COPING WITH INFORMATION TECHNOLOGY: MIXED EMOTIONS, VACILLATION, AND NONCONFORMING USE PATTERNS

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Appendix A

Coding and Aggregating Data

Table A1. Coding Scheme and Examples for the Concept of Affective Cues		
Data Examples	**Descriptive Coding**	**Interpretive Coding**
"FP asked me to enter everything one author at a time. I tried to do it for one of the publications and it took forever. It was enough to completely alienate me." (Vice Provost, State) "Two most annoying things about FP: I can't edit a publication entered by a co-author and I can't see what I have entered (a report preview)" (Tenured professor, PS, Private)	Functionality Affordance Constraint	IT instrumentality
"The initial chairs' response—they were just furious, because the software application very much does seem to be a "one size fits all" (Department chair, A&S, State) "Many people view it as just another bureaucratic requirement they have to fulfill." (Department chair, A&S, Private)	Dominant association Metaphor	IT symbolism
"My faculty were extremely resistant to using FP, because it did not represent them in the way that they wanted to be represented either to me or to the outside world." (Department chair, A&S, Private) "Being a faculty member—you're an artisan....So in my mind, there's a fear of the false certainty of quantifying things. Do I need to be focusing my activities so that I look good on FP or in a way that I look good on the self-crafted CV?" (Tenured professor, A&S, State)	Performance Status Uniqueness	Identity work
"The outreach gave me the impression that they were trying to do a good job and for that reason I'm probably less averse to it than my faculty." (Department chair, PS, Private) "I think they passed up some feedback, but nothing [happened]....And nobody is talking about what the categories in FP should be, which is why there are some concerns as to where FP will lead." (Department chair, A&S, State)	Inclusion Exclusion	Involvement in change
"I don't know first hand how difficult it is. I heard such horror stories—faculty and chairs tell me that it was typing it all in yourself." (Dean, State) "They did a good job of saying that this (FP) is a next integration of something we need." (Former department chair, A&S, Private)	Rumors and myth Sales-pitch	Interactions with others

Table A2. Coding Scheme and Examples for IT Use Patterns

Data Examples	Descriptive Coding	Interpretive Coding
"I had all my data in FP, but when I generated a report, I had to edit it, because when you have the final report, you want to get it to look nice, but the basic information—the articles, etc.—is coming from the system." (Department chair, PS, Private) "I use the CV. I try to update it as I do things. So I output the CV and then I write descriptions (like duties, etc.) in Word. My publication record came out fine though. My concern is not that someone will generate my CV, because I don't have anything to hide, but I don't have any of the descriptive stuff on FP. It's great to have it output, but then I still have to do stuff afterwards. Totally reformatting, taking stuff off." (Tenured professor, A&S, State)	Bones vs. embellishment	**"Personalizing" pattern** System/task: FP for data, Word for making it "nice"/your own and for submission. User: concern mixed with engaged interest.
"In your CV you usually start with your strongest asset. And it (FP) starts with the book chapters, usually people start with the articles. So the likelihood of using this as the basis for my CV is not very high. So that's why I have no use for FP… for my own purposes." (Tenured professor, PS, Private) "There was some report that showed what admin was going to be looking at. If they're only looking at seven fields, then all I'm going to put in is this year's seven fields. And I'm going to try to figure out minimally which buttons I'm going to have to choose but I'm not going to try to massage it into being in any way meaningful." (Tenured professor, A&S, State)	Minimal effort (personal gain) Make yourself look good	**"Gaming the system" pattern** System/task: enter only that data into FP that will make you look good to the administration. User: cynicism and anxiety.
"So part of my thinking here is—does your administration care? Is it relevant? Does it matter for their reports? So that in my mind prioritizes the importance of dealing with some of these categories. So I'm not just filling it out for me, I'm filling this out with my own sense of institutional understanding regarding what this information is supposed to do." (Department chair, A&S, Private) "I don't fill out the abstracts. 'Date accepted', 'date published', 'date submitted'—I usually end up filling out one of those and in the end I go back and change it to date published, so there is a few too many fields." (Tenured professor, A&S, Private) "Departmental service is not important for me, the review is totally based on my scholarship. So I kept only professional service and scholarship. I might have left my classes on. Our courses are just pulled from our university system." (Tenured professor, A&S, State)	Pick and choose	**"Exercising discretion" pattern** System/task: enter all data into FP that is important to you *and* to the university from your perspective User: frustration mixed with engaged interest
"I always look at last year's just because I figure it's a good starting point. It's sort of a completion check for me. I just throw everything up there that might be relevant. I like to keep track of what I'm doing. I'm just taking it one step at a time." (Tenured professor, PS, Private) "The first thing to do is I know in my e-mail I got the instructions that got sent to us for doing the faculty activity reports. So I'm logged into FP, so I think I'm gonna go back and read those instructions once, before I do it. The other thing I haven't done yet is - I didn't look up my report from last year. I just kind of go by the… (instructions)—student-focused activities....departmental committees." (Former department chair, A&S, Private)	Everything in Follow the instructions	**"Being a good citizen" pattern** System/task: enter all data into FP that is required. User: neutral interest/ disinterest, conscientiousness
"I think last year, I just didn't do it because the basic tenor around here was like it doesn't really matter, probably half the school's not doing it anyway. So why are we beating ourselves over the head." (tenured professor, A&S, State) "There's a substantial number of faculty members who have learned over the years that if you just ignore it, it will go away. And finally it got so embarrassing they hired people to do it for us. So, in effect, it did disappear." (Department chair, PS, State)	Opt out Ignore	**"Opting out" pattern** System/task: no FP features used User: resentful disengagement

Appendix B

Chains of Evidence

Table B1. *Being a Good Citizen*: Evidence Chain for Use Pattern Emergence					
	Cues	**Appraisal**	**Affective Responses**	**Adaptation Behaviors**	**IT Use Pattern**
1 former department chair (A&S); Private 1 tenured professor (PS); Private	**IT instrumentality**	*"There are a lot of things I have to re-enter even though they are the same answer as previously. But generally, it's a tremendous time saving when you do annual reports, because the stuff comes out in the right form."* (**Either-or:** FP seen as an opportunity)	**Uniform:** *"I would say we've had a **good** adaptation. I think we installed something, we made progress."*	**Pure: Benefits satisficing; minimal adaptation** (Use FP as given) *"I always look at last year's just because I figure it's a good starting point. It's sort of a completion check for me. I just throw everything up there that might be relevant. I'm just taking it one step at a time."*	**Being a Good Citizen** A1. I log into FP A2. I read the instructions A3. I look over last year's report. A4. I go through each section of the annual report and enter data A5. I am done with all sections A6. I generate the report in MS Word; check the report A7. I go back to edit the report in FP A8. When satisfied, I certify my report is complete in FP and submit it through FP
	Interactions with others	*"There was a lot of 'we hear you' in the message…"* (**Either-or:** Opportunity, but little direct control)	**Reinforcing the uniform response:** *"I think they* [administration] *did a **good** job of saying that this is a next integration of something we need."*		

Table B2. *Gaming the System*: Evidence Chain for Use Pattern Emergence					
	Cues	**Appraisal**	**Affective Responses**	**Adaptation Behaviors**	**IT Use pattern**
2 tenured professors (PS, Private; A&S, State)	**Identity work**	*"This is some sort of silly data that is going to be looked at by higher administration and then they're going to either club you or give you brownie points. I just sort of felt it was more like a club, when it came down to it, because there was no intrinsic worth that I could see. The subtleties of what we do are not collected."* (**Either-or:** FP seen as a threat)	**Uniform:** "*I was **fearful** that, just because of how I think administration looks at things, it* (FP) *was going to be another way that they boil it down to this number."*	**Pure: Disturbance handling; problem and emotion-focused + psychological distancing & task adaptation** (Work-arounds and FP as a meaningless administrative tool) *"I'm going to try to figure out minimally which buttons I'm going to have to choose, but I'm not going to spend a lot of time trying to massage it into being meaningful.*"	**Gaming the System** B1. I log into FP B2. I go through those sections of the annual report/CV that will make me look good to the administration B3. I decide that it is enough
	Involvement in change	*"At the beginning, there was talk about it* [engaging faculty in FP configuration], *but I haven't heard anything."* (**Either-or:** FP seen as a potential threat; desire for control)	**Reinforcing the uniform response:** *"I was **afraid** that was going to be the end of the discussion."*		

		Cues	Appraisal	Affective Responses	Adaptation Behaviors	IT Use pattern
Table B3. *Opting Out*: Evidence Chain for Use Pattern Emergence						
1 department chair (PS), State 1 tenured professor (A&S), State		IT symbolism	"…it's simply another step in a culture of monitoring us. It feels like the software is allowing a level of monitoring that would not have been so easy before." (**Either-or:** FP seen as a threat)	**Uniform:** "If it's not FP, it's some other thing that's gonna make us all **angry**."	**Pure: Self-preservation; emotion-focused** (avoidance) "Faculty members have learned over the years that if you just ignore it, it will go away. And they're right."	**Opting Out** I maintain my CV/do my annual report using MS Word, EndNote, etc.
		Interactions with others	"It was pretty clear to me that there's no-one looking to see if vitas have been entered. No-one's ever contacted me... " (**Either-or:** lack of control over consequences)	**Reinforcing the uniform response:** "They're **not** doing a **good** job of communicating the value of FP - either carrot or stick…"		

Appendix C

Screenshot of FP's User Interface (Main Menu)

FP Main Menu at State   **FP Main Menu at Private**

Appendix D

Categorizing Affective Responses
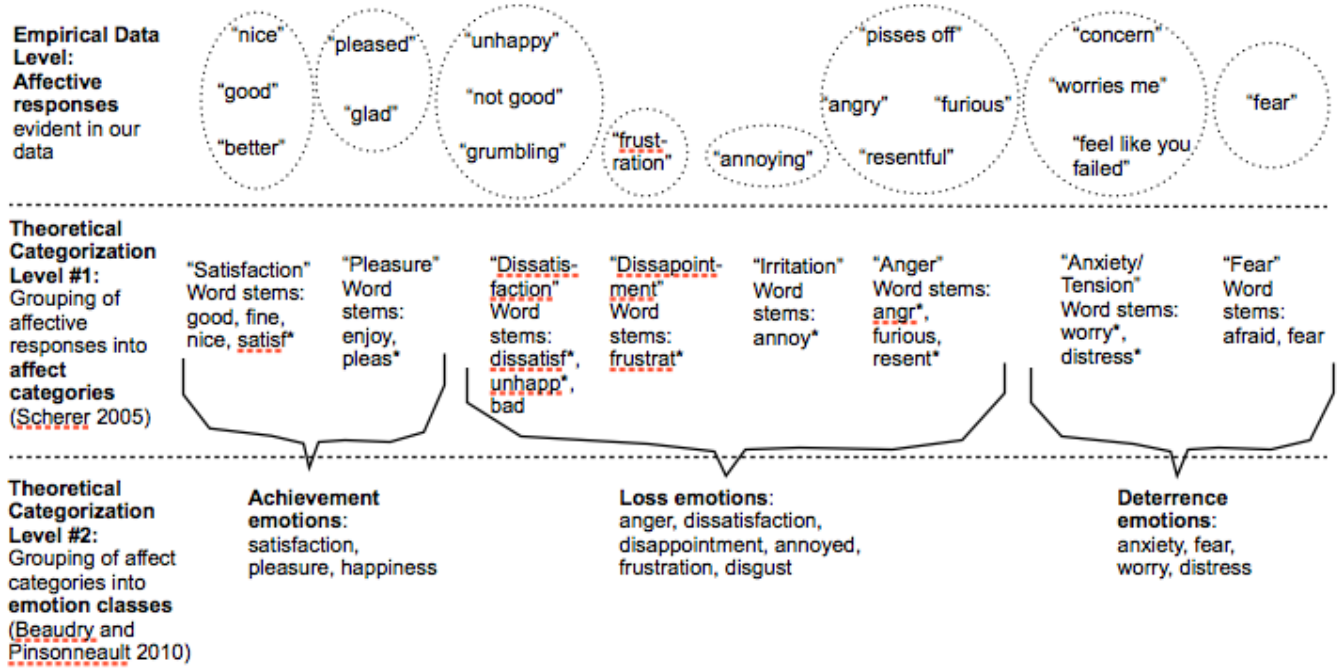
References

Beaudry, A. and Pinsonneault, A. 2010. "The Other Side of Acceptance: Studying the Direct and Indirect Effects of Emotions on Information Technology Use," *MIS Quarterly* (34:4), pp. 689-720.

Scherer, K. R. 2005. "What Are Emotions? And How Can They Be Measured?," *Social Science Information* (44:4), pp. 695-729.