

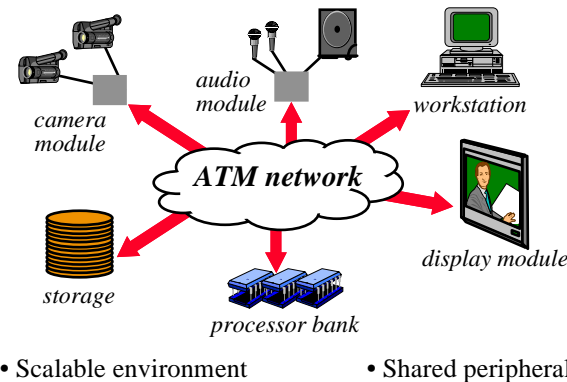
# Medusa

## Modular Networked Multimedia

### Design goals

- Peer to peer architecture for controlling networked multimedia devices
- Capable of handling multiple simultaneous streams
- Modular components to allow rapid prototyping for new applications
- ATM Modules directly connected to a 100 Mbit/s ATM network
- Direct access to raw data

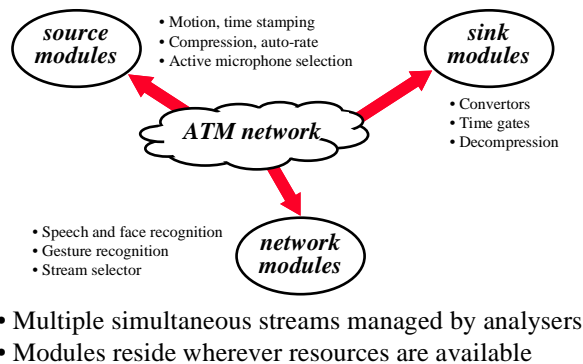
### The Exploded Workstation



### Architecture

- Active objects (*modules*) created by *factories* running on each ATM device
- Module's internal state is available through a set of attributes
- Reliable, untyped, unidirectional connections
- Typed data units (*segments*) grouped in data transfer units (*messages*)
- Synchronization through time stamp segments

### Modules



### Application Categories

- Hands free system (many input/output devices)
- High audio quality (CD quality)
- Multiple simultaneous streams

- |                                 |                                  |
|---------------------------------|----------------------------------|
| <b>One to one applications</b>  | <b>One to many applications</b>  |
| • Videophone                    | • Cambridge Panorama             |
| • Videomail                     | • Media server                   |
| <b>Many to one applications</b> | <b>Many to many applications</b> |
| • Security monitoring           | • Video conferencing             |
|                                 | • Audio chatline                 |

### Application Examples

