

Direct Observation Methods:

for recording
Human Performance

Initial observation of a system

- ❖ Initial walkthrough.
- ❖ Archival data (layouts, job descriptions)
- ❖ Choice of appropriate observation methods

Time-Based Methods

- ❖ Events or states and time are recorded.
- ❖ Event/time records provide information on:
 - ❖ sequence of events
 - ❖ duration of events
 - ❖ frequency of events
 - ❖ spatial patterns of events
- ❖ States can be sampled at specific time intervals.
- ❖ Time study analysis can be performed.

Chart-based Methods

- ❖ Process chart
 - ❖ physical layout and process sequence
 - ❖ spatial and sequence information is captured
 - ❖ time and workload information is lost
- ❖ Flow-process chart
 - ❖ spatial information is replaced by symbolic information so that the logic sequence can easily be examined.
- ❖ Gantt chart - graphically shows time/activities.
- ❖ Multiple activity chart - activities grouped.
- ❖ Link chart - frequency of interactions.

System sampling

- ❖ Occurrence sampling is used to observe a system at suitable times or in suitable states.
- ❖ Observational categories need to be defined.
- ❖ Sample size (# subjects, readings, events etc.) needs to be determined.
- ❖ Raw time and sequence information is lost.