Understanding the life of a knowledge worker

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Goal

• Fighting knowledge worker’s information overload by enabling contextual information delivery

  • Knowledge workers are most often working within a single context for a given period of time and then switch to another context
  • While working, we are only interested in resources within that particular context
  • Example: Receiving too many emails from different contexts, hard to manage

• Understanding the dynamic properties of a knowledge process

  • Given only basic productivity software and no big information systems, how can we identify an informal knowledge process?
  • Is there a bottleneck in the process?

Problem statement

• We need to solve the following:
  • Context discovery
  • Action discovery
  • Process discovery

  • Example - same process in different contexts:

Context Mining

• Discover contexts in which the knowledge worker is working, e.g. projects, clients, cases
  • Via semi-supervised clustering

Action Mining

• Discover the generalized actions the knowledge worker is doing in different contexts
  • Via clustering

Process Mining

• Discover the dynamics of the knowledge process