often? What are the consequences? (Unhappy Path)**

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**Group Work:
Match challenges and
opportunities to innovations
and approaches**

# Common IT Requirements

- Recruitment
- On-boarding/training
- Personnel records
- Operational procedures
- Customer database
- Order taking & assignment to riders
- Customer direct entry of orders
- Proof of delivery
- Customer invoicing
- Accounting (debtors, purchases, P&L, balance sheet)
- Staff scheduling/rostering
- Staff time recording
- Payroll
- Asset register
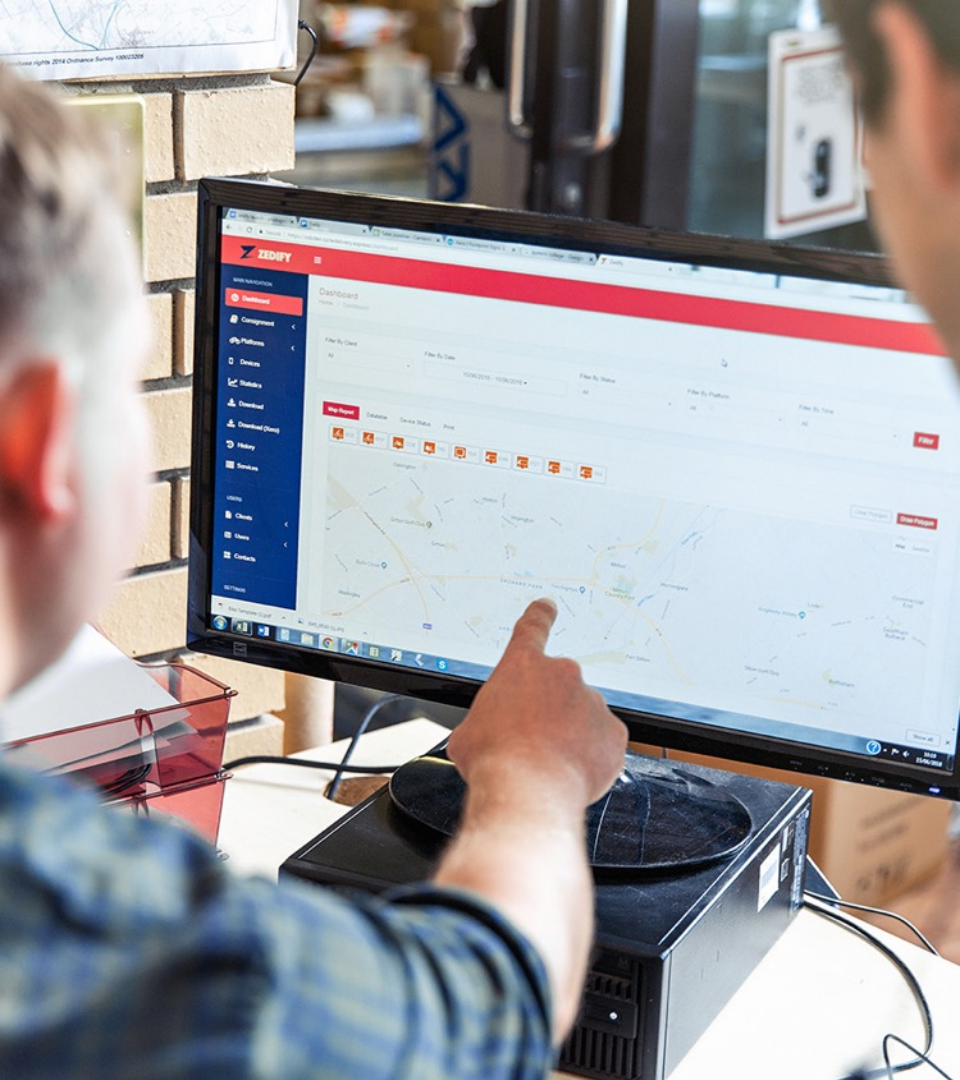- Maintenance schedule & repairs
- Web site

*(From CCCB Startup Workshop)*

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# Common IT Requirements

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**Determine priority requirements**

**Minimise entry of same information into multiple applications**

**What can be done using Word/Excel**

**What can be done using Apps/packaged software**

**Does the software need to be tailored?**

**Get something working**

**Learn what real requirements are after a few months**

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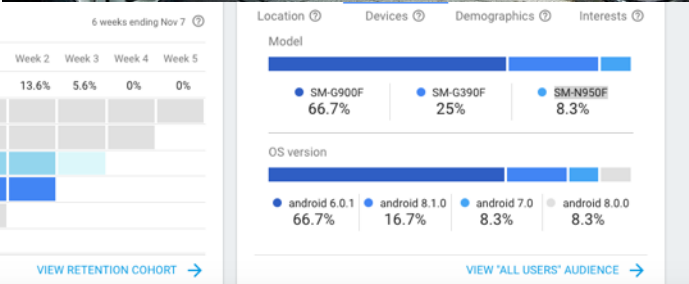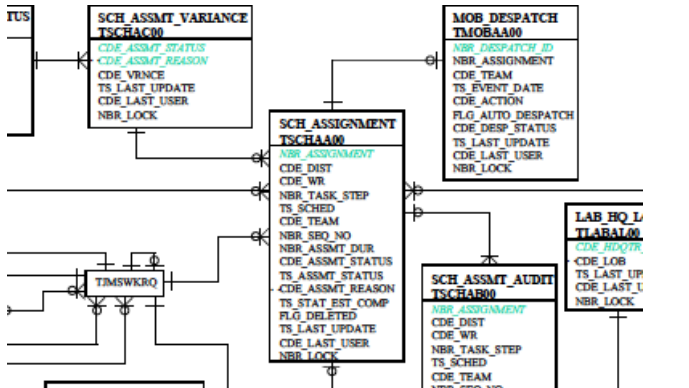
# Integrating Systems - Challenges

**Expanding or taking on new challenges will involve systems change.**

- Can I use what I already have?
- Is there an "off the shelf package" that can do this?
- Even if it is "free", cost of time to test, learn, configure
- Cost of delay – what is it?
- Who will support, maintain, enhance?
- Will this system support the *next* change?
- Do you really know what you need – learn through experimentation?

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**Group Work:**
**Future work programme for**
**smart cities**

# We have just been

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# Thank you for listening

## *Any Questions?*