

# Re-Inventing the Wheel: The Re-Creation of Documents in a Bumble-Bee Organization

Ingbert Schmidt  
University of Illinois at Urbana-Champaign  
ifloyd2@illinois.edu

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## Abstract

In Library and Information Science our emphasis is typically on facilitating reuse of documents. There are many motivations behind this emphasis, but efficiency and time savings are common motivations. However, participants in an on-going study of knowledge communication practices have a strong tendency to re-create existing documents from scratch, despite the fact that sometimes multiple documents that serve the same purpose already exist in the organization's archive. While at first this behavior seems wasteful, examination of their practices indicate that participants often have good reasons for re-creating documents. These include (a) empowerment, (b) learning, (c) personalization, (d) customization, and (e) simplification.

*Keywords:* information behavior, knowledge management, social and community informatics

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## Introduction

Why use an existing document when you can create one from scratch? While this statement seems at first glance purely rhetorical, in a study of a high turnover voluntary organization it was surprising how often documents were created from scratch, despite the fact that similar documents intended to serve the same purpose already existed. At first glance, this fact is puzzling, and seems to indicate something is going seriously awry. Perhaps the organization is disorganized and cannot keep track of its documents. Perhaps it is extremely inefficient, constantly making work for itself. However, when the practices surrounding the re-creation of existing documents are examined, it turns out that the re-creation actually serves some important organizational purposes, and that naive efforts to "streamline" the organization by reducing the amount of document re-creation might actually cause more problems than fewer.

This analysis goes beyond classic research questions in knowledge management (KM) (e.g., Alavi and Leidner (2001)) to look at what other organizational functions seemingly wasteful documentary practices might have. The goal of this research is to identify possible candidates for generalizable unintended consequences of introducing KM solutions (whether social, technical, or sociotechnical) before the solutions are introduced (Schultze & Boland Jr., 2000). In particular, it does not limit itself to looking at unexpected KM consequences, but rather looks for possible unexpected organizational consequences.

## A Bumble-Bee Organization as a Research Site

This note reports some preliminary findings of a study of knowledge communication practices with a focus on the functional role that documents play. Three major methods were employed: participant observation, interviews, and document analysis. There were 46 participants whose activities were actively studied in over 200 observation sessions and interviews over the course of a year (October 2011-October 2012). At least 500 documents were analyzed in varying levels of detail as a part of the research. In my participant observation I took an active role in the organization, volunteering my time for the organization

in order to participate in it so that I would fully understand how it functions, rather than serving as a passive observer. My data collection and processing involved extensive writing of field notes. Documents were analyzed for their functional features in facilitating knowledge communication based on how they were actively used by participants. The research focused primarily on social interaction around documents both face-to-face and via electronic communications (primarily email, but also Google Docs and other social software). Interviews were scheduled with participants when either they did something interesting in order to understand why, or to obtain their perspective on observations that I was making. Most of the interviews were very informal, as I found that turning on the tape recorder prevented people from speaking freely about why they did what they did.

The Researched Graduate Student Union (RGSU), a union for graduate student employees at a large Midwestern university, was selected as the site for this research because it had several important features. First, it is an organization with high turnover: on average active members stay active for about a year; the leadership changes almost completely from year to year. The bargaining cycle which determines the lifecycle of the union is typically 3 years, meaning that few people are still active in the organization from one bargaining cycle to the next. Paid staff (who also participated in the study) stay a bit longer, but only one staff person has been at the organization for over 4 years in its entire history, and his role is that of a part-time administrative assistant. Many members never meet him.

Second, the organization has a strong commitment to preserving its knowledge: it has a large archive of documents that date from the very beginnings of the organization; a significant amount of effort is made to save documents and keep them accessible; in most meetings careful minutes are taken by staff and preserved to keep a record of the actions and decisions of the organization.

Third, while the organization seems to be on the brink of falling apart as knowledge of core skills and organizational memory are constantly being lost, it still manages to be extremely successful both in performing its core functions and in using the same methods to successfully pursue its goals. We might call it a “bumble-bee organization”: it seems like it should not be able to fly, yet it flies extremely well.<sup>1</sup>

The fact that documents are re-created so frequently in the RGSU is particularly interesting case of this bumble-bee nature because there are a number of pressures that would seem to encourage document re-use over document re-creation. First, the two most valuable quantities in the RGSU are labor and time. In many ways they are seen as the currency of the organization by most experienced active members. The RGSU is a large organization with about 2,700 members. While the RGSU hires 3 permanent staff, the bulk of the work of the organization is performed by active members, all unpaid volunteers. New people are constantly becoming active while more experienced people drop out—typically there are about 40-70 active members. Nearly all of them are also working and all of them are students. Furthermore, one of the core values of the RGSU is the value of family and friends, so most active members have significant social and/or familial commitments as well. Thus, the amount of work a particular member puts in (labor), and the amount of time they have to do it, are both a measure of commitment and a scarce resource, and active members are constantly struggling to balance all of their commitments. Therefore, any time spent doing something that is unnecessary is seen as wasteful and active members will quickly become frustrated when a task is perceived as such.

Second, every participant in the organization is an expert at using and managing documents simply due to the requirements of being a graduate student. Evidence of this includes the large number of documents that are created and used, the volume of intra-organizational email messages (over 100/day), and the sophistication with which the documents are structured and organized. Members are keenly aware both that the re-creation of documents occurs, and of how unnecessary it seems. The general sentiment when this is discussed in the organization is one of embarrassment: most participants feel that they and the organization ought to be better skilled at managing documents.

## **The Hidden Benefits of Document Re-Creation**

Why is document re-creation so frequent? Analyzing the practices of document creation and the functional roles they play in the organization reveals five purposes that document re-creation serves.

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<sup>1</sup> Thanks to Dr. Michael Twidale for this name.

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## Document Re-Creation as Empowerment

Because of the time and work pressures outlined above, participation in the RGSU must be rewarding for active members or they would not volunteer so much of their time. There are many factors (community belonging, community of shared values, etc.), however one of the most important rewards is a sense of ownership, pride-in-work, and respect. These feelings are empowering, especially given the contrast to graduate school where many active members feel subject to the whims of their advisor, their department, or the university as a whole.

The opportunity to create a document that reflects hard earned knowledge, the process of creating an artifact for the organization, the trust of fellow active members embodied in their encouragement to create the document, and the respect of fellow active members that a well created document engenders, all are extremely motivating, and create a sense of empowerment, belonging, and shared participation in a communal effort.

For example, one common way in which a person moves from being more on the legitimate periphery (Lave & Wenger, 1991) to being more centrally active is by performing the labor of creating a needed document. This can be a flyer, a hand-out, a guide, or even updating an existing document that needs regular edits. It is not uncommon for more experienced members to encourage newer members when the latter are excited about a task of creating a document, even when the experienced members know it probably need not be created entirely from scratch. What they do not want to do is prevent the newer member from having an opportunity to become more fully involved with the organization; a little bit of redundant labor is worth the trade-off of having a newly empowered active member. Community growth and individual respect is always more important than minor gains in efficiency.

We found that RGSU staff are much less likely to re-create documents than active members. There are many reasons for this. Regarding empowerment, staff are empowered by being central to the RGSU's daily functioning, and need not create documents to remain there. They still do create documents, but it is typically on an as-needed basis. Only rarely will they find a need for a particular document that they are passionate about creating.

## Document Re-Creation as Learning by Teaching

There is evidence that teaching a topic to someone else greatly facilitates learning (Grzega, 2006). Similar to teaching a class, the activity of creating a document can provide an opportunity for a participant to be reflective on their own practice, and crystalize their experience in such a way that it can be of use to someone else.

For example, a long-time active member (M1) re-created a document: a how-to guide for running department meetings (DM1). This replaced an older version created a year prior (DM2) by a different member (M2). There is at least one more version of this document (DM3) created by a third member (M3) in the RGSU archives. Each document has been developed completely independently. M1 was an active member when M2 created DM2, and she was aware of its existence. While I currently do not know who M3 is, I do know that the creation of DM3 predated both M1 and M2 in the organization, and that when M2 created DM2, she was unaware of the existence of DM3.

One of the most important reasons that both M1 and M2 created their respective documents was to encode their learning into a document. M2 in particular spent weeks on her document as part of a process of reflection on her own experience trying to run successful department meetings in different departments that had a very different nature, and to communicate that experience and make it accessible to other members. M1 has a very different kind of experience. She has been very active and successful in organizing her home department (that has over 100 members), but she had heard that DM2 was long (5 pages) and challenging for new stewards to use. Given her experience with new stewards being reluctant to take on running department meetings, she took her experience in the Stewards' Assembly (supplemented with feedback from staff and other stewards) and focused on creating a 1 page document whose express purpose was to "demonstrate how little labor it takes to run a department meeting."

## Document Re-Creation as Personalization

The personalization of a document by re-creating it is a powerful way of having ownership of a part of the RGSU. This phenomenon is often coupled with one or more of the other benefits. Thus, a part of empowerment is having a personal touch on the document that is created. And a part of teaching is

putting the emphasis on the material that you feel is most important, as derived from the lessons you have learned through experience. There are many layers to personalization, and it is worth exploring them a bit.

The lightest layer is a personal style in the document's creation. It can take many forms, from subtle in-jokes embedded in the text or structure, to not so subtle personalized vocabulary. Whatever the form may take, this kind of personalization is typically little more than a flourish that identifies one or more of the authors as such, and may provide a bit of entertainment to active members, but not more. The fundamentally communal nature of the RGSU means that people who feel the need to control details or leave their personal mark as a means of control typically do not last long, because for the RGSU to work effectively people must feel an equal, shared sense of control without any one person taking primacy. Even the role of the co-presidents is more that of mediator, and their leadership is most effective when they amplify the thoughts of other members rather than try to explicitly push their own agenda. The personal touch is most effective when it is simply a signature indicating a public performance of labor, and is insufficient alone to motivate a person to re-create a document.

The deepest layer of personalization is when a core understanding learned through experience is translated into document form (e.g., M2). This kind of personalization is often expressed over days, weeks, or even months crafting a document. Many documents in the RGSU have such an origin, including the previous version of the guide for running department meetings (referenced above), the Stewards' Handbook, various strike reflections, and several strategic plans. Interestingly, these documents are often some of the less used documents; whether because of their length, their density, or for some other reason is not yet clear. This kind of deep personalization is sufficient motivation to re-create a document. However, it can also motivate a thorough editing of a document instead of a re-creation, thus other factors are also at play.

Levels of document personalization can of course range between these different layers.

### **Document Re-Creation as Customization**

One of the most important purposes that document re-creation serves in the RGSU is customization for current circumstance. The RGSU is in a constantly changing environment, where the issues it must address and the circumstances it must respond to are almost completely out of its control. It is vital that the RGSU remain able to adjust to unexpected changes or crises.

Documents are re-created within the particular context the organization finds itself in at the moment. Thus, they are created to teach people what is not currently common knowledge, or to be structured in such a way that they are accessible to the people who are currently a part of the organization.

Continuing the example above, M2 was created when membership was low, bargaining was not yet in progress, and it was difficult to convince people to run department meetings. It was created from the perspective of a member who had tried many different strategies in her home department and still was struggling to find a sustainable solution. She had also worked with several other departments to help them run a department meeting. Consequently, her document was several pages long, emphasized the many different options that existed for having successful department meetings, and left a lot of room for reflection, innovation, and exploration.

In contrast, the newer document for running department meetings was intended to be a quick, simple, bare-bones guide. It will not necessarily work for all departments, but the checklist on a single sheet of paper is easy to follow, meaning that new and busy stewards in the middle of ramping up for bargaining have a simple recipe to follow that they can then build upon. This document thus reflects the current state of frantic activity for which the other document is much less appropriate.

### **Document Re-Creation as Simplification**

All of the preceding benefits of document re-creation can serve as lesser or greater motivation for the activity. However, none of them necessarily lead to document re-creation. One of the major factors that tip participants towards re-creating a document is the well known factor of the ease of old document retrieval from the archive. Rather than spend much time on an oft-explored issue (e.g., Berlin, Jeffries, O'Day, Paepcke, and Wharton (1993) and their exploration of group memory software), I will simply review a few of the most relevant factors for the RGSU archive.

First, the RGSU archive is scattered over several different media. There is an extensive paper filing system, there is a file system currently split between two office computers, there is an online dropbox with files, and there is a massive collection of Google Docs. Not everybody has easy access to each, and

this is further complicated by the fact that both dropbox and Google Docs have displayed problems where the reliability of their data is, at times, questionable. Therefore, there is the issue, can the document be found? Where should I look for it? Who put it where and why? Etc.

This is further complicated by the fact that, even though the filing systems have each been organized on several different occasions by people aiming to make them more accessible, it is still not clear at first glance what the actual organizational theme is by which the documents are arranged. This of course means that any newcomer to the filing system must try to figure it out first, which takes a non-trivial amount of time. Thus, in many cases, re-creating a document from scratch, especially when it either is on a topic that is well known, or when it provides one of the other benefits, can actually be simpler if not quicker than trying to find a document that may or may not (still) exist.

## Conclusion

Despite the fact that re-creating documents looks, at first glance, like a waste of time and effort, there are actually good reasons for re-creating certain documents. These reasons include (a) empowerment, (b) learning, (c) personalization, (d) customization, and (e) simplification. Empowerment is important for engaging peripheral members into the active core group of members who provide some level of stability to counteract the high levels of turnover in the organization. Learning is important because it is one of the means by which members develop their knowledge of the organization more fully, and create artifacts that can be used to teach it to others. Personalization helps motivate some members to do work for the RGSU. Customization allows the created documents to be relevant to the current state of the RGSU, including documents that at first glance might be thought to have a single “best” generic structure. However, while simplification may motivate any of the other four reasons for document re-creation, it also suggests that some inefficiencies exist in the documentary archive of the RGSU which bear further examination.

Members of the RGSU are concerned with the amount of document re-creation that exists in the organization. In future work I hope to examine when document re-creation is appropriate, and when it is unnecessary. Part of this will involve getting some sense of how frequently it happens for each of the above reasons, part of this will involve more closely examining the frequent cases of document updating and reuse, and part of it will be examining the means participants have for effective document discovery.

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