

# Collaborate to Innovate (C2i) - ERDF founded project

## “Enhancing Operations Management in the UK-Northwest Region.

### Application of collaborative approaches in SMEs”

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## SMEs in the UK

- The UK's SMEs, especially the small number of high growth SMEs, are a crucial engine for growth.
- 99.9 per cent of the UK's 4.5 million businesses are small or medium-sized, of which around 75% have no employees.
- Together, they are responsible for almost half of the £900 billion private sector output and 60 per cent, or almost 14 million, of private sector jobs.
- SMEs also account for almost half the net growth in jobs.

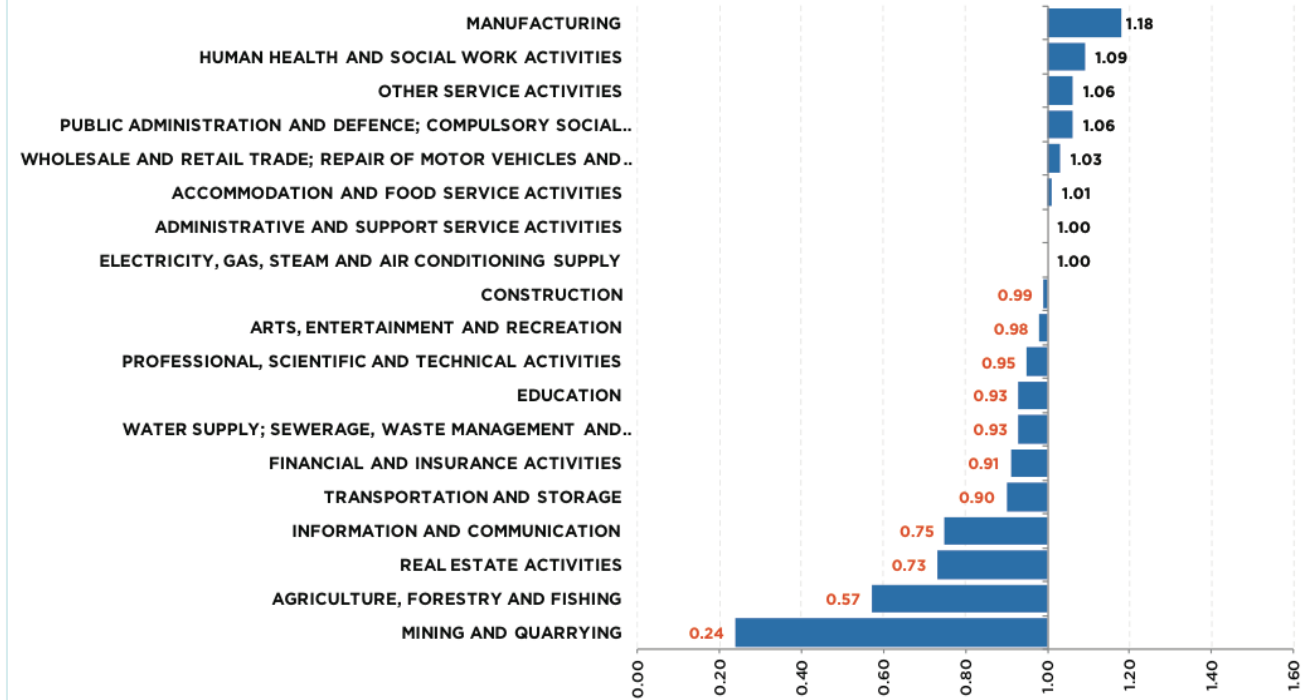
**Source:** HM Government (17/05/2013)

# The Northwest Region

## Drivers of the Economy



**REGIONAL CONCENTRATION OF NORTH WEST JOBS BY SECTOR 2012:**



**Source:** *Economic Modelling Specialists Intl. (12/03/2012)*

# Collaborate to Innovate (C2i)

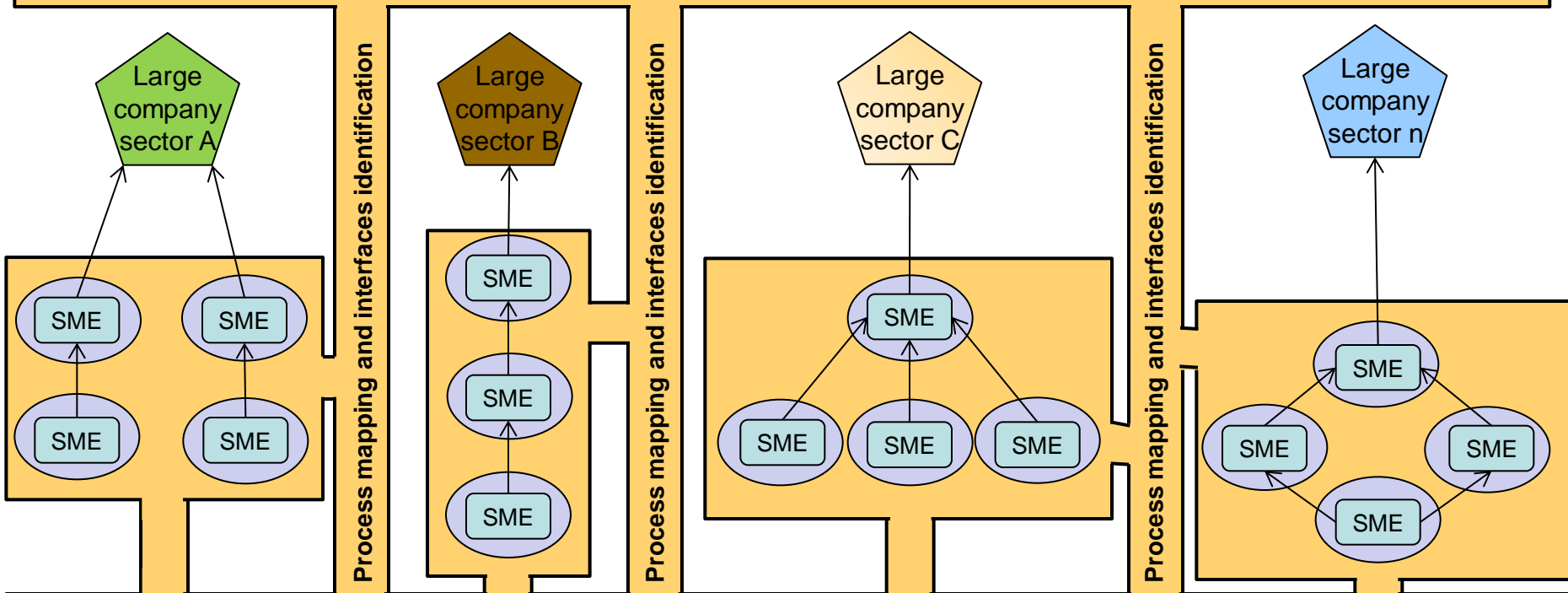
## Overview

- Simple premise – for an SME, innovation is often best performed co-operatively with other external organisations.
- We provide
  - the mentoring and organisational support to engage in improved collaborative alliances,
  - the technical support to develop collaborative ICT platforms.

# Collaborate to Innovate (C2i)

## The Conceptual model

C2I Collaborative solutions for enhancing the decision making process across SMEs



Collaborative networks identification – Vertical & Horizontal collaboration

# Collaborate to Innovate (C2i)

## SMEs characteristics

	<b>Short term innovation</b> Developing and introducing new products Making production processes improvements
Large and medium companies	Challenge fully understood by company; appropriate responses are in place/being developed
Small companies (growth)	Challenges are understood but there are barriers to implement them properly and on-time.
Small companies (non-growth)	Challenges are not fully understood and appropriate solutions are not being developed.

# Collaborate to Innovate (C2i)

## Portfolio of Applications

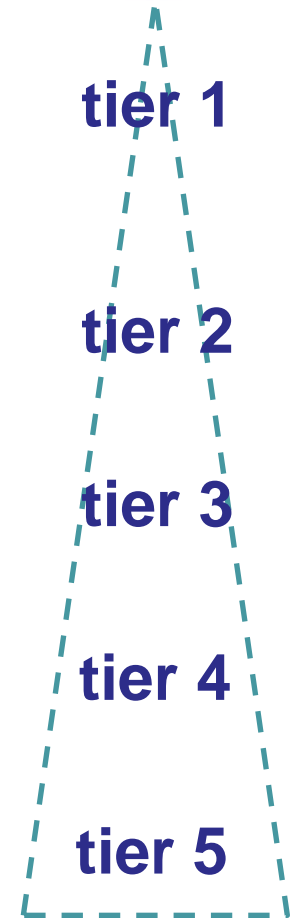
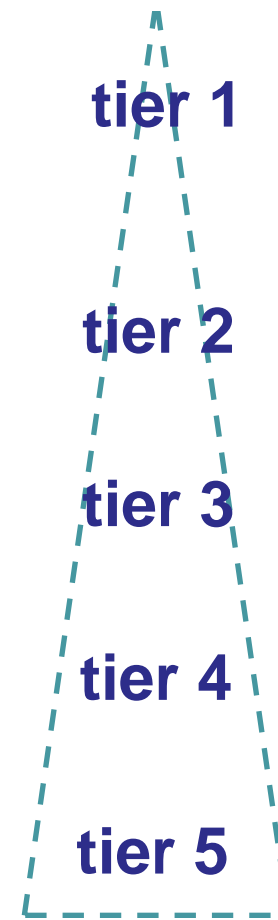
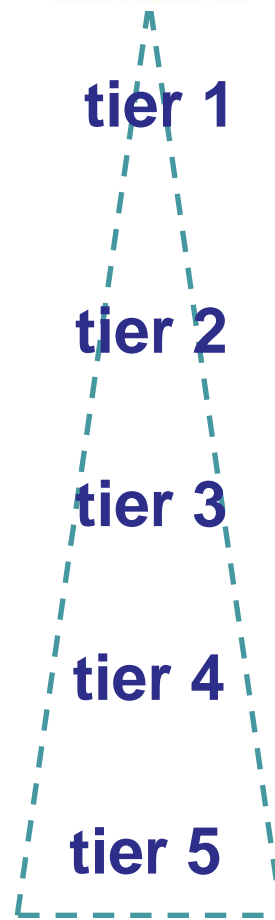
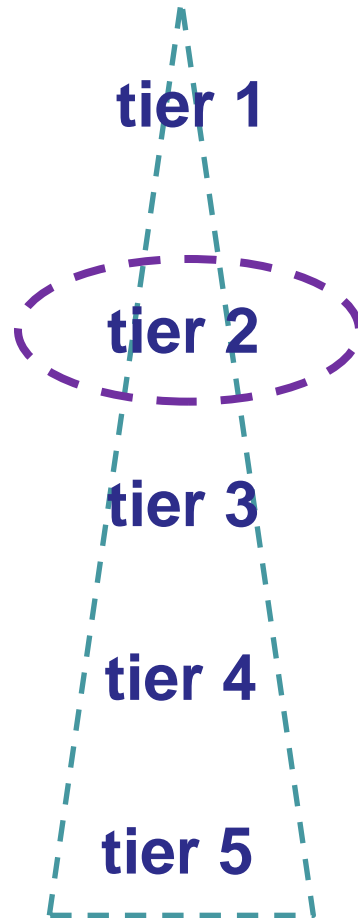
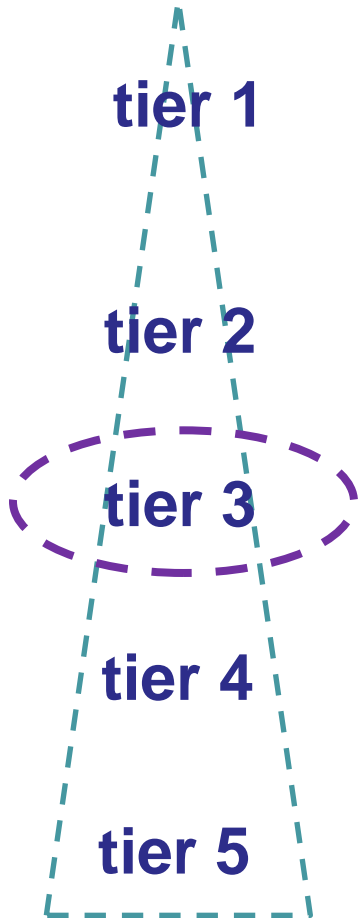
- Collaborative design
- Collaborative planning
- Collaborative procurement
- Collaborative logistics
- Shared services
- Customer relationship management
- Supplier relationship management
- Business process re-design

# Example Applications



Rolls-Royce

 AIRBUS



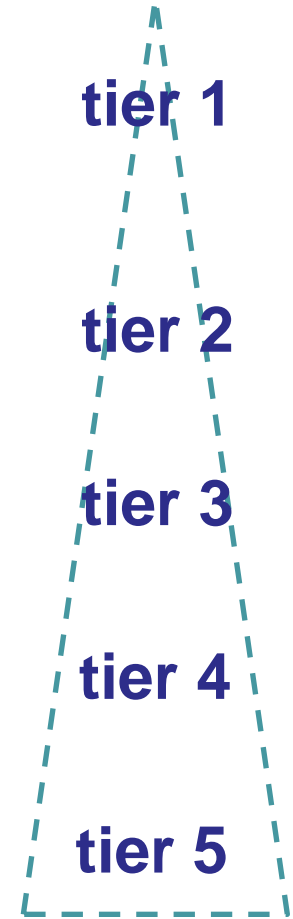
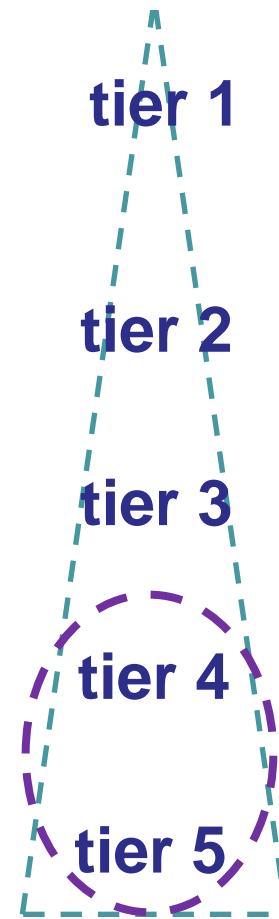
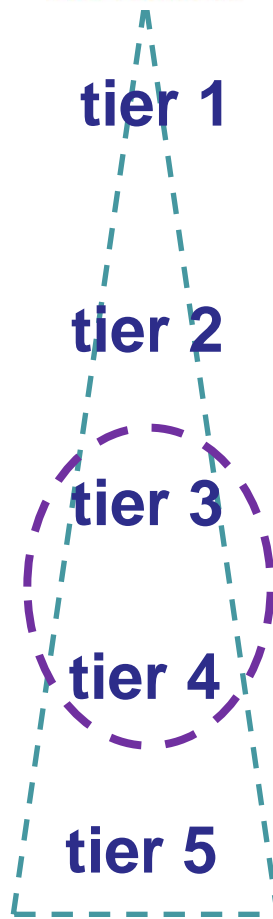
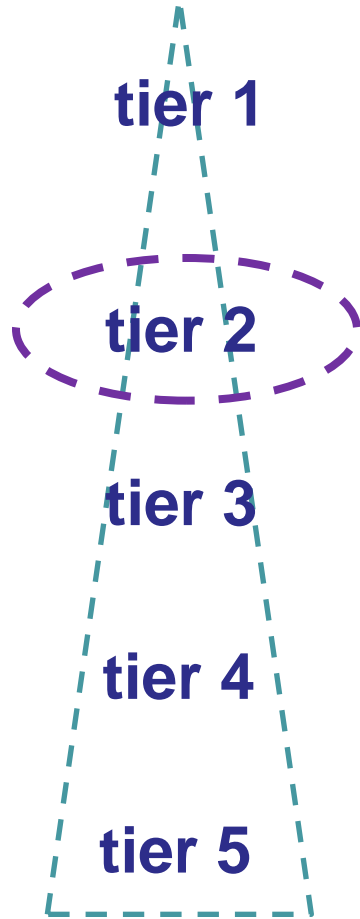
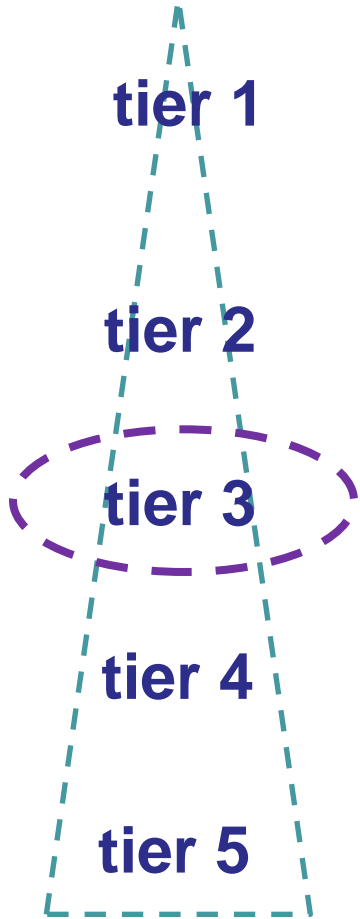


# Example Applications



Rolls-Royce

 AIRBUS



# Example Applications



Rolls-Royce

 AIRBUS



tier 1

tier 2

tier 3

tier 4

tier 5



Unilever

tier 1

tier 2

tier 3

tier 4

tier 5



JAGUAR



tier 1

tier 2

tier 3

tier 4

tier 5



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European Regional  
Development Fund 2007-13



# Example Applications



Rolls-Royce

 AIRBUS



tier 1

tier 1

tier 1

tier 1

tier 1

tier 2

tier 2

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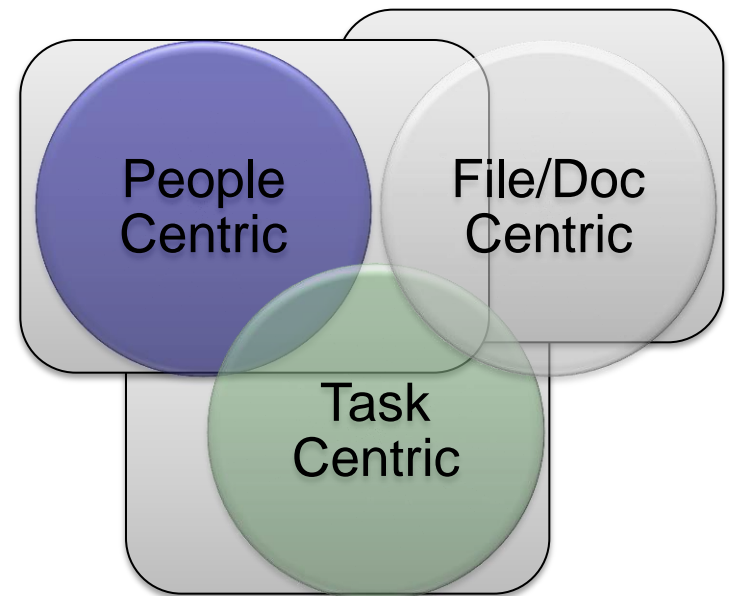
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# Collaborate to Innovate (C2i)

## Example 1 – Automotive Collaborative Design

- A network of 4 Lancashire automotive companies
  - Juno Racing, OakTec, GoTec, Mi Technologies
- Focus on people, tasks & data.



# Example 1 – Automotive Collaborative Design

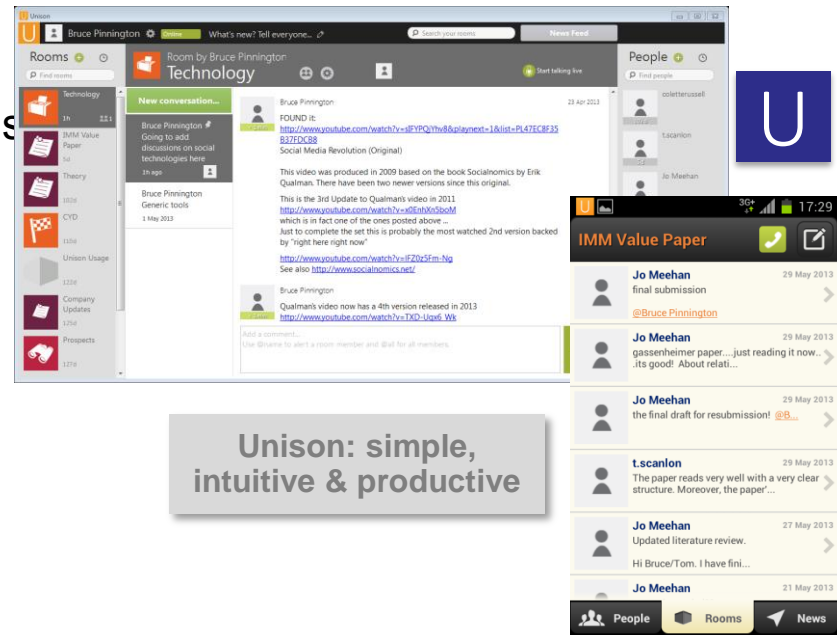
## Interaction requirements

- Community & context oriented forums.
- Highly interactive ‘micro-blogging’ discussions.
- Topic-focused conversations.
- Voice and video extensions.
- Multi-platform: Desktop, tablet, smartphone.
- File and web-link posts.
- Displaces e-mail, phone, IM with one retrievable, auditable, live trail.

# Example 1 – Automotive Collaborative Design

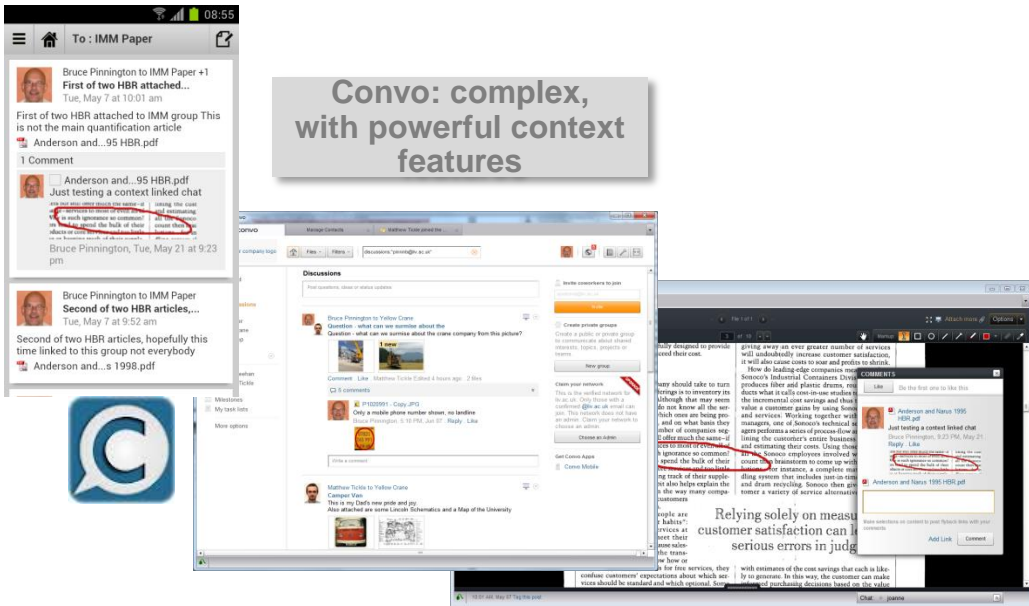
## Typical interaction capabilities

- Community & context oriented forums
- Highly interactive ‘micro-blogging’ discussions
- Topic-focused conversations
- Voice and video extensions
- Multi-platform: Desktop, tablet, smartphone
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Unison: simple, intuitive & productive

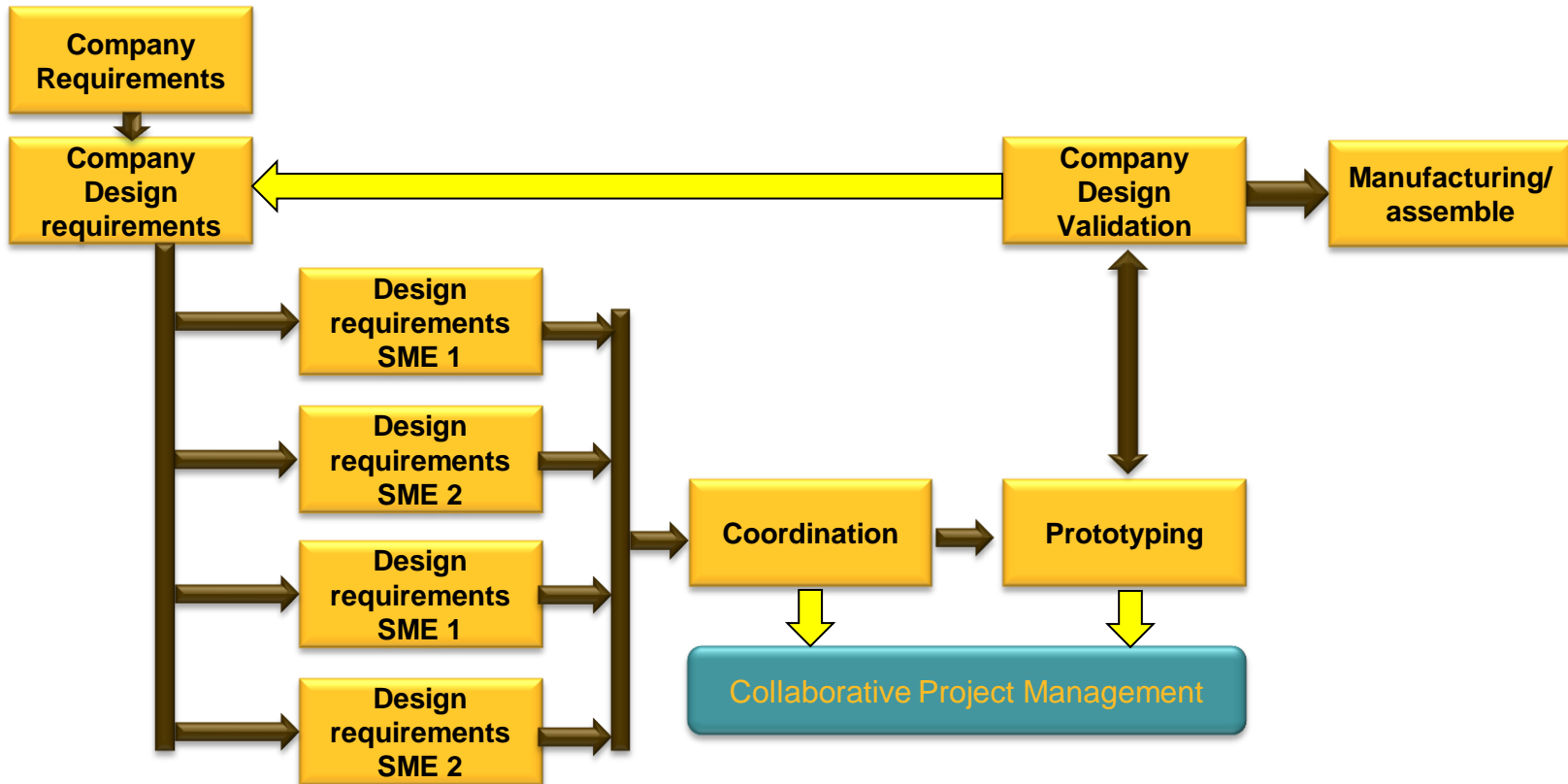
Convo: complex, with powerful context features



- Convo context interaction:
- Highlight and comment on areas of text within pdfs – full document and markup visible on demand to two users
  - Highlight and comment on pictures and drawings in same way
  - Series of pictures, drawings or office files can be uploaded for each conversation

# Example 1 – Automotive Collaborative Design

## The process



# Collaborate to Innovate (C2i)

## Example 2 – Process Re-Design

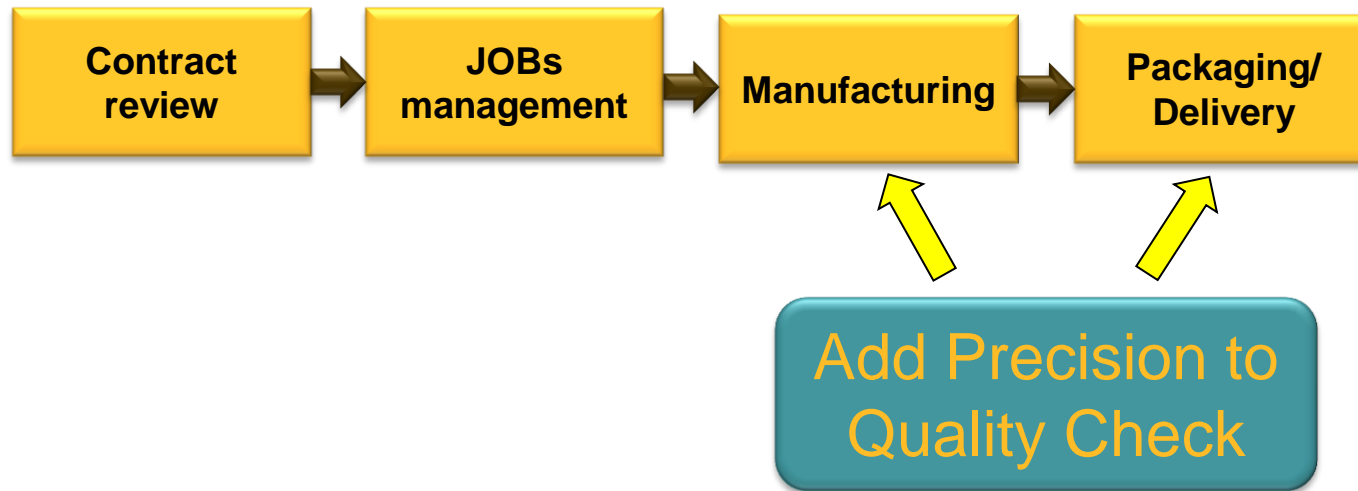
- Moorgate Engineering.
- Improve customer interface for HBS (and other customers) via improved quality assurance & control.
- Commission a co-ordinate measuring machine & implement improved quality reporting.
- Led to significant improvement in product quality & customer satisfaction.





# Example 2 – Process Re-Design

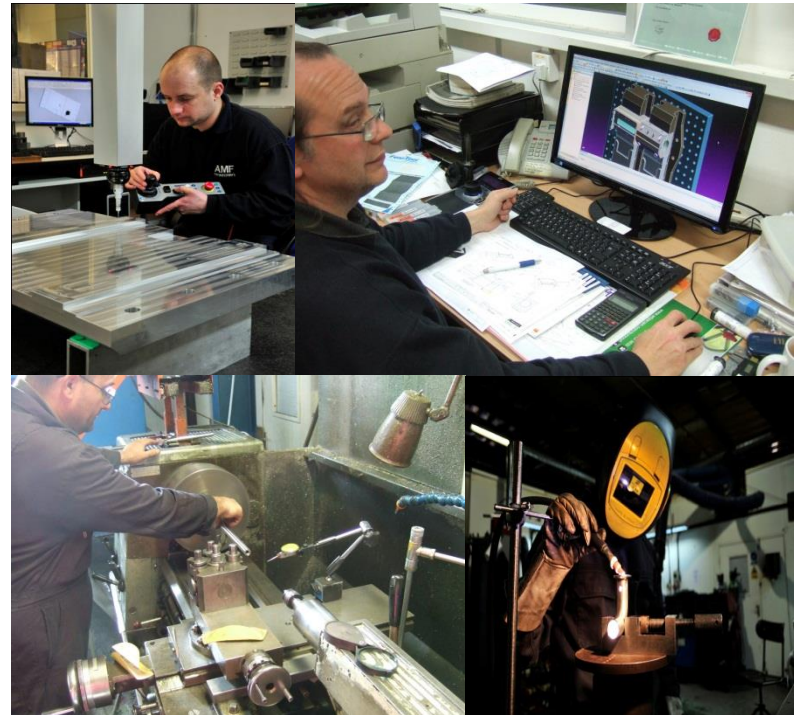
## The process



# Collaborate to Innovate (C2i)

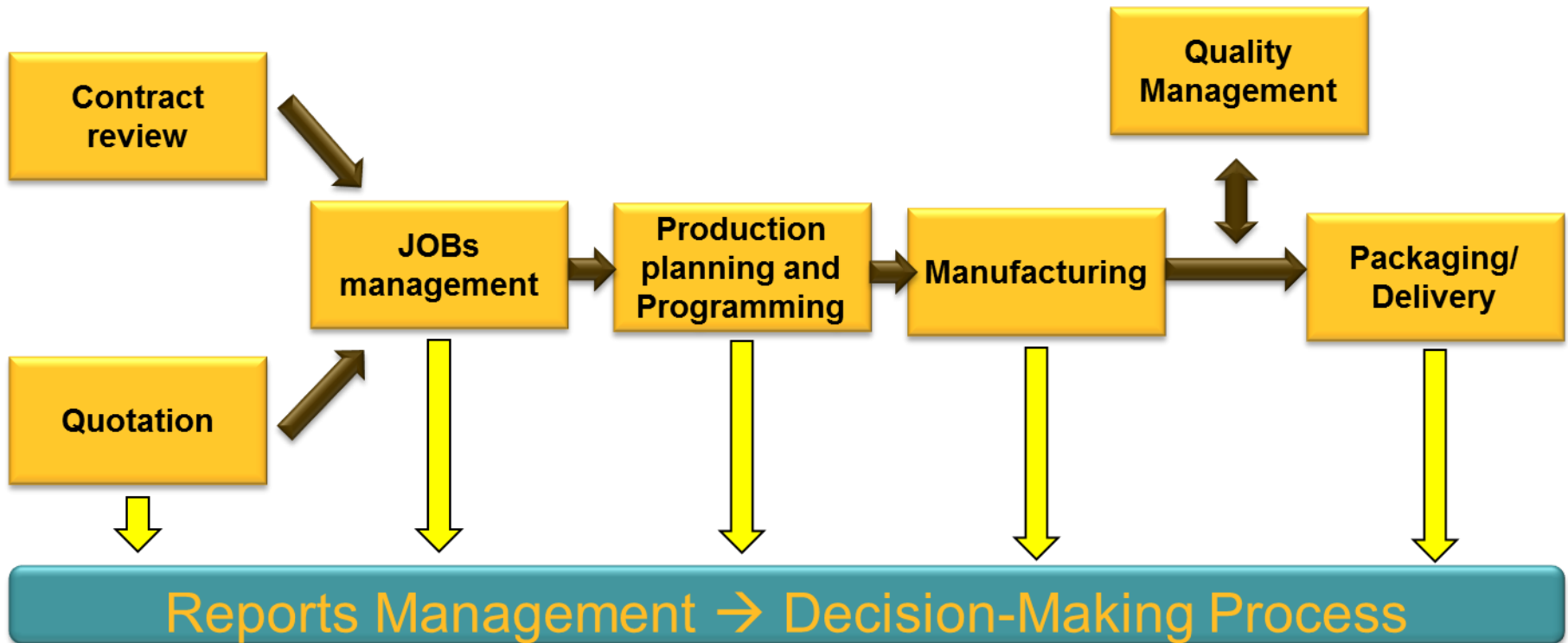
## Example 3 – Collaborative planning in SMEs

- AMF is leading technology subcontractor that specializes in precision engineering.
- Customers are able to place one order and have it managed through to completion regardless of the complexity or number of processes.
- AMF runs an intelligent Oracle based ERP, Aventa, software allowing EDI for their customers.



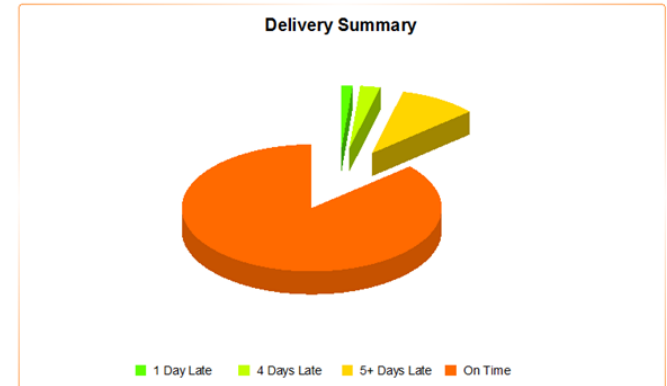
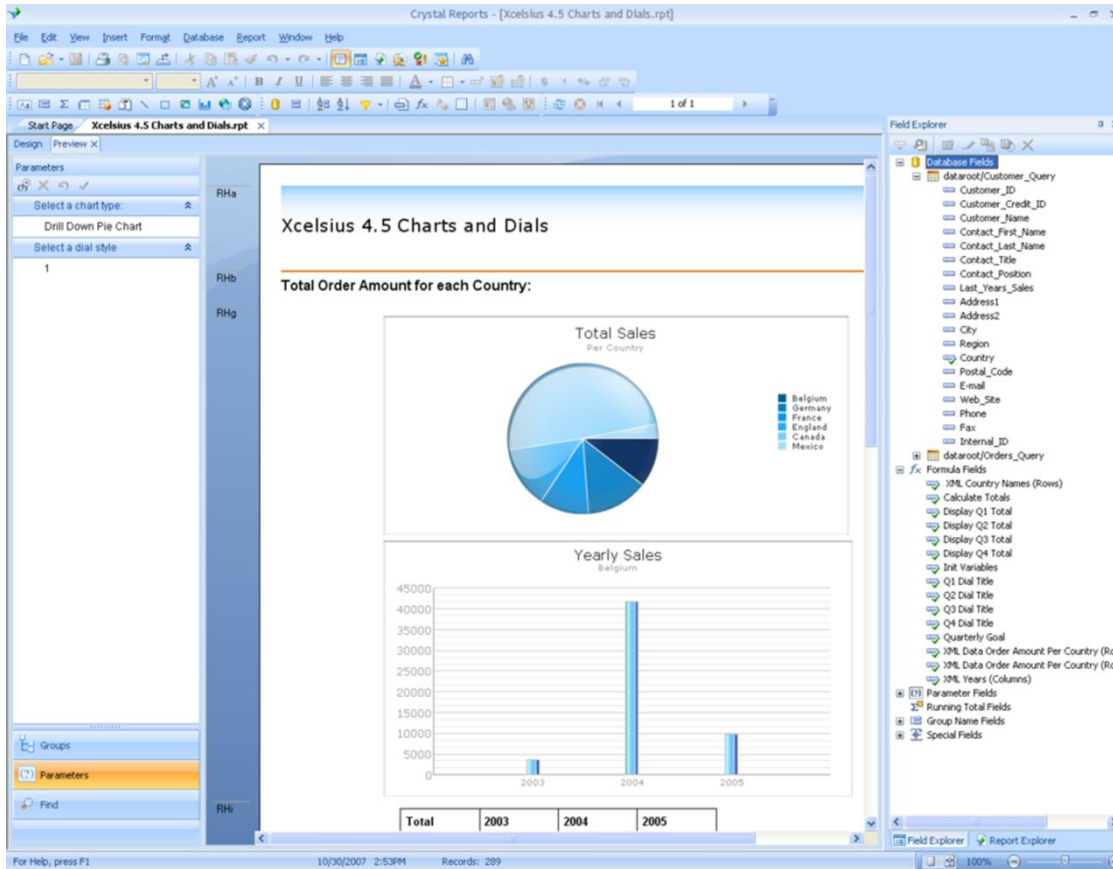
# Example 3 – Collaborative planning in SMEs

## The process



# Example 3 – Collaborative planning in SMEs

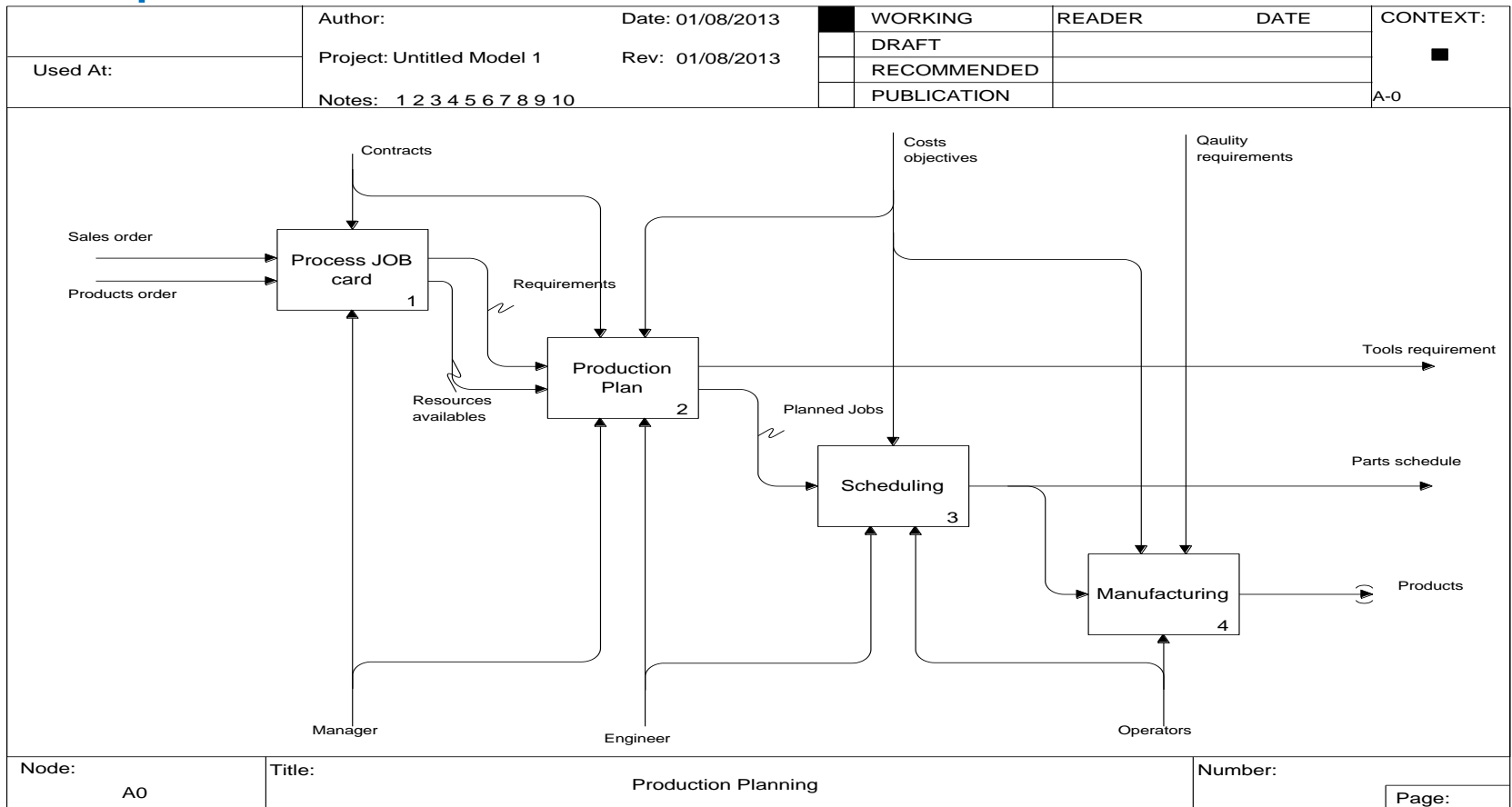
## The process



Del No.	PO No.	Line Item	SOP	Date Del.	Date Req.	Value	Days Late
<b>1 Day Late</b>							
<b>DIV01</b>							
	103421	138876	1	21452	02/07/2013	01/07/2013	239.15 1
<b>VER01</b>							
	103455	VE10499	1	21602	04/07/2013	03/07/2013	190.00 1
<b>2</b>							
<b>4 Days Late</b>							
<b>PER01</b>							
	103417	5503016549/NL7	1	21574	02/07/2013	28/06/2013	14.20 4
	103417	5503016549/NL7	1	21574	02/07/2013	28/06/2013	1,405.80 4
<b>VER01</b>							
	103456	VE10281	1	21609	05/07/2013	01/07/2013	0.03 4
<b>3</b>							
<b>5+ Days Late</b>							
<b>ALL01</b>							
	103427	6199/18838	2	21449	02/07/2013	07/06/2013	1,801.80 25
<b>ETE03</b>							
	103437	851054	1	21542	03/07/2013	21/06/2013	175.00 12
	103437	851054	3	21542	03/07/2013	21/06/2013	158.25 12
<b>OKF04</b>							
	103419	140215	1	21527	02/07/2013	24/06/2013	168.75 8
	103419	140215	2	21527	02/07/2013	24/06/2013	407.50 8
	103419	140215	3	21527	02/07/2013	24/06/2013	269.75 8

# Example 3 – Collaborative planning in SMEs

## The process



# Collaborate to Innovate (C2i)

## Results (end-of-June 2013)

- Number of businesses assisted 24 (64 target)
- Business with improved performance 7 (55)
- Business assisted by KB partner 12 (24)
- Jobs created 7 (24)
- Jobs safeguarded 71 (140)
- New businesses created 0 (1)