

Managing by Email: Thoughts on Patterns for Distributed Processes

About this Poster

This poster is designed to offer a set of fragments which *might* coalesce into a pattern language. Each of the three elements of the poster—the description of the language’s goals; the three scales; the candidate pattern fragments — are meant as starting points.

I’m not sure how to proceed. I personally feel most comfortable when talking either about the purpose of the language, and the pattern fragments. Thus, we might begin by considering the aim of the language, and whether its scope is right: Should it be larger? Smaller? Or simply different? I’ve picked this scope primarily because it feels coherent to me, and because it maps nicely onto a number of activities in which I participate in various roles. But your experience may differ.

Or, it might make sense to start at the bottom with the pattern fragments. Do they make sense? Do they resonate with your experience? If so, what others come to mind that support, or are supported by them? And what other patterns are entirely missing?

Yet a third way to begin might be to consider a concrete scenario. (The process of organizing this workshop might be a possibility), and ask whether and how the proposed patterns might be seen in that.

Goals of the Language

More and more processes—paper review processes are a good example—are being run entirely via email. Email serves as a means of calling for participation, receiving submissions, managing reviews, and so on.

Those managing processes through email must contend with a variety of problems. Technical factors such as spam filters, invisible bounces, and different email clients with differing features, complicate the task of successfully presenting (and even delivering) information via email. Similarly human and social factors such as email overload, forgetfulness and email reading practices, have a strong bearing on whether a process is completed in a timely and successful fashion.

Experienced managers-by-email employ a variety of techniques to conduct processes. These range from socially-oriented techniques (such as being polite, thanking people, and apologizing), to various approaches to designing email messages. The goal of this language is to capture some of the collective knowledge about carrying out such a process effectively.

Candidates for Scales

What are reasonable scales for patterns for “Managing by Mail”? Here are some candidates:

Well-Formed Process

At the highest level we have patterns which contribute to making the process feel legitimate and well structured. The process needs to have a beginning and an end, and people need to feel that they are a part of it, that there is something with which they can engage. Patterns at this level have to do with recruiting participants, setting expectations, formally initiating the process, creating and renewing awareness that the process is happening, and officially bringing it to a close.

Informing and Interacting

A key part of managing a process is ensuring that people have the information they need, when they need it, to complete their tasks. Patterns at this level not only have to do with what information is provided, but with the way in which information is packaged. If information for a particular task is scattered through a number of different email messages, or the participant can’t find the crucial message at the right time, it does no good.

Similarly, in the course of conducting a process, there are likely to be many occasions for one on one interaction. This may occur as a normal part of the process, or because participants have questions, or because problems, misunderstandings, or other exceptional conditions arise. Regardless of how people interact, there are certain things that ease interaction. These include being polite, acknowledging contributions, clarifying ambiguities in communication.

Message Design

The management and conduct of the process occurs through email, and thus, at the root, involves the authoring of messages. A host of factors ranging from how email clients display messages, to cognitive characteristics such as memory skills and reading practices influence the design of messages.

Candidate Pattern Fragments

Here are some candidates for patterns which come out of my personal experience in managing processes by email. Some are described in the following preferences, and others are simply referred to with LARGE AND SMALL CAPS TEXT. They are organized in terms of the scales laid out at the left, but they don’t necessarily fit comfortably within a scale.

Well-Formed Process

LIVING PROCESS

Faceto face events feel ‘real.’ Participants are immersed in a place and surrounded by others similarly immersed and engaged in the event. Processes carried out over email are spread out over time, and do not take place in a single place—typically, people don’t feel as involved, and they lack awareness that the process is happening and that others are involved. Just as urban designers and architects talk of creating a ‘sense of place’, so must those running a distributed process create a ‘sense of flow.’ Participants must be reminded that the process is alive, that things are happening, that time is passing, and that there are opportune moments for them to become engaged in the process. Patterns which might contribute to this might include CALL FOR PARTICIPATION, WELCOME, SHARED RHYTHM, DEADLINE COUNTDOWN, OCCASIONAL CONTENT-FULL PINGS, and FINAL REPORT.

INFORMED COMMITMENT

When recruiting people to participate in a long process, it is helpful to provide -- up front, at the time of recruitment -- full details about the commitment they are taking on, and what is expected of them. Thus, providing a JOB DESCRIPTION and ANNOTATED SCHEDULE is quite helpful. Related to this pattern, is providing an explicit EASY EXIT

Informing and Interacting

INFORMATION ISLAND: ALL-IN-ONE MESSAGES

Storing and finding messages is a challenge for many people. When crucial information needed to complete a task is spread out across multiple messages, the problem is exacerbated. Therefore, make sure any message that asks the recipient to do a task contains all the information necessary to do the task. When possible, this means not relying on links, in that many people do not have ubiquitous connectivity, and may wish to do the task when, for example, they are in a plane. Because all-in-one messages can be long, other patterns are useful in supporting it: these include SKIMMABLE MESSAGES and DEADLINE FOR ACTION.

CONCILIATORY RESPONSES

In the course of conducting a long process, misunderstandings or disagreements sometimes occur. It is well known that reduced social cues can lead to flaming and other sorts of impolite behavior. Polite responses from the recipient of the flame, accompanied by an apology if necessary and/or a full and non-defensive explanation, often serves to repair such breaches. Other similar patterns might include THANKS, CALL FOR FEEDBACK, and CAREFUL DECISION RATIONALE.

Message Design

Occasional, Content-full Pings

In managing a long, drawn out process such as paper reviewing, it is often helpful to remind participants that process is going on and that the deadline is slowly approaching. At the same time, one must take care not to anger participants by overwhelming them with nagging messages urging them not to forget. One technique is to send very occasional notes that serve a purpose: broadcasting the answers to questions received from individuals, pointing out the availability of a new resource for the review process, and so on. In all cases, such ‘content-ful’ pings should be brief and polite. This pattern supports LIVING PROCESS and SHARED RHYTHM.

Skimmable Messages

Often people skim email when reading it. With this in mind, it is a good idea to design email with a clear structure, so that it is easy to skim (keeping in mind, as well, that many mail readers may not support rich text). This suggests a family of low level patterns having to do with the form of email, including: TO-DO’S IN THE FIRST FIFTY WORDS; SUMMARY FOR LONG MESSAGES; NUMBERED LISTS; CHECKLISTS; and so on.

Structured Subject Line

Many people manage their email by scanning through lists of messages which display subject lines. The careful construction of a subject line (keeping in mind both this social practice, as well as technical constraints such as subject line length) can help recipients manage email related to the process. This pattern would address issues such as beginning the subject line with a process-specific identifier (so all related messages will appear in a by-subject sort, and including critical information (e.g. due dates) and instructions (e.g. “SAVE THIS!”) in the text of the line. Other patterns might include INSTANCE REFERENCE IN SUBJECT LINE (e.g. “[Review 117]”).

Fully-Formed URLs

Always include the “http://” prefix to a url. Some mail clients rely on this to make a URL live, and a live URL saves the recipient the steps of selecting the url text, copying it, opening a browser, pasting the copied URL in, and executing the URL.