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The Nostalgia Effect: A Field Investigation
of Satisfaction among IS/IT Professionals in India

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Abstract

Satisfaction is a key indicator of system success, and so it has been the subject of much Information System (IS) research. The nostalgia effect, whereby individuals feel satisfied or dissatisfied when thinking about past goal attainment or failure, has been observed to influence analysts' decisions with respect to ongoing systems development. The Yield Shift Theory (YST) of Satisfaction explains the nostalgia effect as a function of changes in yield for an individual's active goal set. This paper reports on an exploratory field investigation of the nostalgia effect among 105 working IS/IT professionals in India reflecting on past collaboration experiences. The study demonstrates empirically a measurable nostalgia effect, and reveals a strong association between satisfaction responses and the antecedents proposed by Yield Shift Theory.

Keywords: Satisfaction, Yield Shift Theory, Nostalgia Effect, System Success

Introduction

If a large-scale system development project fails, an organization stands to lose not only its considerable investment in the system (Boehm *et al*., 2000), but also benefits it could have gained had the system succeeded. Research shows satisfaction to be a key antecedent of IS success (Delone and McLean, 1992, Lawrence and Low, 1993). There is, therefore, much satisfaction research in the IS literature, (e.g. Chin and Lee, 2000, Lawrence and Low, 1993, Seddon *et al*., 1999, Rai and Lang 2003, Susarla *et al.* 2003,). Satisfaction becomes an important consideration at the dawn of the development cycle. Under certain conditions, when users are involved in design choices and development processes, they report higher judgments of system quality and higher user satisfaction at deployment time (Swanson 1974, Olson and Ives, 1981, Lawrence and Low, 1993). The importance of satisfaction continues throughout the life cycle of a system. People who feel dissatisfied with their early uses of a system tend not to adopt it (Bailey and Pearson, 1983, Ives *et al.,* 1983), while people who feel satisfied tend to repeat its use. Research shows, for example, that satisfaction is a strong predictor of customer loyalty for online shopping systems (Chiu *et al.,* 2009) and of continuance in online communities (Jin *et al.,* 2010). Likewise, satisfaction is associated with continued intention to use e-learning systems (Lin *et al.,* 2011).

People who feel satisfied with their initial experience may not remain satisfied (Khalifa and Liu, 2003) and may discontinue its use (Reinig, 2003). People who feel dissatisfied with the user experience, even for non-technical reasons, may stop using it (Bhattacherjee, 2001, Te'eni and Feldman, 2001). User dissatisfaction is associated with reductions of IS/IT budgets, rendering it harder for IS/IT professionals to provide satisfactory services (Galetta and Lederer, 1989). Users may even outsource their whole IT infrastructure if they feel dissatisfied with in-house services (Lawrence and Low 1993). Satisfaction is also crucial to outsourcing providers for customer retention (Patterson *et al.,* 1997).

There are many potential objects-of-satisfaction in an information system, such as hardware, software, work practices, data, people, services, standards, policies, and information. IS researchers have reported satisfaction responses to objects ranging from a single technical component (Slaughter *et al.,* 1995) to certain system-level attributes like system quality (Chung and Kwon, 2009) and information quality (Chung and Kwon 2009; Koivumäki *et al.,* 2008), to technology-supported work practices (Alter 1999, Reinig, 2003), to complete organizational IS/IT infrastructures (Cats-Baril and Jelassi, 1994). Dissatisfaction at any level can put system success at risk. Recent research shows that customer satisfaction even has a significant relationship to spending growth at the macroeconomic level (Fornell *et al.,* 2010). A better understanding of satisfaction phenomena may therefore be useful to IS professionals both to improve their systems and to increase the likelihood that good systems will succeed.

Most satisfaction effects are an immediate response to current changes of circumstances – something happens, and people feel satisfied or dissatisfied. Briggs *et al.* (2008), however, observed a satisfaction phenomenon they labeled as a *nostalgia effect* that appears to play a role in systems development projects. A *nostalgia effect* is a current satisfaction response to objects and events in the past. The satisfaction effect is not that people remember feeling satisfied or dissatisfied by past events, but rather that they experience a current feeling of satisfaction or dissatisfaction with respect to past events. Individuals sometimes feel positive or negative satisfaction responses as they reflect on past successes or failures, even though such reflection invokes no change with respect to current conditions.

Nostalgia effects can manifest, for example, during a requirements workshop or perhaps during a post-implementation review when stakeholders reflect on past projects. When presented multiple options for consideration, users and analysts alike may judge these options against past experiences. They may for example, share anecdotes about related experiences on previous projects, and may express strong feelings (satisfaction or dissatisfaction) towards a particular approach. Authors observed an exemplar instance of the nostalgia effect during a User Interface / User Experience (UI/UX) design workshop with stakeholders of a large-scale collaborative software system. One stakeholder proposed that the user interface could be simplified and cognitive load could be reduced by using a single component for input to any of three different objects on the screen. Another key stakeholder displayed outward signs of negative emotions in the form of vocalics, facial expressions, and gestures and orally expressed dissatisfaction with an earlier system that used the same approach. The stakeholder said,

"We tried that 20 years ago. It was a disaster. People never knew where their contribution was going to go. Let's don't go down this road again. We know it's a dead-end…the users would get angry. The contributions would get mixed up. We hated it."

Persuaded by the stakeholder's manifest dissatisfaction, other stakeholders agreed to abandon the suggestion. Further probing by the designer, however, revealed that the earlier attempt had been part of an interface with many design flaws. The designer demonstrated a graphical approach to eliminate the earlier ambiguity and simplify the current interface. The key stakeholder, however, continued to express dissatisfaction with the prior system, and the group decided to adopt the higher-complexity layout .

In another instance, a key stakeholder in a 2008 architecture design workshop for a new decision support system evidenced a positive satisfaction response while relating anecdotes about successful system design efforts in the 1980s. After reflecting on the anecdotes, the stakeholder insisted that the team adopt the same methods for the current project. Other stakeholders resisted the older approach, deeming it to be inadequate to address the design and development challenges of creating a state-of-the-art system. The team was not able to resolve the conflict, and in the end, they abandoned the project.

These examples illustrate the important role a nostalgia effect can play in systems development. When people re-interpret nostalgia effects in the context of current systems, it can impact system success. Research has shown, for example, that prior satisfaction levels with a collaboration process are predictive of future satisfaction levels with that process (Reinig, Horowitz, and Whittenburg, 2011). It could therefore be useful to IS/IT professionals to have a better understanding of the nostalgia effect phenomenon in particular and the influence of prior experience more generally. To date, however, much of the evidence for the nostalgia effect has been anecdotal. It could therefore be useful to conduct an exploratory field investigation of the nostalgia effect. In this paper, we seek to describe and empirically quantify the phenomenon. In the next section, authors explore Yield Shift Theory as a possible explanation of the nostalgia effect. A report on a field study that measures nostalgia effects among working IS/IT professionals in India is prepared. Finally, a possible association between these satisfaction responses and the antecedents proposed by Yield Shift Theory is examined for wider implications for practice as well as further research on the theme.

Yield Shift Theory

The Yield Shift Theory (YST) (Briggs *et al.,* 2008) is a cognitive theory of satisfaction developed by IS field researchers to explain observed satisfaction effects for which prior theories, such as disconfirmation theory (Oliver, 1980), could not account. Some authors use the term, satisfaction, to label an affective response, while others apply the term to a judgment that needs and constraints have been met (Coghlan and Pearce, 2009). YST conceptualizes and measures satisfaction as an affective phenomenon, rather than as a judgment. YST defines the satisfaction response as *"a valenced affective arousal with respect to some object that has reference to some state or outcome desired by an individual"* (Briggs *et al.,* 2008, p. 275). YST proposes a deductive-nomological network of causal

relationships to explain the onset, magnitude, direction and cessation of satisfaction responses.

YST assumes that individuals hold multiple goals to which a subconscious cognitive mechanism ascribes some level of *utility* – the goodness, worth, or value an individual ascribes to the goal. A rational individual might be tempted to pursue higher-utility goals over lower-utility goals. However, continuously pursuing higher-utility goals to the exclusion of lower-utility goals could be detrimental to survival by blocking one from pursuing lower-utility goals that nonetheless are essential for survival. YST therefore assumes that a subconscious cognitive mechanism automatically assesses the *likelihood* that a given goal may be attained, and generates a perception of *yield* for the goal that is proportional to its utility, but reduced in inverse proportion to the likelihood ascribed to attaining the goal (Figure 1).
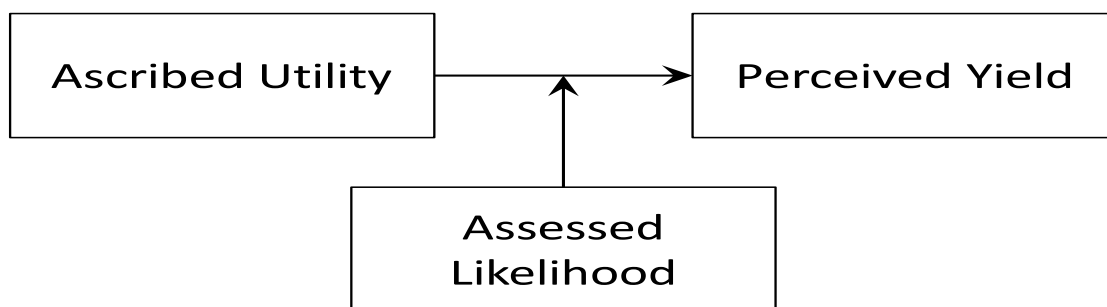

Figure 1. Perceived Yield for a given goal is a function of the utility an individual ascribes to the goal, moderated by the assessed likelihood of attaining it. (Briggs, Reinig, & Vreede 2008)

YST assumes that human attention resources are limited, so individuals cannot attend to all their goals simultaneously. Goals that are currently subject to cognitive processing are said to be *active* (Briggs *et al.,* 2008). YST assumes a subconscious cognitive mechanism automatically detects the magnitude and direction of changes or *shifts in net yield* of the set of currently active goals. A shift could result from changes in the utility or likelihood of one or more goals in the active set, or could result from changes to the goals that comprise the active set. YST posits that a subconscious mechanism automatically triggers a satisfaction response proportional to the magnitude of the yield shift, and with a valence in the direction of the shift (Figure 2).

YST suggests two possible mechanisms by which nostalgia effects could be invoked. First, when one reflects on past success or failure, past goals would temporarily displace current goals in the active goal set. If the yield past goals were different from the yield of the current goals they displaced, this would cause a positive or negative yield shift for the active set as a whole, and to a positive or negative satisfaction response. Second, if one were to recall past shifts-in-yield with respect to those goals, the remembered shifts could invoke a current shift, giving rise to a current satisfaction response. These mechanisms would account for observed nostalgia effects. Because this study is exploratory - meant to describe and quantify a phenomenon and its correlates - rather than experimental - meant

to test a theoretical proposition - we framed the study with research questions rather than hypotheses:

R1: Satisfaction with past processes. *Do people who report more positive shifts in yield with respect to past work processes score higher on a satisfaction-with-process instrument than people who report less positive shifts in yield?*

R2: Satisfaction with past outcomes. *Do people who report more positive shifts in yield with respect to the outcomes of past work score higher on a satisfaction-with-outcome instrument than people who report less positive shifts in yield?*
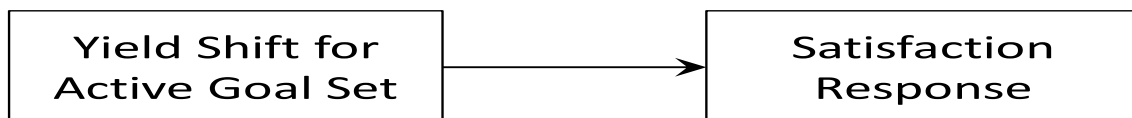

Figure 2. The Satisfaction Response is a function of shifts in yield for the set of salient goals. Yield Shifts may result from changes of utility or likelihood for one or more of the goals in the active set, or from changes in which goals comprise the active set (Briggs, Reining, & Vreede 2008)

Methods

Dependent Variables: There were two dependent variables for this study, each a different potential object of satisfaction: Satisfaction-with-process (SP) and Satisfaction-with-outcomes (SO). Satisfaction-with-process was measured with a five-item, seven-point Likert scale that had been previously validated in two international studies of satisfaction with technology supported work practices (Reinig et al. 2006 Briggs et al. 2008). The items were:

- I feel satisfied with the way in which today's meeting was conducted.
- I feel good about today's meeting process.
- I liked the way the meeting progressed today.
- I feel satisfied with the procedures used in today's meeting.
- I feel satisfied about the way we carried out the activities in today's meeting.

Satisfaction-with-outcomes was measured with a five-item, seven-point Likert scale that had been previously validated in the same studies. The items were:

- I liked the outcome of today's meeting.
- I feel satisfied with the things we achieved in today's meeting.
- When the meeting was over, I felt satisfied with the results.
- Our accomplishments today give me a feeling of satisfaction.
- I am happy with the results of today's meeting.

Independent Variables: Because YST suggests that the nostalgia effects may be invoked by the recall of past yield shifts, there were two independent variables for this study. A scale for recalled Utility-shift and a scale for recalled Likelihood-shift. Utility-shift was measured with a four-item, seven-point semantic anchor scale that had previously been validated in an international study of technology-supported work practices (Briggs *et al.* 2008). The semantic anchors were, "Much Less" and "Much More". The items were:

- I got (less/more) from the meeting than I had anticipated.
- I benefited (less/more) from this meeting than I expected.
- The meeting did (less/more) good for me than I thought it would.
- I gained (less/more) from the meeting than I believed I would.

Likelihood-shift was measured with a four-item, seven-point semantic anchor scale that had also been previously validated by an international study of technology-supported work practices (Reinig *et al.,* 2009). The semantic anchors were, "Much Less" and "Much More". The items were:

- The meeting made it (less/more) likely that I would attain something I want.
- Because of the meeting, I am (less/more) likely to succeed on something I care about.
- I am (less/more) likely to attain my goals because of this meeting.
- Due to this meeting I am (less/more) likely to get what I want.

Participants: One hundred five working IS/IT professionals participated in this study, which included a self-report of demographic data. We asked for those professionals who were directly responsible for the IS/IT functions in the organization. We did not ask for a specific job title, however, we excluded the CEO and the Director level employees if IS/IT was not their background and if they relied on the input of other senior IS/IT professionals for taking related decisions. We did not collect data on their detailed job requirements as they were not of focal interest to our inquiry. Of the 105 participants, 77 were male and 26 were female. Two respondents did not report their sex. Participants ranged from 18 to 60 years of age with a mean of 34.0 and a standard deviation of 10.3. Two respondents did not report their age. Work experience among the participants ranged from one to 34 years, with an average of 10.3 years and a standard deviation of 8.6. All were born and lived in India. One spoke English as a first language. All others spoke English as a second language. Fifty-one spoke Gujarati as their first language; twenty-six spoke Hindi; twelve spoke Marathi; two spoke Telugu. Each of the following languages had a single respondent report it as their first language: Kannada, Ckzyeruti, Punjabi, Kathiyawadi, Tamil, Soudh, Crujarat, Banglf, Soudh, and Madyalam. One question asked how much prior experience the participants had with the tools and technologies (e.g. computers, software, flip-charts, etc. used during the meetings. Table 1 shows the distribution of the users' previous experiences.

Table 1. Distribution of Prior Experience with Technology Among Participants.	
# Prior Uses	# of Users
0	18
1 or 2	22
3 to 5	24
6 to 10	19
More than 10	7
Total	90

Did not report   15

Procedures: Researchers approached potential respondents at professional gatherings in which they participated as a part of their assigned workload. Researchers asked participants if they would participate in a study of meeting satisfaction by responding to a questionnaire. Each participant received a one-page paper instrument containing the questionnaire items. The researcher instructed participants orally to bring to mind and think about a specific meeting in which they had participated in the prior thirty days. The researcher then instructed participants to answer the questions with respect to that meeting.

They were asked to reflect on the work process, the outcomes of the work effort, and the tools and technologies the group used to support that work. We did not constrain them to think about only certain aspects of the meeting, rather, to focus on the process as a whole. Further, we did not ask them to consider only certain tools and techniques. After a few moments of reflection, participants were asked to respond to the Yield Shift and Satisfaction items with respect to that prior event.

The satisfaction items on the questionnaire instrument provided the participants with scales by which to report the magnitude and valence of their satisfaction responses.   Each satisfaction item used a 7 point Likert scale anchored with the terms, "Strongly Disagree" and "Strongly Agree."   Responses lower than the neutral point indicate a satisfaction response with a negative valence.   Responses above the neutral point indicated a satisfaction response with a positive valence.   Neutral responses indicated that the participant experienced no satisfaction response.

It is important to note that the instrument did not measure the participants' past feelings of satisfaction at the time of time of the past meeting. Rather, consistent with the definition of the Nostalgia Effect, it measured their current satisfaction responses to the past meeting they brought to mind.

Analysis

The mean of responses to items in each scale was used to address the research questions. Table 2 presents the mean responses for each scale. In cases where responses were missing, the mean response for a scale was computed using the completed items. Participants gave a wide range of responses to the items in each of the four scales (Table 2).

Table 2. Descriptive statistics for the mean response on the four constructs measured (N=105)				
Construct	**Mean**	**STD**	**Min**	**Max**
Satisfaction-with-process (5 items)	4.70	1.44	1.00	7.00
Satisfaction-with-outcome (5 items)	4.89	1.34	1.25	7.00
Utility-shift (4 items)	4.73	1.35	1.25	7.00
Likelihood-shift (4 items)	4.71	1.40	1.00	7.00

The instruments had been validated in earlier studies. A factor analysis showed that items for each scale loaded highly on the same factor, and did not load highly on any other factor, demonstrating acceptable discriminant validity for the instrument. Chronbach's Alpha showed an inter-item reliability greater than 0.90 for each scale, demonstrating acceptable convergent validity among the items. (Table 3)

Simple linear regression was used to test the research questions. Satisfaction-with-process and satisfaction-with-outcome were separately and independently regressed on utility-shift and likelihood-shift. The estimated regression lines and effect sizes are presented in Table 4 and 5.

There was a statistically significant positive linear relationship between Satisfaction-with-process and Utility-shift (r=.683, p<.001). Utility-shift explained 46.7% of the variance in Satisfaction-with-process (Table 4).

Table 3. Principle Components Analysis and Cronbach's α

Item	Factor 1	Factor 2	Factor 3	Factor 4	Cronbach's α
PU1	.248	.069	.227	**.838**	
PU2	.194	.287	.355	**.738**	.903
PU3	.357	.331	.289	**.684**	
PU4	.191	.402	.383	**.642**	
L1	.282	.189	**.749**	.343	
L2	.287	.305	**.683**	.446	.928
L3	.356	.258	**.780**	.267	
L4	.286	.408	**.693**	.355	
SP1	**.609**	.381	.442	.314	
SP2	**.854**	.232	.242	.163	
SP3	**.819**	.322	.250	.213	.943
SP4	**.799**	.273	.250	.263	
SP5	**.640**	.347	.256	.385	
SO1	.197	**.801**	.123	.299	
SO2	.305	**.811**	.318	.126	
SO3	.408	**.773**	.279	.178	.940
SO4	.450	**.643**	.374	.288	
SO5	.535	**.592**	.272	.281	

Note: Principle components analysis used varimax rotation. Boldface indicates the heaviest factor loading for an item.

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Table 4. Simple Linear Regressions of Satisfaction responses on Utility-shifts.			
Dependent Variable	Hypothesis Test	Regression Equation	R^2
Satisfaction-with- Process	$F_{(1,103)}$=90.28**	$\hat{y} = 1.24 + .73x$	46.7%
Satisfaction-with- Outcome	$F_{(1,103)}$=97.97**	$\hat{y} = 1.61 + .69x$	46.7%

There was a statistically significant positive linear relationship between Satisfaction-with-process and Likelihood-shift . Likelihood-shift explained 52.7% of the variance in Satisfaction-with-process (Table 5).

Table 5. Simple Linear Regressions of Satisfaction responses on Likelihood-shifts.			
Dependent Variable	Hypothesis Test	Regression Equation	R^2
Satisfaction-with- Process	$F_{(1,103)}=114.54**$	$\hat{y} = 1.18 + .75x$	52.7%
Satisfaction-with- Outcome	$F_{(1,103)}=122.87**$	$\hat{y} = 1.57 + .70x$	54.4%

There was a statistically significant positive linear relationship between Satisfaction-with-outcome and Utility-shift. Utility-shift explained 48.7% of the variance in Satisfaction-with-outcome (Table 4).

There was a statistically significant positive linear relationship between Satisfaction-with-outcome and Likelihood-shift. Likelihood-shift explained 54.4 percent of the variance in Satisfaction-with-outcome (Table 5).

Discussion

Although earlier research demonstrates the emergence of satisfaction effects in IS/IT domains of interest, and demonstrates that satisfaction is an important indicator of system success, and although the existence of a nostalgia effect had been noted from anecdotal evidence, the effect had not been empirically demonstrated and explored. The results of this study provide empirical evidence that measureable nostalgia effects do manifest among IS/IT professionals, and suggest a strong association between satisfaction responses and the antecedents proposed by Yield Shift Theory.

R1: Satisfaction with Past Work Practices
When participants were asked to reflect on past work practices, they reported satisfaction responses ranging from very positive (7 on a seven-point scale) to very negative (1 on a seven-point scale). Those satisfaction responses correlated with both Shifts in Utility and Shifts in Likelihood. This answered Research Question 1. People who reported more positive shifts in utility and likelihood from their past work processes did score higher on a satisfaction with process measure. Statistical analysis showed that shifts-in-utility accounted for slightly less than half the variance in satisfaction with work practices, while likelihood shifts accounted for slightly more than half the variance.

R2: Satisfaction with Past Outcomes
When participants were asked to reflect on the outcomes of past work practices, the reported satisfaction responses ranged from strong positive (7 on a seven-point scale) to strong negative (1.25 on a seven-point scale). These satisfaction responses were also associated with Utility and Likelihood shifts. This answered Research Question 2. People who reported more positive utility and likelihood shifts with respect to the outcomes of past work did score higher on a Satisfaction-with-outcome instrument. Statistical analysis showed that shifts-in-utility accounted for slightly less than half the variance in satisfaction with outcomes, while likelihood shifts accounted for slightly more than half the variance.

Implications for Practice

There are several practical implications of these findings. Users of systems may discontinue the use of them if they feel dissatisfied, even for non-technical reasons. Because of nostalgia effects, it may be important for system designers to pay attention to not only technology design, but also to the design of the work practices supported by the technology. It may be important to address not only the pragmatic aspects of technology and work practices, but also hedonic aspects of the work practice. Because of a nostalgia effect, it may be that users could discontinue using a system even after pragmatic issues with the technology or the work practice have been resolved. It is possible that hedonic improvements to the system could help mitigate this risk. Hedonic improvements could leverage the nostalgia effect to invoke ongoing satisfaction responses if each use of the improved system were to remind users of how much they liked the improvement when it happened.

It may be important for system designers to develop explicit methods for addressing nostalgia effects. It may be important that designers recognize when stakeholder preferences may derive from nostalgia effects and to guard against the possibility that nostalgia effects could interfere with achieving current goals. It is also important to recognize, however, that nostalgia effects, like other satisfaction effects, pertain to the private goals of the stakeholders. A nostalgia effect, whether positive or negative, provides a clue about the goals stakeholders seek to achieve with a system. It may be useful to encourage stakeholders to make those goals explicit, and to focus on how they could be attained with a proposed or current system. This approach could increase the likelihood of system success.

Yield Shift Theory suggests at least three approaches that IS/IT managers and designers could use to invoke positive satisfaction responses: utility shifts, likelihood shifts, and change of goals. To invoke a utility shift, an IS/IT professional would have to demonstrate to a stakeholder that, by using a system to attain a goal, the user would receive more benefit than they had previously thought. In the case of a business system, for example, they might demonstrate that the system could cut costs further or generate revenues faster than the stakeholder had previously anticipated. In the case of an online social community they might demonstrate that the system would provide them with a more engaging community of interest or faster, more expert answers to their questions then they had expected.

To invoke a likelihood shift, an IS/IT professional would have to demonstrate that the system would increase the likelihood they would attain their goals. For an online financial advisory system, for example, one could demonstrate that users of the system tended to anticipate the direction of the market more accurately than did non-users.

To invoke a change of goals, the IS/IT professional would have to focus stakeholders on different, higher-yield goals than those that brought them to the system. In the case of an online community of practice, for example, the canon of answers to technical questions might draw people into the system. However, one could demonstrate to stakeholders that, not only could they find answers they could find people who know answers, and form

working relationships with them. This change of goals could invoke a positive yield shift, giving rise to a satisfaction response.

One important implication of all these strategies is that the IS/IT professional must become personally acquainted with system stakeholders in order to learn about their goals and expectations, their satisfactions and dissatisfactions. It may not be possible to predict from one's own desk chair what the stakeholders value and why. Managers and recently hired employees may also gain insight from the storytelling that sometimes takes place among senior developers. We have observed multiple cases in which storytelling invokes observable nostalgia effects among one or more developers and the experience usually helps us to understand why they value certain design methods over others.

Implications for Research

The results of this exploratory study suggest YST may be a useful perspective for understanding the nostalgia effect. Findings are consistent with the constructs and relationships proposed by the theory. Given the strength of the associations discovered, experimental work is warranted to formally validate or refute the propositions of YST. This work could be conducted with respect not only to the nostalgia effect, but also to other satisfaction effects that could not be explained by earlier theories (Table 5), among them anticipation effects, where people feel satisfaction responses before goals are attained or thwarted; differential effects where people who value an outcome equally manifest different satisfaction responses; mentor effects, where people feel satisfied after conversation with mentors; mixed feelings, where people feel both satisfied and dissatisfied simultaneously, and attenuation effects, where satisfaction responses diminish over time. (Briggs *et al.* 2008).

Limitations *and Future Directions*

Exploratory field investigations like this one, trades off some rigor for reality. This paper measures the independent variable in a workplace setting rather than manipulating it in an experimental laboratory setting. While it is useful to measure correlations of independent variables with dependent variables in a field setting to discover and describe phenomena of interest, one must also rigorously test a theoretical proposition and so impute causality to a correlation by deriving experimental treatments to manipulate the independent variable. Further insights about the nostalgia effect and about the scientific utility of YST could therefore be gained through controlled experimental science and through applied design science, where each theoretically informed design choice can be used as a hypothetical treatment.

This study explores nostalgia effects pertaining only to recent experiences – within the prior 30 days. Further exploratory work is warranted to see whether measurable effects manifest with respect to experiences months and years past. We did not conduct post-survey audit about what technology the respondents were thinking about, therefore, we cannot explicate the results in the context of certain tools and technologies. Further, it is likely that the common method bias exists.

Conclusions

This study explored the nostalgia effect as it manifested among IS/IT professionals at the workplace in India. It examined the effect with respect to two different objects of satisfaction: collaborative work processes and outcomes. The study demonstrated empirically a measureable nostalgia effect with respect to circumstances that had occurred in the prior 30 days. It also demonstrated a strong association between satisfaction responses and the antecedents proposed by Yield Shift Theory: Utility Shifts and Likelihood Shifts. These findings suggest that Yield Shift Theory may be a useful explanation for Satisfaction Effects. Additional research is therefore warranted to further describe and quantify the nostalgia effect and to test further the Yield Shift Theory of Satisfaction.

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