A research about Digital social networks influence in urban spaces

Case study – Malmö, Sweden
Stortorget
Lilla torg
Gustav Adolfs torg

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Abstract

This paper sets out the role of social media that can influence the people to stay connected via social networking for meeting up in public spaces. People increasingly use gadgets like laptop and mobile to stay connected for virtual interaction in outdoors. It generates a strong connection and creates more opportunity to socialize and share knowledge with rest of the world. This research paper aims to find the implication of digital social networking for new ways to use public space.

Public spaces in Malmö are chosen for the study such as Stortorget, Lilla torg and Gustav Adolfs torg. These public spaces are been in public attention from hundreds of years and were serving for various generations of public life. It is very interesting to study about digital social networking and how these modern forms of connecting can influence the social interaction in well established and centrally located public spaces.

The study on this topic focuses about solving the problems such as the improving the Visual Qualities, dead spaces, lack of defined outdoor seating and noise level. Objective of this research is to find design principles that support the use of social media in public space. The theoretical background concerns how Digital social networking influences daily life, understanding about urban social interaction in the real and virtual world.

The author has adopted methods such as questionnaire, online question form and Observations. Such collections of data are required to get various opinions from public. This will enrich the understanding on how mobile information techniques will set new requirements for furnishing public spaces. This data is analyzed to yield design strategies for improvement of the existing problems. Data collected from the implemented methods show that people are encouraging the idea of virtual interaction in these public spaces.

As a result, design proposals are made for each square that aim to satisfy the needs of users of the modern generation and seeks to influence the people flow by virtual social media. Thereby virtual interaction will be able to initiate meetings in real life creating livelier city center. The scope of this research is to find a design principle that can be adopted in design of public space for the contemporary users with the new concepts of social life.

Keywords: Social networking, optional activities, WIFI internet, urban squares, social interaction, Place making.
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CHAPTER-1
Introduction

Background
The urban spaces are getting its attention from various ages of people; it acts as informal and formal gathering places for interaction and also serves as an ideal place for people to relax or get entertained, such places are open to public to access any time. In the current generation, people are well connected with each other due to technological inventions and digital social networks, mostly youngsters are frequent users; thus these facts can be emphasized to increase of public usage. In this modern world, internet and mobile are used predominantly as digital networking, thus urban places which meets those criteria of younger generation can be advertise by the users automatically. The quality of a public space can be increased by making it better suited to users of the internet and social media.

Study Area
Urban squares in Malmö, Sweden (Selection is limited within the city core because these squares has been in public attention for several hundreds of years and were serving for various generations of public life)
1. Stortorget
2. Lilla torg
3. Gustav Adolfs torg

Problem and Objective
The diverse users in public spaces are encountering different issues; most users are local residents, shop owners, leisure visitors, passerby etc., General problems identified are improper usage of spaces, visual qualities, dead spaces, lack of defined outdoor seating, noisy hotspots etc.

Objective of this research is to find design principles that support the use of social media in public space. Urban people are using laptops, smart phone and most are carrying them wherever they go, this revolves as advertisement to public space when a user tries to connect with his/her buddies; it increases the possibility to attract the number of visitors to the public space.

Opportunities
The topic is motivated by the use of technological inventions to attract users to public spaces. It is necessary to accept such implements because people are familiar and accepting their existence. WIFI Internet availability in restaurants and cafes are attracting young customers. Mobile usage and social networking are increasing the connectivity between the people. If a place offers good conditions for wireless communication, it will be more attractive for these sorts of users. This in turn may make the place more attractive for many other kinds of people, as “people attract people”(Gehl and Gemzoe, 2001).

This research could serve as a model for designing an urban place better adapted to contemporary behavior spurred by widespread use of communications technology.

Research Question
What are the implications about Digital social networking for the redesign of urban square?

Specific questions
1. What is the possibility to control the noise level disturbing the users in public spaces?
2. What could be the impacts of changing the functions and adding more seating in public spaces to suit the users in terms of digital social networking?
3. Will all ages of people be attracted by such implementation in public spaces? Are negative effects anticipated?
4. Is the split-vision or dual mindset dangerous for a person’s safety in traffic at public places?
5. What are the ways to improve the visual qualities of public space?

**Thesis Outline**

This paper analyses about the possibilities of social networking influence in the public space.

Chapter 1 is about briefing the plot of the thesis, the problems and objectives are identified, introduction of the site chosen for the project and the research question on which the finding goes on were discussed.

Chapter 2 is about knowing the theoretical background of what is social networking and understanding about the intensity of people connected with each other by these technological inventions. The design of public space do have functional activities, optional activities and social activities (Gehl, 2010). This virtual connection binds between people that can influence all the three activities in the urban squares. The changes in life style in public spaces are studied for better understanding to the current users. Advertising Media in virtual and real world are analyzed to find the impact of social interaction that happens in public space. Study on Outdoor seating and noise level are required because it’s closely related and these are the possible ways to keep the users comfortable to stay in the squares.

Chapter 3 discussing about the methodology adopted in the diploma work. Study and motivation process are discussed up, following with the analysis methods adopted such as Questionnaires, online question form and observations. These methods are done to gather empirical data from the chosen site. A brief description about preparation of Questionnaires, Online question form and its limitations were discussed. Observations methods are also discussed in this unit.

Chapter 4 is the analysis of the collected knowledge gained from the theoretical study and empirical data obtained by the research methods. Chosen site are briefed about their physical properties and their historical background. Discussion on the analytical materials and public opinions are worked with graph chart. Comparative analyses and individual analysis of questionnaire of the three squares are also worked to know the major difference and these are required to work on the design ideas. Information collected from online question form is explained with a summary. Observation data such as CCTV image and real time experience and Noise level analysis were discussed up.

Chapter 5 is about the summary of the analyzed data showing as Design strategies, Design concepts adopted and design proposal of the three squares with plans, sections and perspectives. A conceptual furniture design for gadgets users in the square is explained with perspective images of the specially designed prototype furniture.
Chapter 6 is about the results obtained, answering the Research questions, specific questions that rose in chapter 1. Limitation and future research considerations are discussed on it and Concluding the thesis.

Chapter 7 is about Evaluation of the design proposal and the concepts implemented, these ideas are posted in a blog for public view and public evaluated them.

Chapter 8 is references that collected from the various resources such as Book, Journals, journal articles, newspaper and webpage.

Chapter 9 is appendix of Questionnaire form answered by the people in the three squares.

Structure
CHAPTER 2
Theoretical perspective

Urban square - Social interaction
The people in the society are reacting to existing form of public space thus the usage of urban space is related to the materials available in public space. Designer creates potential environments but people can create effective environments (Carmona et al., 2010). There is a need for public space for social interaction from historical time; this always gets uplift after some period of time according to the feature presented in the urban square. Public space is in a form of transition according to the people’s behavior from time to time.

Tradition urban spaces are derived by the buildings, housing units are constructed close to one another and this creates a wall for urban square. Public space are refereed with the term as “life between buildings” (Gehl and Gemzoe, 2001), people spend their time for social interactions, shopping and activities like children play, street entertainments, open market etc.

Urban squares are used for social interaction from the history to till date. The functions are changing date by date due to upcoming need for human life. Physical gathering is much necessary for the society to share knowledge. Different public place for gathering around such as restaurants, café, bars, parks, playground, etc getting attention of the users looking for recreational activities and socialize with others. These public areas can get casual encounters of known people who can bind each other to give power and lives meaning (Carr et al., 1992).

Social media and Social digital networking
Social digital media is defined as service which enables to share various news, information, opinion in ways of multimedia. Social media sites are establishes with contents about any information with videos and pictures. Social digital networking is a sub category of social media by which people are able to connect with one another and share information globally. This advancement leads to various activities, discussion and gives possibility to interact (Hosio and Riekki, 2009).

Users accessing social networking can create their own videos, images and upload text and promote their link to other users. The information can be accessed and other users can also participate. Since its web accessed, within a short time a large number of people are exposed to this media information’s, this information can also be shared by the each individual accessing thus creates a network of people within a short span. Social networking such as Facebook, Google+, MySpace, Twitter, YouTube, etc are popular among the public.

In the year 2009, CEO of Facebook announced the number of users worldwide has reached 300 million members making the social networking as most popular among the people (Zuckerberg, 2009). Social networking statistics about people using Facebook in Sweden has went to 51.12% in comparison to the country’s population and 55.23 % on penetration of online populations. (“Sweden Facebook Statistics,” 2012)

Latest gadgets like Smartphone’s, Tablet PC’s are portable and convenient to carry around anywhere in outdoor for usage. These devices are equipped with wireless connectivity and gives flexibility for the users to stay connected even when they hang out in outdoor zones like coffee shop, while travelling in train, parks etc. thus users prefer stay for long time. People accessing social networking sites in the web are like to share their ideas or thoughts, share pictures, video, upload any kind of data (Hosio and Riekki, 2009).
Social networking is not a new era for internet users and these ideas has already adapted to handy devices. People interacting in mobile social networking have grown up. It is estimated that 3.3 billion Mobile phone users around the world are internet surfers according the New York Times (Shannon, 2008). The possibilities of being connected in the networks are increased because of the portability. It creates the continuity of staying in the network for various discussions and helps to meet. This explores the usage of mobile networking for social interaction in public spaces for physical meeting (Humphreys, 2010). Image below depicts how various communities can interact and have social connections.

![Building social connections virtually (Clarke, 2012)](image)

**Virtual Community - Social interaction**

There is popularity for virtual spaces such as web which is satisfying the criteria to meet and interact such as traditional public space that leads to new identity of urban life (Aurigi, 2005). These new concepts are growing to satisfy the public needs on time to time but it can be argued whether these technology of connecting virtually by telecommunication and virtual world (internet) are trying to prevent face to face meetings in physical.

These ideas do not prevent the use of public meeting but its gives a convenience and flexibility to the lifestyle (Graham and Marvin, 2001). The conversations and interactions are raised easily in virtual talks and many viewers who are able to connect to that social network can discuss on it.

Internets is wide spread media accessed by public and gives possibility to stay connected for discussions and information sharing, these virtual networking supports the new type of social interaction within the electronic space, Such network also supports selective communities or groups to participate. These are artificial platform created by the electronic media. World internet usage and population statistics denotes the usage of internet has grown almost 528 % from the year 2000 -2011([http://www.internetworldstats.com/stats.htm](http://www.internetworldstats.com/stats.htm)).

Social interaction has grown more in the electronic urban spaces; there is possibilities of different community people are to interact and share their knowledge. Discussions about sense of public spaces in real world are losing its purpose. Human experience in real time seems to be limited. Public interaction in streets and sudden encounter of meeting known people are giving much pleasure compared to living in the virtual world.

The virtual communities are called as an illusion created technological inventions and people living in a fantasy world giving much priority to them compared to others in real time(McBeath and Webb, 1997). The real feeling of talking and expression are getting
neglected, but this act completely ignores the dimension of being together (Graham and Marvin, 1996).

**Advertising media in public spaces**

Advertising media is very important to gain public interest in urban squares; this gives a visual impact to attract more people for shopping in such spaces. There is different ways of exhibiting the products such as signboards or advertisement panel on the building. Banners, stickers, signboards are common ways of exhibiting the products. Pictures below depict the contrast between European style and Chinese style of exhibiting advertisement.

Technological outcome of these advertising boards are replaced with visual interaction panels. These are installed in public space where people can interact by touching their surface of the screen; this is called as “City wall”. These are large multi touch display are installed in Helsinki, Finland (Morrison et al., 2008). The main reason to make this attempt is to gather people in public space. Creating such attractive feature with these new technologies is awakening the people to bring back the glory of using public space in this modern world.

Advertising is common thing used to establish any product or any news. People can have flexibility to share their ideas easily by creating interacting panels. Information about the city life, Events or any news is established in the big screens. Interaction panels allow people to write down their comments, share pictures etc.

A similar idea was proposed in Stockholm city in Sweden by installing a 70-inch Multi-touch installation allows people to interact, view pictures, slides, navigate maps etc. (*Stockholm Bygger*, 2012)
Traditional Public space in European perspective
Public spaces have used for various purposes and this concept of gathering changed in different along the course of history. Usage such as meeting place, market place and traffic space exists in traditional cities. (Gehl and Gemzøe, 2001)

Gehl explanations in the book “New city spaces” are that people usage of public space changes in each era. For example in 1880’s, a public space was used predominately by pedestrians changed in a course of time. In 1960 this space turned to serve for vehicle movements. This public space was later changed completely for pedestrian usage. People began to use the space for transit, window shopping and move around but in 21st century, there are other activities happening. There is a shift from necessary activities to optional activities along the history from 1880 to 2005 according to new city life (Gehl, 2006)

Public enjoy the concept of staying outside in public spaces. They prefer to sit down in open areas for communicating and relaxing. Old cities like Venice, Italy still traditionally functions well for meeting, market place and traffic. In the recent years, the car population have increased and already dominating the outdoor spaces this in-turn pushing the market place in indoors or underground.

In the past, most cities were walk able, the cityscape was pedestrian friendly. People walk around the city for various uses such as trade, for meeting, walking around etc. this creates a good balance for the main uses of accessing public spaces. After the new inventions for transportations, city began to expand more and leads to dramatic changes.

Market places have changed from the traditional idea of open booths into small shops along the streets, squares etc. Later this moved into bigger shops, super markets. And in this generation Giant shopping malls are serving as market spaces. Due to these changes, public life is controlled and regulated. These shopping malls are private property and restricted indoor activities. It does not give the real feel of interacting which happens in traditional Outdoor market places. Traditional cities are often considered that cities which maintain a balance within meeting space, market spaces and traffic. (Gehl, 2006)

Malmö city has traditional value, it was founded in 1275, and Public Square of this city has served for different purposes such as Market place later, those squares have been dominated by car movements.

Approx. 1900’s Stortorget
(Approx. 1950’s Stortorget)

Stortorget is the town hall of Malmö city, this square is constructed in 15th century and it served for public usage for different ages. Images above show how stortorget square is used for various purposes.
**Change of life in public spaces**
Cities have changed into various ideas about using space, streets are getting the life and activity and people are interested to spend time to get entertained. Activities like playing music, open markets and window shopping happens along the streets. Public space are getting new attraction day by day such as art installation, attractive benches, fountains and open stalls etc. these are new elements emphasized to bring comfort to the public using the urban squares.

Jan gehl raises a question that “can the function of cityscape can be taken over by electronic media such as TV, internet, mobile technology” Social life have changed in different form but the real quality is face to face meeting, unpredictable meeting experience, those are the quality of cities meeting place (Gehl, 2010). These media are indirect communications that are used as secondary ways to connect more people for the meeting. Many social changes occur in this modern world but even then there is always an increase in interest in staying outside in common public space.

Jen gehl also point out meeting place in societal perspective that media are exploited and they concentrate on inappropriate information mostly such as attacks and accidents, these are creating a change to the image of the city. There should be some kind of strategies to be considered to prevent such crime such as creating activities in common space so that various societies of people gather and interact. This place is open and non gated zone so people can exchange their cultural knowledge and share ideas.

Health conscious talks are also mentioned that in this modern time, people are overwhelmed with the developed infrastructure and sophisticated technology. Walking is replaced with motor vehicles leads to lack of exercise and working behind machines all time making the people unhealthy. These modern cityscape and urban squares are taking care of their healthier life style by adopting strategies such as encouraging public to use bicycling, ice skating in winter, public outdoor exercising etc.

In china, public spaces are also used for elder people to practice dancing, this is considered to be best relaxing and good exercise for their health. European cities like Malmö, Copenhagen are equipped with upgraded pedestrian networks and bicycle paths to encourage people to avoid motor vehicles.

**Importance of Outdoor seating & different types**
Discussing about outdoor seating is considered very important aspect of any public spaces. People tend to stay in public space for their comfort and European cities are focusing on entertaining people to continue to use urban spaces. Importance of continued to stay outdoor depends on the quality of the space. The cityscape is maintained in such manners that people are encouraged to be in outdoors. There are optional activities that are becoming necessary to gain attraction for the public.

Public space in the city are often crossed by pedestrians, most passerby or people waiting for bus, recreational activities, etc. these spaces are very much lively with people moving here and there but Jan gehl comments as good city can be recognized by the many people staying not just walking around, If many people are walking around often it denoted that it’s a sign of insufficient transit options. Standing around is also a short term activity but there is limitations for each individual of how long they stay just standing waiting for bus or stopping and looking around, window shopping. There is a purpose to stay for little longer in each spots thus sitting becomes important aspect. People get tired of walking and most prefer to relax for a while so they start looking for place to relax their back.

Attracting seating’s and locations of them have become criteria to emphasis the public space. Individual using the seating’s preferred to have view of the life in the public or some kind of
activities visible to them such location are considered to be the best. Attractive view is having greater opportunities to be occupied by the people who prefer to stay longer. In European context, people prefer stay in outdoors in summer, sitting outside in a sunny spots are kind of pleasure people like to experience. Artistically decorated benches are also getting its credits but if it’s located in a shaded zone, its turns to be disliked by most people. Urban furniture’s are usually placed next to trees, flower pots and dustbins creating standardization. These are getting an upgrade by new concepts of combination of the artistically outdoor seating and locations.

Lively cities are often considered when people prefer to stay for longer time in outdoors. Social life becomes a necessary to creates an opportunities to all ages to people to move around in city spaces. Many landscape architects and designers are working on various ways of attractive benches in public spaces to gain the attention of the users of the square. Some existing common benches are without back rest; these sometimes are called as uncomfortable benches because meant for staying for short time and not all age people prefer to use it.

**Noise level**
People encounter various noises around the public space. Vehicle traffic, public talking around, market sale’s conversation, children playing around etc. Noise levels are measured in Decibels (dB). The average background noise level is measured as 60 decibels (dB) when people are having a normal conversation, but if it increases to every 8 dB then noise level is doubled.
A study was conducted by the Royal Danish Academy of Fine Arts about finding the noise level in Burano, Venice and Copenhagen. The average noise level recorded in the small street and town’s main street were 52 dB and 63 dB respectively, thus the background noise approximately double as loud as the small street. In Copenhagen traffic street 72 dB was recorded in normal traffic time and it reaches up to 84 dB when there are large vehicles like bus and trucks pass by. This 72 dB of noise level is about three to four times greater in walking normal streets, about 60-65 dB are noted in car-free city spaces with few human movements (Gehl, 2010). People are encountering higher noise levels in cities’ major streets and public spaces.

According to the News paper article “New York post” in the year 2010, 98% of Manhattan’s public space are facing heavy noise levels. Background noises such as car traffic are dominating.

Small pocket parks with outdoor seating and attractive features are also turned to be disliked because of high noise levels. Researchers visited Public spaces in the city including Times Square and Union Square for monitoring the noise level and Most were recorded over 70 decibels.

This shows Vehicular domination in the roads around public space spoils the quality of urban life. People prefer quite and comfortable places to move around and spend time there thus controlling of noise background is very important.

(Bill sanderson, 2010)

Below 75 Decibel level, hearing damage is negligible, and for busy city traffic noise level might reach to 85 decibels.

(WSJ research, n.d.)
Concepts understood are interpreted in flow chart:

Flow chart depicting the relationship between social networking, advertising media & Public spaces (Author created)
CHAPTER-3
Methodology

Study and motivation process
The study of the thesis is about using the virtual networking that is influence in activities in public space. It’s very interesting to gain the knowledge about how the social networking works. These modern ways of discussions over the internet create a whole new experience for the urban users to share ideas quickly. Social interaction in public space have been a prominent fact from the history but in this modern world, the ideology of virtual public space influence the physical gathering
Social networking in virtual world have various private companies, they are growing in numbers and its leads to multi connections such as image below.

People are gained to access multi social networking thro web (Author created)

This concept of social networking is revolving much within the users; this medium is interesting to study upon on how it is influencing people to interact in the public space.
The study was focused on the three squares located in Malmö city and the most interesting fact is all the three squares have a personalized Facebook page. Among the three squares lilla torg seems to be popular. Social networking sites helps people connecting in electronic space but it leads to physical ground such as urban squares for social interactions.
It is very motivating to understand the relationship between virtual spaces linked with the physical space.
Facebook-Stororget ("facebook-stororget," 2012)

Facebook-Gustav Adolf Torg ("facebook-gustav," 2012)

Facebook-Lilla Torg ("facebook-lilla torg," 2012)
Virtual networking needs physical space for social activities (Author created)

**Analysis methods**
This unit discuss about the analytical methodology that are adopted in answer the major findings. The following are the methods which are used to collect data,

- Questionnaire (filled by the users in each squares)
- Online Question form (filled by the people living in Malmö thro web)
- Observations (CCTV image/observations done by the author)

Primary data collection was Questionnaires from Stortorget, Lilla torg, and Gustav Adolfs torg. 30 random inhabitants are to be questioned in each of the square to get the public ideas on this topic. The results perceived will be used to draw a guideline in designing the space for the end users. Questionnaire prepared are framed based on the topic such as their interest in using the square, social networking and other activities in the square.

Secondary collection of data is through online Question form which is prepared on the web and sent to the selective users who are predominantly using the square for various purposes. Using Google Docs Form - Questions are prepared and post on the web for them to access and fill out. Question prepared are based on their preference of using the square in various conditions and their requirements which will help out to extract precise data about the topic.

Thirdly, Observations of the public movement in each of the square are analyzed, Access to surveillance data (CCTV image) from the news paper website, recording noise levels in various spots in each square are done.

After obtaining the required data and information, the problems can be structured and suggestive improvements can be presented. Based on the survey, the result of designing the site will satisfy the needs of the existing surrounding and influence the people flow in and around the public space.
Chosen Study Area and its history
Public squares in the City core of Malmö, Sweden is chosen, selection are limited because people living in the city are well known for these public squares because of its historic value. 

This city is focusing on sustainable development and it’s considered to be the attractive city of high rated for various events on city public space for cultural and entertainments. (“Arrange - City of events - Malmö stad,” 2012). It is located along the southernmost Sweden along the coast line, connecting Copenhagen in less than half an hour. Population of nearly 300,000 inhabitants with 30% of immigrants living in the city

Malmö has been founded in the year 1275, it was considered to be Denmark’s biggest city. After the year 1658, the city and the skåneland become part of Sweden (“Malmö’s History,” 2012)

Study area chosen is limited inside the city core because these urban square has been in through the transition of various ages and served people for social interactions at different period.

Public space chosen for study:
1. Stortorget
2. Lilla torg
3. Gustav Adolfs torg
Stortorget is the town center for Malmö and it is surrounded by the old settlement of the city. King Karl X Gustav statue and bronze water sculpture are the highlight in the square, this square is one of the oldest and was built in 1536. (Mapes, n.d.)

This square is facing governor residence and Malmö City hall. Its area is approximately 20,000 Sq.meters. Thus big events are organized here such as festivals and concerts etc.

Lilla torg is smaller square and its has close proximity to stortorget, this square had most of night life and restaurant activities, the square was built in 1592 for function as market square for public meeting place (“Malmötown -Lilla Torg,” 2012) building around the square are erected along 1600-1800, now it serves as shopping and restaurant/café activities.

Gustav Adolfs torg is often referred as popular market, this square is founded in the early 1800’s, its was named after the King Gustav IV. Before the construction, this plot was outside the medieval city (“Gustav Adolfs torg - Malmö stad,” 2012).

All the three squares are connected by shopping streets and only pedestrian movements are allowed but Stortorget and Gustav square have vehicular movement around the square.
Case study – I (Stortorget)

King Karl X Gustav statue
Bronze water sculpture

Parking lot
Outdoor seating area infront of city hall

Area - 19624.82 Sq.m

**Highlights**
City hall  
King statue  
bronze well sculpture  
Fastfood  
Car parking lots  
Underground toilets

**Negatives**
30- 40% area is occupied for parking lots  
Inactive seatings behind the statue

Illustration shows existing functions and elements in Stortorget
Case study – II (Lilla torg)

Buildings aged 1600-1800
Well sculpture

Outdoor Seating's restaurant/cafè

Area - 3820.33 Sq. m

Highlights
Pedestrian streets around
Restaurants surrounded
Well sculpture
Bicycle parking lot

Negatives
Public activities are less in day time

Illustration shows existing functions and elements in Lilla torg
Case study – III (Gustav Adolfs torg)

Illustration shows existing functions and elements in Gustav adolfs torg

Florist shop
Inactive seating space

Restaurants/cafés
Informal Seating's along fountain

Area -12841.59 Sq. m

Highlights
- Bus station
- Fast food
- Florist stall in daytime
- Fountains
- Greenery and trees
- Restaurants & shopping surrounded
- Bicycle parking lot along corners

Negatives
- Passerby is high
- In active seating spaces
- Visibility and connections are not clear
Optional activities - Social networking

According to Gehl, if the physical environment Quality is high, there is an increase in use of optional activities and social activities.

This topic focuses on such activities to find out the ways of increase the quality of public space with the Digital social networking. People are connected virtually by the social networking thus this idea has a possibility to create a space for people to interact in public places. Public squares and its usage are getting updated at every generation by the technology and ideas which people are overwhelmed. People are involved in place making process.

Some examples:
1. An Urbanist made a concept for OpenIDEO which is a global community to sharing ideas. His concept was “Open city” – which brings principle of place making process with the use of an app in the Smartphone and creating spaces for new ideas (Matthew rouser, 2011).

2. There was surprise event happened in a public space of a little town in Belgium, It was a launch for a TV channel TNT. They placed a Red push button in the center of the square and hanged a big sign of text “Push to add drama” on top. This is a kind of theme adapted to create attention in the public view with a twist of surprises. As someone pushes the button, a series of drama began to happen in front of public to surprise them.

(A DRAMATIC SURPRISE ON A QUIET SQUARE, 2012). by turnerbenelux
People are overwhelmed with the technological invention. Usages of laptop, Smartphone, Tablet PC are outnumbered. These are turned to become essential gadgets to stay connected with the web for various personal use or business purposes.

Image above shows young generation are mostly to enjoy staying outdoor with their laptops. For example: In Paris, most public spaces like gardens, parks etc are equipped with Free WIFI- access points. This encouraged people to carry their laptops wherever they go.

A web article by Eccles deals on public space "Is Wireless Connectivity Driving a Behavioural Evolution in Public Space? (Jonti Eccles, 2011).
His article discusses about how function of communication changed in public spaces. Face-face interaction is common but then the communication technology has developed further to connect virtually.

Bryant Park NYC is an example of people using laptops in the benches for accessing wifi internet to use virtual social groups to stay connect with their buddies. Suggestive note was these parks could have additional facilities for informal meetings that will encourage people to hav social meetings in realtime after the virtual talks.
People are using a choice of devices for accessing WiFi internet and they have a variety of functions to access but for communicating quickly Digital Social networking stands apart and it dominates.

The idea of adopting a virtual networking tends to invite more users, this is considered to be optional activities as Gehl pointed out. The concept is interpreted with Gehl different activities in public space such as necessary activities, optional activities and social activities.

Flow chart shows the Interpretation of Digital Social networking & Jan Gehl –outdoor activities (Author created)
Questionnaires
The questionnaires are framed to extract the opinion about public interaction and social activities with Digital networking. According to Jan Gehl, if the physical environment Quality is high, there is an increase in use of optional activities and social activities, this topic focus on such activities to find out the ways of increase the Visual qualities of public space with the Digital social networking where people are connected virtually.

Due to time limitations, 30 candidates were chosen randomly for each of three squares so this data is considered to be tentative. The times spend on the squares for questionnaires were between 10.00 am – 1.00 pm on weekends and weekdays (Date: 25th to 29th February 2012).

Questionnaire Analysis:
This analysis is calculated in finding the percentage of people who are interested for each of the questions. (FigA-14a, 14b, 14c) was optional and it’s a suggestion based questions thus most people neglected to answer up however few people spend their valuable time to answer up.

All the bar charts below are prepared by the author.

There was a need of collecting information about people using Phone/tablet PC with internet connection. According to the questionnaire results, (Fig.A-1) shows comparatively all three squares have potential of 65 - 75% of people are likely to use the modern generation smart phones and tablet PC for internet purpose and only 20 – 30% people have opt for phone without internet. Less than 10% people are still not carrying any devices.

(Fig.A-2) shows about percentage of people carrying laptop has been reduced in this modern time. Working class people and students prefer to stay connected in internet and follow up their activities but now a days, people using laptop in outdoor is consistently low compared to before. But still 20-30% people prefer using laptops in urban squares. In this generation; technology is upgraded with smart phones and tablet pc. Those are fully loaded with most of the functions of laptop with ability to use internet and it’s handy, easy to carry.
According to (Fig.A-3) People are much interested with restaurants and shopping activities in Stortorget and Lilla torg but in Gustav Adolfs torg square, the passerby are high because of bus station located on this square. People visit this square often even they don’t willing to spend time.

Purpose of Social interaction very low in stortorget and Gustav Adolfs torg compare to lilla torg, this is because of the size of the open space, lilla torg is enclosed and comparatively smaller in size. But the other two square are large and these squares are also used to conduct many public events for social gathering in various seasons. Almost 25% people preferred to use the square for private time in gustav square but only 5-10% prefer stortorget and lilla torg square.

Private time in lilla torg is comparatively very low this is due to closed spaces and this square is meant mainly for restaurant activities. This squares receives most of the users in the evenings or nights for café, bar, night club activities etc
In the (Fig.A-4) People visiting this square are compared and the most interesting fact is all three squares are visited by 40 - 60% of people on weekly basis. lilla torg and gustav square gets more credits for percentage of people likely to visit on daily basis 25 - 30 %.

![Image](image1.png)

Fig.A-4

In (Fig.A-5) was about people preference for Restaurant/café that has WIFI internet facility. According to the questionnaire results, people voted for 70 – 80 % as “it doesn’t matter” in lilla torg and Gustav Adolfs torg and people preference to use internet is likely to be 30- 45% in the big squares. Lilla torg is an exemption, only 15 % preferred to use internet. Only a very few no. of people have opted for without WIFI internet facility in stortorget and lilla torg.

![Image](image2.png)

Fig.A-5

Internet facility has become a new idea to attract younger generation because of people interest to stay connected. Thus restaurants and café owners prefer to gain customers by adding such features in their outlets but at the same time, there are limitations with the usage of internet for an hour. When a Customer buys something from the restaurant he /she get the access to the WIFI internet.
Using laptop or internet facility in public space has increased but it depends on each individual’s perspective.

(Fig.A-6) shows preference about percentage of people likely to use laptop or internet facility in public space. In Lilla Torg and Gustav Square only 30 - 40% people are interested to use these facility but in Stortorget more than 60% prefer to use laptop or internet facility. People who prefer to use laptop or internet facility in the public space have answered for the coming up questionnaire.

(Fig.A-6a) shows that all the three squares are comparative similar that from 15 – 35% people prefer to stay for an hour to use internet facility and only 5 - 15% prefer to stay for 30 minutes and people prefer to stay for 2-3 hours is lower than 5%.

People activities are changed in this modern world. In traditional urban life, public space acts a key for social living and interaction but now this is replaced with virtual world called internet.

Social networking had become in a digital form that people stay connected even if they don’t have to meet each other. Public spaces have become a medium to stay connected physically for social interaction or other activities.
(Fig. A-7) below was about how often people are connected with their buddies using digital social networking and this was categorized in various time of usage such as every hour, every four hours, once a day, once a week, once a month and never.

Most candidates participated in stortorget square picked for “every 4 hours” was about 40% but in lilla torg and gustav once a day of social networking usage was selected by 33 – 36% people. Every hour usage is relatively low in the all the three squares as 13 -16%.

(Fig. A-8) shows about percentage of people invite their close one/buddies to the square. This was to know about the chances of advertising gained by the squares. Interesting fact is almost many as 40 -60% occasionally invite their buddies to the square and 20 -30% rarely invite people but only 5 – 15% people often meet up their known friends in the square.

People are much occupied with their work and schedule in all ages but when it comes to go out to some public space they prefer to be accompanied by close ones /buddies.
This is a kind of formal interaction spot for everyone. Urban Square are often used for social interaction and public gathering even in the history and also continued in this modern trend.

![Graph: How often you use outdoor seating in urban square](image)

**Fig.A-9**

People prefer to use outdoor seatings in public space varies for different seasons however this questionnaire asked in general and (Fig.A-9) shows 40-60% people prefer to use outdoor seating when they want to relax. Not everyone is interested to use outdoor seating every time they come. Only 10% people are interested in stortorget and gustav square but in lilla torg 26% people opted for. These squares do not serve much for private chat that’s why only 16% people preferred in stortorget but other two square are comparatively very low than 5%.

![Graph: Do you enjoy the conditions of this square in terms of outdoor seating space?](image)

**Fig.A-10**

(Fig.A-10) expresses about people enjoying the conditions of the square in terms of outdoor seating space. This is kind of public opinion about seating and comparatively, the majority on all three squares was “partially seating can be increased”. In stortorget 66% people voted for it but in lilla torg and gustav square only 40-50% opted. Most people had a quick view of the public space and filled up this question, one random public commented to the author in lilla torg that this square is crowded in summer and there is no place to sit down.
People also pointed out about “no need for more seating” in lilla torg and gustav square was 40% and 35% respectively but only 13% stated this in stortorget. Lack of seating was mentioned in all these squares but it’s around 10 -15% only thus this can be neglected.

There is uncomfortable situation in public space because of various reasons and public information in the questionnaire will be useful to find the problems. (Fig.A-11) shows the percentage of people not comfortable with various things like it's noisy, it's crowded, and no enough entertainment or joy. Only 15 -27% of people stated as noisy spot on the squares, In those stortorget and gustav square are considerably more noisy. Lilla torg is considered to be most crowded square of 33% even though the size of the square is small and 43% of people stated that this square comfortable in its current condition. Stortorget and gustav square are considered that there is lack of entertainment or joy, Around 40- 45% of people voted for it. A public opinion was received in stortorget as “there is no enough trees”.

People using public space prefer to stay longer only when it’s comfortable, so there was a need to find out the most disturbing thing in the square which the users encounter. In stortorget and gustav square, Motor vehicle’s dominate the most disturbing fact for 65 – 75%
people. 50% people have voted for lilla torg that this square is considered to be comfortable. Some people also pointed out that even people using the square are disturbing the other users. People disturbing in the Square- Stortorget, lilla torg, gustav has got voted as 30%, 20%, 10% people respectively. Stortorget is getting the most disturbing no. of people comparatively according to (Fig.A-12).

Usage of public space in various seasons are looked into consideration and there was a question raised whether a weather shelter is required or not and this finding helped out, According to (Fig.A-13), People interest is that more than 85% people accepted for a weather shelter in stortorget and 78% in gustav square but in lilla torg only 52% voted for.

This is an optional- public opinion question given to know their feedback of how they feel about these public spaces and very few answered this question. (Fig.A-14a) shows the public required feature of activity they prefer in the square –Stortorget. A total of 5 people answered out of 30 and few had similar answers. Those are categorized and prepared in chart to express in percentage of people interest. 6.5% people prefer to have more café/fast food and shopping malls in this square and other comments are adding more landscape such as green planting, water bodies, trees and theater, art exhibit in the public space.
In lilla torg, people showed interest to think a while to and answered this optional question. 14 out of 30 people answered this. (Fig.A-14b) shows various interests of optional activities and social activities people are interested. Musical activity was mentioned most, Open Markets, fun are for children’s, Ice skating in winter. Exhibits were mentioned by 6.6% of people. Minor point were small parks, free Wi-Fi spots, Cheap beer sale.

In Gustav Adolfs torg, around 8 out of 30 people answered this question, Most people are trying to skip this question due their busy lifestyle. (Fig.A-14c) shows most people answers were about more eating out spots, Music and some play area for adults. Children fun activity and open market was also mentioned in this square by smaller number of people.
Fig. A-15

(Fig A-15) is about the percentage of people’s Gender answered the questionnaires. Stortorget and lilla torg had a similar data out of 30 people -16 male and 14 female answered. In Gustav Adolfs torg square it was equal.

Fig. A-16

(Fig. A-16) shows the age of the candidates attended the questionnaire, this was collected to find majority of user’s age accessing the public space. In Stortorget 20-30 age people were around 66%. In lilla torg and gustav square was 46% and 36% respectively. Age between 30 -40 people were 30% in lilla torg and 43% in gustav square. Rest of the age group people like (17-20), (40-50), (50-60) and (60-70) were comparatively low.
Comparative analysis:

- Most users in the square were around 20 -40 aged people.
- Phone/tablet pc usage is high compared to laptop & they prefer to connect with internet for at least 1 hour.
- Main purpose is: Restaurant & shopping, passerby
- Weekly visit to the squares and occasionally invite their friends
- Stay connected with digital social networking (every 4 Hrs or once in a day)
- Public prefer to relax in outdoor seating & partially seating can be increased
- Vehicle movement is disturbing in stortorget & gustav adolfs torg
- There is a need for weather shelter from rain, snow and wind

Individual analysis:

Stortorget

- Prefer to stay in restaurant /cafe for internet
- 65% prefer to use laptop or internet in public space

Public suggestions

- Trees/green planting/water
- Cafe/fast foods
- Art exhibits
- Theater

Lilla torg

- Prefer to stay in restaurant /cafe but internet “doesn't matter”
- Prefer to use laptop- internet in the square is very low
- There is no disturbing fact

Public suggestions

- Light music
- open market
- fun for kids
- ice skating
- free WIFI
- cheaper beer
- Art exhibits

Gustav Adolf’s torg

- Passerby is higher in number.
- Prefer to stay in restaurant /cafe but internet “doesn't matter”
- 40 % prefer to use laptop-internet

Public suggestions

- Play area for adults (ping pong, table tennis)
- music
- open market
- Children fun activity
- more eat outs
Online question form
A web based Question form is done using Google Docs and forwarded to selective candidates. The reason for preparation online web form is to find out the preference of users who access public squares for using internet. The feedbacks from different opinions are useful to sort out their interest to form the guidelines in designing Public squares.

This Online form was restricted to 4 candidates from Malmö because of time limitations, so this data is considered to be tentative.
8 questions were asked as general opinions in that question 5 and 7 are choice based question with defined answers. Candidate’s answers are differentiated by denoting as A), B), C) & D)

Summary

1. Do you prefer park or these squares for using internet and why?
   A) No, can't focus on what I'm doing.
   B) No, I don't prefer using internet in parks or none of these squares. Because I go to these places relaxing myself and with my family
   C) The park is preferred as it’s quite relaxing to surf and watch what you need
   D) I prefer Park; because it is the place with no noise and where people come to take rest/spend free time. But, there should be internet access, because in some Park we will not be able to catch the Internet access.

2. Do you require shaded space-seating for using internet?
   A) No
   B) I don't need shaded space seating in the public square
   C) Yes
   D) Yes, for sure.

3. While using internet in public square, is there any disturbance in the square?
   A) Yes
   B) I have never faced it ;)
   C) Yes as there are many people moving around some like to peep as well
   D) Yes, had couple of times.

4. Do you feel secured while using laptop or any device? [Any safety problems]
   A) No, just avoid using laptop or devices different from phone in public places
   B) Yes
   C) Now the technology has been improved so much that it safe but of course there are few risks which needs to be taken
   D) Yes.
5. Which type of seating you prefer to use laptop or any device in public space?
   - Proper back rest (2 candidates mentioned)
   - No need - I prefer lying in the grass (1 candidate mentioned)
   - Seating without back rest (1 candidate mentioned)

6. Do the public spaces satisfy the needs of sharing information’s & socializing?
   A) No
   B) Yes, of-course. That is the place where we get to know about many new good people and also to get aware of some strangers.
   C) Somewhat yes
   D) Yes, I normally sit with my friends and share any information regarding work, sometimes family.

7. How long are you living in this city?
   - 3 -5 years (3 candidates mentioned)
   - More than 5 years (1 candidate mentioned)

8. Age
   A) 31   B) 29   C) 44   D) 26

From the gathered data, the understandings of answers are summarized below.

- Designing Urban square can add green parks for visual comfort. By adding internet facility to it, this gains comfort of relaxing even while using laptops.

- Shaded space seating for using internet is a debatable because it depends on the users who wish to spend time on the square. If the user prefers stay long then obviously he/she favor the shaded space for comfort ability to avoid getting a glare in the laptop screen while using.

- Using internet in public square will gain disturbance from various activities happening around. People expect a private space for using laptop within the public square.

- Most People are feeling secured while browsing with their laptop in public squares

- Many accept that public squares are satisfying the need for socializing, sharing ideas and meeting new people.
Observations

Date: 2012-03-10 Time: 13.53
(“webbkameror-stortorget,” n.d.)

Demonstrations today

Malmo: The demonstration were about twenty people in the town square, in a demonstration organized by the Sweden Democrats.

An hour earlier, at 10.00 Tuesday, there were hundreds of counter-demonstrations in the town square, organized by "National's Network Against Racism.

The area in front of Opi, which is cordoned off and a score of police officers in place, reports Sydsvenskan Vaxholm Chalmers in place.

The blinding light is necessary in order to separate the demonstrators to.

"We make an assessment of who can come in, but it is not obvious to go into a closed area. Our mission is to get the demonstrators to organize themselves, as they have been allowed to organize, says Patrik Holmstrand, commanding chief of police.

When Sweden Democrats came to the square they were met by "SACKFLYK from counter-demonstrations, who also called the police in with great.

(NewsPaper WebArticle - Sydsvenskan.se)

This is an article in sydsvenskan webpage about public gathering in stortorget. The character of the square changed dramatically from the regular period. This gathering was organized for political talks and there were some issues. However the point is, people reacts to different events in the square. The functions of the space changes from time to time depend on what is happening.

Image below are taken in different timings to see the intensity of people using the square and it seems strength of people activity is more from 12:00 – 15:00 however this may vary depend on the sunshine. People prefer to stay in public space when is actively bright and shaded spaces are often inactive.

Date: 2012-03-21, Time: 12.43
(“webbkameror-stortorget,” n.d.)

Date: 2012-03-26, Time: 18.29
(“webbkameror-stortorget,” n.d.)

Images are collected from a webpage” www.webbkameror.se” which offers 24hours live camera view of stortorget.

However, there are no CCTV images acquired for Lilla torg and Gustav adolfs torg.

In Lilla torg square, the intensity of people is not visible much in day time. This square has known for Restaurants and nightlife activities. Public activity in the square is very low however during summer; this square is occupied completely for dinning. Lilla torg turns into
a food court. Majority of people moving in the square is from shopping street in the down east.

Interesting fact about Lilla torg is, this square is surrounded by pedestrian streets thus only bicycle movements and pedestrian are getting more comfort in accessing. This square functions mainly for dining purposes thus other optional activities are very low.

Based on the observations in real time, Gustav square seems to be most lively. Many inhabitants using this square as a transition space to move from their home, office work, etc. Due to location of bus station in this square, the flow of people is continuous. People moving in different directions and certain paths are identified as higher Public movements in the squares.

Some of the users of Gustav square quoted that “This Square is most crowded in summer that there is no room to sit down “This shows the intensity of people occupy the square depends on weather conditions.

People using this square as a transition space and for short breaks along the fountain in Gustav Adolf’s torg

During the observation, people flow is gradual from north south directions across the shopping streets on the both sides. It’s connecting Stortorget in the north and Triangeln square in the south. Interesting fact about this square is the open stalls which give a little breakthrough for the users. People attention is pulled by florist stall, a guy playing-music, selling snacks in fast food etc.
Public movement

The locations of these Squares are in alignment from north to south thus Railway station and bus station are well connected and its distance between them is approximately 850 meters thus its quite walk able for the public.

There is a shopping street connecting stortorget and gustav square, there is another shopping street connecting gustav square and triangeln square. Thus public flow continues down towards other parts of the city.

People pass along public squares for various reasons such as window shopping, buying a coffee, sit down in the sunny spot, on the way to take public transportation etc. These public areas act as a breathing space from their regular time of living. People prefer to come and relax in the square is comparatively less than people pass by. Interesting facts are only attracting people.

The locations of different amenities are important for the people to pass by and people prefer to choose the roads for quick and comfortable accessibility.
Noise level analysis
There are various noise levels that are disturbing the activities in the public square. In order to comfort people with better noise protected zone in such square, analysis of existing noise level are to be noted. As part of Observation analysis -Noise level recording is done in each of square by using I phone application.

Device: I phone 3GS
App name: Decibel meter
Developer: Man eye

On 10th April 2012, few randomly selected spots are chosen for each of the squares. Time spent on the squares between 12:00 – 13:00.

Below Maps shows the spots where the DB level recording is taken and a detail graph chart is prepared out of the findings. As per the finding, Gustav square is likely to have some noisy spots compared to Stortorget and lilla torg.

Below 75 decibel is considered to be in comfort zone.
Design Strategies

There are certain key points needs to be considered while designing the public space such as
- Public Square needs to change its identity to the new trend.
- Adopting more seating feature in the square can invite many to stay
- Informal meeting space has to be created.
- Shaded space and non shaded space are to be defined to various users.
- Attracting people with wireless internet facility and unique designed seating’s.
- Virtual interactions and opinion sharing has to be there.
- Place making process – creating space for optional activities
- Greenery and park spaces need to be created.
- Controlled vehicle movement around the square
- Noise level controlling should be focus on certain spots.
- Weather shelter need to be adopted during necessary seasons [Temporary installations]

Design Concepts

The idea of creating virtual communication is emphasized in the design. Adopting features such as Free WIFI internet in public spaces will induce many younger generation and working class people. Installing Interaction panel will enable people to suggest and vote for certain events, this will create place making for better lively neighborhood.

Facts considered while designing are mentioned below,
The accessibilities are highlighted according to the people movement and visual impact spot are located for installing interaction panel. Spaces in the square are defined as shaded zone and Non- shaded zone such as Green Park and paved elevated spaces. The elevated stage is designed with circular pits and accessed by steps and ramps; these are informal seating spaces for group conversations. The boundaries were highlighted with green hedges.

For Stortorget square, Basement car parking is proposed and car ramp, lift access are highlighted. This underground car park can accommodate 200+ cars compared to existing condition with 100 car parks.

For Lilla torg, Clock post is proposed in the centre and defining the spaces, because many working class people crossing the square.

For Gustav Adolfs torg, shared space is highlighted in pavement where car traffic and pedestrian crossing is meeting to avoid conflicts.

A Conceptual 2D Animation is prepared about how WIFI internet and Interaction panel helps in connecting people for interaction and enables peoples to create place making for various activities in public space.

Web link for watching the animation: http://www.youtube.com/watch?v=qMOhjnZlW5U
Conceptual plan:
Proposed design

Green hedge ht 1.8 m
Raised stage with circular plia & steps for informal seating - non shaded space
Car ramp to access underground parking
Lift access to underground car park
Small park - shaded space
Bicycle parking

Existing underground toilet access

Car ramp to exit from underground parking
Existing Wall sculpture
Curved seatings to give different perspectives
Existing king’s statue
Highlighted accessibility path
Placemaking zone for optional activities
Interaction panel - discussion board

Plan of Stortorget

Section-A

Bird eye view
Perspective towards South
Perspective towards North
Perspective towards West
Plan of lilla torg

Section-B

Bird eye view 1

Bird eye view 2

Perspective towards South west

Perspective towards North west
Plan of Gustav Adolfs torg

Section –C

Bird eye view

Perspective towards South

Perspective towards North east

Perspective towards North
Conceptual Furniture Design

A Conceptual model of Outdoor furniture is designed. This is specially designed Prototype furniture for Gadgets users. This informal seating will give more comfort and convenient for relaxing and using tablet PC, laptop. The Design of the furniture is simple and curvy structure for comforting the back and roof cover shading for the screen of the gadgets.

Materials are metallic frames with Power socket along the side and wooden finish for resting on it. This furniture is a temporary installment placed in the square for certain seasons, analyzing the intensity of people using the furniture will be helpful in further research.
Furniture placed in Stortorget

Furniture placed in Gustav Adolfs torg
CHAPTER-6
Results

**Major findings** (Answering the Research Question)

**What are the implications about Digital social networking for the redesign of urban square?**

Public spaces are in need of uplift with the technological inventions to make it easy to connect with many people in a short time. Digital social networking is established and well known to many users living in the city thus by adopting such features can induce the functions of the square in different ways.

Digital communication features in public space
- Wireless Internet facility (Free WIFI zone)
- Interaction panel

People of all ages are comfortable with this social networking to stay connected with their other buddies, thus by adopting wireless facilities and informal seating’s in public space will allow them to feel updated to the current trend and comfort them. Carrying laptops and smart phones are becoming necessary for various comforts such as education, business, commercial and entertainment purposes, thus making it more convenient for them to use those gadgets in public space will increase the number of users to the square.

The concept of adopting virtual interaction panel in the public space is to connect people, share opinions, ideas. This creates a possibility for place making with public interest however the city authority has rights to control and delimit the functions in the square. By digital communities like blogging, video sharing, public can have virtual discussion, but to make that into a real time activity, these web based community and discussion can be adopted as public display in the urban squares. This is called Virtual interactional panel / Discussion board. Unlike a normal discussion board, this is touch enabled screen which allows People to read text, watch images, video etc. People can rate others ideas, opinions. Like, dislike them by touching.

Place making a key for lively neighborhood in public spaces, it is becoming an essential part to the urban life and allowing people to choose what function they need and rate them is the ideal way. This works by the people and for the people. By adopting such interaction panel, many new ideas will emerge and people can get access to their needs.

**Specific questions:**

1. **What is the possibility to control the noise level disturbing the users in public spaces?**

Noise level in Public spaces is common problems due to traffic movements by vehicles or people get crowded, market sale, load music, open concert etc. Many public spaces are in lack of controlling the noise level. Creating a sound shield is very much necessary for the comfort of the people using the square. Adopting sound absorbing materials, thick green hedges, adding trees along the road, wooden benches can reduce the noise load.
Car traffic zones can be regulated with time limit and speed limit along the surrounding roads to the public space. During events, these squares have to be installed with sound absorbing materials to control the intensity of sound.

2. **What could be the impacts of changing the functions and adding more seating in public spaces to suit the users in terms of digital social networking?**

Adding more seating spaces is not going to help out to attract many users but making it attractive is very important. Redesign of the seating has to comfort the end users for using their digital devices. Informal seating’s are preferred for group conversations. Free WIFI internet facility in public space will allow many internet users to flow in with their gadgets however to comfort them specially designed furniture can influence and attract them.

3. **Will all ages of people be attracted by such implementation in public spaces? Are negative effects anticipated?**

Almost all age people living in the city are Internet users but most public space users prefer to come to square to relax and comfort him or have a chat with his friends, thus creating informal spaces will help people to interact and have fun. Shaded space and non shaded space are need to defined thus various aged people can choose between them according to their need.

4. **Is the split-vision or dual mindset dangerous for a person’s safety in traffic at public places?**

Public squares are used as accessibility or a movement space and many users move along while they talk on phone or listening to music. It is dangerous for each individual; many urban people are doing this mistake of keeping mobiles in their ear and walk along the roads. Conflicts occur when people collide with bicycle riders or vehicles, obstacles along the path. Urban designers are responsible for designing space with barrier free, considering different levels and visibility of objects that are bound to get conflicts.

5. **What are the ways to improve the visual qualities of public space?**

Public squares are in lack of visual quality, grey spaces are to be removed and highlighting colors can attract younger generations. Visual connections and clear accessibility are necessary to any public squares. Green landscape, art sculptures plays an important role in designing a public space. Public movement spaces are to be defined thus conflicts can be controlled.

**Limitation and future research**

This research had various limitations in collecting empirical data from the public such as Questionnaire and online forms. Due to time limitation, the analyses were limited to certain number of users. For higher Quality of statistical data, the number of user’s questionnaires can be increased. Noise level recording done along working days and weekends will be useful to differentiate the difference in use of the square at various times.

Future research about this topic can be continued by taking Interviews from the urban designers from Malmö authority, local residents and visitors who are using the square. Observations about finding out number of users connecting WIFI internet in the Urban Square can be used to make a strategy of people flowing for using this facility. Weekends and weekdays activities can be measured to find the hyper activities of wireless connections.
Installing a prototype of specially designed outdoor furniture’s for wireless gadget users would make it possible to find out how the design responds to the needs identified in this thesis and obtain feedback from the users. City Authorities can invite various Professional like landscape architects, Product designers etc to make a proposal to design a prototype furniture for the square especially for modern users.

**Conclusion:**
The study of social networking in digital form and learning about the characteristics of each square was analyzed to understand the diversity, Qualities and conditions of the square. This yielded the design strategies to make the proposal for the Squares.

Urban squares are in form of changing the functions for various activities, this concept of technological ideas feed into the square will induce users of the square to share ideas, and implement various optional activities in the square.

The research is exploring means of making a certain public place more known to the internet community by offering good digital connectivity on this place. Such design criteria and outdoor furniture will satisfy the needs of the users and will be worked out for the public spaces, thus more aligned to contemporary users. This research leads to elucidation of an upcoming design problems in public space.
CHAPTER-7
Evaluation

Evaluation is made by posting the concepts of the research and design proposal in a Web blog. By Using Google blogger and Google documents, the blog and evaluation questions are prepared and this web blog is launched in the internet for collecting public opinions. This blog was launched on 14th May 2012 and public reviews were collected until 17th May 2012.

Web blog: http://www.digitalsocialnetworkinginpublicspace.blogspot.se/

Evaluation results: 47 people evaluated this.

Bar charts shows number of people voted with respective to the scale 1 to 5 (1- least, 5- Most)

1. Rate these features that you recommend in the square?

Informal seating’s (Elevated stage -circular pits) Place making for various activities

Shaded space- Green Park
2. Which of these squares should be prioritized?

**Stortorget**

![Stortorget Preference Graph](chart1)

**Lilla torg**

![Lilla torg Preference Graph](chart2)

**Gustav Adolfs torg**

![Gustav Adolfs torg Preference Graph](chart3)

Comments:
- How about an underground small shopping mall in Stortorget?
- The Stortorget should be prioritized of it scale compare to other square and Gustav have more opportunity of it is location near the public transportation facility.
- Lilla torg seems to be focused asap.

3. Rate the possibility of implementing this concept in the square?

![Possibility Rating Graph](chart4)

Comments:
- When we have the elevated seating arrangement, it would be a good option to have the pits with flowing water (Warm during winter / normal water during summer)
- would be soothing to have the foot immersed in the water.
4. Can these concepts invite more users to the square then compared to the present conditions?

![Bar Graph]

5. Overall, how do you rank the concept?
   [1 = Poor, 2 = Fair, 3 = Good, 4 = Very Good, 5 = Excellent]

![Bar Graph]

Comments:
-This approach seems to be futuristic and say "Thinking behind the beyond". It provides more of public opinion on what’s to be created.

-This concept seems to be simple, yet powerful. One of the main projects in management sectors is, overcoming the complication in collecting the scattered ideas. This project seems to be very good for that. This project not only brings the ideas of people, it also brings the people together, which increases the productivity in any terms. Excellent work! Keep Going!
CHAPTER-8
Reference

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All Images and illustrations which are not mentioned with citation are created by the Author.
Stortorget/ Lilla torg/ Gustav Adolfs torg

Questionnaires for surveying the public: Please tick one box for each item

This questionnaire is a part of my thesis, the aim of my study is to analyze the people usage of social networking in public space and possibility of increase the users in the urban square. In this modern world, internet and mobile are used predominantly as digital networking, thus urban places which meets those criteria of younger generation can be advertise by the users automatically. The quality of a public space can be increased by making it better suited to users of the internet and social media.

Are you carrying:  □ Phone/Tablet PC with internet □ Phone without internet □ No phone
Are you carrying laptop:  □ Yes  □ No
1. What is the main purpose to come across the square?
□ Restaurants &Shopping    □ Social interaction □ Private time □ Passerby    Other Opinion:

2. How often you visit this public place?
□ Daily □ Weekly □ Monthly □ Yearly

3. You prefer restaurants/café:
□ with WiFi internet □ without WiFi internet □ doesn’t matter

4. You prefer using laptop or internet facility in the public space:  □ Yes □ No
   If “YES” How long do you stay:    hour    minutes

5. How often you are connected with your buddies in digital social networking (Facebook, twitter etc)?
□ Every hour □ every 4 hours □ once a day □ once a week □ other:

6. Do you invite your close ones/buddies to the square?
□ Often □ Occasionally □ rare □ never

7. How often you use outdoor seating in urban square?
□ Every time I come □ when I want to relax □ private chat □ rarely

8. Do you enjoy the conditions of this square in terms of outdoor seating space?
□ No need for more seating □ partially seating can be increased □ Lack of seating
   Other Opinion:

9. Public squares is not comfortable some time because
□ It’s noisy □ It’s crowded □ There is no enough entertainment or joy
   Other Opinion:
10. Which one is the most disturbing in the square you experienced?  
☐ People  ☐ Motor vehicle (car, bus)  Other Opinion: 

11. There is a need for weather shelter from rain, snow and wind:  ☐ Yes  ☐ No

12. Is there any feature or activity you like to have in this public space  
Your opinion: 

Gender:  ☐ Male  ☐ Female  Age: ______