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State of IT Artifacts: An Analysis of ICIS 2009 Research Papers

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STATE OF IT ARTIFACTS: AN ANALYSIS OF ICIS 2009 RESEARCH PAPERS

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Abstract

The notion of IT artifact as the core of the IS discipline has been generally accepted by IS scholars, despite a thick gray area consisting of multiple and varied conceptualizations of IT artifacts. In this study, we do not seek to clarify this gray area, or to impose any specific worldview upon it. Rather, we strive to present an accurate representation of the current state of IT artifacts as researchers conceptualized them. We do so through content analysis of 134 research articles from the most recent proceedings of the International Conference on Information Systems (ICIS) 2009. We consider three facets for our analysis: IT artifact conceptualization adopted from Orlikowski and Iacono's (2001), context of a study, and granularity of IT artifact treatment. These facets inform us as to the current state of IT artifacts. We provide discussions about the intersections of these three facets, comparison of our analysis of IT artifacts to two other studies, and provide implications for IS scholars and the IS discipline as a whole.

Keywords: IT Artifact, IS Discipline, ICIS 2009, Content Analysis

1 RESEARCH OBJECTIVES

IT artifacts have been continuously linked to the state of IS research and the identity of the IS discipline, and have thus been at the center of serious debates (Agarwal et al. 2005; Alter 2002, 2003; Benbasat et al. 2003; Hevner et al. 2004; Orlikowski et al. 2001; Saunders et al. 2003; Weber 2003; Whinston et al. 2004). Despite the importance of understanding IT artifacts in the IS discipline and continued efforts on examining IT artifacts (Carroll 2008; Evermann et al. 2009; Matook et al. 2008), there are still several gaps in the literature that beg for investigation.

First, there is a lack of definition and connotation regarding IT artifacts among IS scholars. It is well acknowledged that the term *IT artifact* can refer to a variety of different concepts (Hevner et al. 2004), and that different definitions of IT artifacts can lead to different conceptualizations of other important IS concepts (Alter 2006). Related to such inconsistent treatment is the granularity of IT artifacts, that is, the level of specificity upon which IT artifacts are studied. For example, some studies consider types of e-commerce technology (thus a general type of IT artifacts), while others might consider a single e-commerce website (such as Amazon.com), or even a feature of that single website (such as the reputation mechanism inside Amazon.com).

Second, there is a lack of agreement on a clear territory of what can be considered as IT artifacts in IS research. This "gray area" (Whinston et al. 2004) arguably has significant implications on what should be considered IS research, and thus acceptable for publication in IS journals and conferences. Concern over this gray area is continuously mounting, owing to the fast evolving nature of IT development that has already seen the term ICT (information and communication technology) replacing IT, while within the foreseeable future, the term ICET (Information, Communication, and Entertainment Technology) may replace both IT and ICT.

Third, few recent studies have demonstrated whether the roles of IT artifacts in IS research have changed since, for example, when Orlikowski and Iacono (2001) articulated and demonstrated their classification scheme more than a decade ago. In particular, since the most recent debates on IT artifacts, few studies have provided an overall picture of the state of IT artifacts in IS research with a systematic approach to examine the published work on IS. However, one exemplary exception to this is an article published last year by Akhlaghpour et al. (2009) which we will discuss below.

This study does not address all the identified gaps above, but does offer a first attempt to address some of the gaps. In this study, we do not attempt to redefine, or modify existing notions of the IT artifact. Rather, we accept IS as a fragmented adhocracy (Banville et al. 1989), believing that as a multidisciplinary, evolving discipline, IS scholars should be allowed to explore various ways of investigating IT artifacts as they deem appropriate. As such, our interest lies in investigating, and reporting what IS researchers themselves are studying, how objects and phenomenon are being researched, and which contexts are most salient in the current literature.

In particular, this study examines the most recently published IS papers to achieve two main objectives: (1) to depict the current state of IS research in terms of conceptualizations of IT artifacts in IS research, and (2) to illustrate the diversity of the types of IT artifacts in IS research. Based on the findings, we discuss the implications of the current state of IT artifact studies on IS research in general.

2 RESEARCH METHOD

2.1 Article Selection

In order to reflect the most up to date state of the art IS research, we considered the 134 complete research articles (excluding teaching cases and one article on the nature of IT artifact, similar to the

objectives of this present paper) in the ICIS 2009 proceedings as the pool of published IS papers for our analysis.

We chose the ICIS 2009 proceedings as these represent the most current research in the discipline, as opposed to IS journal articles which tend to sometimes take several years from the initial research ideas to final publications. In addition, the topical coverage in ICIS conferences is much broader than articles from certain journals, thus reflecting the breadth of the research interests by the IS community. Some ICIS conferences contain both complete research and research-in-progress papers. Complete research papers have the advantage over research-in-progress papers for being able to provide empirical evidence and support for research objectives. To manage the work load, we considered only 2009 ICIS proceedings. We believe that findings from 134 papers provide some meaningful insight into the state of IT artifact research.

2.2 Classification Scheme

This study uses a multi-facet classification method to achieve the two objectives. Three facets are considered in the study: the conceptualization of the IT artifact in IS research, the contexts of studies, and the granularity level of IT artifacts being studied.

Among several interesting studies analyzing the role of the IT artifact in IS research, arguably the most systematical and influential one is by Orlikowski and Iacono (2001). They analyzed all of the research published in *Information Systems Research* (*ISR*) in the 1990s and identified 14 distinct conceptualizations of the IT artifact across five main categories: the nominal view, the computational view, the tool view, the proxy view, and the ensemble view. Their classification forms the foundation of our coding scheme in this analysis. Here we provide a summary of the Orlikowski and Iacono (short for O&I) framework. The conceptualization of five views with 14 roles is summarized in Table 1.

Category	***Role***	***Definition***
Nominal View	*Absent Technology*	IT is invoked in name only or as background details
Computational View	*Technology as Algorithm*	IT is represented through the computational algorithms that yield functionality
	Technology as Model	IT is represented by data simulation, or specifying, building, and programming models
Tool View	*Labor Substitution Tool*	IT performs activities that humans would have to otherwise
	Productivity Tool	IT as labor augmentation, extending or enhancing human productive capabilities
	Information Processing Tool	IT as managing, storing, and/or controlling flow of information, and access to it
	Social Relations Tool	IT alters or enhances social relations (or roles) through media and communication
Proxy View	*Technology Perception*	IT is represented by measures of user's perceptions
	Technology Diffusion	IT is represented by measures of diffusion and penetration
	Technology Capital	IT is conceptualized and measured by costs associated with tools or infrastructures.
Ensemble View	*Development Project*	IT as a work in progress, focused on social design, development, and implementation processes
	Production Network	IT as a work in progress, with focus on the group-level of development and implementation
	Embedded System	IT is conceptualized as shaped by dynamic, complex social contexts
	Technology as Structure	IT as it embodies social structures, purposefully designed with sets of rules and resources

Table 1. IT Artifact by Category and Role (adapted from Orlikowski and Iacono, 2001)

According to Orlikowski and Iacono, the nominal view is named as such to indicate that those within this classification do not invoke technology in fact, but rather only in name. They elaborate that "typically, the terms 'information technology', 'information system', or 'computer' are used a few times in the articles, but these references to technology are either incidental (as in studies of CIO compensation or computer security) or used as background information (as in studies of IS personnel, or outsourcing practices in the IS industry)" (p. 128). As such, technology does not play a role as a variable in the research and is, in this sense, absent.

The computational view "concentrates expressly on the computational power of information technology," with research focusing "primarily in the capabilities of the technology to represent, manipulate, store, retrieve, and transmit information, thereby supporting, processing, modeling, or simulating aspects of the world" (p. 127). Two conceptualization fall within this view: technology as algorithm and technology as model. In the former, the computational system is technically detailed, typically through the articulation of algorithms, and validated through use or testing. In the latter, phenomenon such as knowledge, processes, and events, are represented through models, which are often mathematically specified.

The tool view of technology "represents the common, everyday, received wisdom about what technology is and means," as "the engineered artifact, expected to do what its designers intended it to do" (p. 123). Four different representations of the tool view are identified by: 1) technology as a labor substitution tool, whereby the artifact is that which replaces and/or substitutes work a human would have to otherwise perform; 2) technology as a productivity tool, that is, "prosthetic devices that enable individuals and social institutions to extend their reach and achieve performance benefits in the course of their ongoing socio-economic activities" (p. 123); 3) technology as information processing tool view assumes that the role of the IT artifact is to enhance or modify ways in which information processing is done by humans and/or organizations; and 4) technology as social relations tool conceives of technology as that which alters social roles, impacting hierarchies, business processes, and communication choices through different media and tasks.

The proxy view assumes that surrogate measures can capture indicators of those critical aspects of the artifact of interest. Three conceptualizations exist within the proxy view: technology as perception, technology as diffusion, and technology as capital. In the first, technology as perception, the representation of IT is based on measures of how users perceive the technology, often drawing on theories such as The Theory of Planned Behaviour, or the Technology Acceptance Model. Technology as diffusion uses penetration and diffusion measures within socio-institutional contexts to understand IT. This is because "what researchers want to know is how many people, organizations, or nations are currently using the technology" (Orlikowski et al. 2001, p125). Finally, technology as capital typically treats technology as an independent or dependent variable, measured in dollars that represent costs of the IT, or related infrastructure.

The ensemble view of technology goes beyond the proxy and tool views to address both how technology comes to be, and how it comes to be used. They identify four distinct variations of the ensemble view: development project, production network, embedded system, and structure. The first perspective, technology as a development project, considers the artifact to be a work-in-progress, with the focus on the social processes surrounding the design, development, and implementation, typically grounded in a specific organizational context. The second perspective, technology as a production network, focuses on technology development at the level of industry, or nation-state, with research that covers issues such as policy or market forces. Thirdly, conceptualizing technology as embedded system represents IT as "an evolving system embedded in a complex and dynamic social context...enmeshed with the conditions of its use," and is thus "neither an independent or dependent variable" (p. 126). Finally, technology as structure is similar to technology as embedded system, but is grounded in structuration theory, with a focus on particular, concrete artifacts.

The context of a research study plays an important role on the research itself and its implications. Zhang and Li (2005) note that "nothing happens in a vacuum," and the "context imposes constraints or significance" to what humans do with technology (p. 238). It has been well recognized that although the IS discipline was initiated within the organizational context, current research interests

have extended to phenomenon outside of this context. Capturing the contexts of research studies will allow us to examine not only *what* is conceptualized as an IT artifact, but also *where* the impact or significance of the IT artifacts occurs. Adapting from Zhang and Li (2005), we consider the following contexts: organizational, marketplace, home, cultural, and other. These are defined in Table 2.

Context	***Definition***
Organizational	Organizational or workplace setting, including universities if students are the subjects
Marketplace	Where commerce, banking, and marketing take place
Home	Settings in individual homes
Social	General setting in a less organizationally constrained environment
Cultural	Cultural, national, and geographical contexts
Other	Contexts that do not fit into any of the above categories

Table 2. Context definitions (adapted from Zhang and Li, 2005)

The second objective of this study is to illustrate the different types of IT artifacts being studied in IS research. One way of doing this is to identify the granularity at which IT artifacts are being addressed. Examining the collected articles revealed three levels of granularity: general, specific, or feature. General exists at the highest level, consisting of the artifact from a broad perspective, and often labeled by a term/name representing a type of similar IT artifacts. For example, if a paper notes that a decision support system was the object of study, with no distinction as to which one, it is classified as a general type. Specific exists when a specific artifact is named or distinguished. For example, a study of e-commerce might take place, focusing only on Amazon.com as the object of interest. In this case, the article would be marked as having a specific granularity for the IT artifact. If the same article focused on the review-posting feature of Amazon.com, it would be marked as having the granularity at the feature level. However, it is worth noting that while the feature level is of a finer granularity, research need not note a specific granularity in order to explicate a feature. For example, if a study on blogging focused on the ability for users to post comments, but did not name a specific blog hosting site as its setting, granularity still exists at the feature level. Table 3 summarizes the three granularity levels.

Granularity	***Definition***
General	The artifact is studied broadly, without distinguishing a specific type or feature
Specific	A nameable, distinct artifact is studied
Feature	A distinct feature of either a general or specific artifact

Table 3. Granularity definitions

3 DATA ANALYSIS AND RESULTS

Each of the 134 papers was carefully examined and assigned with one value for each of the four coding dimensions (views with five values, roles with 14 values, context with six values, and granularity with three values). Coding results were recorded in a Microsoft Excel file and then analyzed with pivot tables and other tools. The following are the results.

3.1 Broad Overview

Table 4 summarizes the percentages of articles assigned with views and roles. It indicates that 20.9% of the 134 articles are with the nominal view (absent technology). For the rest of the articles with a clear IT artifact notion, the ensemble view is held with the highest percentage at 26.1%, followed by the proxy view at 24.6%, the computational view with 16.4%, and the tool view with 11.9%. Among these views, the top four most popular roles are technology perception (within the proxy view) as the most frequent role with 14.9% of the articles, technology as a model (within the computational view)

with 11.9%, development project (within the ensemble view) with 9.7%, and technology capital with 8.2%.

Category	*Category Percent*	*Role*	*Role Percent*
Nominal View	20.9%	*Absent Technology*	20.9%
Computational View	16.4%	*Technology as Algorithm*	4.5%
		Technology as Model	11.9%
Tool View	11.9%	*Labor Substitution*	0.8%
		Productivity	3.7%
		Information Processing	1.5%
		Social Relations	6.7%
Proxy View	24.6%	*Technology Perception*	14.9%
		Technology Diffusion	0.8%
		Technology Capital	8.2%
Ensemble View	26.1%	*Development Project*	9.7%
		Production Network	6.7%
		Embedded System	5.2%
		Technology as Structure	4.5%

Table 4. Category and Role Percentages of Analyzed ICIS 2009 Articles

Table 5 summarizes the context and granularity analyses. The most dominating context is the organizational (58.2%), followed by marketplace (23.1%), the social (9.0%), the cultural (5.2%), the other (3.7%), and finally the home with only 0.8%. In terms of granularity, 73.1% of the articles considered general types, 21.6% considered a specific IT artifact and 5.2% at the feature level.

Context	*Context Percentage*
Organizational	58.2%
Marketplace	23.1%
Home	0.8%
Social	9.0%
Cultural	5.2%
Other	3.7%
Granularity	***Granularity Percentage***
General	73.1%
Specific	21.6%
Feature	5.2%

Table 5. Context and Granularity Percentages of Analyzed ICIS 2009 Articles

3.2 View Conceptualization by Context

We further broke down our analysis in such a way that can provide insight into different conceptualizations of IT artifacts within the six contexts. Figure 1 shows the distribution of article numbers with five views inside each of the six contexts. For example, most of the analyzed articles are in the Organizational context, within which the ensemble view is held by about 18% of the 134 articles. This is followed by the proxy view (about 13%) and the absent view (about 12.7%). Inside the second and third most salient contexts, Marketplace and Social, all five views are present with varied frequencies.

3.3 Role Conceptualization by Context

To understand the relationship between conceptualization and context from an even more detailed perspective, we analyzed conceptualization at the role level in relation with the six contexts. In Figure 2, the highest bar indicates that papers with absent technology are mostly found within the

organizational context (12.7% of the 134 papers). The second highest bar is technology as a development project within the organizational context, spanning 9.0% of the articles. The third is technology perception within the organizational context, encompassing 7.5% of the articles, while technology as a model within the marketplace is fourth, found in 6.7% of the papers.

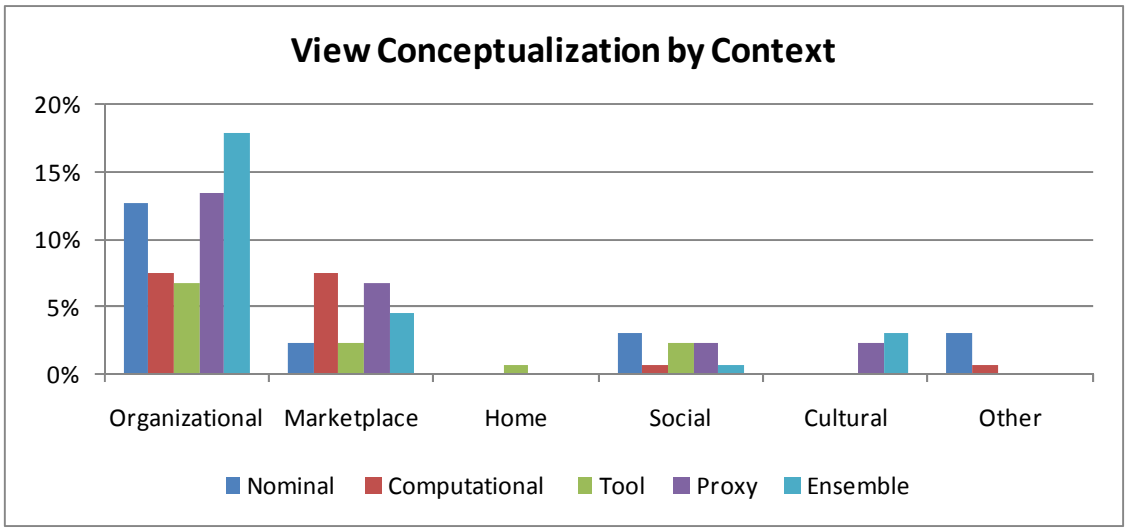

Figure 1. IT Artifact Conceptualization within Context at the View Level

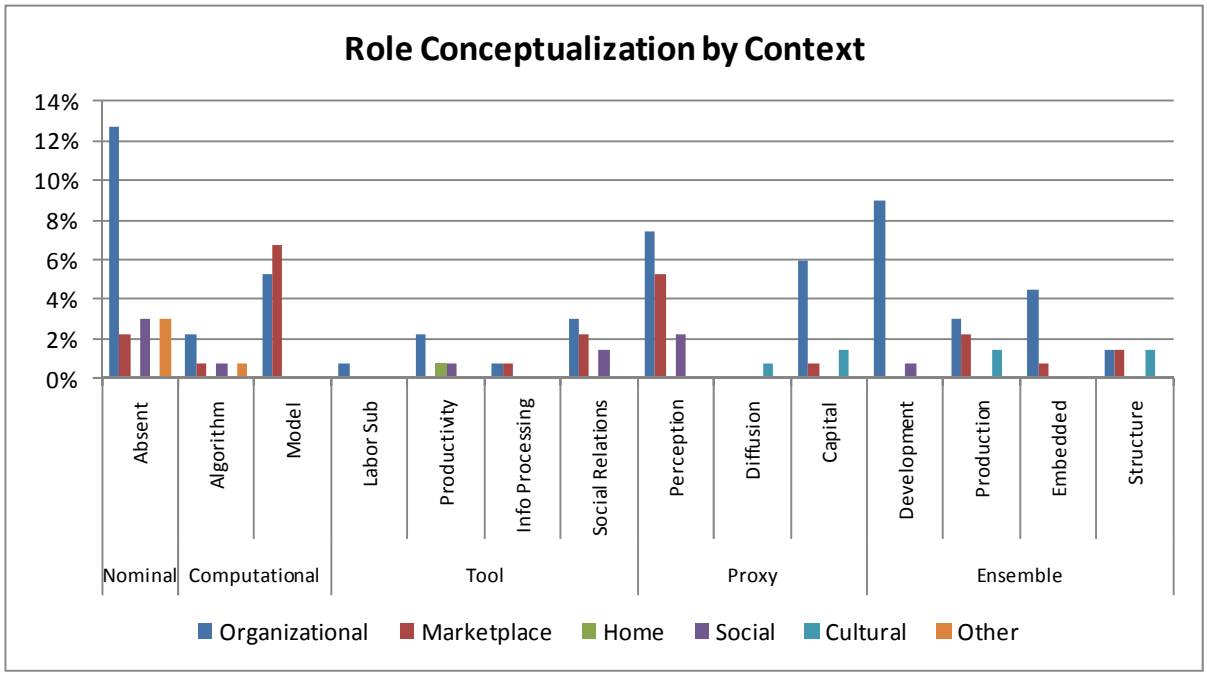

Figure 2. IT Artifact Context within Conceptualization at the Role Level

3.4 Conceptualization by Granularity

We also considered conceptualization by granularity, as shown in Figure 3. It is by definition that the nominal view would consider only the general type of IT artifacts. Among the other four views, three of them have been studied at all three granularity levels, except the tool view which has not been studied at the feature level.

3.5 Granularity within Contexts

To further understand granularity levels, we looked at the co-occurrence of granularity and context within the 134 articles. The results show that 49.3% of all articles were of the organizational context at the general level of granularity, while 10.5% of all of the articles were of the marketplace context at the general level. Considering the percentage of papers in the organizational context more than double those from the marketplace context, we decided to look at the percentage of granularities within both of these two contexts, as this might be more revealing than co-occurrences. As seen in Figure 4, 85% of all the articles within the organizational context are at the general granularity level, vs. 45% of all articles in the marketplace context are at the general level.

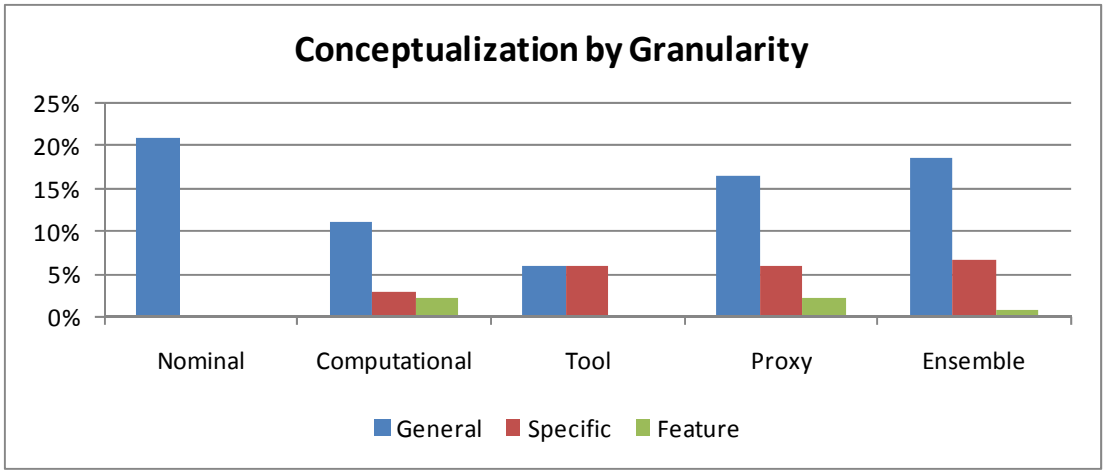

Figure 3. IT Artifact View Conceptualization by Granularity

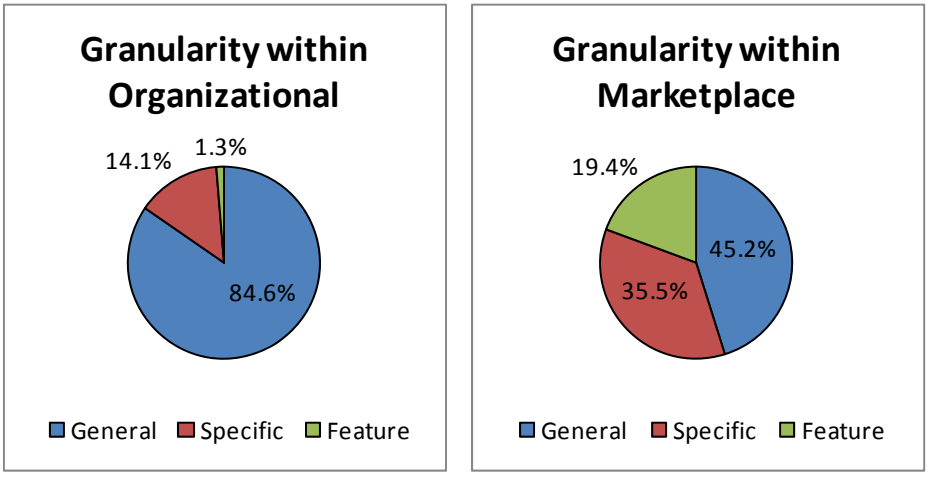

Figure 4. Granularities Studied within the Organizational and Marketplace Contexts

4 DISCUSSIONS AND CONCLUSION

4.1 Changes on the Conceptualization of IT Artifacts in IS Studies

In depicting the current state of IT artifacts in IS research, it is useful to compare the findings in this study to others. As we noted in our introduction, a recent study by Akhlaghpour et al. (2009) (abbreviated AWLP) also explored the state of the IT artifact. While O&I considered ISR publications during the 90s, AWLP analyzed all research articles published in ISR, as well as JAIS and MISQ

from 2006-2008. Figure 5 presents a comparison among the three studies at the view level in the form of percentages within the respective paper pools. Figure 6 presents the comparison at the role level.

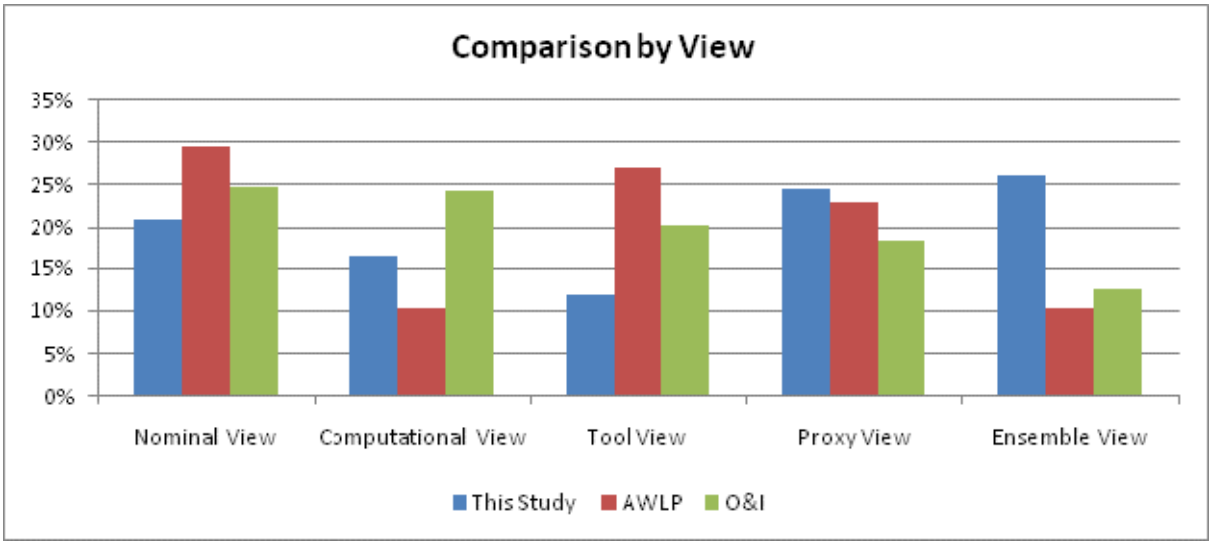

Figure 5. Comparison of the Findings among three Studies at the View Level

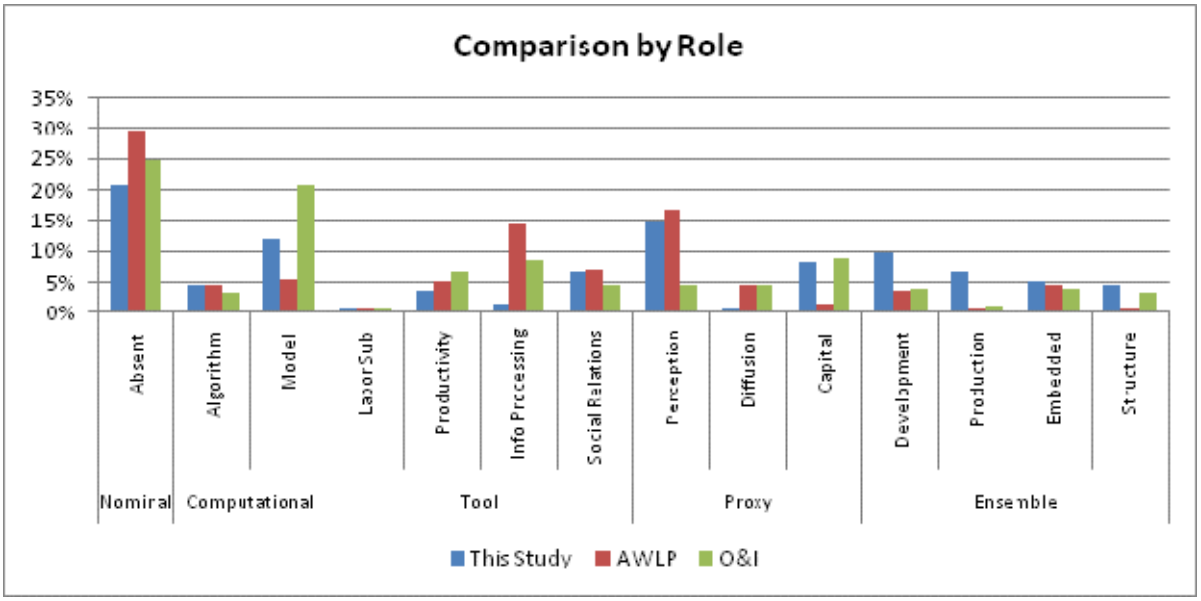

Figure 6. Comparison of the Findings among three Studies at the Role Level

In commentary surrounding the original analysis done by O&I, they stated their belief that the IT artifact was too often taken for granted, asserting that researchers "must theorize about the meanings, capabilities, and uses of IT artifacts, their multiple, emergent, and dynamic properties, as well as the recursive transformations occurring in the various social worlds in which they are embedded" (Orlikowski and Iacono, 2001, p. 133). They expressed surprise that the ensemble view received the least attention (at only 12.5%), asserting that more research in this area would help deepen the discipline.

Figures 5 and 6 show that in the 10 years since their commentary, technology as absent is still the most common role of the IT artifact, evidenced by the independent analyses by both AWLP and us. Yet, one glaring discrepancy amongst the analyses is that this study identified the ensemble view as the most common categorical conceptualization, while AWLP showed that it had actually declined (at 10.2%) since the O&I paper. However, it is worth noting the venues studied may reflect the editorial theme and coverage of the journal. We focused solely on conference proceedings, while O&I focused

on a single journal. AWLP, who analyzed research across three journals, noted the different slants in conceptualizations across them. As an example, they observed the tool view at 18.2% in JAIS, compared to 36.8% in ISR. Still, it is interesting to note some trends common in both our analysis and AWLP's. Two instances where of this are in technology as a mode, and technology perception. Regarding the former, we both found that research considering this role has dramatically decreased, while regarding the latter, the role has drastically increased.

4.2 The Gray Area in IS Research

The dominance and prevalence of the IT artifact as absent across these analyses lend support to the idea that there is a thick gray area around the core of the IS discipline due to its rapid growth. Yet, Whinston and Geng (2004) call for an approach of strategic ambiguity in regard to acceptance of IS research in scholarly forums. That is, "strong research should be welcome in IS journals even if its relevance is still under intense debate" (p. 157). Whether or not the persistence of the IT artifact as absent is an indication of strategic ambiguity is unclear based on these analyses alone. Understanding why it continues to be so absent may require probing the researchers themselves, as well as editorial boards to get a picture of their intentions.

Whinston and Geng (2004) caution that rejecting research within the gray area may hamper the discipline by overlooking innovative research topics that may prove relevant later. Unless research "is clearly irrelevant to the IT artifact" (p. 157), they believe that it should be acceptable by journals. Thus, they assert that it is the duty of the IS researcher to explicate relevance of his or her research to the IT artifact. As an example of relevance, they note that in the early 1990s, the fit of e-commerce in IS was doubted widely, but turned out to reach mainstream status in the discipline a decade or so later. Thus, while conceptualizations of the IT Artifact shift as the field evolves, so too does the context.

4.3 IT Artifact Context

Despite comparing our analysis to those of O&I and AWLP, ours is distinct in that we examined multiple facets of IT artifacts. This is useful because we can see that IS has expanded beyond its original boundaries of the organizational context. As Avgerou (2000) explains, IS evolved from the applied computer science field of the 1960s, which sought to systematize business data processing applications. Yet, even in the earliest stages of the discipline's development, researchers expressed interest in more than just organizational impacts of IS. Our analysis shows just how much interest is being expressed in other contexts, as only 58% of the papers considered the organizations as their research focus. With the marketplace context covering 23%, we find support for this being less of a gray area, and more mainstream, as Whinston and Greg (2004) noted above.

Context helps us to understand the second purpose of this paper, which is the diversity of IT artifacts being studied by researchers. In this vein, we found it a bit surprising that the social context was not ranked higher, identified as the primary context in only 9% of the research. With the explosive growth and popularity of Web 2.0 applications into many facets of life, we expected to see much more focus in this context. However, this may in fact be indicative of how IT artifacts themselves are being studied. For example, while Second Life may be seen largely as social platform, when a researcher investigates how trade takes place within this environment, the context of the research is the marketplace. Thus, analyzing context is important because it informs us of where the interests of researchers in IS are the most salient, despite the contexts the artifacts themselves may have been designed for.

4.4 IT Artifact Granularity

Like context, granularity helps us to understand the diversity of IT artifacts being studied. As shown in Figure 4, within the organizational context, the vast majority of research (84.6%) was conducted at the general level, while just a small fraction (1.3%) was being conducted at the feature level. Contrasted with the marketplace, the feature level covered much more of the research (19.4%), and

the general level much less (45.2%). In fact, a specific level of granularity covered more than double as much research in the marketplace (35.5%) than in the organizational context (14.1%). This tells us that there is a much finer grain of research being done in a context that was once thought to be on the fringe of the discipline. Thus, perhaps we can posit that when IS expands into novel territory beyond its original base, artifacts might be conceived of at a finer level in order to expand the depth of the discipline's understanding.

Another implication of looking at granularity is that we can see the vast number of labels that researchers assign to the IT artifact of interest. Table 6 lists some of these particular labels used, with the majority of them appearing only once among the 134 articles (or otherwise noted by the number after the label). There were 120 different labels used in referring to general IT artifacts, and 45 for specific, showing that across our pool of research, there exists very little consensus in regard to artifact naming. All 7 labels for features are listed in Table 6, with a sampling taken for general and specific as to illustrate the diversity of artifacts under investigation.

General	***Specific***	***Feature***
cloud computing, E-commerce (2), electronic health records, ERP (2), green IS & IT, handheld computers, infotainment systems, IT outsourcing (2), learning management system, social media, virtual worlds (2)	Amazon.com (2), Del.icio.us, eachnet.com, Facebook (2), Podcast Alley, Prosper.com (2), Second Life (3), Southwest Telemedicine Program, Twitter, Wikipedia (2), Yahoo Pipes, YouTube	ad animation, content-based recommendations, economically enhanced resource manager, feedback mechanism, live help, online virtual advisor, Tecless model

Table 6. Context and Granularity Percentages of Analyzed ICIS 2009 Articles

4.5 Limitations

There are several limitations in this study. First, the article pool contributes directly to our findings. This is supported by Akhlaghpour et al. (2009) as they observed in their study that drew from three different journals, distinct differences between the conceptualizations of the IT artifacts within each journal. Our study was limited to articles from the ICIS 2009 proceedings. Adding articles from other year's proceedings, other major IS conferences, and more IS journals would affect our results and present a much more holistic picture of the discipline. Secondly, we considered three facets to examine the collected articles: the conceptualization of IT artifacts (using the O&I framework), the context of a study (using the classification in Zhang & Li 2005), and the granularity for IT artifacts. There could be additional facets which might provide more insight on the state of IS research. For example, analyzing the infrastructure which supports artifacts (internet, intranet, mobile, etc.) might help us identify what areas of IS are gaining momentum, and which are ripe for further investigation. Third, the classification of conceptualization as a whole might need to be reexamined. The I&O framework was used to compare the conceptualizations across studies was originally developed through open coding of literature from the 1990s. While we were able to apply it to our data pool, as did Akhlaghpour et al. (2009), new categories or roles may emerge if a fresh set of eyes coded the data pool from the ground up. Our concern is that we may have applied an antiquated coding scheme to a discipline that is rapidly evolving. Lastly, we only applied one primary context in each study when there may have been overlaps into multiple options. For example, Second Life may typically be perceived of in a social context, the phenomenon of interest in the study determines the research context. Yet, when research which considers the market of a social environment is classified as a marketplace study, this can mislead researchers into thinking that a specific context is inherently not of interest.

4.6 Conclusion

The IT artifact remains an elusive concept in the IS discipline. The idea that IS as a fragmented adhocracy (Banville et al. 1989), characterized by a thick gray area (Whinston et al. 2004), is supported by not only this analysis, but also by the variety of conceptualizations observed across two

other studies (Akhlaghpour et al. 2009; Orlikowski et al. 2001). These studies show that despite a consensus in the discipline that IS needs a core object of investigation, the IT artifact, most often conceived of as that core, is frequently absent from the studies that are accepted into the research community.

As we support IS as an adhocracy, we agree with the stance of Whinston et al. (2004) that authors need to explicate why their work is of relevance to the discipline if strategic ambiguity is to benefit the discipline rather than cripple it. Despite ongoing findings that the most common role of the IT artifact is one of absence, studies such as this can assist IS researchers by identifying which venues are best for supporting their conceptualization.

Going forward we recommend additional analyses that take into account the facets of context and granularity of works in other various IS research venues, as well any additional, informative facets that IS researchers consider beneficial. Although we may still have a fragmented adhocracy, such analyses can help us to understand its topography a bit better, allowing us to better explicate the relevance of our research to other scholars, especially when so much of it falls into the gray area.

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