A workflow that most probably isn’t yours

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My workflow principles
design, tools, implementation

Modern tools and ecosystems prescribe workflows
instead of letting you choose tools that fit the way you like to work
e.g. Outlook calendar invites (email inbox as an agenda), Google calendar (tasks/events)
Life of an academic

Research (incl software development)
Proposals
Reviews and feedback
Teaching
Examinations
Administration
Advising
Conferences, workshops & seminars
Self-development
Outreach and communication
Relaxation & Reflection
What does a workflow do?

Manage daily input
ideas, notes, meetings, errands, correspondence, hands-on work, breaks, relaxation

Handle commitments
collaborations, conference/journal deadlines, editorial work, administration, ...

Keep track of progress and self-development
progress with project/software/thesis, waiting others to do stuff, self-learning, ...

Set goals
short-, mid-, long-term
Why have it?

- Make time count
- Prioritize and focus
- Form habits
- Minimize stress
- Achieve goals
Assumptions

Brain’s noise-to-signal ratio is high at least higher than one would hope...

Human memory ultimately fails as an agenda

No workflow is good for everybody & forever personal circumstances & work requirements, different priorities & problem solving strategies

Parsimonious workflows are the best workflows taking long time to operate, complicated information retrieval, bottlenecks
Definitions

Todo
something that needs completion, you have a plan for
e.g. waldi CRAN release, improved estimation in LMM, YRM seminar, kitchen renovation, ...

Task
a natural and manageable next step in a todo, best described starting with a verb
e.g. write vignette, carry out simulation study, write introduction, buy sink

Context
where todo items arise
e.g. home, work
Workflow processes

Categorize, refile & retrieve
  e.g. distinguish between todo types (research, admin) and contexts, etc.

Prioritize

Manage time

Consolidate activity
Inbox

Collects signal (and noise) from your brain & others
e.g. ideas, tasks, errand, meetings, notes, email, impromptu visits, phone calls, ...

Commit entries to it
during the day

Entries from inbox are categorized to workbench or someday
end of the day

Needs to be accessible; not necessarily tidy
Tasks

Meetings
- **MEETING** with Jake Pegden
- **MEETING** with Asma
- **MEETING** with Nicola

Notes
- **NOTE** Priorities
- **NOTE** Impact evidence and work
- **NEXT** Respond to *PhD Supervision in Statistics*...
- **NOTE** Principles for PhD supervision
- **NOTE** Automatic replies
- **NOTE** Warwick-Turing Post advert 2017
- **NOTE** House hunting emails
- **NOTE** Beta regression references
- **NOTE** brglm2 examples

Ideas

Breaks
- **BREAK** for lunch

Emails
- **NEXT** Respond to *Re: reference* ...
- **NEXT** Respond to *Provisional list of roles, green=updated* ...
Workbench

Context-specific and dedicated to ongoing projects

Entries from **inbox** are categorized to **workbench**
daily until project completion, cancellation or abandonment

Entries from **someday** are moved to **workbench**
monthly, as necessary

Entries are frozen/cancelled/prioritized according to **goals**
fortnightly, as necessary
Seminar series: Algorithms & Computationally Intensive Inference...
Conference: MathSports International 2019...
Workshop: WHOA-PSI 4...
Conference: useR! 2019...
Talk: Ioannis Kosmidis at VRM seminar...
Conference: RSS 2019 conference...
Workshop: Greek Stochastics lambda...
Lunchtime RSE Talks presentation...
Research visit: University of Toronto...
Someday

Ideas & potential projects that have not started yet and will not start anytime soon

Entries from inbox are categorized to someday
daily, as necessary

Entries from someday are moved to workbench
monthly, as necessary

Entries are reviewed according to goals
monthly, as necessary
Goals

Entries are mid- and long-term goals
monthly, annual, 3 years

Review fortnightly
freeze/cancel/prioritize entries in workbench

Review monthly
move entries from someday to workbench
adjust goals, as necessary
Archive

Completed and cancelled entries are refiled in archive fortnightly

Same structure as workbench

Annual archives
Entry types

TODO
project, e.g. a provisional paper/R package title, YRM organization
states: INACTIVE, CANCELLED, DONE

NEXT
next task towards a todo
states: CANCELLED, DONE

WAITING
for something to happen/somebody to do something, typically towards a todo
Entry types

**NOTE**
something to retrieve later (thought), a resource (e.g. reference, software tool)

**IDEA**
e.g. idea for research, a seminar series, a book club, ...
typically it will be labelled as silly, but sometimes it becomes a todo

**MEETING**

**BREAK**
Typical workflow hierarchies

<table>
<thead>
<tr>
<th>TODO</th>
<th>IDEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEXT</td>
<td>NOTE</td>
</tr>
<tr>
<td>NOTE</td>
<td>IDEA</td>
</tr>
<tr>
<td>WAITING</td>
<td>WAITING</td>
</tr>
<tr>
<td>MEETING</td>
<td>IDEA</td>
</tr>
<tr>
<td>IDEA</td>
<td>CANCELLED</td>
</tr>
</tbody>
</table>
* TODO ST329 module 2018-2019
  * MEETING Teaching ST329 - Topics in Statistics (R0.04)...
  * MEETING Teaching ST329 - Topics in Statistics (MSB0.08)...
  * MEETING ST329 revision lecture :meeting:...
  * MEETING ST329 exam :meeting:...
  * MEETING with Paul on peer observation :meeting:...
  * DONE [A] Prepare ST329 lecture...
  * DONE [A] Record 2018-2019 dates for ST329...
  * DONE [A] Pop in Student Support to check ST329 exam requirement :errands:...
  * DONE [A] Prepare ST329 exam...
  * DONE [A] Prepare peer-review form for ST329...
  * DONE [A] Collate ST329 exam paper...
  * DONE [A] Moderate st329 exam...
  * DONE [A] Submit st329 exam...
  * NOTE about new examination arrangements :note:...
  * DONE [A] Prepare ST329 revision class...
  * NEXT [B] Mark and moderate exams...
  * CANCELLED [A] ST329 solutions...
Timestamping, keeping time and tagging

All my entries are timestamped
for being able to recover project timelines if needed

Keep time for all NEXT and MEETING entries in workbench
how much time I spend doing X?

Tags
@work, @home, comms, seminar, note, reviewing, software, ...
Implementation

4 notebooks, 1 agenda, 1 stopwatch
1 notebook for each of inbox, workbench, someday, goals; update agenda daily

emacs
org-mode, agenda views, mu4e, workgroups2, helm
Switching between interfaces takes me long, so I learned to use emacs for the majority of things

R and (R-)Markdown (any volunteers to work with me on this?)
workflow as an R package, possibly with an Rstudio plugin

...
Advice

Offload your brain in a trusted system
and focus on what is important

Your mail inbox is not a task list
an email is not a task; responding/reacting to it is

Teach yourself to speak to yourself
Find the verbs for your tasks

Think of the workflow that suits you and find the tools
do not let the tools decide for you

Manage work according to priority and available capacity
Resources

Org mode and task management systems

Getting Things Done: The Art of Stress-free Productivity, David Allen