

Defining a niche for Facilities Management in Smart Cities

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http://www.ntnu.no/web/metamorfose/metamorfose

Communities are impacted by current challenges in cities



Number of elderly has increased



Welfare services complicated



Maintenance backlog where the decay of public buildings

Slide of Prof. Alenka Temeljotov-Salaj

URBAN FM

Relationship between public and private space

Community management to professional service providers



Involvement of communities in the design and management of services and the urban environment

> Alexander and Brown, 2006

Roberts, 2004

NTNU Norwegian University of Science and Technology

Approach to student activities for FM in Smart Cities

February and March 2019,

3-day workshops with students of a refurbishment, technology and management course.

Objective of the workshops was to gain student perspectives of further development and transformation of real case areas in two districts, Sluppen and Brattøra in Trondheim.

Students examined the concept of Urban FM linking to FM in a Smart City vision.

Students conducted a survey of 19 residents living near Sluppen

| Likes | Dislikes |
|---------------------------|-----------------------|
| Quiet areas | Lack of green areas |
| To live close to the city | Noise |
| center | Poor public transport |
| Live close to school | Poor maintenance of |
| Live close to work | the area |
| Live close to the river | |
| Feeling of a nice | |
| neighborhood with good | |
| communication with each | |
| other | |



Students took a view that Sluppen should be for "all ages"

Make it accessible for not only commercial activity but also residential and recreational activity

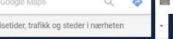
- Activities throughout the day, both at night and during the weekend
- Green and blue areas
- Multiple purpose building
- Connect Sluppen to Nidelva
- Sport facilities (preferably tennis courts), shopping malls, swimming pool, schools, day care, dentists, doctors, etc. ect. etc
- Public transportation needs to be upgraded
- Commercial activities are already there
- Round underneath ground

Students conducted on street interviews with 15 people in Brattøra

| Likes | Dislikes |
|------------------------|--------------------------|
| Nice architecture | Barriers is the railway |
| Not many cars as | Walking over the bridge |
| construction area | People use the car |
| Bike and walking paths | "asphalt jungle" |
| good | Very quiet after working |
| Good waste management | hours No community life |
| in the area | Coast is not taken |
| | advantage of in terms of |

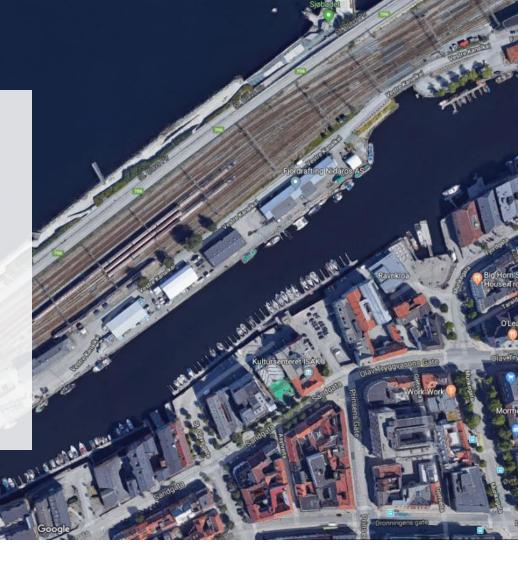
social activities and

accessing views of the fjord



LEISURE/REASON TO BE – Student perspective for Brattøra

Training, swimming, restaurant and park to kids



Conclusions

Built environment limits use and functionality

"Smart" is not just about technology Space between buildings Create connectivity between districts

Urban FM is an intermediary links to function – use – development and district service needs.