Unfolding the Organizing Vision for Straight-through-Processing in Taiwan Financial Industry

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Abstract
In this paper, we adopt the organizing vision perspective to examine the creation and adoption of straight-through-processing (STP), an inter-organizational information system innovation, in Taiwan Financial Industry. Through the lens of organizing vision and the use of qualitative research, we reveal the dynamic of interpretations and actions among different social actors in this community, and how such interpretations and actions lead to development and adoption of STP in a particular context. Our findings indicate that the business culture and language can affect greatly the understanding of business problematic and innovation at the outset of diffusion lifecycle. The analysis shows that the assimilation of innovation does not solely depend on the rational accounts of technical efficacy, but rather involved the complex interaction among various stakeholders. We conclude with the implications of this research.

1. Introduction
With the nature of information-intensive and growing investment volume in financial service industry, a variety of information technology (IT) innovation has been developed to optimize the transaction efficiency, improve customer services, and reduce operational risks. While much practical and research attention has been drawn to the area of front-office IT deployment in financial industry [1, 2, 3, 4, 19], there is very little empirical work focusing on the IT adoption and diffusion in the area of back-office processing. When dealing with the challenge of adopting an IT-based innovation, developing a conceptual understanding of how that innovation might benefit their business is crucial for the industry communities. In this study, we intend to characterize the innovation of “straight-through-processing” (STP) which aims to enable the entire trading process for capital markets and payment transactions to be conducted electronically without any manual intervention. Given the tremendous amount of trade volumes generated by the globalization of capital market, the general consensus is that huge productivity gains and risk reduction are expected by the introduction of STP. That is, STP can automate the trading and settlement of trade transactions and provides pooled information resources such as common databases, communication networks, and common applications. In the light of its practical importance, unfolding the organizing vision of STP innovation practice plays an important role in understanding the way innovations are applied and diffused. Therefore, in this paper, we attempt to theorize how the STP innovation comes to be and how this vision consequently influences the way that the innovation takes part in the adopting community. From a theoretical perspective, we argue that organizing vision is socio-technical constructed and ought to be examined at the inter-organizational level. We further apply this conceptual framework to analyze the diffusion process of STP for offshore fund transaction in Taiwan financial service industry. The empirical setting, as we detail later, allows us to capture the complexity and contradictions of different stakeholders and their drives towards the elimination of errors, inefficiencies and costs associated with high level of manual transaction processing.

The paper proceeds as follows: First, we introduce the organizing vision in information systems innovation. We then use the organizing vision as our theoretical lens to trace the diffusion of STP as an information system (IS) innovation. Next, we analyze the organizing vision for STP in Taiwan financial service industry. Finally, we conclude with remarks about how applying the organizing vision and probe its three functions can be theoretically and practically interesting to unfold the adoption and diffusion of STP innovation.

2. Organizing vision
Understanding the organizing vision (OV) is important when making sense of an IS innovation.
An organizing vision is a focal community idea for the application of information technology in organizations [30, p. 460]. According to Swanson and Ramiller, organizing vision is the shared understandings of the organizational application of IS innovations that are established, maintained, and transformed through the community discourse. The community is comprised of developers, suppliers, customers, vendors, regulators, academics, and journalists who contribute to the discourse. As Swanson and Ramiller argue:

...an interorganizational community, comprised of a heterogeneous network of parties with a variety of material interests in an IS innovation, collectively creates and employs an organizing vision of the innovation that is central to decisions and actions affecting its development and diffusion. That organizing vision represents the product of the efforts of the members of that community to make sense [36] of the innovation as an organizational opportunity. In so making sense of the innovation, the community in effect also defines it and creates it. (p 459)

As such the OV becomes the community’s vision for organizing in a way that embeds and utilizes IS innovation in organizational structure and processes. Different scholars have extended their support on the value of OV to explain how IS innovations originate, develop, and diffuse over time, across firms and industries [27]. For instance, Wang and Ramiller [33] analyzed the community discourse on enterprise resource planning (ERP) and found that different types of organizational actors played different role in contributing different types of knowledge to the discourse. By studying the discourse promoting ERP, Wang [32] further examined the influence of key forces on the “career” phase of an OV. Ramiller and Swanson [26] suggested that different OV take different career paths, according to how they are received in the community as interpretable, plausible, discontinuous, and important. Wang and Swanson [34] proposed that OVs are launched through institutional entrepreneurship across a community in their study of a failed diffusion of Professional Services Automation (PSA). In their series of study, Wang and Swanson [35] concluded that coherence of the vision and compelling success stories are important to legitimating and successful launch of a new innovation. The customer relationship management (CRM) was studied by Firth [15] as an IS innovation, he argued that by creating, participating, and being influenced by the CRM discourse, managers do not operate in a vacuum when they consider whether to adopt and implement CRM. Currie [10] observed and analyzed application services provisioning (ASP) and indicated that a process-oriented analysis of how OV’s are interpreted, legitimized, and mobilized is critical for understanding and explaining how underdevelopment of an OV at an early stage may inhibit its later adoption and institutionalization. Kishore [21] discussed the role that participation and trust (in the ASP organizing vision) play in mitigating the client-side know-what uncertainties during the course of adoption and implementation. In healthcare, Klecun-Dabrowska and Cornford [21] first studied the organizing vision of Telehealth. Davidson and her colleagues [12, 27, 28] had done an intensive work on OV for electronic medical records in independent physician practices. Ellingsen and Monteiro [14] argued on the necessary prerequisite for mobilizing political and ideological support among stakeholders for integrated health information systems. Gorgeon and Swanson [16] applied the concept of OV to investigate the evolution of the Wikipedia entry for Web 2.0 and categorized the patterns of the types and numbers of contributors and edits on the web 2.0 articles. Additionally, Carton et al. [27] analyzes cross-cultural difference in the production of a response to the organizing vision discourse. Turning to a recent work, Kaganer et al. [18] examined the legitimation function of OVs surrounding computerized physician order entry (CPOE) systems and create taxonomy of discursive strategies for building IT innovation legitimacy. In sum, a community’s discourse serves as the developmental engine for an OV [28].

When applying OV in research, Swanson and Ramiller further suggest that a community makes sense of a new technology through three functions channeled by several institutional forces. These three functions are interpretation, legitimation, and mobilization. First, the vision interprets the innovations’ purpose. The organizing vision presents the community’s ongoing interpretation of an information technology innovation, what it is about and how it could be used, thus, then suggest there is indeed an innovation worthy of widespread consideration by potential adopters [30, p.460]. In other words, the organizing visions explain the innovation’s purpose relative to its broader social, technical, and economic context, eventually, it represents the community’s effort to develop a common “social account” [17]. Second, the vision offers the underlying rationale for the innovation. Legitimation of an innovation does not simply follow from an “everyone is doing it” argument [31], because an organization vision is a requisite step
toward the innovation’s potential, eventual legitimization as an element of good organizational practice [30]. Third, the vision helps mobilize the market forces to support the material realization of the innovation. It serves the dynamic function of helping activate, motivate, and structure the entrepreneurial and market forces that emerge to support the material realization of the innovation. These three functions together facilitate and shape “institutional production of organizing vision” [30, p.461]. As Figure 1 illustrated, the institutional production of OV consisted of 6 distinct features. They are (1) community discourse; (2) community structure and commerce; (3) the IS practitioner subculture; (4) the business problematic; (5) core technology; and (6) innovation and diffusion.

3. Research approach

In this paper, we use organizing vision as our theoretic framework to examine one vision for IS innovation use for offshore fund trading in Taiwan financial service industry. This type of financial product is offered by mostly European fund house and make available to Taiwanese investors through the distribution channel of local banks. According to statistics published by the Securities Investment Trust & Consulting Association (SITCA) in Taiwan, the size of the offshore fund market stood at USD 31 billion in January 2009. The prosperity and potential growth of the offshore fund market in Taiwan represents a growing challenge for European mutual funds, since most Taiwanese banks use a manual, fax-based system to process fund transactions. Discussions about the STP was begun in year 2003 in Taiwan market to take shape as a vision distinct from related financial service innovations (e.g., straight-through-processing). To streamline the transaction process, stakeholders in financial community began to originate the concept of STP as a strategic operating principle focusing on optimizing process design and technology to improve customer services and reduce operational risks [6]. As the name suggests, the implementation of STP provides a greater control over transactions across processing chains and helps improve data-access speed, dramatically reducing batch processing and manual intervention within the chain [13]. The STP initiative is not a one-time operational project. Instead, it has to constantly align with strategic and tactical needs of business. Central to the STP theme is the premise that STP objectives flow top down from business needs and eventually get translated to IT spending. Nordgard's [24] white paper highlights an STP approach that requires a shift away from departmental thinking and towards a holistic view of the fund management operation.

So how does the organizing vision for STP develop? We began to follow up the STP development since 2003. Since then, in this longitudinal study, we conducted 50 individual face-to-face, semi-structured interviews with distributing banks, fund house representatives, IT solution providers, and government agency. Interviewees were those directly in charge of funding the STP project in their respective organizations. On average, each interview lasted about one to one and half hour. Our protocol included general questions (e.g., when did you first become aware of STP and the source of information, as if your organization is considering about adopting STP, why or why not?), and specific

Figure 1. The institutional production of organizing visions (Adapted from Swanson and Ramiller, 1997, p. 462).

In this paper, the objective is to unfold the OV of an innovation during the diffusion process. In particular, we focus on the development of OV to diffuse STP in Taiwan offshore industry. Before discussing the findings, the next section details the research approach and the case background.
questions tailored for specific informants (e.g., what is needed to make STP diffusion successful in the industry level, what are the drivers and inhibitors of your company when adopting STP). In addition to individual interviews, we participated in meetings and conferences, including Asia Fund Automation Consortium (AFAC) meetings where managers from the fund houses met and discussed the STP strategy; fund automation conferences, and fund automation workshop. About two third of the interviews were recorded and transcribed, generating considerable data about participants’ assumption, expectation, and experience with STP. Other examined materials included several hundred conference presentation slides, workshop agenda, newsletters, MOU, Technical Specification of Fund Automation Process, and memorandum of understanding (MOU) from first TFOG meeting. We provided detailed interview information in Table 1 and source of our research data is shown in Table 2.

4. The diffusion of the organizing vision for STP

So how does the organizing vision for STP diffuse? We structured our findings through the institutional forces proposed by Swanson and Ramiller (1997) in the following sequence: (1) community discourse, structure, and commerce; (2) the IS practitioner subculture; (3) the invention adoption of core technology; and (4) the adoption and diffusion.

4.1. Community discourse, structure, and commerce

The vision exists because a collection of social actors agrees its existence; therefore, the vision is first produced and sustained through the discourse. STP was introduced as a set of business process and technologies that can be used to create an infrastructure for automated real-time transaction processing. The original impetus for STP came from the push by the SEC (Securities and Exchange Commission) and the SIA (Securities Industry Association) to shorten the trade settlement time from three days to one day. STP puts a significant pressure on industry participants to make their operations more technology-dependent, and less personnel-dependent, thereby, benefiting from faster, and more reliable and less error-prone financial transactions. The demand for STP was due to the rising of trading volume in stock markets and the US security industry for their pressure to compress the settlement time from T+3 (3 days settlement) to T+1 (same day settlement). STP has quickly become a buzzword for the securities industry. This fully automated global approach is proposed by the Global Straight Through Processing Association (GSTPA) in year 1998, which was originally made of 40 firms in the financial service industry. The backbone of the GSTPA solution was to be multilateral interconnectivity designed to establish an environment for investment managers, broker/dealers, and global custodians to inter-operate in the process of trade enrichment and matching with information provided just in time rather than housed in data stores just in case. The scope of the GSTPA initiative consists of post-trade and pre-settlement activities of industry participants, engaged in cross-border institutional securities trading. To meet the demands of financial service industry and to facilitate participations, it is imperative that this multilateral interconnectivity be provided through a pipeline in a manner that is highly secure, reliable and confidential. Strong evidence shown a growing consensus on the need to increase productivity and efficiency by reducing operational costs, mitigating risks to participants, and eliminating volume sensitivity to enable the business to grow [20]. Following the globalized trend of such development, Taiwan Fund Operation Group (TFOG) was formed toward the end of 2003 and held their first meeting in early March of 2004 to discuss fund processing, benefits of automation, price reporting (NAVs), and market practices. The members of TFOG included sixteen most active distributors and large fund houses in Taiwan market. Besides, the Asian Fund Automation Consortium (AFAC) was formed in September 2006 by seven large fund houses to “provide distributors throughout the Asia Pacific with a consistent approach to automate across the majority of the fund providers” and “agree on common formats, standards, and routes for automation”. In common with past financial IS innovation, STP was expected to enhance business value and performance, particularly for financial service industry. Eventually, the OV discourse gets richer in detail, as new texts are contributed to the discourse by industry forums, consultancy report, and negotiated within the community’s members. For instance, between 2004 and 2008, the Society for Worldwide Interbank Financial Telecommunication (SWIFT) has held fund automation conference to communicate the idea of STP to banks and fund houses in Taiwan. Members from TFOG met

1 http://archive.fisd.net/presentations/gstpa200/sld001.htm
intensively in 2003 and 2004 to discuss the development requirement and implementation for offshore fund operation shall STP is implemented. As one STP provider points out, the communication interaction has shaped the development of OV for STP:

“The landscape has gone through a major change over the last three or four years. When we started the education process four years ago, we had to spend the first meeting explaining the concept of fund automation to our clients. However, distributing banks now understand the rationale for STP, so we can move straight to the discussion of our solution when talking to potential clients. Within 15 minutes, they are asking about our pricing model.”

4.2. The IS practitioner subculture and business problematic

The OV discourse draws meanings and language from a store of cultural and linguistic resources provided in the subculture of IS practitioners [30]. Later, when the community finds focus for that discourse the business problematic is then identified. In our case study, evidence of the complexity of IS practitioner subculture and business problematic for STP comes in a reflective comment from regional director for the securities arm of SWIFT. After the first TFOG group meeting in early March of 2003, he stated that “Taiwan is the ideal market for mutual fund automation, and there is a lot of cross border fund activity in Taiwan and yet most orders and confirmations are handled by fax and there is a high error rate.” However, the job of convincing fund managers and distributors to use a single platform hasn’t been easy. Also, as pointed out previously, the concept of STP was initiated by market participants in US and Europe. Thus most STP providers are foreign companies, and most salespeople do not speak Chinese which makes it difficult to communicate the idea to the local banks in Taiwan. In addition, the IS vendors in Taiwan who provided most support to banks have little knowledge of STP development. Therefore, we see the development of global vendors communicating the specialized knowledge and know-how to the local vendors. Through the discussion and communication, the global and local IS vendors share experiences, ideas and knowledge about the strategy and requirements for implementing STP for offshore fund operation in Taiwan. Global vendors even then partner with the local vendor to mitigate the problem associated with linguistic communication with the banks in Taiwan.

In addition to IS practitioner subculture, business problematic is another important element in the OV development. The business problematic “defines the organizing vision’s fundamental relevance in the material economy” [30, p.466]. In our context, STP is the response to the rising volume and operational risk of offshore fund market in Taiwan. SWIFT estimated that it costs Asian-based fund managers between 1 billion and 1.5 billion euros per year to process orders and rectify errors. As mentioned above, the overall size of Taiwan offshore fund industry grew tremendously over the past few years and stood at USD 31 billion in January 2009. However, while IT solution vendors and fund house broadly agree the potential value of STP, the banks in Taiwan are still uncertain about investing STP at the outset. For instance, banks are hesitant in deciding the scope of automation and how such automation would impact on their existing business operation. Through the discourse of community discussion at conferences and inter-organizational meetings, the OV for STP started to link with the pressing problem of processing offshore fund solution. That is, STP would be developed and implemented in standardizing three most frequent types of transactions, i.e. purchase, redemption and switch. This has a practical implication in assisting IT managers in the banks to put a business case to request resources and financial support for STP implementation in the organizations.

4.3. The invention adaption of core technology

The OV is constrained by a core technology and its capabilities. In accordance with Orlikowski’s example of adaptive structuration [25], when the community members use the STP technology, the technology gets adapted to the vision, and the vision gets adapted to the technology. According to Swanson and Ramiller [30], the core technology conceptually draws technical artifacts, organizational forms, and practice together. For example, the STP vision, in bringing together risk-based perspectives (e.g. redundant processes, breaks in transaction flow, manual intervention, lack of automation, and eliminate fax communication) with certain straightforward technological capabilities (e.g. file transfer protocol (FTP), XML module, FIN fund templates, web service, etc.), has helped to bring up-

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2 Source: 13 Feb 2004 Posted:10:04 (CET), FinanceAsia.com (Cherie Marriott) Taiwan set to automate fund processing
to-date image of utility and practicality to the existing financial service technology.

Whilst STP play a crucial role in allocating resources and distributing information among financial market, the way in which fund transaction is generated, distributed, and processed has received considerable attention in the finance and banking technology literature [24]. To implement STP in reality, technically financial institutions need to reconfigure the in-house fund transaction system and develop a set of interorganizational standards facilitating the cross-border transaction. In this process, organizations become to realize the technical, organizational and financial difficulties of making such a wonderful state happen within a short time span. Therefore, debate started to emerge whether the community should devote the full effort in working out all technical specifics for full STP or have partial effort in developing a temporary solution during the transition process. In our case study, it was evident in various AFAC meetings that fund managers were discussing the possibility of FTP as the temporary solution. Proponents consider that although FTP is not perfect, it helps to reduce the existing amount of manual processing. Those against such an idea argue that the implementation of FTP might prevent the take-up of STP solution when it is ready. At the end, a collective understanding of having a full STP solution was gradually achieved through the exchange of opinions with vendors, fund houses and banks. Nevertheless, this reflects what Swanson and Ramiller [30] how a full OV can be constrained by a core technology and its capabilities. This case study demonstrates that the time taken to develop the full STP has temporarily given the rise of idea about alternative imperfect solution.

4.4. The adoption and diffusion of STP

The organizing vision is formed and reformed in the ongoing interpretation of the innovations’ adoption and diffusion [30]. As mention earlier, the STP discourse community was made up with a variety of market players in financial service industry; the organizing vision addresses the application of technology within prospective adopters’ organizations. In order for STP to be successful, its organizing vision must be distinctive, intelligible, and plausible. Furthermore, financial organizations began to realize that STP is an interorganizational solution and its success relies the collective effort in development and implementation. Over the past few years, we see the formation of various consortium and association to facilitate the interorganizational communication on STP functions, such as the set up of Taiwan Fund Operation Group (TFOG) and the Asian Fund Automation Consortium (AFAC). Through our observations in these meetings, practitioners were able to have a collective discussion on the data format and definition for different offshore fund transactions. As what Swanson and Ramiller [30] identified, the layer of social structure, that is the network of community, is related to the layer of practical activities and objects, i.e. the data standards for STP. Without the design of these consortiums involving various stakeholders to channel the communication, the standardization process can be slow and difficult.

Furthermore, the success of adoption and diffusion requires the support of the interpretive layers. In other words, the stories of earlier adopters must be told, shared and communicated in the user community. This process allows the OV to evolve, modify and expand, and thus keep the diffusion alive and ongoing. In our empirical study, we observe numerous mechanisms to infuse the storytelling process. For instance, in Taiwan Fund Automation conferences, which were highly publicized in local newspaper and industry magazines, the first adopting bank was invited to share his viewpoints and experiences on the implementation of STP. In the presentation, he described the business rationale for STP implementation and the technical requirement to achieve so. Our interview results indicated that the experience-sharing has offered the confidence boost and business case in the roll-out of STP projects for other banks. For IT vendors, the practical experiences of implementing the first STP project allowed the vendors to learn any technical modification and developments required. Understanding, facilitating, and utilizing the “lessons learnt” from first successful STP adoption helps point the way toward know how, why, and how to launch a STP innovation. The successful story has help to conceptualize STP through interpretations, facilitated the justification of STP based on rationales for adoptions.

Put together, as more banks adopt and the technological capabilities mature, the adoption and diffusion process began to take place.

5. Discussion

In this section, we critically assess the institutional development of OV for STP in the context of Taiwan offshore fund industry. Our overall findings extend the support to the argument that adoption and assimilation of IT does not solely take place on the
rational account of technical efficacy [18], rather, the diffusion of an innovation depends on the complex interaction among different stakeholders in the business and IS community. In our case, we see how different actors try to utilize OV to interpret, legitimate and mobilize resources in shaping STP diffusion for offshore fund industry.

At the beginning of the diffusion process, organizations tend to look to the institutional environment of trying to make sense of the emerging technology and its potential values. Scholars have echoed this viewpoint and proposed focusing on a deeper interpretation of the relationship between technological and industrial structures in the diffusion process [7, 8, 9]. Our findings here offer additional evidence on the operation of such institutional forces. The concept and purpose of STP was tightly associated with the broader economic trend of globalization of the capital market. The phrase “straight-through-process” (STP) was the special linguistic term created to facilitate the communication on the objective of automated financial transaction without any manual intervention. That is, although other industries might have established similar ideas or concepts to automate the business process at the interorganizational level. STP becomes the unique OV and the sense-making mechanism for user institutions, vendors and consultants in the financial community when discussing the technical and operational requirements for process automation. Such a term becomes meaningless and puzzling to the audience outside the financial industry, as the contexts are irrelevant and different. Furthermore, to facilitate the interpretation and sense-making process, collective community efforts was established to define, explain and clarify the nature and application of STP among various stakeholders. In the empirical findings, we see the establishment of different consortiums and industry working groups such as GSTPA, TFOG and AFAC. These business groups place an important role in enhancing “the salience of the innovation and, as such invites discussion that may ultimately lead to a broadly shared account” [30, p.460].

In addition to interpretation, the institutional forces also serve the function of legitimization and mobilization that supports the production of OV. As Kaganer et al. [18] point out, legitimation helps to sustain the development and success of the innovation diffusion. In their studies, they went on to reveal that pragmatic and cognitive forms of legitimacy were mostly adopted in the vendor discourse. The former refers to convey the new project to immediate audience through the direct expected business values, or influence strategy such as regulation or mass-media communication while the latter means that an activity or product has either “affirmative back for an organization or some take-for-granted cultural account” [29]. Our results share the similar patterns to what was found in the work of Kaganer et al [18]. The vendors in this empirical investigation try to highlight the business benefits of STP, such as cost efficiency and risk reduction, to the early potential adopters. Our analysis indicated that the business benefits of STP was dominant and populated in most of vendors’ presentation materials at conferences and the associated press. Furthermore, the term STP is further legitimate by internal auditors whom focus on Sarbanes-Oxley (SOX) compliances [6] to ensure management recognizes the value of STP, to provide improved control over transactions across processing chains and to help satisfy the SOX internal control requirements. In 2005 and 2006 of Fund Automation Conference, the IT manager from the first adopting bank in Taiwan was invited to share his experience and offer his support on the implementation of STP. In other words, the vendor was also trying to “trigger the contagion diffusion mechanism” as part of pragmatic legitimacy strategies [18, p.23]. Wang and Swanson [34] also conclude that coherence of the vision and compelling success stories are important to legitimating and successful launch of a new innovation. With respect to cognitive legitimacy, it was evidence that while TFOG and AFAC serve as the common platform for discuss and exchanging ideas about STP for fund automation, these business groups are also the venue where different stakeholders, including fund managers, vendors and banks, can collaborate closely to work on the STP requirements and process that are specific to Taiwan offshore fund operation. Such collaboration can both enhance understanding of STP, and at the same time increase the backing of potential adaptors on its adoption and assimilation.

Regarding to mobilizing function, as we describe in the findings, the implementation of STP requires financial institutions to invest in new technological artefacts and reconfigure the existing systems. It thus requires financial resource, availability of technologies and professional know-how. The findings demonstrate several interesting developments around mobilization. In our case, mobilization of professional know-how was carried out through the partnership between the global and local IS vendors. The global vendors taught the local providers about the new technological development
link with STP, in return, local providers can share
their knowledge about the system architecture of the
Taiwanese banks. This also helps to reduce the
pressure for banks to obtain the needed financial
resources. Our interview results illustrated that
because of the increasing numbers of local vendors
with knowledge of STP implementation, banks are
able to lower the development cost from the rising
competition among vendors. Furthermore, the limit
of financial resources led to the deployment of FTP
as the possible temporary solution and imperfect
version of STP. In this sense, we see how the OV for
STP shape, are shaped by, the market resources
during the institutionalization process.

6. Implication and conclusion

Understanding how people make sense of a new
information technology innovation seems essential
for developing a broader and fuller picture of
organizing. By bringing transformation aspect
centrally into theories of organizing vision we should
be able to speak more precisely about why people do
things they do with IS innovation and why
organizations and practices acquire the forms they
acquire in a collective action [23]. We conclude that
the concept of the OV is “interpretive and rhetorical
construction” [30] shaped by institutional, economic
and societal perspectives simultaneously. Through
the qualitative case study of Taiwan Financial service
industry, the organizing vision of STP is evolved
through the co-existence of conflicting and congruent
interpretation within and across different
perspectives. Examining the structure of discursive
arguments over time and across stakeholder groups
highlighted common assumptions and expectations
about IT-related change within stakeholder groups in
the organizational field. These help us to better
understand the differences between groups. For such
reason, it become theoretically and practically
important to conceptualize an organizing vision as a
field-level framework and to analyze the content and
structural changes that evolve within this broader
context as well as to consider how the vision is
appropriated and shaped within Taiwan financial
service industry [11].

Furthermore, we see our approach to discourse
analysis would be useful to looking outside the
organizational ‘box’ and extending research beyond
the organizational boundary in two ways. First, our
studies contribute to the area of existing studies on
the application of organizing vision. We argue that as
globalization continues, the development and
adoption of IS innovation will increasingly involved
the collective efforts of participants from different
countries. This means that the community discourse
will become more complex and uncertain since the
contextual variations in regulation, economic
condition and cultural practices increase. Additional
studies on the cross-country diffusion are likely to
deepen our understanding on the dynamics of
diffusion at the global level. Second, our findings
reveal the importance of “community learning” [35]
during the diffusion lifecycle. One interesting further
research can extend to investigate how different
modes of learning affect the diffusion of IS
innovation. With respect to its practical contribution,
this empirical investigation calls for increased
organizational-level awareness of how different
interpretations and expectations can have a strong
impact on IOS implementation, especially when the
diffusion involves organizations from different
institutional contexts. Furthermore, by creating,
participating, and being influenced by the STP
discourse, top management support, the power of IT
department within the firm (local), and collective
action (industry level) lead to the first adoption of
STP innovation. The success of negotiation at
legitimation and mobilization dimension requires a
certain collective action.

Put together, in this study, we are trying to
understand the role cross-organizational discourse
plays to shape organizational decisions to adopt IT
innovation. The empirical investigation focuses the
institutional forces in shaping diffusion of STP for
offshore fund transaction in Taiwan financial
industry. The findings unfold the community’s on-
going discourse to interpret, legitimate and mobilize
resources for the innovation. We hope that the rich
insights will serve as a stimulus for conducting
further research in institutionalization of IOS
diffusion.

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8. References

Table 1. Interview Information

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<th>Stakeholders</th>
<th>Method of data collection and analysis / Timeframe</th>
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| Fund distributing banks             | Face-to-face and Semi-structured interviews carried out in Taiwan with eleven local distributing banks. For each bank, we interviewed staffs directly in charge of STP project (at least one manager and one staff each from Trust department and IT department). Besides, we spoke to two vice presidents from global banks operating in Taiwan to offer their views on local STP development compared to their European practice.  
**Timeframe: from July 2003 onwards** |
| Fund Houses                         | Extended semi-structured interviews were carried out in Hong Kong with selected representatives from fund house who attended the AFAC meeting.  
**Timeframe: during and after AFAC annual meeting in December 2009** |
| IT Solution Providers                | Four global STP solution providers, one of Taiwan regional partner, and one system integration service provider specialized in financial banking system. We collected and analyzed their product brochures and company profiles.  
**Timeframe: from July October 2008 onwards** |
**Timeframe: from January 2010 onwards** |

Table 2. Source of Research Data

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<th>Research Data</th>
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* Conference agenda and presentation materials were collected which consisting of several hundred PowerPoint slides |
| Participant observations             | * Three official visits to distributing banks which already adopting a STP practice. The time varied from 2 hours to a half day observation of back-office operation in trust department where transactions were processed and processing.  
* Two corporate visits to fund automation service providers to learn about their product and service ( along with an hour company presentation) |
| Industry-wide survey                 | * 11 questionnaires were collected in May 2009 from 16 selected banks that are considered as key or potential adopters in Taiwan market. Within these survey data, 5 from those already adopted fund automation, 6 from those are still evaluating the possibilities. The findings revealed the diffusion status of STP in Taiwan. |
| Document archive                     | * 50 + online newsletters reporting the progress of STP technology in financial market ( mostly from GT news, CIO magazine, and Wall Street)  
* 16 Memorandum of Understanding (MOU) from first TFOG meeting  
* 1 Technical Specification of Fund Automation Process  
* 2 whitepapers from Findel group in Luxembourg and AFAC in the Asia Pacific region reporting their progress promoting STP  
* 1 Principles of Securities and Exchange Law Enforcement Rules on general agency system for Fund trading in Taiwan |