Institutional Work & Individual Competence: The role of interactions in creating maintaining and disrupting institutions.

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Abstract. This work is a research proposal on microfoundations of neo-institutional theory. This proposal suggests to analyze, through the lens of neo-institutional theory, the role of individual competences in creating, maintaining, and disrupting institutions. Individuals exercise influence on the type of processes and operations that the organization carries on [1]. When these influences enable organizational innovation through the introduction of new practices, the underpinning mechanisms assume importance as premises for organizational design. In this study we propose to analyze a case of successful design and implementation of a service platform in the Italian public sector, supporting the interaction among Public Administrations (PA), Small and Medium Enterprises (SME) and citizens. This platform has been successfully adopted through software re-use projects in more than 140 local PAs in the Toscana Region, resulting in an interesting case-study to understand the influence of individual competence and their interactions in fostering innovation.

Keywords. Institutional Work, individual competence, individual interactions.

Introduction

According to neo-institutional theory, organizations in order to survive in a competitive environment (and experience organizational performance) have to seek legitimation in that environment [1]. Legitimation means that they have to be accepted as reliable and accountable by the environment to which they belong. This environment pushes organizations to adopt particular solutions, develop given capabilities, and assume particular organizational forms in order to gain legitimation.

As Powell & Colyvas [2] claim, legitimation (by the environment, other organizations, or collectivity), is founded on the actions performed by individuals. Also Lawrence, Suddaby, & Leca [3] define this activity as "institutional work", i.e. the set of actions that individuals perform in their daily tasks within an organization.

In this work we underline the importance of individual dimension while analyzing this institutional forces. The importance of consider individual dimension have been highlighted also in other fields for the same reason. For instance, in Cohen's introduction of organization science special issue (1991), Stinchcombe [5] points out that organizational capabilities are founded by "skills of its individual members". According to another well-known and established work, individual dimension is very important because the "only contribution to collective action" is done by individuals [6]. In (inter-) acting together toward the same aim, individuals create the social force of a group. So, the organizational level forces, are mainly based on the idea of collective action that investigate the outcome of group behavior in reaction to given inputs [7].

To completely understand how these institutional forces work, we propose a deeper analysis through the competences possessed by individuals, as a way to improve the understanding of how individuals through their actions legitimate institutions.

This work is a research proposal which aims at analyzing how individual competences (of actors committed in institutional work and their mutual interaction while performing this kind of work) can influence the practice of SW re-

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use within a local PA (creating, maintaining, and disrupting that practice). That means the possibility for a particular organizational form or organizational capability to be created, maintained, or disrupted depending on the micro-dynamics between individuals in that institutional environment.

The main research question that arise is: how the influence of different individual competences works on the legitimation of an organizational activity?

In this work we propose to analyze a case of successful design and implementation of a service platform in the Italian public sector, supporting the interaction among Public Administrations (PA), Small and Medium Enterprises (SME) and citizens. The way to design the implementation of a project, in which the influence of individuals and groups is very important, has gone through the analysis of a complex service implementation in the Italian Public Sector (Applicazioni Interoperabili Digitali per l'Amministazione, AIDA). In particular the development of a service platform to support the interaction among PA, SME, and citizens have been studied.

This case is particularly relevant for the analysis because the AIDA project, for its nature of IT project developed in PA environment, is sensitive to the different influences playing in this environment. For this reason the analysis of this case in light of institutional theory give the possibility to highlight determinants that led to the institutionalization of the practice of SW reuse.

Theoretical Background

Neo-Institutionalism and embedded agency

Neo-institutional researcher assert that every organization is influenced by the broader environment in which it operate (by institutional pressure). In this environment, organizations need to establish legitimacy within the world of institutions. To do so organizations influence human behavior through rules, norms, and other frameworks [8], [9].

Even if neo-institutional theory is mainly focused on organizational level, it is possible to recognize an important stream of this theory that is "institutional work" [3]. This concept describes "the purposive action of individuals and organizations aimed at creating, maintaining and disrupting institutions" [10]. This stream became even more important if it is examined at individual level as Powell & Colyvas [2] suggest.

Following this line of thought individuals actions and behaviors should be driven by the pressure that institutions makes and routines are followed because they are taken for granted as "the way to do these things" [11]. As contrasting to this view in which individuals are seen as "cultural dopes" embedded in institutional arrangements there is institutional entrepreneurship consisting in individuals "who leverage resources to create new institutions or to transform existing ones" [12].

In this paper the focus is in the middle between these two extreme. The gamut of individuals is made of a very different behaviors in response to institutional pressure. At same time the actions of those individuals legitimate institutions as it is shown in Fig.1. Institutions are first produced by individuals, through actions [13], than institutional theory is inherently characterized by the tension between agency and institutions [14].

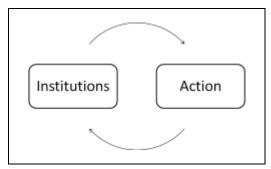


Fig. 1: The recursive relationship between Institutions & Action [3]

The analysis of individual action is then necessary to understand not only those behaviors (creating and maintaining) aligned with institutional pressure but also those (disrupting) that renovate institutions. In particular the existence of professionals (individuals) in different entities with same background and experience lead to the development of shared orientation toward problems and common implementation of new solution.

Individual Competence

From the analysis of literature it is possible to understand a recent convergence on the importance to investigate below the organizational level, groups and individuals (i.e. [15], [16]). Also Felin & Hesterly [17] challenge the collective (macro-level) as a locus for understand development of capabilities, thus building a theoretical model with individuals as a foundation of capabilities.

Scholars and researches recognize that collective actions are a complex set of underlying individual actions and interactions and oppose many possible different micro level behaviors to a macro level explanation [18]. Felin & Hesterly [17], challenge the conceptualization that capabilities-based research should be focused only at firm level variables [19], and propose a more individualist foundation of value creation. Felin & Foss [20] argue that "to fully explicate organizational anything – whether identity, learning, knowledge, or capabilities – one must fundamentally begin with and understand the individuals that compose the whole, specifically their underlying nature, choices, abilities, propensities, heterogeneity, purposes, expectations and motivations".

Following this stream it is possible to recognize that individual competences (ICs) have been studied form a great variety of perspectives, and as a result a lot of different definitions have been developed. This shows the importance that academics and practitioners confer to this concept. The literature in general on IC is quite fragmented, and it's very difficult to identify or impute a coherent theory or to arrive at a definition capable of accommodating and reconciling all the different ways in which the term is used [21], [22]. As Woodruffe [23], suggests "competence is also used as an umbrella term to cover almost anything that might directly or indirectly affected job performance".

The outline in which ICs are analyzed can be divided in two main approaches, from the one perspective ICs are investigated using a top-down approach [24], [25] and from the other they are investigated using a bottom-up approaches [26–29].

The first approach takes into account organizational competences (distinctive firm competences) and investigates the strategies that are behind the preservation of this organizational competence. In this view ICs are seen just as a mean to fulfill organizational strategies [25].

The second approach instead, from our perspective, is more interesting. For some researches ICs are expression of individual performances". Nelson and Winter [30] look at skills as a very important concept for prediction of individual behavior (performance), but recognize that it is not the only. Torraco & Swanson [31] in their research on management of expertise (of employee) as a basic requirement for managing human capital, highlights that "business success is increasingly centered on an organization's ability to use its employees' expertise as a factor in the shaping of its business strategy". In figure 3 (see below) it is possible to see the components of individual competence that are identified as knowledge, experience and problem solving [32].

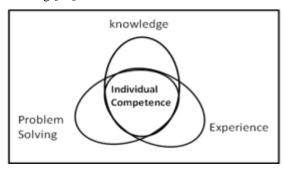


Fig. 2: Basic component of individual competence (Herling, 2000)

Herling [32], makes three main considerations. The first refers to the idea that individual competences are seen as a dynamic state, "an internal process of continuous learning is characterized by the constant acquisition of knowledge, reorganization of information, and progressive solving of problems". The second is the fact that expertise is recognized as domain specific, so there are different domains in which an individual can excel. The third foundational concept is that expertise has a few basic components; there is not always agreement among the researchers as to which component took precedence.

In a more famous piece of research [26] ICs are defined as: "an underlying characteristic of an individual that is causally related to criterion-referenced effective and/or superior performance in a job or situation". In this meaning competences are intrinsic features that any employee has and are defined of five characteristics. This meaning suggests that IC is a deep and durable part of a person personality, can predict behavior in many different situation, and can be a font of good performance in a given task. Spencer & Spencer [26] identifies five traits of ICs: "motives" (the things a person consistently thinks about or wants that cause action; as McClelland (1971) suggest, motives, are recurrent concern for a goal state); "traits" (physical characteristics and consistent responses to situations or information); "self-concept" (a person attitudes, values or self image); "knowledge" (information a person has in a specific content areas); and "skill" (the ability to perform a certain physical or mental task).

In this research the characteristics on which is more interesting to focus on are "knowledge" and "skill" that are what Spencer define the visible part. While "motives", "traits" and "self-concept" are more hidden and embedded in human nature, "knowledge" and "skill" are the only ones that can be developed and improved with training.

Following the bottom-up approach, there are some interesting work on information technology that investigate what are the necessary individual competence that managers should posses. On this line of thought Bessant & Howard [34], investigate the components of managerial competences required to absorb and assimilate new inputs of technology

required for successful transfer. In this view technological competences are referred, as in the view of [35] to the package of technological resources, skills and experiences which give distinctive competitive advantage.

Empirical study

The empirical case usable refers to a case of implementation of a service platform in the Italian public sector, supporting the interaction among Public Administrations (PA), Small and Medium Enterprises (SME) and citizens, in Toscana region. This is an interesting case-study to understand the influence of professions in fostering the diffusion of software re-use projects in more than 140 local PAs in the Toscana Region.

An important findings can derive from the comprehension of the different role that different types of capability plays in the implementation project in local PA and the particular stimulus that this have in legitimating the reuse activity.

A preliminary study of the case has already been performed. This first analysis has highlighted that exist two kind of normative pressure (by individuals): those pressure executed by professionals acting within a given local PA and pressure performed by professionals that posses similar skills and attitude across different local PA.

The first kind of normative pressure toward software adoption from other local PA, so the practice of reuse, as said, is linked with professionals within a local PA. These forces come from individuals with common background, or that have developed common professional network through which they spread very fast. In AIDA case it is possible to observe exactly this kind of phenomenon, where professional associations and labor union have a strong influence in organizational life. At same time it is possible to identify within the AIDA project another source of normative pressure, that are professionals that hold similar positions within different PA and develop common similar orientation toward problem solving and implementing solutions. The commonalities among professionals belonging to different local PA overcome the different organizational culture and processes.

The interplay between micro level and macro level, instead is not completely analyzed and, according to this study, needs further investigations.

In order to understand which are the needed information to conduct the research, it is necessary to specify what practical data are needed to explain the different constructs (such as interactions and competences).

As said before, preliminary study of the case has already been performed, nevertheless other data will be collected through interview. Defining the kind of practical information needed to shed light on the complex interplay between individual level and collective level helps to understand which managerial actions and organizational events have to be considered as important and therefore "recorded" in the research for the analysis.

The problem to evaluate the competences is not very difficult to observe and to collect data on it. Within the human resources unit is possible to collect the set of curricula of people belonging to the different local PA. Another method to improve the result of the data collection is to conduct a small talk with each one of responsible of units to deepen the level of competence analyzed².

The interaction side of the research is the most difficult to observe. In this case it is very important to consider the kind of activity that local PA is conducting. The part of operations, duties relating to the usual management of everyday

² An example can be, talking with an employee that is known (from the CV) to be an engineer, understand if he has got some certifications or posses skills in project management (from corporate training)

maintenance of IT infrastructure, have a scheduled meetings and exploit the established routines. The part of projects, responsibilities related to exploration of new solutions, are much more fragmented set of interrelations between individuals³

Other type of interactions relates to the nature of the relation. It is important to consider interactions that involve simply a verbal communication (people that talk about their work) or the performing of a task (people that work together on a given task).

Conclusions

In order to analyze these forces we use the lens of neoinstitutionalism that highlights the concept of institutional isomorphism as similarity of the processes or the structure of one organization to those of another [1].

The strength of this mechanism stands in the interaction among individuals within organization as employees and across organization as professionals. The interaction is then seen as a reciprocal influence among employees; this interaction permits to shift from local knowledge and skills, of each single employee, to "distributed" knowledge and skills, of a group or organization [36]. As a matter of fact, scholars [30], [37–39] have illustrated that an organization and its capabilities are basically built and developed by individuals in their interaction and recombination of knowledge bases through different forms of social interactions.

The concept of interaction, in common sense suggests that two or more entities are involved in doing something together (to perform a task, to take a decision, to share knowledge). In particular McCall [40] distinguishes between action from interaction. While the former refers to the "doing of agents" the latter refers to at least two agents "acting upon one another", this acting one upon another can be reciprocal in form or mutual.

Another important thing to fix relates to the level on which these interactions take place. In this work we are interested in interactions that happen among individuals in different organizations while implementing a complex IT project. In this work, in order to understand dynamics that dive to the success of a complex IT project, it will be necessary to look among all types of interactions. The employees within an organization being part of a particular unit will have formal meetings, draw reports, have informal talking to each other (i.e. at coffee machine) and so on. To explain interactions between individuals we analyze all the possible different kinds of communication that take place inside an organization (or a unit).

We argued that institutional research can benefit from complementary attention to the microdynamics and the macro-level. Such attention will provide a fuller account for endogenous and exogenous influences. Our aim is to outline how efforts on the micro level, so the activities of individuals and groups, may influence macro-level changes and responses. Rather than focus only on the success on legitimation of a given organizational capability, we want to better explain the nature of this capability. The results of such investigation will lead to decisions more effective on the way individual competence can affect the legitimation of a capability of project governance.

³ An example can be, the kind of meeting that take place in the normal development of a project (spontaneous at coffee machines or formally and scheduled)

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