

Techinown

What can medium sized cities do to grow jobs through the digitalisation of existing industry and business?





A few conclusions from....









TechTown Thematic Focus – a reminder

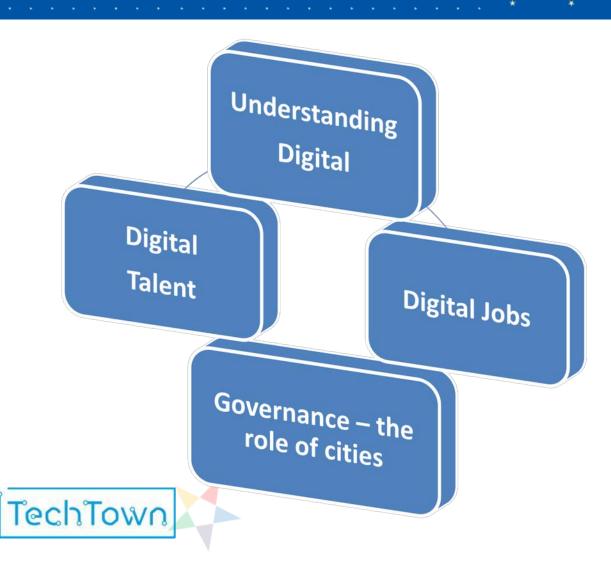




Thematic Focus









Thematic Focus



Better understanding the digital economy Growing digital jobs

- Growing new digital jobs through start ups and existing businesses
- Growing jobs through the digital transformation of traditional industry
- Growing digital jobs through the smart city agenda

Providing spaces and places for connections

Finding, growing, retaining and returning talent





Key questions on Digitalisation of existing business



- What can cities do to support digital transformation of traditional industry and existing businesses?
- How can they ensure that 'digital' is an opportunity (and improves productivity) and not a threat to existing industry?
- What is the role of cluster policy?
- How can cities help / motivate traditional small businesses to digitalise?





First..... Some of the examples we heard about





The examples are from...



- FindIT Forum for Industrial IT from the Gävleborg region of Sweden introduced by Peter Nordqvist, project leader
- Kick Start Innovation a national initiative being piloted in 10 swedish cities – introduced by Ola Wallberg from Fiber Optic Valley
- Connected Manufacturing from Barnsley in the UK introduced by Tracey Johnson and Ceri Batchelder
- An example of big and small companies working together in Sweden –
 introduced by Arnfinn Fredriksson (business coach, Movexum regional
 incubator), Johan Soläng (Invotech) and Roland Andersson (SMT Sandvik)
- Some lessons from the French e-cluster "Auvergne Efficience Industrielle" from Clermond Ferrand introduced by Dominique Lestant





FIND-IT — Forum for Industrial IT Solutions

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- Regional IT-cluster financed by community-, regional-, and national authorities
- Works as a "coupling device", i.e. connects problem owners with problem solvers
- Supports the creation of sustainable competitive SMEs and value chains through industrial IT
- 400 Team FindIT member organisations
- Monthly letters, invitations....
- Targeted searches/mailings/ requests...
- More information at http://www.finditsolutions.se/en







KickStart – Fiber Optic Valley

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www.kickstartdigi.se

Aims to increase understanding, willingness, pace & volume of digitalisation Pilot project in 10 cities + 10 companies per city – targets SMEs and larger industry



WHAT DO THE PARTICIPANTS OF THE KICK START?

"The KickStart, we have a new image of what digitization is and what benefit we can have it on now"

"Kickstart is a great way to get a review of what digitization is all about and how it affects my business and what they themselves can get out of it"

"Kickstart is as a useful tool to identify the small to the large, facilitating our daily lives"





Connected Manufacturing Barnsley



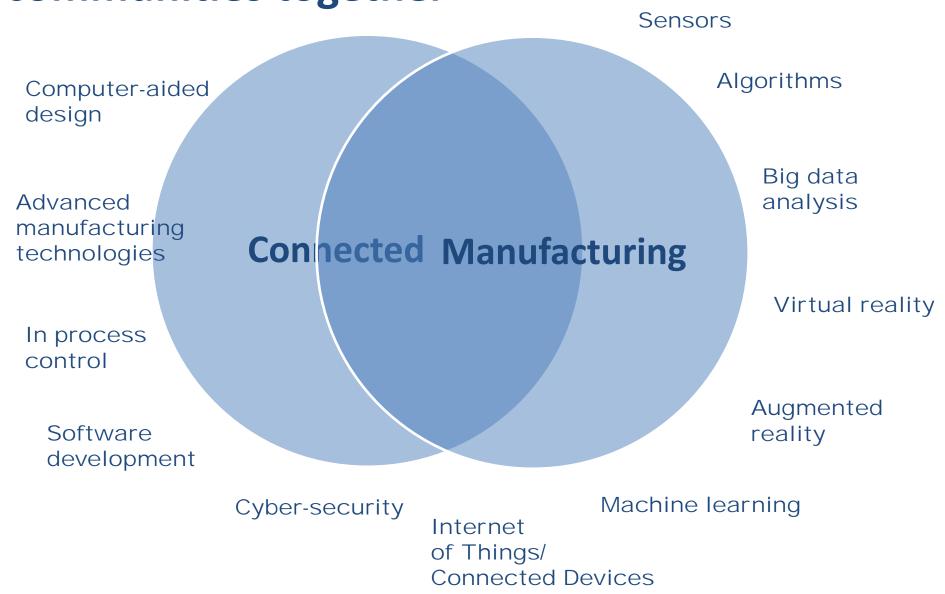
Connecting local manufacturers with digital SMEs Everybody wins...

Digital companies, tech people and entrepreneurs	Manufacturers	
New market understanding and contacts	New ways of considering industry challenges	
Profile raising	Increase operational efficiencies	
Potential for collaborative projects	New products and services to respond to customers' needs	
Opportunity for new product/service development	Improve competitiveness	
Combining software and hardware	New business models	
R&D tax credits	Keeping up with technology developments	





Bringing the manufacturing and digital communities together



Gamification and pulp processing*



- Sweden is leading player in making games for computers, game consoles, mobiles etc.
- IT-cluster FindIT and local pulp processing company Skutskär wanted to investigate how/if they can use gaming in industrial processes.
- Co created new game-based app covers & incentivises:
 - o Routine & maintenance work
 - Safety hotspots
 - Positioning of workers, preventive maintenance
 - Staff feedback
- Interesting and fun improves motivation and productivity





Large and small supporting each other - open innovation



- 'Business Tailor' from regional incubator
 Movexum works with Sandvik (large
 materials engineering company) to identify
 digitalisation needs
- Brokers links with local tech start up –
 Invotech
- Massive industrial area 6m m2 (800 football pitches)
- Co created new GPS system for positioning of materials
- Supports truck drivers and management
- Improves safety and productivity and therefore contributes to growth
- Everybody wins.....

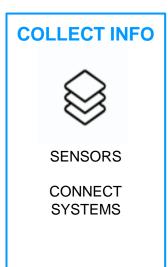


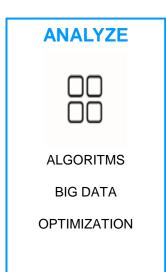




Digitalisation offers new opportunities...

Management and control of material and production flows within the total supply chain. Positioning and event triggers during the transportation generate information for control and provides a basis for evidence based decisions in a control tower.













Lessons from





Author: Pascal Lièvre, 2006, La logistique, Edition La Découverte	Economy of Mass Production 1950- 1975	Economy of quality 1975- 1990	Knowledge based economy 1990-
Ratio demand / offer	Demand bigger than offer	Demand equal to offer	Demand smaller than offer
Knowledge of Demand	Predictable demand	Likely demand	Uncertain demand
Product life cycle	Long	Middle	short
Market size	National	Continental	Worlwide
Technology	Large computer system	Microcomputers	Integrated software and web
Competitive positioning	Price	Quality	hnovation
Management	- Mass Production Management - Zero vacancy time	quality management - Zero stock - Nothing wrong	Management of innovation - Zero response time - Zero Contempt
Main actor	Producer	Customer	Innovator
Management tool	Shortest path	JΓ, Total quality, ERP…	KM, Design by use, C/K model
Place of Human Factor	Man = productive force	Man = creation of value	Man = actor of change
Form of company	Hierarchical	Network	Community







So, what can medium sized cities do to grow jobs through the digitalisation of existing industry and business?

Medium sized cities can...

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- Help increase understanding and benefits of digitalisation (as opposed to automation)
- Help local businesses to understand that this is not about reducing headcount or destroying jobs but about changing the nature of tasks and redeploying existing workers
- Help to remove the 'fear' of digitalisation within existing businesses



Medium sized cities can....



- Act as an honest broker / navigator / catalyst bringing together large and small companies (a 'business tailor')
- Help incumbents to identify and be led by their actual digitalisation needs and find (local) tech start ups which can address them ('in 90% of cases the tech solution exists; in the other 10% there is a start up eager to find it')
- Co-Create 'win-win' relationships between large and small companies.



Medium sized cities can..



- Lead from the front 'walk the talk' by working with (local) tech start ups to (disrupt and) digitalise provision of public services
- Support companies to identify local talent and embed digital skills into local training and education provision (for young and old alike)





Top tips from our speakers on supporting digitalisation of existing business....

Tips on supporting digitalisation of existing business and industry

- Focus on the business needs rather than immediately seeking solutions – the WHY and the WHAT is more important than the HOW....
- Don't seek large catch-all solutions systems can often operate well separately where there is good communication between them – often better than 1 system
- Aim low; think high
- Don't use disruptive brands as your only example - Take a local approach – use local companies as examples



Tips on supporting digitalisation of existing business and industry

- Remember if companies don't embrace digitalisation, it becomes a threat
- Understand the difference between automation and digitalisation – automation is a start – using information from automated processes is where digitalisation starts
- 9/10 times the technological solution already exists. 1/10 times, entrepreneurs are eager to develop it; technology is not the problem. It is more about mindset.





Messages to the Mayor....

Dear Mayor...to support the digitalisation of Existing business please

-understand that digitalisation not about reducing head count. It is about removing non value adding activities and digitalising them
-realise that digitalisation is not a choice for your local businesses – if they don't adapt, they won't survive
- ….look inwards look at the people you represent and work with them. 'walk the talk'
-remember that businesses are your customers too
-don't be afraid to start, take the first step even if it is small, this is important



Tech Town

www.urbact.eu/techtown





With thanks to our speakers:



Peter Nordqvist, project leader, FindIT – Forum for Industrial IT Lars Aspelin, Stora Enso

Arnfinn Fredriksson (business coach, Movexum – regional incubator), Johan Soläng (Invotech)

Roland Andersson (SMT Sandvik)

Ola Wallberg (Fiber Optic Valley – Kick Start Innovation)

Tracey Johnson/Ceri Batchelder (Barnsley Digital Media Centre and Connected Manufacturing)

Dominique Lestant, (e-cluster "Auvergne Efficience Industrielle", Clermond Ferrand)



