



*Photo: Jan Juel – Als Fotografi*

# INNOVATION DISTRICTS MARK THE 4TH INDUSTRIAL REVOLUTION

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**Innovation districts are an emerging urban development trend. Characteristics include diversity of research institutions, companies and start-ups are collaborating in a walkable geographic area. American innovation district expert Julie Wagner recently visited COWI to discuss the phenomenon and its fundamentals.**

Innovation districts is a form of urban development where firms, organisations and institutions connect across disciplines to create a centre for innovation and an environment with walkability, access to amenities and the ability to mix with others.

Julie Wagner, senior fellow at the Brookings Institution in Washington DC, recently visited COWI in Denmark to discuss the phenomenon. She pointed at three assets as fundamental in the development of an innovative ecosystem: 1) economic, 2) physical and 3) networking assets,

Economic assets involve the firms, institutions and organizations that drive, cultivate

and support an innovation district. Physical assets involve the public and private spaces, and networking assets are the social relationships – formal and informal – that ultimately enable collaborative work.

"Two kinds of groups exist in this setting: People with similar background experiences, which can be useful in talking about challenging issues in their field. They are defined as 'strong ties'. The other category is 'weak ties' with very different people from a range of backgrounds. They are harder to mix but research shows that this type of group can lead to new ideas and 'a-ha moments', often as a precursor to disruptive ideas," Julie Wagner said.

## MORE FOCUS ON NETWORKING

COWI's head office in Denmark is a member of The City of Knowledge in the Copenhagen suburb Lyngby, which attempts to achieve just that:

"It is not new that we focus on creating for example workplaces based on the research the universities deliver, but there is a stronger focus on that innovation districts require active, attractive, physical spaces to facilitate that people across sectors meet and engage," Project Director in Urban Planning and Transport, Svend Erik Sloth Rolandsen, says.

"We can deliver strategies to develop innovation districts. For example COWI is engaged in The City of Knowledge in Lyngby. Here we can create the necessary physical spaces as well as infrastructure that connect universities, companies, public authorities and local communities. An upcoming light rail is an example of just that," Svend Erik Sloth Rolandsen says.

## FROM SILOS TO SHARED IDEAS

The trend of the 1950s was a rather secluded form of innovation.

"You had advanced laboratories, but they were separated into individual, siloed

spaces. If you stepped outside, you would also find a landscape that was very reflective of that time, with buildings separated and secluded with the aim of keeping ideas secret," Julie Wagner explains.

Over time, a new mind-set has emerged where the development and advancement of ideas are more "open" or collaborative. Groups of scientists work together to solve complex challenges collectively, and innovative processes – which are increasingly complex – demand the competencies of more than just one organisation or discipline.

"Many of our customers are occupied with creating growth, development and workplaces by establishing a connection between educational institutions, companies and the local community. When we develop urban strategies, it is obvious to look into how we can create these synergies," Svend Erik Sloth Rolandsen says.

## DON'T FORGET THE LOCALS

The aim of innovation districts is not to create a clustered, closed elite but to create a synergy between the locals and the leadership class where the districts can be a means to lift vulnerable areas.

"It is important to implement strategies to grow the skills of the locals to be part of the innovation economy. Data from life science clusters in the US show that 40 percent of the jobs in these innovation districts do not require an advanced degree. It is about creating a pipeline: understanding their existing skills, what career paths are available and how to train people for those pathways. For children, a growing number of innovation districts are opening STEM schools in, or adjacent to, innovation districts. Innovation districts have a responsibility to look at the bigger picture," Julie Wagner says.

# CITY OF KNOWLEDGE: INNOVATION DISTRICTS AND URBAN DEVELOPMENT

- > COWI is a member of The City of Knowledge, which is a unique urban development alliance between private companies, research and educational institutions, public authorities, housing associations and citizens to ensure the continued growth and development of the city of Lyngby, Denmark.
- > The City of Knowledge invited Julie Wagner, Non-resident Senior Fellow at the Brookings Institution in Washington DC, to speak at COWI headoffice in Lyngby and share her expert knowledge on innovation districts.
- > Innovation districts are defined as geographic areas where anchor institutions and companies cluster and connect with small firms, start-ups, business incubators and accelerators. Psychically compact, transit and broadband accessible, they offer mixed-use housing, office and retail.

## GET IN CONTACT



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