Formality and Informality in Signage Design Management

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Abstract: Signage design can be understood as a process consisting of a plan, a project and specification of graphic elements in the place that has been built. A project is a temporary, gradual endeavor undertaken to generate a unique product or service. A signage project, in this sense, involves the development of a product that will somehow affect factors such as the atmosphere created (environment), the meaning assigned (user), and the message conveyed (content). Regardless of how complex a project is, project management can be seen as planning, programming and controlling a series of tasks required for the successful achievement of a particular goal. However, projects can be either formally or informally managed. This paper investigates issues related to formality and informality in the process of signage project management through case studies carried out in three renowned design offices. For this purpose, it analyzes the relationships between the project phases and the occurrence of formality and informality regarding different stages and sizes of projects. Data were collected through semi-structured interviews with managers and other members of the project teams in the companies studied. The results obtained have suggested that both forms of control (formal and informal) can coexist and contribute to obtaining the results aimed by the project team. It has been noticed that the coexistence of characteristics of formal and informal management processes is important to the process as a whole. It has been concluded that formal management is important to project organization, i.e. the definition of its stages and documentation. Yet, informal management is also important, since it allows the project to be developed in a flexible way, thus facilitating information sharing, and making the participation of the project team more effective along the stages involving creative skills.

Keywords: project management; design management; formality; informality; signage design.

1. Introduction

The Society for Environmental Graphic Design - SEGD [12] has defined signage design as planning, project and specification of graphical elements in constructed or natural environments. Such elements are used to convey specific information in identification, information, direction, interpretation, orientation, regulation and ambience systems. Signage design can be understood as the application of graphical signs to environments with the purpose of communicating. It seeks to meet information and orientation needs with the least cognitive effort. Whenever a signage project is developed, the atmosphere created (environment), the meaning attributed (user) and the message conveyed (content) must be focused.

According to the Project Management Institute – PMI [10], a project is a temporary, gradual endeavor that is undertaken to generate a unique product or service. For Naveiro [9], project is an activity that produces a description of something that has not come into existence yet, and makes the construction of this artifact viable. A signage project, in this sense, involves considering variables of different natures that will somehow affect the future users, the environment or the society.

Complex project problems require efficient management processes to be solved. Project management, according to Kerzner [8], can be defined as planning, programming and controlling a series of tasks to successfully achieve a particular goal. In general, a project consists of several phases, and it is fundamental to highlight their need, and identify internal and external factors. The processes of management control can be classified as formal or informal [8]. Formal management is related to organograms, departmentalization and reports, and results from functional relationships. Informal management concerns team work and people interaction, as a result of social relationships.

This paper aims to investigate the occurrence of both formality and informality in project management, specifically in the signage area, based on three case studies carried out in three different design offices. More specifically, the purpose is to observe (i) the relationships among the phases of the signage project, (ii) the occurrence of formality and informality in those different phases, as well as (iii) in different sizes of signage projects.

2. Theoretical foundation

PMI has presented a definition of project management concerned about its practical application. *Project Management Body of Knowledge* - PMBOK [10] has related such definition to the application of knowledges, skills, tools and techniques to activities aimed at meeting needs and expectations in an attempt to establish equilibrium among competing demands.

Borja de Mozota [2] has highlighted that more classic management models that present more conservative views have diverged from the design field, in which a creative and innovative spirit might also influence management methods. A more informal management style develops both design and management activities as investigative, experimental knowledges that may decrease the possibility of conflicts and increase the gains of an organization as a whole [2]. However, the author has stated that this does not minimizes the complexity of integrating design into a company, as designers and managers tend to have different views of reality.

Therefore, Design Management refers to the effective insertion of design as a strategic tool for economic and competitive development. Such incorporation of design in a company is conditioned to the business and management model. However, as the Portuguese Center of Design has pointed out, the incorporation of a design culture by a company involves the adherence to a new way of thinking about the activity and its global integration into the company. The most favorable environment for its implantation is exactly the one that adopts a more aggressive strategy in terms of innovation, with a more flexible structure and easy adaptation [2]. It is worth reminding that, as design is a multidisciplinary activity, its incorporation affects every department, thus influencing the organic structure and functional relationships in a company.

As part of the definition of project management proposed by Kerzner [8] and design management, as the latter also comprises the organization and coordination of activities related to projects, the control system addresses the development and implantation processes in search of possible deviations. The control system is also related to the surveillance of activities performed by people, units and departments, or the inspection of products, so that such activities do not deviate from pre-established norms. The control system can be classified as formal or informal.

Formal control can be seen as an important process to mitigate project risks through the establishment of effective controls. PMI has detailed nine control elements in the PMBOK document [10]: integration, scope, time, costs, quality, human resources, communications, risks and acquisitions. According to Eisenhardt [6], formal controls, such as behavior control and outcome control, are tools to assess performance. While behavior control is related to specific procedures and rules that must be followed, outcome control articulates specific results. An example of formal control would be a meeting with predetermined agenda, record and duration [6].

On the other hand, for Kerzner [4], the concept of informal project management is based on four fundamental elements: trust, communication, cooperation and team work. The author says that the idea is to reduce bureaucracy by minimizing the excessive use of paper for handbooks, procedures and reports. According to Eisenhardt [6], informal control, such as self-control and team control, rely on "unwritten practice codes", such as social values, beliefs and common traditions shared by individuals. Self-control is established by an individual to perform a particular task while controlling his or her own actions. Team control is that found in a group or in individuals that share common beliefs or goals. An example of informal control would be a meeting in which there is neither an agenda nor a specific duration [13].

Authors that have discussed the issue of informality and formality in project management, such as Chaudhuri [4] and Susilo, Heales, Rohde [13], have stated that informal practices of project management can be successful and considerably reduce the project costs. For this purpose, the company/office should be at a maturity level that can only be reached when project management is fully understood and the project team culture is based on trust, cooperation and communication [4]. Such projects are likely to be less complex, having fewer potential problems and management difficulties, and better budget control [13].

Formal project control is mainly focused on tangible indicators, which can be quantitative or qualitative, with structured data collection and analysis that enable their physical record. On the other hand, informal control does not usually have either indicators or procedures that could provide any form of record or filing.

3. Method and Case Study

According to Yin [16], a case study is an empirical investigation that views a contemporary object or phenomenon in its real context. The author sees case studies as an adequate strategy when questions such as "how" and "why" are asked, and when the investigator has little control over the events. Underpinned by qualitative data, case-study researches are more exploratory and interpretative, with a focus on the process, if compared to other research methods that work with quantitative data. In this sense, the complexity and the interactions that characterize signage projects require a research approach aimed at finding and explaining the relationships between formality and informality and their incidence in management. However, the case study

method is not immune from problems. As ideas and actions are often intertwined, this gives way to the possibility of indicating hypotheses that had been established before the study was conducted. In order to ease this problem, it is advisable that the researchers have a deep knowledge of their research object [14].

Following Yin's ideas [16], this study was divided into stages that delineated the research: (i) problem definition, (ii) project, (iii) data collection, (iv) data analysis, and (v) report writing. In this study, the (research) project and data collection addressed the strategy of adoption of the case study method, the selection of offices, and the application of the interviews. Data analysis was performed considering the interview transcriptions and information obtained. Report writing, in this case, can be seen as data systematization, formulation of conclusions and considerations, and disclosure of knowledge acquired.

For the case study, three design offices with remarkable work in the area of signage project were surveyed. They were selected based on their acknowledged production in the area, which is attested by their publications and awards. Furthermore, the offices are located in Porto Alegre (Brazil) and have clients from all over the country, from different areas and different sizes. The interviews were conducted between the end of 2011 and the beginning of 2012. The managers were personally interviewed (Appendix 1) according to a semi-structured protocol; separately, there were virtual structured interviews with project executors (both professionals and apprentices) (Appendix 2).

The offices studied will be here identified as Office#1, Office#2 and Office#3. Office#1 has two partners: one of them has a degree in Advertising, and the other has not completed college, but both have a large experience in professional practice in general design. Office#2 has three partners: one with a degree in Design, one with a degree in Architecture, and one with management knowledge, exclusively focused on signage design and ambience. Office#3 has an Architecture professional dedicated to signage design, but also working with commercial identity and architecture. All of the three offices work with different sizes of projects: small projects (total resources allocated for project and implantation up to R\$ 10,000.00), medium projects (resources higher than R\$ 100,000.00), and large projects (resources higher than R\$ 100,000.00). For this classification, we have used the criterion proposed by the Brazilian Service of Support for Micro and Small Enterprises – SEBRAE, deleting three zeros for the purpose of adequacy to the area of this study.

3.1 Office#1

Office#1 was founded 16 years ago. It consists of a team of professionals and trainees, designers and architects, under the surveillance of two partners. It works in different design areas, such as visual identity, promotional material, packages, editorial design, ambience and signage. One of the partners has a large experience in signage design and worked for five years in a company in the United States dedicated to project, production and installation of signage elements, "which is very interesting because design works side by side with the factory", and it is possible to see "that the interference of a signage project is much bigger than the traditional notion of way finding, with orientation and direction signs only". The interview was initially seen as a pilot interview, but it showed to be totally satisfactory. It was conducted in November, 2011, at the office headquarters in Porto Alegre, and lasted about one and a half hour.

The methodology is based on three documents that must be handed to the client: project catalogue, spread sheet and signage location plan. The project catalogue addresses the project documentation and involves

the presentation of the set of elements, content hierarchy, definition of sources, pictograms and color pallet, definition of materials and detailing of elements. The spread sheet is the list of all the signage elements, with their codification and content. The location plan refers to the localization of the elements in the environment where they will be placed. If the place does not exist yet, a location plan is used; if the place is already arranged, the localization is made in the local. It should be highlighted that, regarding the ambience, the handbook is usually more complex, comprising issues related to adaptability, extension, modularity, etc., although this does not change either the process or the methodology to be used. In this context, the general flowchart of project management of Office#1 comprises the following stages (Figure 1) based on Follis & Hammer [7]: initial analysis, planning, concept definition, development, executive detailing, and implantation.



Figure 1: Project Flowchart – Office#1.

The initial analysis involves the consideration of the place requiring signage. Planning has to do with the hierarchy of the content and the way it will be distributed over the place. Concept definition refers to the adoption of specific visual and verbal languages to be used in the project. Office#1 understands a signage project as a system that must have logic, a hierarchy and a common thread, which may be color, typography or the material chosen, for example. The development consists of replicating the concept, i.e. the project of all the elements of the system, by taking into account the information hierarchy, expressed both graphically and formally, and adequate selection of materials, respecting universal design norms. The executive detailing, which is divided into architecture and communication, comprehends the precise specification of types, pictograms, colors, materials, diagramation of information in supports, and preparation of the material for correct execution. The implantation stage comprises both the production of material and the installation of the elements, under the supervision of a professional from the office. We can notice that there is no feedback between the project stages, even though the project is constantly evaluated by the team and the client. Feedback is supposed to occur at the end of the process.

As Figure 1 shows, the project stages are formalized, as well as the management project stages, according to the Office#1 manager. However, the procedure varies in accordance with the different types and sizes of projects. Data have evidenced both formal and informal control of project management. In smaller projects, some stages are shortened, although never completely eliminated. Such flexibilization is more likely to be seen at the stages of concept definition and development, both in project replication (e.g. different shops of a supermarket chain) and in small-sized projects (e.g. signage on a shop façade). The executors confirmed this information, and highlighted that they are not always informed about the whole project, which evidences a centralized management approach.

3.2 Office#2

Office#2 is positioned as a consulting firm specialized in signage and ambience. The office benefits from the three partners' background in different areas: design, architecture and management. This has allowed the office to be arranged in three areas: service, project and administration. The three professionals worked at a renowned office three years before founding Office#2, which is specialized in Environmental Graphic Design. The office attends to a variety of clients, from residential condominiums to large international companies. The partner that has a degree in Design also works as a professor. The interview was conducted in January, 2012 at the firm headquarters in Porto Alegre and lasted around one and a half hour.

Regarding methodology, Office#2, like Office#1, has also based its approach on Follis & Hammer [7], emphasizing that they were the first authors to record the professional practice in an organized, systematic way, with stages and checklists. For Office#2, "the methodology is like a book of good practices" that leads to a solution and prevents the professionals from forgetting or loosing track of the process, but it does not guarantee innovative results. In this context, the flowchart of Office#2 can be summarized into three words: intentions, definitions and specifications; it is possible to say that it has three broader phases or periods: Pre-Projectual (Planning), Projectual (Project) and Post-Projectual (Production). These phases are subdivided into the following steps (Figure 2): the Pre-Projectual phase comprises preparation and diagnosis; the Projectual phase includes studies, project and executive project; and the Post-Projectual phase involves dealing with contracts, inspection and documentation.

The Pre-Projectual preparation step includes the kick-off and briefing meetings at the beginning of the process. The three areas of the office (service, project and administration) meet to assign tasks, detail the activities, specify the documents to be generated and the project scope, and define the project schedule and the need of human resources, information and materials. The diagnosis corresponds to a study of the place to be signed and the content to be conveyed, also considering a research into conditions and references. Office#2 always works with four key factors in terms of Ambiance Graphic Design Project: understand the place, understand the use (user), understand the company, and understand functionality. This means investigating, knowing, visiting the place, because the project materializes *in loco*, rather than on a clipboard. It is necessary to consider that the whole place communicates with the users, who, in turn, have their own characteristics and profile. Besides, it is important to know that every company has its brand positioning and its own language, and that every place requires specific information.



Figure 2: Project Flowchart - Office#2.

In the Projectual phase, the first step addresses the intentions that allow the generation of alternatives through brainstorm. After this step, two approvals take place: the first one is internal and is under the team's responsibility; the second is external and depends on the client. After both approvals, they move on to the next step, which comprises the project development itself, i.e. costs are defined and estimated. After that, the client is supposed to examine the procedures for approval. The execution step involves specifications, examination of virtual and physical models, and budget.

The Post-Projectual phase comprehends the stages of contract/inspection and documentation. The latter concerns the photographical record and the formal documents of the project, such as a manual, for example. The process includes feedback between stages, with internal and external approvals.

As shown in Figure 2, the project phases are formalized and, according to the interview with the office manager, the project management phases are, too. He said that the procedure is the same for different types and sizes of projects, which strengthens the formal kind of control. From the preparation, with the briefing, to the documentation, with the formalization of the project manual, all the stages are accomplished. Management is centralized by the managers, but each one acts in a different area (service, project and administration). The project executors confirmed that, independently on the size of the project, all the stages are completed, and they highlighted their knowledge of the internal stages, i.e. the ones related to the project itself.

3.2 Office#3

This office started its activities 18 years ago, initially acting only in the area of architecture, in which the professional in charge of the office has a degree. Gradually, the office migrated to the areas of graphic design and signage. According to the manager's perception, knowledge of architecture enables him to view three spatial dimensions, especially when he is still working on the project. The change of focus was triggered by his work as a representative of a North-American company that produced standardized and modulated elements for signage projects. He then learned about the need and benefits of working with a method and the concept of system, together with a better knowledge of shapes, materials and fixation systems. Presently, the office is concentrated on visual identity, signage and, occasionally, point of sale projects, involving whole, integrated projects. The office deals with different sizes of clients, "but they are all treated in the same way: a problem to be solved that follows the same trajectory, so there is a common method for all of them". The interview was performed in January, 2012, at the headquarters of the office in Porto Alegre, and lasted about one and a half hour.

From the methodology used in architecture (despite not being formalized), the method employed by the office has been improved with the everyday practice. The years of experience have led to the perception that "if you don't have a rigorous work method, the results aren't good for either the client or the office". The project flowchart of Office#3 consists of eight phases (Figure 3). The process starts with a briefing and is followed by documentation, references (both internal and external), concept, presentation, draft, execution project and implantation.

The briefing phase comprehends an intensive exchange with clients and draftsmen in order to provide all of them with necessary explanations and inform the clients about what they will receive along the different stages of the project. With the involvement of the draftsmen in every aspect of the project, from the architectural features to complements, such as lights and landscaping, for instance, a deep interaction is achieved, always having in mind that the architectural project is the focus and the others, including signage, are its satellites. However, the signage project should not lose track of either the whole or the context. The documentation phase concerns the collection of all the information needed for the good development of the work, such as measurements taken *in loco* and information to be made available, for example. The references, as mentioned above, can be found both internally, in previous projects executed by the office, and externally, in specialized publications (books, journals, sites and blogs).

All the previous stages converge to the stage of concept, which is designed from the team's insights in "an explosion of ideas". Teamwork is encouraged, and the team members are free to generate alternatives allying technique and creativity, traits that are inherent to signage projects. The range of options is reduced to one alternative by means of group discussions. After that, there is the presentation stage, a moment in which the office shows a judicious material together with explanations about how and why they arrived at such result (the trajectory).



Figure 3: Project Flowchart – Office#3.

At the draft stage, all the elements are separately addressed: the pictograms, the alphabet, the harmonious composition, the colors, etc., following the line of thought established and approved in the concept. Sometimes, another stage emerges in the midst of the draft: in more complex projects, the development and approval of different elements are required. The stage of execution concerns the detailing of elements. According to Office#3, "the projects always have a new detail, a way of fixation, a composition of materials", because "it is always a new investigation (...) in every project, there is always a new solution". Finally, the stage of implantation occurs along the fabrication and installation. "A project is only completed at the moment you deliver the last piece installed". Feedback is present between some stages, particularly at the presentation stage.

As Figure 3 illustrates, the project stages as well as the project management phases are all formalized, according to the interview with the office manager. The manager claims that the procedure varies according to the size of the project, because bigger and more complex projects may require more stages. This evidences formal management of the project structure as a whole, but with some informal control at certain stages. In this case, choosing either a formal or informal kind of control is related to the type and size of the project and the manager's professional background. Here a single professional centralizes management and coordinates the different project phases. The project executors, depending on the internal hierarchy, have more or less knowledge of the project as a whole; some of them actively participate in some stages, particularly in the stage of references and concept.

4. Analysis of Results

The analysis of the project flows has provided us with an overview of the process conducted by each office. We can notice the presence of comprehensive, well-defined phases, which can be denominated as predesign, pre-projectual or planning; design, projectual or project; and post-design, production or implementation. The steps and actions needed for project completion are taken along these phases (Figure 4). Regarding control, project management is quite similar in the three offices studied, as all of them show characteristics of both formal and informal management. Formal management can be seen, for instance, in the structure of a project as a whole, i.e. in its phases, and in project documentation (project catalogue or manual, graphic spread sheet and floor plan). Informal management, in turn, can be evidenced through the flexibilization of stages, according to the type and size of the project (Office#1); project management sharing, which requires trust between the team members (Office#2); and wide participation of managers and project executors in their meetings, particularly those devoted to creation (Office#3).

Formality usually guides the sequence and structures the control of the stages. It is also present in the organization of documents and in internal and external feedbacks. As parts of formal management, Eisenhardt [6] has pointed out formal control, behavior control and outcome control. These are all related to procedures that must be followed (to complete the stages), and outcome articulation (by generating documents and feedbacks), which may assess performance and drive the projects.

On the other hand, informal management is evidenced by the flexibilization of stages, considering both the type and size of the projects. Borja de Mozota [2] has claimed that in the field of design a creative and innovative spirit can influence the management methods, as the data obtained here can show. The internal stages can be considered as the most suitable to informality, and they often involve more creative aspects. The type and size of a project also appear to influence the adoption of informality in management, since less complex projects are likely to present fewer problems in terms of management and budget [13]. Informal management is present in project management sharing, and requires trust between the team members. The informal character of an organization favors shared values, which end up guiding behavior norms [5]. Informal management is also found in the wide participation of managers and project executors in meetings, particularly the ones related to creation. Such findings corroborate Kerzner's [8] and Chaudhuri's [4] ideas that trust, communication, cooperation and teamwork underpin informal management. Similarly, a manager's experience may influence the adoption of more informal management. In Offices #1 and #3, the figures of both office manager and project manager are combined into a single person, while in Office#2 there are people with different profiles in each function, and a third person is in charge of service (gray dashed rectangle in Figure 4).

Rank [11], addressing the coexistence of formal organizational frameworks and informal networks in the German context, has said that a significantly larger number of informal relationships are constructed and maintained along a vertical line, i.e. between the different hierarchies of the project team (as opposed by a horizontal line, among peers), which reasserts the importance of informality in project management.



Figure 4: Scheme showing the project flowcharts of the three offices analyzed (from left to right: Office#1, Office#2 and Office#3).

Figure 4 also illustrates the project stages that are likely to present characteristics of informal management (the internal area of the white-dashed rectangle) that are internal, i.e. stages of the projectual phase: references, studies and conceptualization, development and execution project. These areas are more related to creativity and innovation. Such data is in agreement with the study by Bönte & Keilbach [1], who have claimed that informal cooperation is more important and prevailing than formal cooperation in highly innovative companies (again in the German context). In contrast, areas that more often interact with people from outside the office, such as clients, suppliers and installers, are more suitable to a formal management system (the external area of the white-dashed rectangle).

5. Final Considerations

Project management consists of managing all the aspects of a project at two different levels: one is the strategic level, and the other is the project execution level [15]. In this study, we have chosen the second level to analyze the presence of formality and/or informality in the control of signage projects. The analysis has shown

that formality and informality coexist in the offices studied; both can be seen in different situations, and contribute to obtaining the results targeted by the project team. We have also concluded that formal management is important to the project structure, i.e. the definition of stages and documentation. However, informal management is also important, as it allows the project to be flexibly developed, thus facilitating information sharing and making the participation of the project team in the creation stages more effective.

The specific objectives of observing the relationships between the phases of both the management process and the signage project, examining the occurrence of formality and informality in different phases and investigating their occurrence in different sizes of signage projects have all been attained. It has been possible (i) to show that the project flow is similar to the management process, being both performed along predetermined stages; (ii) to identify the stages that are more likely to be under formal control, and the ones that tend to have informal characteristics; and (iii) to relate the type of control to the size of the projects.

In this context, we could say that complex problems require management and control of the project stages in order to be solved. The methodology conducts the whole construction of the method to be employed to solve a particular problem. The management requires that the different stages of the method are reached by the team members (managers and executors) so that the best results can be achieved, always taking the PMBOK aspects into consideration: integration, scope, time, costs, quality, human resources, communications, risks and acquisitions. Therefore, this exploratory, interpretative study has proved its relevance by bringing forward the theme of formality and informality in signage project management, mainly by showing that both forms of control can coexist and contribute with their characteristics to the attainment of the best result.

As further research, we suggest the replication of this study to confirm or not the results obtained, and extend it to other design areas to examine the occurrence of formality and informality at the stages and projects in which creativity has an important role (for instance, visual identity, editorial design, web design and product design).

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