



## Studio 5: Future Communication

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### 1. Terminology:

#### Communication

Communications are the systems and processes that are used to communicate or broadcast information, especially by means of electricity or radio waves. – Collins COBUILD Lexicon dictionary.

A simple communication model (sender -> message -> receiver) with a sender transferring a message containing information to a receiver. (See fig. 1) It is obviously, the message is the most important **media (interface)** between the sender and the receiver. A clear and meaningful message will makes the communication complete more easily.

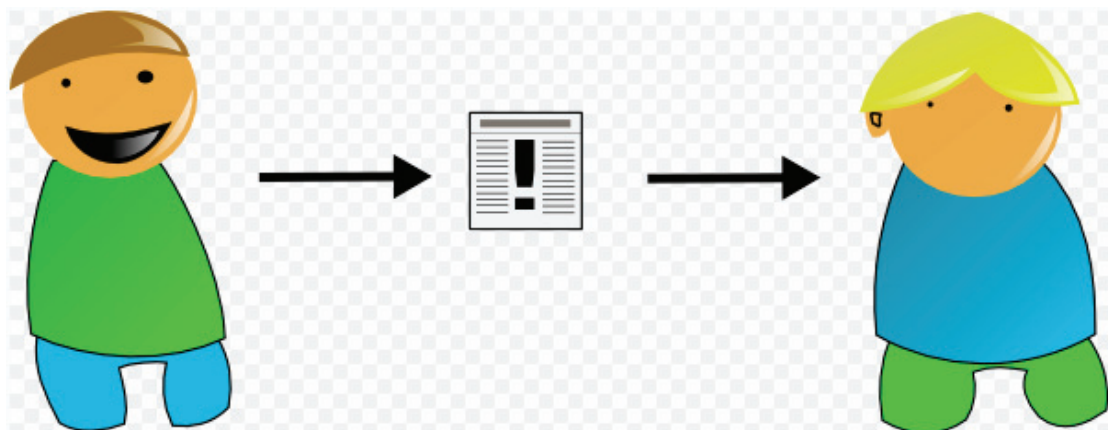


Fig. 1: A simple communication model: sender -> message -> receiver

Information Visualization, Tangible Interfaces and Gesture Communication are three major factors to reach out more possibilities to stimulate the communicated process in the future era.

## 2. Goal:

For the consideration to communicate to appear at all there must be some kind of shared space. The participants must have some kind of concept of each other's location and of a possible channel of communication existing between them. They must agree sufficiently on these to agree that communication is taking place. How can we make an interface not only for better platform of message but as a stimulating trigger to link the share agreement of participants? Hyper-Graph, Semantic Web, Tangible table, Tangible Sequencer Fork, Hand Gesture can be some candidates for the stimulators of communication. Future communication way can be considered as a better interface people like to use them and more easily to know each other.

### **Communication theory** – from [http://en.wikipedia.org/wiki/Communication\\_theory](http://en.wikipedia.org/wiki/Communication_theory)

There is much discussion in the academic world of communication as to what actually constitutes communication. Currently, many definitions of communication are used in order to conceptualize the processes by which people navigate and assign meaning. Communication is also understood at the exchanging of understanding.

We might say that communication consists of transmitting information from one person to another. In fact, many scholars of communication take this as a working definition, and use Lasswell's maxim, "who says what to whom in what channel with what effect," as a means of circumscribing the field of communication theory.

● **Networks Devices:**

**Wires:**

xDSL  
optical fiber  
wire cable  
powerline

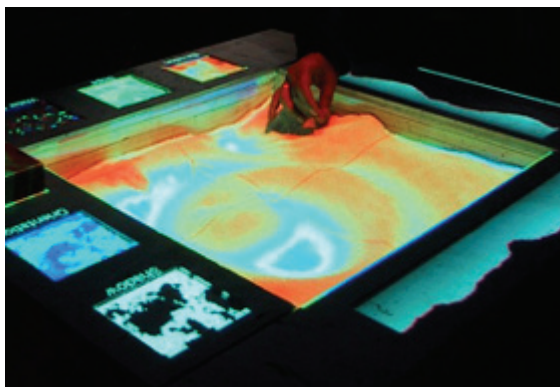
**Wireless:**

Wi-Fi  
GPRS and UMTS  
Bluetooth  
ZigBee  
Infrared  
Consumer IR

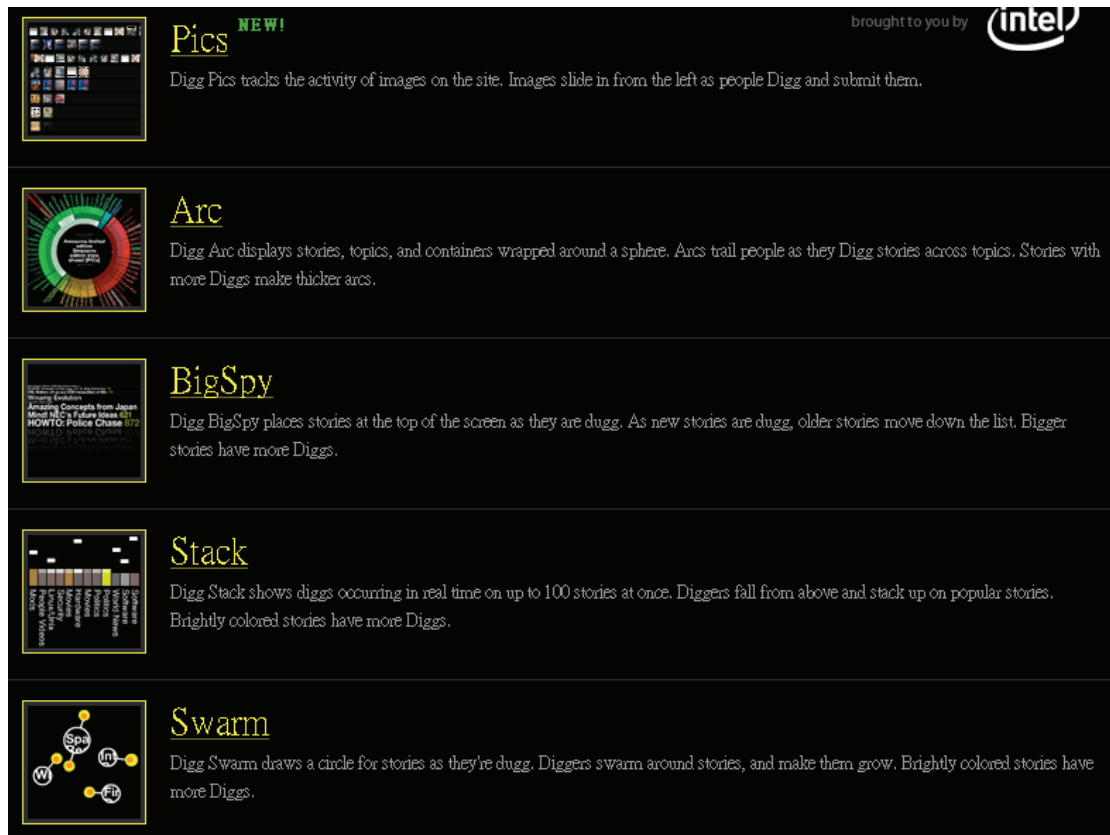
**3. Expected Outcomes:**

- Combine message (document) and data as a whole to represent communication intention.
- Tangible device play a stimulated role to make communication more easily.
- Easy and non-ambiguity gesture increase the efficiency of communication.

**SandScape**



## Information Visualization



The screenshot displays the Digg website interface with five information visualization tools highlighted in yellow boxes. Each tool has a small icon and a brief description. The tools are: **Pics** (with a 'NEW!' tag), **Arc**, **BigSpy**, **Stack**, and **Swarm**. The Intel logo is visible in the top right corner of the interface.

**Pics** NEW!  
Digg Pics tracks the activity of images on the site. Images slide in from the left as people Digg and submit them.

**Arc**  
Digg Arc displays stories, topics, and containers wrapped around a sphere. Arcs trail people as they Digg stories across topics. Stories with more Diggs make thicker arcs.

**BigSpy**  
Digg BigSpy places stories at the top of the screen as they are dugg. As new stories are dugg, older stories move down the list. Bigger stories have more Diggs.

**Stack**  
Digg Stack shows diggs occurring in real time on up to 100 stories at once. Diggers fall from above and stack up on popular stories. Brightly colored stories have more Diggs.

**Swarm**  
Digg Swarm draws a circle for stories as they're dugg. Diggers swarm around stories, and make them grow. Brightly colored stories have more Diggs.

## Tangible Business Process Analyzer



## Tangible Sequencer Fork



## Tangible Interface [http://www.musicvideo.idv.hk/video\\_SAx7Y04HL4o.html](http://www.musicvideo.idv.hk/video_SAx7Y04HL4o.html)



### 4. Links:

Communication model

<http://www.worldtrans.org/TP/TP1/TP1-17.HTML>

### Information visualization

<http://labs.digg.com/>

<http://www.neoformix.com/>

<http://hypergraph.sourceforge.net/>

online Journal

<http://www.palgrave-journals.com/ivs/journal/v6/n1/index.html#in>

## **Tangible Interfaces**

Sense table – MIT 2002

<http://video.google.com/videoplay?docid=-7385461989822000031>

Tangible bit

<http://tangible.media.mit.edu/projects/>

<http://tangible.media.mit.edu/projects/tbpa/>

[http://www.musicvideo.idv.hk/tag\\_tangible.html](http://www.musicvideo.idv.hk/tag_tangible.html)

## **Gesture Communication**

<http://www.matessa.org/~mike/gesture-comm.html>

[http://product.dangdang.com/product.aspx?product\\_id=9351703](http://product.dangdang.com/product.aspx?product_id=9351703)

## **Sensors:**

<http://www.mortalspaces.com/diytouchpanels/>

<http://wiring.org.co/learning/index.html>

<http://www.sensorwiki.org/index.php/Sensors>