# Communities of Practice as Conduit for Knowledge Management: A Sociological Analysis of the Macro Level Health Care Decision-Making in Canada

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## Abstract

In this paper, Regional Health Authorities (RHAs) - occupying the macro-level health care decision-making in Canada are examined as a community of practice. The rationale is to assess the extent to which RHA members interact as a community of practice and how such interaction impacts on the knowledge management processes informing RHAs decision-making process. The fact that RHA members are geographically dispersed within a given health region makes the distributed community of practice the best option for RHA members to optimize the management of knowledge in their decision-making process. The prospects and challenges likely to confront RHAs as they embrace the distributed community of practice prism are examined. Identifying the prospects and challenges is vital in the institutionalization of enabling conditions in support of knowledge management at the macro level health care decision-making in Canada.

**Key Words:** Communities of Practice, Knowledge Management, Knowledge Utilization, Health Care Decision-Making, Regional Health Authorities (RHAs)

# 1. Introduction

Communities of practice are groups of people held together by a common interest in a body of knowledge and driven by a desire and need to share problems, experiences, insights, hunches, and best practices. Such informal networks have a tremendous impact on worker cognition and behaviour (Wenger, 1998; Brown and Duguid, 1991). Communities of practice, thus, manifest themselves in organizational cultures, and can serve as major motivations to a personalized knowledge management strategy (Alavi and Leidner, 2001). In this study, Regional Health Authorities (RHA) in Canada are conceptualized as communities of practice. The extent to which the informal networks among RHA members influence the knowledge management processes is examined as the main objective of the study. The study is critical because an empirical investigation of how health care decision-makers manage knowledge at their disposal can help identify the facilitators of, and barriers to, knowledge management in health care organizations. Such empirical findings can enable policy-makers to adopt appropriate strategies for institutionalizing factors that impact positively on health care knowledge management processes, while at the same time addressing barriers to knowledge management in health care decision-making.

An assessment of how RHA members manage their knowledge represents an important component of the study, given the complexities involved in managing knowledge in organizations. Knowledge sharing and collaboration among RHA members, no doubt, can thrive on face-to-face or person-to-person engagement. Such interactions are best supported through the establishment of informal networks, which provide the platform for exchanging knowledge for decision-making purposes. Since communities of practice facilitate informal communications around a common body of knowledge, they potentially hold a central role in supporting knowledge management strategies and practices in organizations. The extent to which RHAs exhibit the features of communities of practice, and how these features affect knowledge management strategies become a central theme of the study.

Communities of practice, which evolve either spontaneous or purposefully within organizations, are thus held up as potential means for understanding knowledge management in organizations. In view of this, the features that support the formation and nurturing of communities of practice within the context of RHAs will be identified. Ultimately, this will provide the RHAs with recommendations on how best to cultivate, nurture and support communities of practice in further promoting the management of knowledge in informing health care decisions. Knowledge management is defined as "the process by which an organization creates, captures, acquires and uses knowledge to support and improve the performance of an organization" (Kinney, 1998, p. 2). It can also be understood as the exploitation and development of the knowledge assets within an organization, aimed at furthering the goals and objectives of the organization (Metaxiotis et al., 2005).

Knowledge management, therefore, can be said to involve a conscious effort to incorporate strategies and practices that ensure maximum use of knowledge in organizations with the aim of advancing the goals and objectives of the organization. Presently, it is recognized that successful organizations are those that create new knowledge, disseminate it widely throughout the organization, and represent it into new technologies and products (Metaxiotis et al., 2005; Hansen et al., 1999; Leonard, 1999). Perceiving knowledge management as a condition of organizational success makes it imperative for organizations to embrace and engage in it. But while leaders in the business sector have long recognized the value of managing knowledge, other sectors like health care have lagged behind in doing so. There is, therefore, the need for knowledge management to be applied to other areas of social life, including the health care industry (Metaxiotis et al., 2005).

Ensuring effective knowledge management in health care decision-making therefore requires the coordination of many elements: organizational structure and culture, the extent of individual interactions within organizations, and the use of information and communication technology (Lesser and Prusak, 1999; Donoghue et al., 1999). Important here is the observation that individuals neither work in isolation, nor are they (usually) able to make wholly autonomous decisions. They work in organizations embedded with routines and established cultures which influence their actions regarding knowledge management in decision-making. The activities related to knowledge management, therefore, are shaped by the extent to which the individuals involved have been socialized into their groups, of which the communities of practice are exemplary. In Canada, RHAs in 10 of the 13 provinces and territories in the country are responsible for making ultimate decision-making in their respective health regions. They are expected to be closely linked to the communities in the respective health regions by responding to their needs. RHA members undoubtedly occupy an important place in health care delivery system. This study, therefore, concentrates on the RHA members as macro-level decision-makers in the health care system in Canada. The main objective is to find out how the RHAs function as a community of practice in maximizing knowledge use in their decision-making process.

#### 2. Regionalization as Macro Level Health Care System Governance in Canada

Regionalization as an approach to health care system governance in Canada is defined variously in the literature. The Canadian Centre for Analysis of Regionalization and Health ({CCARH} 2004) defines regionalization as the processes involved in the creation of autonomous organizations responsible for the administration of health care services within a defined geographic region in a province or territory. Frankish et al. (2001) define health regions as bodies responsible for health care-related decisions and policies affecting the population of defined geographical areas through public participation. Dickinson (2002), however, develops a more comprehensive view, defining health regions as "system(s) of health governance designed to increase local citizen involvement in health care planning and service delivery, to facilitate greater integration and coordination of the health care system, and to increase the efficiency and effectiveness of the health care system." The effectiveness of regionalization as a policy instrument depends largely on the effectiveness of the decisions made by the various RHA members. Such decisions are invariably based on RHA members' ability to manage the knowledge they have at their disposal.

Although regionalization is referred to as a single policy innovation, there are variations in its structure and implementation, and regionalization structures within provinces have grown and changed over the years (CCARH, 2003). Still, some common features can be found. CCARH (2004) identified four main features of regionalization in Canada. These include (1) the definition of regions by geography; they occupy specific territory, (2) the existence and authority of the health regions are at the discretion of the provincial government, (3) the consolidation of authority at the regional level, as opposed to its previous distribution among many programs and communities, and (4) the responsibility of the regions cover considerable health services, spanning at minimum community, long-term, residential and acute care services, and often extending to mental health, addictions, public health, and health promotion services.

Regionalization, therefore, becomes an important policy initiative, and RHA members are now central to the making of critical health care decisions. RHA members, thus, face pressures from governments, citizens, and health professionals to not only represent their health regions but also to ensure cost-effective and efficient health services delivery in a timely and transparent fashion (Frankish et al., 2002). Measuring up to these expectations implies that individuals appointed to serve as RHA members meet some qualification criteria. In Saskatchewan, all RHA members of the health regions are appointed by the provincial government. The appointment of RHA members—most of whom are mainly lay people—has received mixed feelings from the public.

Some believe that lay individuals cannot properly make the technical, medical or clinical decisions usually made by health professionals (Sullivan and Scattolon, 1995). Others counter that since RHA members are not required to make clinical or medical decisions, they certainly can be comprised of lay people or non-health professionals (Frankish et al., 2002). This, however, does not relegate to the background the need for qualifications in the appointment of RHA members. Requisite qualifications for RHA members may include relevant experience (health care involvement, experience in education and/or social services, etc.) and specific knowledge, skills or abilities related to public relations, law, finance, strategic planning, evaluation, or health impact analysis. The range of such qualifications works to ensure a mix of expertise on a given RHA membership (Dolan, 1996; Walker, 1999).

### 3. Theoretical Framework

Communities of practice are informal networks capable of nurturing and supporting the development of the personalization strategy of knowledge management in organizations. The literature clearly views communities of practice as powerful conceptual tools for pursuing personalization (person-to-person) knowledge management in organizations (Wenger, 2002). It is mute, however, on the appropriateness of communities of practice for pursuing a codification knowledge management strategy. Even though tacit and explicit knowledge forms are complementary theoretically, it is unclear how communities of practice can support explicit knowledge management in health board decision-making. Knowledge management is well supported by the close ties of individuals in a community of practice (Hurley et al., 2005; Brown and Duguid, 1998). This is particularly evident in situations where the organization's dominant knowledge form is tacit. Communities of practice, therefore, become effective organizational strategies for assisting people to harness knowledge for improved organizational performance. For knowledge management to flourish in organizations, individuals in organizations must understand that the viability of their groups depends on their contributions and commitments.

Communities of practice are powerful conceptual tool for understanding the social process related to the carrying out and perpetuation of a practice. Sawhney and Prandeli (2000) describe the concept as "a sustained, cohesive group of people with a common purpose, identity for members, and a common environment using shared knowledge, language, interactions, protocols, beliefs, and other factors not found in job descriptions, project documentations or business process". Communities of practice, therefore, are social media for learning and managing knowledge by individuals who are knit together by a common interest or agenda. Wenger (1998) sees communities of practice as marked by three dimensions, which take shape through routines and repeated interactions as opposed to rule or design. The first is mutual agreement among participants. This involves negotiating diversity, doing things together, developing mutual relationships and maintaining the community. The second is joint enterprise, which involves participants' engagement in a common passion or agenda. The third dimension is a shared repertoire that draws on stories, artifacts, discourses, concepts, historical events, and reflects a history of mutual engagement and dynamic co-ordination through the technologies of communication. These features potentially make communities of practice important venues for supporting knowledge management in organizations (Cook and Yanow, 1993).

Communities of practice flourish on common concerns and passions, trust and mutual respect among the people belonging to the communities, and commitment on the part of the members to ensure the success of the communities. Since these are the basis for the formation and growth of communities of practice, it is not difficult to identify various forms of it. Wenger et al. (2002) identify several forms of communities of practice. They believe that communities of practice are as diverse as the situations that bring them into existence and the people who populate them. Communities of practice, therefore, take many forms, depending on the issue of interest to the communities, its composition, commitment, as well as the internal and external consistency of the communities. Communities of practice, is no doubt, a potential conduit in attaining a communicative action. Habermas (1990) perceived communicative action as a distinctive type of social interaction based on mutual understanding reached by all the parties involved in the interaction process in an unrestraint fashion. This action facilitates a decisionmaking process that encourages collective construction of goals and means to attain mutual agreement, rather than the achievement of conceited interest. Decision-making in this context becomes an interactive collective task, where communicative rationality is reached mutually by means of the application of varied knowledge forms. including scientific, moral, ethical, and emotional analysis (Healey, 1997). Practically, however, communicative action geared towards communicative rationality is difficult to be attained in health care decision-making process ingrained essentially in strategic rationality.

Such strategic rationality operates by identifying and pursuing set goals, with reference primarily to scientific knowledge and adopting scientific solutions with tacit knowledge being kept on the fringes. Communicative rationality in the context of decision-making by RHAs, by contrast, should involve the development of shared decision-making used as the basis for mutually agreed action. RHAs are likely to attain communicative rationality if they are motivated to adapt and integrate the explicit and tacit forms of knowledge at their disposal as resource in informing their decisions for overall improvement in health care delivery.

# 4. Methodology

Two RHAs representing urban and rural Canada respectively, were purposively selected for the study. A qualitative case study was used as the main research paradigm of the study, which aimed at investigating more thoroughly the knowledge management strategies and practices of health care decision-makers at the RHA level. Interviews were adopted as the main data collection technique for the study. Interviews were made at the convenience of respondents, which presumably motivated respondents to cooperate well with the interviewer. A combination of inductive and deductive approaches was adopted as the main data analysis technique, and was conducted in two stages: single interview transcripts and cross interview transcripts, respectively (Miles and Huberman, 1994). In order to ensure the validity of the study, the issues discussed during the interviews were first pilot-tested with related health professionals. The results of the pilot-test were used as benchmarks in restructuring the interview guide for the real interviews. The pilot test, therefore, helped ensure that the final interview guide was very concise, which in turn assisted in the smooth running of the interviews. Documents informing RHA members' decisions were also critically reviewed to ensure consistency in the study data. Furthermore, in order to ensure the reliability and validity of data gathered, respondents were made to approve their transcripts before they were analysed.

#### 5. Study Results and Discussion

In this section, RHAs are assessed based on the community of practice conceptual framework. This will help determine if RHA members constitute communities of practice, and if so, how they are used to facilitate personalization knowledge management. Since communities of practice can be cultured (Wenger et al., 2002) attention will also be paid to the structures of the RHAs which nurture personalization knowledge management strategies. Communities of practice thrive on positive member relationships. A positive relationship facilitates fluid communications critical to ensuring the success of the community. RHA members were asked to describe their inter-member relationships both during formal deliberations and outside meetings. Almost all individual members indicated having good relationships with other members.

We joke at times that colleague members are our group of friends because they are the ones you see most because of work. Informally we don't socialize outside the board's work. That aside, we indeed get along well and work as a team. Even at this moment, we have new members who joined in February, and have been integrated into the team. We indeed work as a team (*A female urban-based RHA member*).

Very good. We are an open board. We are formal when we have to be in meetings environments. Outside meetings, however, we are fairly informal and we are able to email and phone each other and I am personally comfortable with that and hope other members are also comfortable with that. I receive a lot of calls from other members (*A female urban-based RHA member*).

We are pretty [good] together. Different thoughts, but we have grown and work together as a team with [a] common purpose and agenda (*A male rural-based RHA member*). RHA members believe strongly in the positive relationship that exists among them. Such positive relationships are vital for the formation of a community of practice of RHA members. Still, such relationships need to be transformed and nurtured into a functional community of practice. One member, however, had a dissenting view on his or her relationships with other members. Even though the RHA member agreed that they generally have good relationship among themselves, this person does not get along so well with another member.

Very good. Its only one person I find irritating, else we get along so well as a board. Generally, the relationship among us is very cordial, which to me is a necessary prerequisite for us to operate as a board (*A female urban-based RHA member*).

The fact that RHA members have good relationships implies that they are likely to rely on each other for inputs in guiding their discussions.

RHA members confirmed that they indeed function as teams and rely mainly on each other for inputs in guiding their decisions. Since RHA members have different professional backgrounds, relying on each other is essential in ensuring that members complement themselves by way of knowledge sharing to enrich their activities as a decision-making body with a unified mission.

The board is made up of members from diverse backgrounds. We complement each other to enrich our discussions (*A female rural-based RHA member*).

Sometimes yes of course, because it may be something you may have missed or never thought of. Again we complement ourselves well given our diverse background (A female urban-based RHA member).

RHA members were quick to add, however, that the professional experiences they share among themselves take place mainly during formal discussions. In order to find out the extent to which they were encouraged to communicate as an informal network, RHA members were asked to indicate the extent to which informal networks existed, and if they were encouraged to engage in these smaller group activities. This issue was raised in order to find out the extent to which RHA members were encouraged to belong to informal networks to share knowledge. RHA members generally expressed the view that they were not encouraged by their respective authorities to form smaller groups, communities of practice, or informal networks.

Not really, but we have committees in place. These committees handle specific assignments and report back to the general board with recommendations (*A male urban-based RHA member*). We have four committees and also set up task forces if something comes up at a meeting and we are not getting anywhere in our decision-making, then we go into smaller groups to discuss the ins and outs of it and make recommendations, which are brought to the attention of the entire board (*A female rural-based RHA member*).

Though RHA members are not specifically encourage to form smaller groups, communities of practice, or other informal networks, they do have working teams which are tasked with the execution of specific assignments or issues. To some extent, team activities can be compared to the activities of communities of practice. However, Wenger et al. (2002) distinguished between teams and communities of practice. To them, while teams are "task driven", communities of practice are guided by the passion underlying their formations. Communities of practice in general differ from working teams because they have no specific time-bound work objective, but exist indefinitely for the promotion of the issue or passion around which the communities have been formed. Thus, the encouragement of RHA members to form teams tasked with specific assignments does not qualify them as communities of practice. The fact that RHA members sometimes function in teams could be seen as a good platform for communities of practice to be formed, given that individuals working in teams are very likely to know themselves better, which can facilitate stronger networking among them.

Since communities of practice can be intra-organizational or inter-organizational, RHA members were asked if they relied on other RHA members of other health regions and/or health organizations for inputs and knowledge to better inform their decisions. Their responses were unanimous:

We receive presentations at the board's table from community groups, other health regions, media, staff, and unions. Most of our meetings, we have outsiders coming to share information with us. Our board is a tertiary one, so our services are provided to other health regions as well. So we need to know what exists because most problems they have affect our health region directly or indirectly (*A female urban-based RHA member*).

The realisation that RHA members rely on other health organizations for knowledge is a good signal for them to set up an informal networking with these other health organizations. Such informal interactions, if explored and nurtured, could facilitate knowledge sharing and management in health care decision-making processes. For communities of practice to be functional means that members have places to meet, interact, and engage in the passion or mission of the community. This is important because communities of practice are feasible when means or channels of communications are clearly mapped out to facilitate the free flow of information among members. Respondents were, therefore, asked to indicate whether their boards maintain physical spaces for board members informal discussions, collaborations and networking. It was clear from respondents that apart from the official RHA members' meeting place or hall, there is no specific place for such an informal interaction.

Members further stressed that they could arrange for a place for such an informal interaction if they needed one, but that has not been done because there has not been the need for such an informal meetings and interactions apart from the formal meetings.

No, we meet at formal meetings and committee meetings. That is the only time we see each other (*A female rural-based RHA member*).

We don't have a place. The board's chair before the current one was against chit-chat. He did not like the idea of members forming any informal relationships apart from formal board sessions. The current chair, however, is relaxed and encourages members to get to know themselves (*A female urban-based RHA member*).

Physically, there is no specific place allotted for informal interactions. Though such informal meeting places could be arranged, members did not seem to look for or demand such places. As a result they hardly met outside the formal RHA members' interactions. First, RHA members are less motivated to arrange for informal meetings places because they come from different geographical areas within their health regions. Most members come together only for meetings because of the differences in locations, and are, therefore, unlikely to utilize "coffee rooms" even if they were specifically arranged for. Second, the fact that RHA members could always arrange for informal meeting places, if needed is a good signal for the cultivation of communities of practice.

Another way to encourage informal networking among RHA members, apart from the use of physical spaces, is to encourage the use of virtual spaces, online communications, telephone, or email communications. These forms of communication can support personalization knowledge management because they connect and bring together people from different locations for informal interactions without any physical meetings. While RHA members do not have virtual spaces to support informal networking among themselves, members did indicate that they use telephone, email, and their board corporate offices as a means of sharing information among members. Members were then asked to indicate the main form of knowledge that they share informally among themselves. It was unanimously agreed that members mainly share tacit, informal, or personal information or knowledge among themselves, it is very likely a lot of valuable personal experiences regarding health care issues could also be shared informally if RHA members were encouraged to engage in such interactions. Clearly, the use of telephone and email are the main practices supporting the management of tacit knowledge by the RHA members.

Despite the fact that majority of RHA members use these personalized practices (telephone and e-mails), few have not fully taken advantage of them because they do not even have email addresses and regular access to computers to engage in some of these practices. Obviously, tacit knowledge is not sufficiently being utilized in supporting RHA members' decisions. Such a revelation is not surprising giving the dominant use of explicit form of knowledge in supporting RHA members' decisions, which invariably implies that they engage more in codification rather than personalization strategies. This, however, does not indicate that RHA members should not put more effort into tapping tacit knowledge at their disposal, especially with the interest shown by RHA members in face-to-face and other informal forms of dialogue in supporting tacit knowledge management in health care decision-making. Again the fact that RHA members find their packages in codified form overloading, justifies the need for intensifying personalization knowledge management practices to enhance tacit knowledge use in decision-making.

An important strategy for supporting tacit knowledge exchange among RHA members is to embrace the communities of practice approach. It is clear, however, that RHA members cannot be described as engaging in communities of practice. This is because of the absence or the under-developed nature of the arrangements essential to the formation of communities of practice. These arrangements include the lack of formal physical and virtual spaces to facilitate the free flow of information among members. In spite of the fact that RHA members may not qualify completely as engaging in communities of practice, they do exhibit some features. Such features include the positive relationship that exists among RHA members, the engagement in team activities, ability to engage in formal and informal knowledge sharing, and the inter-organizational search for knowledge. These are all critical prerequisites for the formation of communities of practice. The transformation of these groups into communities of practice demands that RHAs design or formulate policies that support such communities. Cultivating communities of practice among RHA members has the potential of enriching knowledge management in health care decision-making.

Benefits to be accrued by RHA members if they cultivate communities of practice include the following; first, RHA members are geographically dispersed in their health regions and meet primarily only when there are formal meetings, they can be brought together if they are encouraged to form communities of practice. The best form of communities of practice conducive for RHA members, however, will be the online communities of practice. Though online communities can be costly to begin with, they may serve the interest of RHA members better than physical communities of practice.

Second, since health care issues and concerns interest a wide spectrum of people, an online community of practice holds the key in making it feasible for so many people interested in health issues to belong to such online community. Though online communities of practice should be premised on RHA members, the general public can be brought on board as the communities flourish.

Third, cultivating online communities of practice for RHA members has the potential in enhancing tacit knowledge management. This potential is being raised because RHA members believed that a wealth of knowledge can be mobilized if informal communications are improved.

Fourth, cultivating online communities of practice will assist RHA members to have access to wealth of information and inputs from diverse areas to guide them in making their decisions. Since RHA members are largely representatives of their communities, an online communities of practice will bring them closer to their communities. RHA members indicated that their meetings are mainly open to the public, yet the public patronage has not been encouraging. One way of gaining and sustaining public interest and patronage in RHA members' activities is the nurturing of online communities of practice.

Fifth, online communities of practice have the possibility of bringing a number of health regions and health organizations together. This will facilitate inter-organizational networks to be formed among these organizations. Knowledge and experiences of the various health regions and health organizations can be shared to ensure improved health care decision-making.

# 6. Conclusion and Recommendations

Bearing in mind the potential benefits associated with communities of practice as an intervention for tacit knowledge management, RHA members embracing and adopting communities of practice approach seems a feasible strategy in ensuring improved knowledge management in decision-making. Even though communities of practice generally emanate voluntarily, they can be deliberately introduced and nurtured in organizations (Wenger et al., 2002). Cultivating communities of practice in organizations implies that such organizations have the necessary structures in place to support the communities to thrive. Such structures may include a positive relationship among the individuals to form the communities, the trust to freely engage in informal discussions with others, availability of physical and/or virtual spaces for members interaction and most importantly the willingness and the commitment on the part of the individuals to form the cannunities to enrol in, and push the communities of practice per say, though they have all the fundamental structures to facilitate and support communities of practice in their activities. A major prerequisite for the introduction of communities of practice approach, however, is for RHA members to have a knowledge management policy to guide the entire knowledge management processes.

Such policy will spell out in clear terms the overall objectives of the RHAs, the knowledge management strategies and practices to be adopted by the RHA members, and systematically designing ways of ensuring that RHAs knowledge management strategies and practices are commensurate with, and lend credence to the objectives of their organizations. RHA members are likely to embrace the communities of practice approach in managing knowledge if they are equipped with the benefits associated with it. RHA members currently rely heavily on explicit knowledge received from senior management of the health regions in informing their decisions. They should have the opportunity to engage in more informal discussions on inputs from management, and seek more inputs from other sources to supplement management package, which seem to be the blue print for RHA members' decisions presently. Through the communities of practice approach, RHA members can engage in informal discussions to facilitate tacit knowledge sharing to enrich boards' decisions. The online rather than face-to-face communities of practice seem to be the best fit for the RHA members. Though online communities of practice can be costly because they are computer-based, they can support informal interaction among the RHA members, despite the dispersed geographical destination of the members. It was clear from the field interviews that few of the RHA members do not have computers.

Some even do not have email addresses, which can seriously undermine online communities of practice to flourish. Online communities of practice for RHA members imply that members are resourced and educated on the use of the technology involved in online communities.

As indicated by Wenger et al. (2002), cultivation of communities of practice should revolve or start with some few individuals with the passion to share knowledge on health care system. Such members will be the core members to put in the foundation for the community. Since enrolment in communities of practice is purely voluntarily, members can only be encouraged or motivated to be part of it on their own accord. It is likely some RHA members will be ready to constitute the core membership, if they have the opportunity. This fact is being stressed because some members explicitly expressed interest in engaging in informal discussions with other members on health issues if they have the opportunity to do so. The fact that most members are already sharing valuable information through telephone and emails is an indication that at least some members will volunteer as core members to facilitate the growth and interaction among RHA members.

Furthermore, since communities of practice can go beyond an organization, online communities for RHA members can be broadened to incorporate other individuals from related health organizations to share knowledge on health. Again the public will also have the opportunity to be part of RHA members' discussions by participating in such online communities fora. Such a move will indeed make regionalization a true democratic intervention in health care decision-making process in Canada.

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