# An Allegory on the Role of the Action Researcher to Enable User Engagement and Change Management in the Early Phases of Information Systems Implementation

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Abstract: Genres of communications significantly influence the evolution of a field of research. In the Information

Systems (IS) domain, a debate has recently emerged on the chance to implement alternative genres to generate unconventional ways of looking at IS-related issues. This study hence proposes to apply allegory as an alternative genre to write publications accounting IS research. To exemplify the use of the allegory genre, the study tackles the role of the action researcher to enable user engagement and change management in the early phases of Information Systems implementation. The allegory is applied to the case of a Small-Medium-Enterprise undergoing ERP implementation. Reflecting on the allegory and its interpretation, it is argued that the action researcher can take a paramount role in IS change management as "user engagement enabler"; from a writing genre perspective, it is claimed that allegory is particularly suitable for writing

action research accounts.

#### 1 INTRODUCTION

The evolution of a field of research like that on Information Systems (IS) inherently relates not only to the content of investigation — in either its theoretical or empirical forms — and to the methodologies applied to conduct the research endeavor; it is also significantly shaped by the writing genre traditionally applied as a vehicle to report its content and findings.

In the last years, an intriguing debate has emerged with regards to the genres to be applied when writing academic publications (Rowe,2012). IS scholars and practitioners are currently discussing the opportunity to apply alternative genres in IS research representation. According to Mathiassen et al (2012), the term "alternative genres" refers to unconventional forms of thinking, doing, and communicating scholarship and practice. In particular, it is related to innovation with respect to epistemological perspectives, research methods, semantic framing, literary styles, and media of expression.

Provided that alternative genres are not valuable

per se, but they become significant once they are fruitfully applied to writing studies on relevant IS issues, propose the adoption of alternative genres to tackle a significant problem in IS research: user engagement and change management in the early phases of Information Systems implementation — with specific reference to Enterprise Resource Planning (ERP) systems. To address this problem, I take the methodological perspective of an action researcher directly involved in the problem's observation and solution, and propose to employ the alternative genre of "allegory" to allegorically describe the role action researchers can play in enabling user engagement and change management in the early phases of ERP implementation.

Reflecting on the allegory and its interpretation, this study argues that the action researcher can take a paramount role in the IS change management process as "user engagement enabler"; from a writing genre perspective, the study also proposes that allegory can be beneficially applied as a genre to write action research accounts, due to the genre's peculiar characteristics.

# 2 THEORY: CHANGE MANAGEMENT AND USER ENGAGEMENT IN IS IMPLEMENTATION

Change is an ever-present feature of organizational life both at an operational and strategic level (Burnes, 2004), and since information technology and organizational change show an inherent strong relationship (Markus and Robey, 1988), the issue of managing change determined by the introduction of new IS within an organizational setting has been a core theme in Information Systems (IS) research and practice (e.g. Aladwani, 2001; Lim et al., 2005)

In general terms, change management could be defined as "the process of continually renewing an organization's direction, structure, and capabilities to serve the ever-changing needs of external and internal customers" (Moran and Brightman, 2001). Both Organizational and IS theories widely recognize how Information Technology (IT) influences the nature of work, thus catalysing innovation while forcing incremental or radical organizational redesign (Thach and Woodman, 1994).

Through implementing IT, organizations aim at increasing process efficiency and effectiveness (with a possible beneficial impact on outward performance), although they also trigger inward organizational effects that mostly reflect on employees' routines, practices, habits and perceptions (Thach and Woodman, 1994): these non-trivial, subtle effects require dedicated effort to be understood and handled.

Focusing on the IS field, change management hence tackles the problem of how to govern the organizational transition determined by the introduction of new information technologies and systems (Markus and Robey, 1988).

Several studies have tackled the issue of user engagement in IS implementation, finding that such engagement is influenced by different factors. In his seminal work "Psychology of innovation resistance", Sheth (1981) argued that there are two main sources of resistance to IS innovations: perceived risk, which refers to one's perception of the risk associated with the decision to adopt the innovation; and habit, which refers to current practices that one is routinely doing. Joshi (1991) applied equity theory to IS implementation and found that individuals attempt to evaluate all changes on three levels: (i) gain or loss in their equity status; (ii) comparison between personal and

organizational relative outcomes; and (iii) comparison between personal and other user's relative outcome in the reference group. They only resist to changes they see unfavourable, while changes that are favourable are sought after and welcomed. Gefen (2002) identified users' trust as a key determinant for their engagement in the complex process of ERP system customization: trust was increased when the vendor behaved in accordance with client expectations by being responsive, and decreased when it behaved in a manner that contradicted these expectations by not being dependable. Lim et al. (2005) investigated user adoption behavior and motivation dynamics of ERP systems from an expectancy perspective, and claimed that managerial actions shall target different levels of motivational factors to avoid counterproductive dissonances. Wang and Chen (2006) found that assistance of outside experts in ERP implementation is inevitable: competent consultants can facilitate communication and conflict resolution in the ERP consulting process and assist in improving ERP system quality.

Beyond identifying the factors behind user engagement, particularly relevant to this study are also two process models designed to obtain and enhance engagement.

According to organizational theory, change management aimed at cognitive redefinition of users' attitude and behaviour should follow a process model called the force field model, made of three stages (Schein and Bennis, 1965; Schein, 1999): (i) unfreeze the existing condition and apply a force to it in the attempt to motivate users to change; (ii) change and movement to a new state, by focusing on training and communication; and (iii) re-freeze to make new behaviours become habitual or institutionalized routines.

In assessing the complex social problem of users' resistance to ERP implementation, Aladwani (2001), elaborates on Sheth's (1981) model and proposed a process-oriented conceptual framework consisting of three phases: (i) knowledge formulation (where insight is gathered on needs, values, beliefs and interests of future IS users); (ii) strategy implementation (where change management leverages tools such as communication, endorsement and training to create awareness, stimulate feelings and drive adoption, by constantly confronting habits with perceived risks; and (iii) status evaluation (where the progress of ERP change management effort is monitored).

#### 3 RESEARCH SETTING

The company this study considers is a Small Medium Enterprise (SME) operating as an artistic exhibition designer and manufactured, run and owned by a Chief Executive Officer who inherited it from his father. The company began operations in the early fifties and in 2012 it had gained worldwide recognition, being involved in several projects with renown institutions, such as the British Museum, the Tower of London Museum, the Louvre in Paris, the Museum of Modern Arts and the Metropolitan Museum in New York.

As the company grew globally, however, it was shaped by two diverging thrust: on the one hand, the CEO aimed at maintaining the company's inheritance of a SME and its craftsman approach towards each activity and work; on the other, a compelling need for organic development and structuration was perceived by the management. As a result, the organizational evolution was to some extent convoluted and not fully consistent: while some functions (e.g. design and manufacturing) operated with a high degree of structuration and technology support, others (e.g. administration, procurement, project management and marketing) were almost completely unstructured. Furthermore, Information Technology did not evolve alongside the company's manufacturing technologies. The little IT function was largely focusing on maintaining the computers used for running Computer Aided Design and Computer Aided Manufacturing software; data analysis and storing was either based on mere spreadsheets, or more frequently, on paperwork.

In late 2012, when the action research process began, it was time to make a strategic decision about IT. The management team had been consulting a shortlist of IT vendors for three months, and the most promising solution proposed was that of implementing an Enterprise Resource Planning (ERP) system to centralize and support information management and workflow throughout functions. However, the CEO had profound doubts about this change, and his worries were somewhat justifiable. The CEO foresaw the introduction of such a pervasive system would determine radical modifications in several areas, with unpredictable results; he also he expected some of his employees to eventually resist to or impair the IT project. On top of this, he held a Philosophy and Literature background, which gave him an anti-conformist and original perspective on many strategic organizational issues, including technology: he had

contrasting feelings concerning IT, which he liked to philosophically define as "a robot with huge potential to enhance human's capabilities, but after all, a robot with no will and no creative value in itself other than that of the human utilizing it".

The CEO's and his top management's primary concern was hence to adequately set and manage this IS transition.

### 4 ACTION RESEARCH METHODOLOGY

Action Research (AR) was primarily developed from the work of Kurt Lewin and his colleagues, and is based on a collaborative problem-solving relationship between the researcher and the client system, aiming at both managing change and generating new knowledge (Coghlan, 2000).

As a form of qualitative research (Myers, 1997), AR is described as a setting in which a client is involved in the process of data gathering, which is prevailingly under the charge of a researcher. Avison et al. (1999) define AR as an iterative process involving researchers and practitioners acting together on a particular cycle of activities, including problem diagnosis, action intervention, and reflective learning. According to Rapoport (1970), "action research aims to contribute both to the practical concerns of people in an immediate problematic situation and to the goals of social science by joint collaboration within a mutually acceptable ethical framework". Indeed, action Research is perhaps the most widely discussed collaborative research approach (see Baskerville and Wood-Harper 1998, Davison et al. 2004).

The collaboration this study depicts by means of the allegory alternative genre is set in an artistic exhibition design Small Medium Enterprise (SME) and began with the identification of a problem, i.e. the need to support the SME's CEO and Project Manager in enabling and managing change from a basic and piecemeal approach towards technology to the implementation of a broader ERP system. More specifically, the CEO and the Project Manager were concerned with user engagement, resistance to change and communication issues that could burden the early implementation phases.

This complex problem brought together multiple participants, all of whom had an interest in solving it. The set of participants included: Chief Executive Officer; the management team; the internal Project Manager; the SME's employees (also referred to as

users); the IT Vendor's Marketing Manager; and the team of three Action Researchers.

The problem that needed a solution was not easily solvable within the current community of practice inside of the company, who lacked specific IS and change management competencies, and furthermore called for the combination of knowledge from multiple perspectives, expertise, and disciplines (Mohrman et al., 2008). Hence, a problem-focused research approach like AR could provide a natural home for and evoke a need for collaboration that brought together multiple perspectives, including those of theory and practice. In part, this is because problems represent anomalies, and present a need to step outside of the daily reality that is driven by implicit theories, and to try to achieve a detachment that enables the search for new understandings that can guide action (Coghlan, 2000).

In order to solve the previously identified problem, from December 2011 to March 2012, the researchers who are authoring this study where directly involved in the early stages of the implementation process of an Enterprise Resource Planning system within the SME (thus following the direct involvement principle of the action research methodology), with the planned overarching objective to apply change management and organizational communication practices supporting the early phases of ERP implementation - with a focus on enhancing user engagement. Although the whole implementation project lasted till April, 2013, this study focuses on allegorically describing its first four months, where change management practices and user engagement dynamics where at the heart of the discussion.

The AR process was organized through a series of weekly meetings (for a total of 21 meetings, each lasting 2 hours 40 minutes on average) that the action researchers alternatively held with all the actors involved (including users). The content of such meetings was previously planned with and agreed upon by the CEO and the Project Manager, and these actors were open to the researchers' proposed lines of intervention. In the meetings, the action researcher set a flexible agenda, checked the progress status of previously identified actions, gathered insights from the participants, provided new content for discussion, set and explained new action points and assignments and instructed participants on how to act upon them.

In parallel, action researchers were involved in supporting the change management and communications activities and observing the user engagement process almost of a daily basis, in order to gather further information relevant to the research; they also operated "shoulder to shoulder" with the CEO and the Project Manager, and the result of this was that the researchers not only gained a deeper understanding of the company, its culture and its management's approach, but also gradually became accepted as a non-threatening and legitimate presence (Coghlan, 2000).

# 5 ALLEGORY AS ALTERNATIVE GENRE: DEFINITIONS, STRUCTURE AND PRINCIPLES

An allegory is "the representation of abstract ideas or principles by characters, figures, or events in narrative, dramatic, or pictorial form", and "a story, picture, or play employing such representation" (American Heritage Dictionary, 2011), where "the apparent meaning of the characters and events is used to symbolize a deeper moral or spiritual meaning" (Collins English Dictionary, 2003).

The term derives from the Greek allēgoría, derivative of allēgoreîn, i.e. to speak so as to imply something other. As a rhetorical device, an allegory is a figure of speech that makes wide use of metaphors (i.e. "a figure of speech in which a word or phrase is applied to an object or action that it does not literally denote in order to imply a resemblance" – Collins English Dictionary, 2003) and symbols (i.e. "something that represents or stands for something else, usually by convention or association, especially a material object used to represent something abstract" – Collins English Dictionary, 2003), though extending them to a complete and sense-making piece where complex ideas are illustrated by means of text or images that can be understood by the reader or viewer.

The very definition of allegory as a genre may be controversial. As the concept of genre represents a meaningful pattern of communication which consists of a sequence of speech acts (Yetim, 2006), and provided that "a genre is a category of art distinguished by a definite style, form or content" (American Heritage Dictionary, 2011), allegory is hard to fix since its convention are less formal or external, they are rather informal, skeletal or structural.

However, Quilligan (1979) in her book "The language of allegory: Defining the genre" argued that allegory is a genre, i.e. "a legitimate critical

category of a prescriptive status similar to that of the generic term 'epic'". Quilligan identifies the four main features that define the genre of allegory and its structure:

i.Text – the textual nature of the allegorical narrative, which unfolds as a series of punning commentaries related to one another;

- ii. Pretext which addresses the question of that source of which always stands outside any allegorical narrative and becomes the key to its interpretability (though not always to its interpretation). The relation between the text and the pretext is necessary slippery, yet by gauging its dimensions, we can begin to articulate the affinity of allegory as literary criticism to allegory as literary composition;
- iii. Context which addresses the question of formal evolution by tracking the cultural causes of allegory (allegories from different period may differ, since linguistic assumptions differed as well);
- iv. Reader which represents the final focus of any allegory, and the real action of any allegory is the reader's learning to read the text properly. "Other genres appeal to readers as human beings; allegory appeals to readers as readers of a system of signs, so it appeals to them in terms of their most distinguishing characteristics: as readers of, and therefore as creatures finally shaped by, their language" (Quilligan, 1979: 21).

The text and pretext hence focus on what the texts themselves say about the genre; the context provides the historical milieu out of which the author may write an allegory; and the reader is the ultimate producer of meaning (Nelson, 1968).

Considering that the primary characteristic of allegory as a genre is to separate the representation meaning from the inner and implied meaning, a mode of analysis for allegory can rely on hermeneutics (Myers, 1997). Hermeneutics is a classical discipline primarily concerned with the meaning of a text, and provides approaches to interpret it. The most common of such approaches is known as the "hermeneutic circle", which refers to the dialectic between the understanding of the text as a whole (a theory) and the interpretation of its details (single words), where the two dimensions are reciprocally validating and help deciphering the hidden meaning from the apparent meaning of narrative (Gadamer, 1976).

In the allegory this study presents, the whole story should be hermeneutically interpreted from the theoretical lenses of change management and user engagement in ERP implementation, while the details refer to specific aspects that influence and make sense within such context.

# 6 ALTERNATIVE GENRE APPLICATION: THE ALLEGORY OF THE SMALL VILLAGE

A small village was located in a wood and surrounded by a barriers of trees. The barrier was so thick nobody could actually see what was beyond it, and although it could be trespassed, no one had ever been bold enough to make the attempt. Rays of light made it through the ceiling of trees' branches, but branches were so many and intricate that the village was most of the time dark and surrounded by shades.

In the village lived a small community, who gathered to follow the lead of one whose visions were so fascinating and original that their heart was captured by them: he believed that human beings were meant to create works of art, and craftsmanship was mankind's deepest and essential virtue. The people from the village called him the Father, and once they stopped wandering in the dark of the wood to share his vision, the Father welcomed them in his community and taught them his idea of art as a form of beauty all men should pursue. From that time on, the Villagers' highest aspiration hence became to put such beautiful vision into practice.

They began collecting or even manufacturing tools they could use from what the wood offered them, and gathered into smaller groups of people whose abilities lied in one piece of art or another. As time went by, the Father selected a few chosen to help him lead his community that was growing, he called them the Wise Men and placed them at the lead of those smaller groups. The results of all their efforts were extraordinary, and notwithstanding the hardship they were confronted with, their masterful hands created objects of rare beauty.

Passers-by who were wandering nearby the village through the thick woods were fascinated by their works of art, and started asking for them: in return, they offered rewards coming from outside of the village they had been collected, and the village grew richer.

Word of the beauty of the crafts the community created spread, and soon many passers-by reached to the village to demand for the Villagers' pieces of art. At first, the Father and the Wise Men met these requests with joy, but soon they all realized the requests could not be met: the tools and instruments

their Villagers assembled to craft their art were incapable to perform the complex activities passersby started asking for; and the wood, with his almost perennial darkness, was a difficult place to work in.

In the long nights in the wood, the Father tried to find a solution: however, his wisdom and art lied elsewhere, and the problem remained unanswered.

Then came the Wizard. He wore a cloak who concealed his figure, and he spoke a language no one in the village could understand. But he brought light: a light he could control, he could lit and stop at his will; a light Villagers could use to assemble new tools, to perform new works of art, and to illuminate the gloomy darkness of their village.

Still, the Wizard's mysterious light was met with doubt, or even fear: Villagers did not know where it came from, how to use it, and they were frightened by it. The Father perceived an inner power in that light, but it was something he could not fully comprehend himself: so he decided to host the Wizard in the village until he could unveil his mystery.

Some time passed, and a small group of Travelers, packed with big rucksacks on their shoulders, reached the village. These Travelers had seen some of the outer world and visited other villages before: but most shockingly, they seemed to understand part of what the Wizard was saying. While all other passers-by just came and went, the Father asked the Travelers to stay and help him disclosing the power of light.

The Travelers spent their days with the Father, to learn about the Villagers' habits; soon, they sympathized with them, and began understanding their fear for the new source of light, as well as their frustrations for the way they had been performing their activities till that day. The Travelers also attempted to speak with the Wizard, to understand his light's potential.

Villagers were afraid of relating with the Wizard, and were ashamed to talk to their Father about their dissatisfaction, but they felt they could confide in the Travelers and be open with them: after all, the Father introduced them, and it seemed a comfortable aura surrounded them.

Since the Father had many duties to perform as a leader of his community, he entitled a Wise Man to accompany the Travelers for all the time of their stay. The chosen Wise Man made sure all Villagers paid attention to the Travelers' questions and requests, and eventually learnt to understand some of the things the Wizard said or did.

It took many days to the Travelers to see, understand, reflect and learn; often, they were also seen walking around the village with awkward objects they pulled out of their rucksacks; but eventually they told the Father and his Wise Men that there was nothing to be feared about the light, although they needed them and all the Villagers to see this with their own eyes. And the Father agreed.

First, the Travelers convinced the Wizard to remove his cloak, to show everyone in the village he was a man like all the others; then, they helped him showing how the light could be used in the village to help or change what Villagers currently did. A big brazier was placed in the center of the village, and the light coming from it was strong and warm; the brazier could be a main source of light, but many other lights could be lit from it, and they could be used by the smaller groups of Villagers to perform their specific activities, shining from darkness; also, that light could alter forever the way the Villagers crafted their beautiful objects.

The Villagers were indeed impressed, but many of them were still frightened. The light could burn, they were used to darkness, and they had been using their skills in a certain fashion since they first joined the community. The Travelers hence knew that demonstrating the light's power was not enough: they needed to stay longer.

Almost each day since the brazier of light was brought in the village, the Travelers met with each Villagers, and then with the smaller groups of Villagers, reminding them of how dark their days were before the light came; they once again pulled some of their awkward objects out of their rucksacks and explained they came from their previous travels - many of them they even inherited form Travelers who lived in the past – and used them to show how the light helped others before the Villagers, and, by applying small changes to the objects, they could also show how the light could possibly help their own village. Then they asked the Villagers to tell stories on how the light could change their activities, the art they craft, and their lives, exposing their fears but also their hopes, and although several Villagers and even a few Wise Men were reluctant or shy to make up their own story, eventually the Father and the Travelers could convince them; and all these stories were reported to the Father and the Wizard, to make sure no voice would be left unheard. The Wizard was himself reluctant, as he could not see the reason why he should listen to the Villagers stories told in a different language than his own, but once again the Travelers were able to persuade him to change his perspective of reality and see it with the Villagers' eyes.

When a Villager complained or seemed to be left

apart, the Travelers spent time with her or him to understand the reasons, and all were treated the same way. The Travelers also got the Wizard to share his knowledge, and they translated while he taught the Villagers how to employ the light in many different ways. Those who proved remarkable skills at the new activities were also rewarded and indicated as examples to follow; some Villagers even passed from one smaller group to another. The Father and the Wise Men themselves showed passion and interest in these new activities, and took part to many of these gatherings.

Although the Villagers were still afraid of talking to the Wizard alone, they trusted the Travelers, since they never disguised themselves, they spoke a language similar to theirs, they listened to everyone and they had always treated everyone equally and fairly.

Once the lights were used everywhere in the village, the Father gathered all his community and said the dark age was over and would never return. A new era had started for those who lived in the village: craftsmanship had eventually found a new and more sophisticated instrument to be pursued.

The Travelers could hence leave the village, towards another endeavor.

### 7 DISCUSSION

### 7.1 Contribution to IS Practice

Applying the hermeneutical mode of text analysis (Gadamer, 1967) to the allegorical representation of ERP implementation allows to individuate two layers of meaning: (i) the apparent meaning, i.e., the way the narration is presented and appears as such; and (ii) the hidden meaning, i.e., the implied sense of the narration in the light of the IS issue tackled.

Table 1 shows the apparent and hidden meaning for each of the allegory's characters and elements.

Table 1: Apparent and hidden meanings in the small village allegory.

Apparent meaning	Hidden meaning
Allegory characters	
The Father	The CEO
The Wise Men	The Top Management
The chosen Wise Man	The Project Manager
The Villagers	The Employees
The Passers-by	The Customers
The Wizard	The ERP Vendor's
	Marketing Manager
The Travelers	The Action Researchers

Allegory elements	
Small village	SME
Wood	Environmental complexity
Barrier of trees	Closed approach
Darkness	Lack of technology
Works of art	SMEs products
Craftsmanship	Working skills
Smaller groups of	SME's division of
villagers	labor/functions
Rewards	Revenue streams
Wizard's language	IT language
Wizard's cloak	IT Professionals' different
	background
Villagers' language	Natural language
Light	Technology
Travelers' rucksacks	Action Researchers'
	theoretical background
Travelers' aura	Academic credibility
Travelers' objects	Action Researchers'
pulled out of the	theoretical models
rucksack	G701
Father's community duties	CEO's managerial tasks
Big brazier at the	ERP system
center of the village	ERI System
Smaller sources of	ERP modules supporting
light springing from	SME's functions
the brazier	
New instruments	New technological
	applications
Villagers', Wise	Communication resistance
Men's and Wizard's	to storytelling
reluctance and	BLICATIONS
shyness	

The action research methodology and the change management theory provide the theoretical framing to decipher the hidden meaning of the allegory, whose implications for IS practice are various.

The allegory shows how action researchers acted in the empirical setting of a SME where the introduction of an ERP system was determining significant changes in the way users organized and performed their work and interpreted their organizational self.

The company was held together by the CEO's passion and eclectic leadership, although it started encountering significant issues as demand increased and became varied; moreover, the technological skills at hand were insufficient to govern a growingly complex company, but the CEO and his Top Management had little or no knowledge of IT. They perceived the opportunity represented by the ERP system, but were not capable of grasping it and a management-vendor leap appeared: this situation was similar to what Wang and Chen (2006) reported, where the lack of internal IT skills makes way for

external support. However, instead of looking for external consultancy firms or vendors to obtain such support, the company's CEO turned to action researchers. The involvement of action researchers in the project hence came with several advantages, and their role was crucial in key stages of the change management and user engagement process.

Action researchers first acted to demystify the new IS, by supporting the IT vendor in translating the IT language into natural language users could understand; by being almost ever-present they were responsive, and made sure the IT vendor removed his cultural "cloak" to become dependable and trustworthy (Gefen, 2002). Because of their academic status, an "aura" of credibility surrounded them from the management's and the users' standpoint, so they were seen as a much more reliable listeners than the IT vendor himself or any external consultancy firm could ever be: this aspect paved the way for open discussion, communication and sharing, all key elements in change management (Schein and Bennis, 1965; Gallivan and Keil, 2003).

Action researchers also played an intermediate role between the CEO, the Project Manager and users. They received endorsement from the CEO and worked shoulder to shoulder with him and the Project Manager to govern the change, so that the management could keep indirect control over the IS implementation's early stages without the risk to either abandon other managerial tasks supporting the business as usual (the "community duties") or be perceived as poorly committed to the innovation taking place; the researchers also had the CEO and the Top Management be involved in milestone steps of the project (e.g. kick-off meeting and regular meeting) and play as committed "ERP champions" to boost motivation for user adoption (Lim et al., 2005; Brown and Jones, 1998). Users did not enjoy complaining with their managers, and appreciated the role of the action researchers as trusted third parties they could rely on, as they perceived the researchers could collect their thoughts and feelings, relate them, add their own expertise and present them to the CEO and Project Manager in an organized, sound and apparently impartial mode.

Action researchers performed in a way that aimed at closing all the communication leaps and lapses (Gallivan and Keil, 2003) at three levels: (i) users-management; (ii) users-IT vendor; and (ii) user group-user group. In this process, action researchers became a sort of central buffer between the "Father" and the "Wise Men", the "Villagers" and the "Wizard", to solve all possible controversies arising. Consistently with the tenets of the equity-

implementation model (Joshi, 1991), action researchers took the role of "organizational equalizers" and used communication devices to support the idea that no inequalities or loss of equities were perpetrated, so that the transition could be accepted and welcomed, rather than resisted.

User engagement was a priority in the change management process, and action researchers acted following a contingent approach that mixed rationalism (e.g. IS and change management theories and models) and experiments (e.g. hands-on training, exemplification, learning by doing and trial-and error approach) on the basis of their acquired knowledge of the specific research setting (Saarinen and Vepsäläinen, 1993) to enable it. They based their actions on the constant confrontation of users' habits and perceived risks (Sheth, 1981) to drive ERP adoption.

They were eventually the main actors to trigger and govern the unfreezing, change, re-freezing stages of the force field process model (Schein and Bennis, 1965; Schein, 1999), by: (i) sympathetically and empathically gathering knowledge on the needs, values, beliefs and interests of future IS users (Aladwani, 2001), feeding dissatisfaction over the "dark days" when IT was not available while clearly illustrating the benefits of the new solution; (ii) providing constant communication support to the IT Vendor as he tangibly started introducing the ERP system in the company, while listening to the voices of the internal customers and taking an active role on training; and (iii) setting the basis for a re-freezing of the newly acquired routines into institutionalized practices that the top management agreed upon.

Most originally, this study illustrates how the CEO and action researchers made use of "storytelling" as a communication device to create IS consensus on the employees/users were requested to express their working expectations and feelings related to the new IS, and this made for better interiorizing of change and reduced long-term resistance. By doing so, the CEO and the action researchers performed an interesting paradigm shift in the classical approach to change management (Kettinger and Grover, 1995): they created and inflated an initial "communication resistance" aimed to lessen the impact of any future "user resistance". As the allegory discloses, the process of approaching ERP implementation through personal stories created early inter and intra-organizational tensions, which, however, in the short term eased participation, involvement and commitment to use the newly introduced system. Storytelling could hence become

part of IS change management practice, as a valuable communication device to support the early unfreezing and knowledge formulation phases where information on the users' habits and perceived risks should be gathered.

### 7.2 Contribution to IS Publication

This study also suggests to employ allegory as an alternative writing genres in IS publication.

An allegory can contain several layers of meanings, thus making the narration multidimensional and flexible and allowing to hide a deeper moral behind a literal interpretation of the text. The work of the IS action researcher/writer to add these layers to the traditional representation of her or his studies (as commonly reported in IS case studies) certainly requires and additional narrative effort: however, such work also forces the writer to dialectically move from the meaning to its symbol, from the symbol to a whole metaphor and then to the extended metaphor represented by the allegory itself. In this dialectic and iterative process, the researcher/writer has the chance to: deeply elaborate and reflect on the field data he collected; resort to a combination of expertise, intuition and creativity to develop an enlightening sensitivity towards the IS problem investigated (e.g. IS change management); describe such problem in a lively way where the explicit and the implicit perspectives coexist and both add to the account; and encourage the reader to empathically embark in the same interpretation process.

Thus, the allegory genre stimulates the construction of many apparently different though integrative narrations that can help the reader in the gradual activity of disentangling multifaceted and multidimensional IS problems and discover the action researcher's findings. A sense of empathic "discovery" will then permeate the allegory and accompany the reader during the interpretation process, and this will make for better interiorizing of the inner meanings – that is, the study's findings.

Paradoxically, an allegory could hence tell more of a writer's insight, understanding and perspective on a given IS phenomenon than a plain case description would: the allegory has the power to manage and convey the action researcher's intended meaning and personal insights which would have largely been "lost in translation" in traditional scientific writings. By properly framing the allegory in a methodological and contextual background (like this study attempts to do, by presenting the IS change management and user engagement theory

and the action research methodology), the researcher/writer could offer an hermeneutical tool, a key to help the reader to translate metaphorical concept into real-world IS phenomena and elements. The theoretical and methodological frame would hence serve as the allegory's pre-text and con-text to stimulate a profound understanding of the literal text (Quilligan, 1979).

Due to its peculiarity, the alternative genre of allegory could show further characteristics. It could provide a narrative language that is appealing for a wider range of readers (other than researchers or IS specialists), possibly enlarging the target audience of IS studies towards different disciplines like Management; it could leverage symbolism and metaphors to nuance critical messages (e.g. IT vendor's scarce dependability) and convey positive or negative messages (e.g. "light" and "darkness" equated to the presence or absence of technology) that stay with the reader; and it could eventually place the reader into a position of self-denying selfconsciousness (Quilligan, 1979), where he is more open to discovery and learning of the allegory's moral.

This study contends that allegory as an alternative genre could be most indicated to report action research endeavors, considering this research characteristics. methodology's inner researchers' activity is inherently multi-layered (as the allegory is): action researchers mix observation and action, detachment and involvement, description and normativity; they need to craft a narrative that draws from multiple perspectives and possibly unifies them into a single narrative; and their role is intimately hermeneutical, as they strive to help interpreting details in the light of the whole and validate the whole by means of details. The "Travelers" undertake journeys not only from company to company, but also cross-domain travels from theory to practice (and back to theory), from literal meaning (i.e. empirical events) to hidden revelations (theoretical and practical implications). Eventually, they can provide the sound theoretical and pragmatic key to read the allegory, always keeping in mind that an invisible thread shall relate the metaphor and the case they experienced (see Table 1).

Exploiting allegory as an alternative genre would constitute a normative breach that enables IS publications based on action research cases to overcome the limitations of canonical scientific writing (i.e. constraints on figures of speech, rhetorical devices and styles available; structural rigidity; limited accountability of internal responses

and motives, and limited perception of the intentional state vs. external response dualism; limited empathy and involvement evoked in the reader), thus providing a truly multifaceted account of the "organizational drama" (Avital and Vandenbosch, 2000) behind IS adoption.

#### 8 CONCLUSIONS

This study's possible contribution is twofold.

Concerning IS practice, the allegory shows that a contingent approach that combines communication, endorsement, cognitive understanding and training can enable change management where change is caused by IS implementation. The study also proposes to include "user storytelling" as a valuable communication device to help the management and the researchers reveal employees' habits and perceived risks related to technological change, while buying them in in an emotional and empathic way that helps leapfrogging traditional resistance to change.

The first core claim from this study is that Action Researchers can play a paramount role in enabling and governing IS change management and users engagement. The mediation between theoretical detachment and professional involvement that characterizes action researchers, together with the "aura" springing from their academic background, make them a trusted and dependable party users can refer to in the often painful change process. Action researchers can support the key stages of the change management cycle by means of proper instruments like communication, managerial endorsement and training supervision, combined with their theoretical and practical IS endowment, to create a comfort zone for users where awareness is increased, empathy is stimulated, conflicts are resolved and adoption is driven.

The second core claim this study presents is that allegory is an alternative genre that could be beneficially employed to account for action research endeavors. Allegory as a genre shows similarities with the action researcher's multi-layered and multidimensional activity, and could force the researcher/writer into a reflection, abstraction and transposition cycle that could support his elaboration of his study's findings. The risk action researchers run is to be so involved in the project they observe and operate in that they eventually become incapable to get detached from it and grasp its deeper findings (that may be hiding below the surface of the operational activities performed). Writing the action

research account in the form of an allegory demands to reinterpret a factual case in the light of symbols and metaphors that should connect to reality, while offering the reader a set of interpretation lenses borrowed from IS theory and practice. The positive result of this process is an enhanced ability to highlight the story's findings. And the hidden meaning of the allegory, once revealed and made apparent to the reader through an hermeneutical text analysis, could also allow deeper interiorizing of such findings and meanings.

#### **REFERENCES**

- Aladwani, A. M. (2001). Change management strategies for successful ERP implementation. *Business Process management journal*, 7(3), 266-275.
- American Heritage Dictionary of the English Language, Fifth Edition (2011). Houghton Mifflin Harcourt Publishing Company.
- Avison, D. E., Lau, F., Myers, M. D., and Nielsen, P. A. (1999). Action research.Communications of the ACM, 42(1), 94-97.
- Baskerville, R., and Wood-Harper, A. T. (1998). Diversity in information systems action research methods. *European Journal of Information Systems*, 7(2), 90-107.
- Boje, D. M. (2001). Narrative methods for organizational & communication research. Sage.
- Boland, R., and Schultze, U. (1996). Narrating Accountability: Cognition and the Production of the Accountable Self", in R. Munro and R. Mouritsen (eds), Accountability: Power, Ethos and the Technologies of Managing. London: International Thomson Business Press, 1996.
- Brown, A., and Jones, M. (1998). Doomed to Failure: Narratives of Inevitability and Conspiracy in a Failed IS Project. *Organization Science* (19:1), pp. 73-88.
- Burnes, B. (2004) Managing Change: A Strategic Approach to Organisational Dynamics, 4th edn (Harlow: Prentice Hall).
- Coghlan, D. and Brannick, T. (2005) *Doing Action Research in Your Own Organization*, SAGE Publications, London.
- Coghlan, D. (2000). Interlevel dynamics in clinical inquiry. Journal of Organizational Change Management, 13(2), 190-200.
- Coghlan, D. (2011) Action Research: Exploring Perspectives on a Philosophy of Practical Knowing. *The Academy of Management Annals* 5(1), 53-87.
- Collins English Dictionary Complete and Unabridged (2003). HarperCollins Publishers, 2003.
- Cortimiglia, M., Ghezzi, A. and Frank, A. (2015) Business Model Innovation and strategy making nexus: evidences from a cross-industry mixed methods study. *R&D Management*, DOI: 10.1111/radm.12113.
- Czarniawska, B. (2004). Narratives in social science

- research. Sage.
- Davison R., Martinsons, M. and Kock, N. (2004) Principles of Canonical Action Research. *Information Systems Journal* 14(1), 65-86.
- Gadamer, H.G. (1976). Philosophical Hermeneutics. Berkeley: University of California Press.
- Gallivan, M., and Keil, M. (2003), The user-developer communication process: a critical case study. *Information Systems Journal* 13 (1), 37–68.
- Gefen, D. (2002). Nurturing clients' trust to encourage engagement success during the customization of ERP systems. *Omega*, *30*(4), 287-299.
- Ghezzi, A., Cortimiglia, M. and Frank, A. (2015) Strategy and business model design in dynamic Telecommunications industries: a study on Italian Mobile Network Operators. Technological Forecasting and Social Change Vol. 90, Part A, 346-354.
- Ghezzi A., Georgadis M., Reichl P., Di-Cairano Gilfedder C., Mangiaracina R. and Le-Sauze N. (2013) Generating Innovative Business Models for the Future Internet. *Info* 15(4), 43-68.
- Ghezzi, A., Mangiaracina R. and Perego, A. (2012) Shaping the E-Commerce Logistics Strategy: a Decision Framework, *International Journal of Engineering Business Management*, Wai Hung Ip (Ed.), ISBN: 1847-9790, InTech.
- Ghezzi, A., Renga, F., and Balocco, R. (2009) A technology classification model for Mobile Content and Service Delivery Platforms. In *Enterprise Information Systems* (pp. 600-614). Springer Berlin Heidelberg.
- Joshi, K. (1991). A model of users' perspective on change: the case of information systems technology implementation. *Mis Quarterly*, 229-242.
- Kettinger, W. and Grover, V. (1995) Toward a Theory of Business Process Change Management. *Journal of Management Information Systems* 12(1), 9-30.
- Lanzara, G. F. (1991). Shifting stories. Learning from a reflective experiment in a design process. In *The* reflective turn: Case studies in and on educational practice (pp. 285-320). Teachers College Press New York
- Lim, E. T., Pan, S. L., and Tan, C. W. (2005). Managing user acceptance towards enterprise resource planning (ERP) systems—understanding the dissonance between user expectations and managerial policies. *European Journal of Information Systems*, 14(2), 135-149.
- Markus, M. L., and Robey, D. (1988). Information technology and organizational change: causal structure in theory and research. *Management science*, 34(5), 583-598.
- Mathiassen, L., Chiasson, M. and Germonprez, M. (2012) Style Composition in Action Research Publication. *MIS Quarterly* 36(2), 347-363.
- Mohrman S.A, Pasmore W.A., Shani A.B. (Rami), Stymne B., Adler N. (2008) Toward Building a Collaborative Research Community, in: Shani A.B. (Rami), Mohrman S.A., Pasmore W.A., Stymne B., Adler N. (Eds.) Handbook of Collaborative Management Research, Thousand Oaks (CA): Sage.

- Moran, J. W. and Brightman, B. K. (2001) 'Leading organizational change', Career Development International, 6(2), pp. 111–118.
- Myers, M. D. (1997). Qualitative Research in Information Systems. *MIS Quarterly* (21:2), June 1997, pp. 241-242
- Quilligan, M. (1979). The language of allegory: Defining the genre. Cornell University Press.
- Rapoport, R. (1970) Three Dilemmas of Action Research. *Human Relations* 23(6), 499-513.
- Rowe, F. (2012) Toward a richer diversity of genres in information systems research: new categorization and guidelines. *European Journal of Information Systems* 21, 469-478.
- Saarinen, T., and Vepsäläinen, A. (1993). Managing the risks of information systems implementation. *European Journal of Information Systems*, 2(4), 283-295.
- Schein, E. and Bennis, W, (1965), Personal and Organizational Change Through Group Methods: The Laboratory Approach, New York: Wiley.
- Schein, E. H. (1999). The corporate culture survival guide: Sense and nonsense about culture change. San Francisco: Jossey-Bass Publishers.
- Sheth, J. (1981), "Psychology of innovation resistance", *Research inMarketing*, Vol. 4, pp. 273-82.
- Thach, L., and Woodman, R. W. (1994). Organizational change and information technology: Managing on the edge of cyberspace. *Organizational Dynamics*, 23(1), 30-46
- Wang, E. T., and Chen, J. H. (2006). Effects of internal support and consultant quality on the consulting process and ERP system quality. *Decision Support* Systems, 42(2), 1029-1041.
- Yetim, F. (2006) Acting with genres: discursive-ethical concepts for reflecting on and legitimating genres. European Journal of Information Systems, 15(1), 54– 60
- Zwickl, P., Reichl, P. and Ghezzi, A. (2011) On the quantification of value networks: a dependency model for interconnection scenarios. In *Economics of Converged, Internet-Based Networks* (pp. 63-74). Springer Berlin Heidelberg.