

PKN: The Challenge of Building a Virtual Knowledge Network to Address Food and Agribusiness Management Research, Service and Training Needs

Francesco Braga¹, Matteo Antorini² and Pietro Gandolfi³

¹ Department of Business, College of Management and Economics,
University of Guelph, Canada

² Operations Director, PKN, Italy

³ Societa' Parmense Insedimenti Produttivi, Parma, Italy

fbraga@uoguelph.ca . matteo.antorini@spip.it . pietro.gandolfi@spip.it .



**Paper prepared for presentation at the 110th EAAE Seminar 'System Dynamics and Innovation in Food Networks' Innsbruck-Igls, Austria
February 18-22, 2008**

Copyright 2008 by [Braga, Antorini, Gandolfi]. All rights reserved. Readers may make verbatim copies of this document for non-commercial purposes by any means, provided that this copyright notice appears on all such copies.

PKN: The Challenge of Building a Virtual Knowledge Network to Address Food and Agribusiness Management Research, Service and Training Needs

*Francesco Braga*¹, *Matteo Antorini*² and *Pietro Gandolfi*³

¹ *Department of Business, College of Management and Economics,
University of Guelph, Canada*

² *Operations Director, PKN, Italy*

³ *Societa' Parmense Insedimenti Produttivi, Parma, Italy*
fbraga@uoguelph.ca . matteo.antorini@spip.it . pietro.gandolfi@spip.it .

Introduction

The *Parma Agribusiness Research & Management Knowledge Network*, PARMaKN (PKN in the article) is an innovative public-private partnership, focused on the development of advanced food and agribusiness management research and service activities. PKN was launched in Parma in July 2007 by *Societa' Parmense per gli Insedimenti Produttivi* (SPIP), the economic development corporation of the City of Parma. This paper presents the vision, mission and medium term activity plan of PKN.

The Political and Environmental Context

PKN results from the commitment of the two most recent City Administrations, the one led by Dr. Elvio Ubaldi who was Mayor from 1998 to 2007 and is now President of the City Council, and the current one led by Dr. Pietro Vignali, elected in June 2007, to the constant improvement of quality of life in Parma, and the desire to capitalize on and nourish the traditional vocation of Parma as center of excellence for food and life sciences.

Parma's claim to agrifood fame is well warranted thanks to the reputation of world renown Parmigiano Reggiano and Prosciutto di Parma, both have been produced here for many centuries with essentially the same process, and to the excellence of many other traditional food products.¹ The Ubaldi and the Vignali administrations have shared a common comprehensive vision for their City, a long term plan to constantly promote and support Parma and its world-class quality of life. Parma, then, is seen as a City where life is "slow and fast at the same time" (Vignali, 2007), only an apparent contradiction which instead captures a way of living which is sophisticated and well rooted in Parma's rich history, culture and traditions, and that can be maintained thanks to the effective and efficient availability of a well rounded world-class technological and social infrastructure.

1. A completely unscientific but quite telling test designed to appreciate one of the key reasons the quality of life in Parma is deemed to be so high ... is rather simple. Just try it. The test involves a simple invitation to walk for a couple of hours in late morning around the city centre, and just watch the many captivating and mouth watering food products offered by the many specialized stores. As the test is undertaken, it is essential not to be distracted by the citizens of Parma, well dressed, slowly walking or riding bicycles, ready to talk with you and help if you need any, nor by the many religious and civic monuments. To avoid duress and / or temptation, do not undertake this test if you are on any specific diet for personal choice, medical or religious reasons.

Quite simply, as remarked by Vignali in his political program, this vision is that of a City “where it is a pleasure to live and to invest, as societal development provides and guarantees for safety and opportunities to all” (Vignali, 2007)¹

This vision calls for the creation in Parma of a world-class center of excellence for food and life sciences, which should attract to Parma the best academic and professional talents and relevant economic activities. PKN is a component of this push, centered in Parma, and with a world-class scope and objectives.

PKN: the Simplified Model, Value Proposition, Benefits and Portfolio of Services

PKN’s vision is simple: to create an advanced, flexible and lean central administrative structure, complemented by a flexible and effective global expert network to be relied upon to address its research, training and service needs.² PKN intends to build on and grow its existing virtual global network of advanced academic and professional expertise to address specific needs of its stakeholders and to develop innovative educational, research and service activities in the food and agribusiness management area. The world-class, traditional food and agribusiness vocation of Parma provides an essential initial critical mass and, as noted above, PKN is well supported by the long term vision and political leadership of the local administration.

PKN believes that this virtual structure can be the best, most cost-effective and flexible approach to access top knowledge resources, leverage them and provide value added to its stakeholders. PKN most certainly recognizes its key obligations to local stakeholders, but PKN is equally convinced that the best, most effective way to serve its local stakeholders is to secure a global perspective and relevance for its portfolio of activities, bringing a dimension of global excellence to bear on any of its activities, while not limiting itself to narrowly defined local issues. This approach secures the creation of value added for PKN’s international partners, creating a win-win proposition.

PKN recognizes the opportunity for projects dealing with “public knowledge” as well as “proprietary activities”. The needs of its stakeholders are interdisciplinary and highly specialized, most importantly they are constantly evolving and this dictates an innovative & flexible approach to servicing them; existing traditional research and consulting structures were not designed to do this and may not have the critical mass, the competitive benefit / cost ratio, nor the required structural flexibility. PKN strives to excel in building dedicated and highly specialized flexible teams of world-class experts to satisfy its knowledge needs.

PKN: the Model

The model adopted by PKN is presented in Figure 1. It is based on the benefits of flexible facilitation, in:

- a- designing a stakeholder-centered, relevant and efficient project brief;
- b- providing an efficient and uncluttered access to existing academic and professional skills and infrastructures in a custom, cost efficient and timely manner;
- c- completing the project in a timely and cost-effective manner, with clear conclusions and clear operational recommendations;

1. The political agenda of the Vignali administration can be found at: “Linee programmatiche del Sindaco Pietro Vignali”, http://www.comune.parma.it/portal/page?_pageid=199,369514&_dad=portal&_schema=PORTAL

2. Such as, for example, from issues of executive and corporate leadership to problems of management of innovation, from basic financing policies to the utilization of innovative financial instrument and practices, from effective promotion, protection and valorization of IP in typical agribusiness products to the development of new high value-added foods).

- d- the effective, stakeholder-centered delivery of the empirical results, completed with the specialized services -including financing- necessary to secure an effective execution and implementation of the empirical solution.

d-

PKN’s proposition is designed to build on flexibility, timeliness, excellent value for the money, and comprehensive execution and implementation of the results.

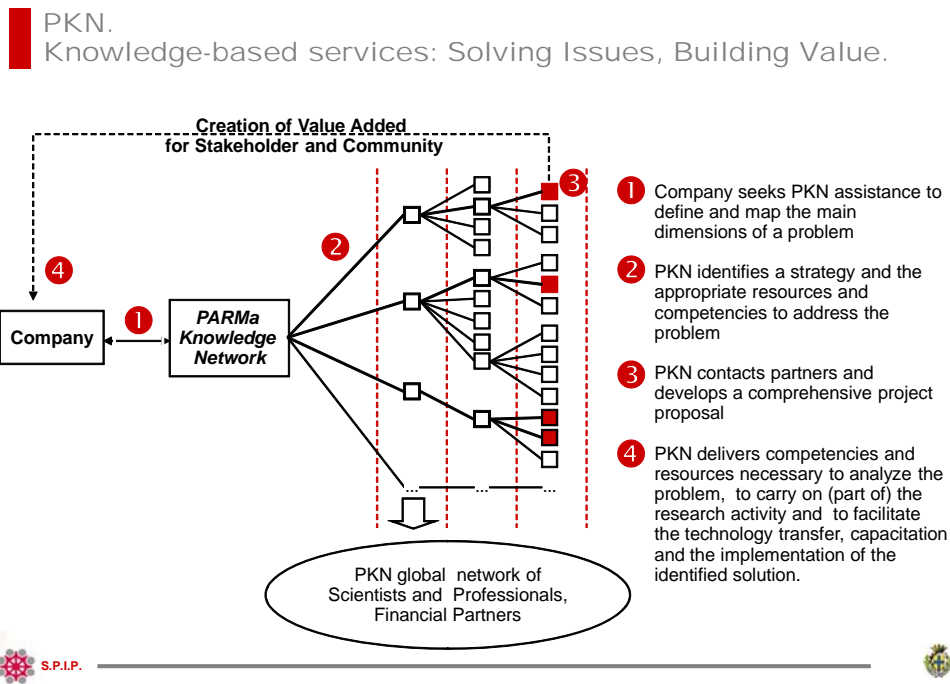


Figure 1. PKN: the Simplified Model

PKN: the Value Proposition

PKN’s value proposition is illustrated in Figure 2. PKN is convinced that significant value added may be gained thanks to the efficiency of a streamlined research supply chain which is stakeholder-centered throughout its stages. These efficiencies arise because of superior professional, technical and lay person communication, overall uncluttered and truly entrepreneurial research process, the world-class excellence of the resources involved, and a clear commitment to a superior execution of the delivery and implementation of the empirical results, starting from on excellence in training all the way to a custom financing package.

PKN.
An integrated approach supporting innovation.

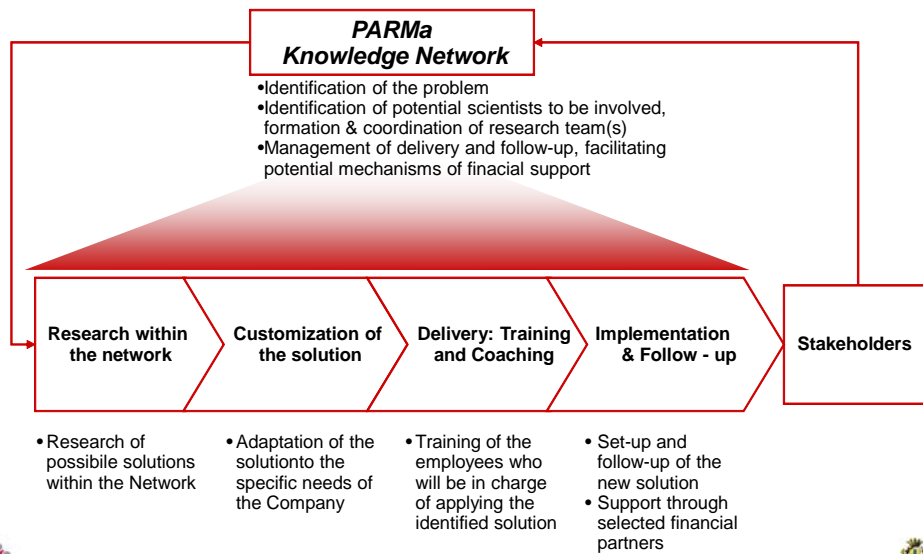


Figure 2. PKN: the Value Proposition

PKN: the Benefits

A description of the expected benefits stemming from the activities of PKN is presented in Figure 3. In essence the contribution by PKN is expected to support the long term competitiveness of smaller and medium size companies, mostly by providing them with access to services not otherwise available or of difficult access; to promote the creation of human capital, by offering opportunities for young scientists, entrepreneurs and managers to grow their skills and experience; to contribute to the prosperity of the local community by taking an active part in relevant initiatives, by providing new innovative services, and by promoting Parma’s international image.

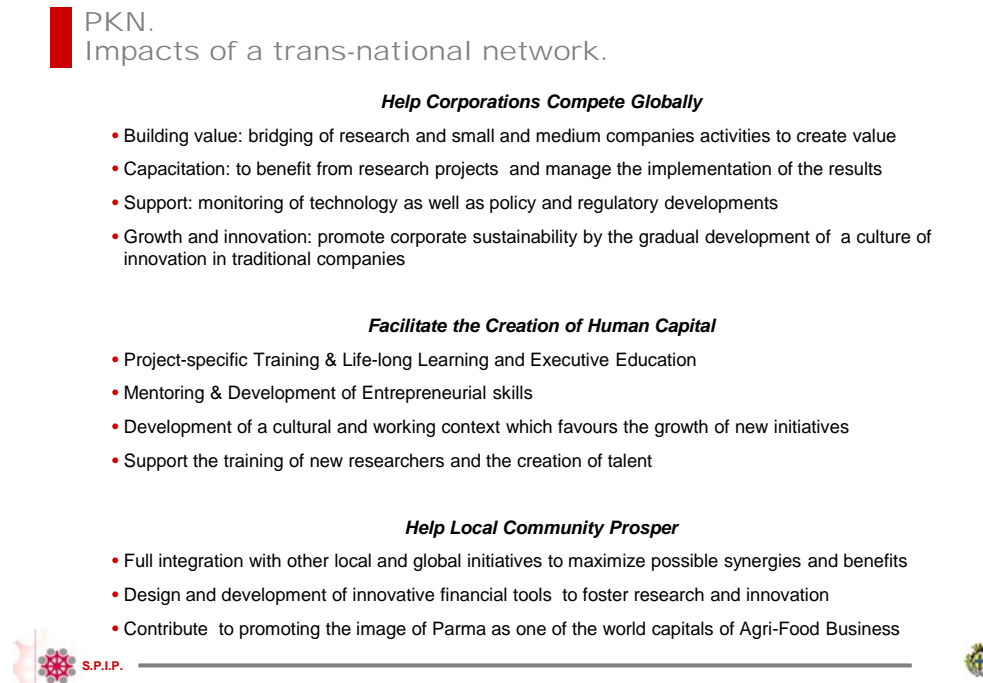


Figure 3. PKN, the Benefits.

PKN's Services Portfolio

The portfolio of services offered by PKN is presented in Figure 4. It follows a traditional Research & Scholarship – Training– Service paradigm, which spans both proprietary and pre-competitive, public activities. Research and Scholarly activities include knowledge-based academic and professional activities, scholarship dissemination, and multi-client studies. To signify PKN's commitment to quality, all PKN research and professional output will be certified by means of a blind peer review process; special measures will be in place for proprietary activities. PKN intends to be an active scholarship player, and recognizes that in order to be able to benefit from scholarship activities it is necessary to contribute to them as well. To achieve this, PKN intends to disseminate scholarship results, and publish technical working papers, peer reviewed cases and articles stemming from PKN's own research and professional activities and those contributed by external authors.¹ This material will be published online, and collected in volumes to be printed annually. Training activities will consist of support activities to secure the successful implementation of empirical research results, the financing of new scientific and professional talent who would be working on a PKN research project, as well as a seminary activity dealing with ad hoc themes. Service activities include proprietary consulting activities, as well as pre-competitive activities designed to facilitate access to grants and research funding opportunities, the development of a specialized partnership with one or more financial institutions finalized and committed to providing funding needed to implement specific research findings, as well as an advanced research and technology monitoring service designed to scout promising discoveries and market developments of specific interest to PKN's stakeholders.

1. The first formal call for cases to be presented in a dedicated annual conference is forthcoming in a few weeks. Whereas it is not appropriate to anticipate the detailed official announcement, it is certain the conference will offer an innovative and stimulating venue for case presentation and their discussion with all stakeholders.

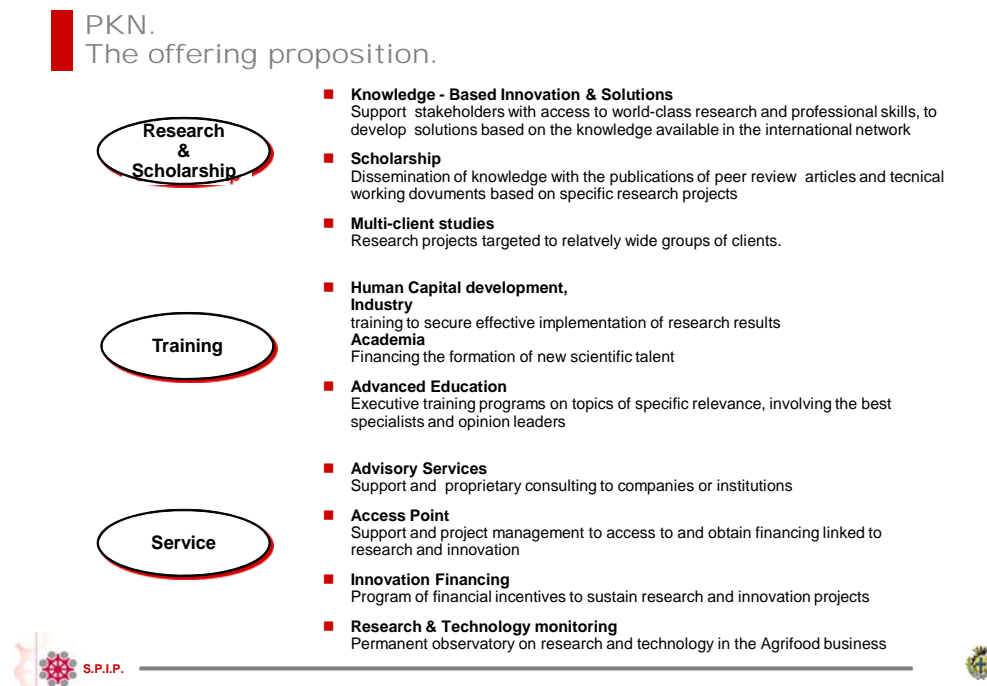


Figure 4. PKN, the Portfolio of Services

Medium Term Initiatives

Within the next 12 to 18 months PKN intends to formally start its research, seminar and service activities.

PKN is expected to start long term research efforts to investigate what is required to take the most advantage of the business opportunities offered by sustainability and climate change, and by new development in the financial services industry. An official announcement is expected within the next few weeks, as funding for the initiative is secured; the research will engage several international teams. In addition PKN will address any additional research need of its stakeholders. A formal consultation process will be in place to address these.

Topics that will be covered in a first stream include: sustainability, climate change and its implications, challenges and opportunities for agriculture and agribusiness; the food vs. fuel debate and what it could mean for a high quality high cost system such as the one in many European regions; the incoming US presidential election and the possible policy decisions pre and post election and their potential repercussions on world markets; the post-Kyoto policy scenario and the relevance, opportunity and strategies to reduce carbon footprint; the resurgence of strategic investment opportunities in agriculture and agribusiness in a post sub-prime mortgages crisis scenario.

Another “stream” of seminar activity will focus on human resources management and succession planning. The motivating perspective is the well known consideration that farmers in developed countries are getting older and older, and that it is increasingly difficult to find qualified workforce. Similar issues are relevant for the smaller and medium sized processing firms that are key to secure so many high quality productions.

A third stream of activity will deal with the promotion of cases as educational tool both in the traditional classrooms as well as for executive education. The use of relevant cases is the best way to effectively transfer advanced concepts and managerial tools to an adult audience which is decades past traditional classroom education, is likely production-oriented and is endowed

with a true wealth of really unique product-specific skills, but is badly squeezed by the faster pace of market change and finds it quite difficult to cope with the new competitive demands of the market. In essence an audience which is literally almost overwhelmed by the faster pace of change in the marketplace and by the new skill set required to deal with the managerial challenges that are posed by this change. An audience which in order to survive commercially must improve their global competitiveness by developing new and improved managerial skills, an audience whose prosperity is essential to secure the sustainability of traditional productions, Parma's advantage.

A number of service activities will also be launched. The first two will consist of a specialized service designed to assist companies and institutions improve their access to public and private research and innovation financing opportunities both in the domestic and international market, and a specialized market, research and technology monitoring service scanning issues of relevance for Agrifood business. This latter service will also offer important support for an advanced empirical research initiative attempting to aggregate the frequency and extent of media coverages in a strategic index which may be used to provide early warning inputs to PKN stakeholders and partners.

Why a Contribution to This Meeting

Quite simply, this industry contribution is designed to support and promote awareness of the PKN initiative, seeking to expand the network, and -more importantly- to solicit a forum for discussion that can result in an improvement of PKN.

Questions and Challenges

As PKN is gearing up to full activity, three fundamental challenges require attention.

Implementing the network: drivers of success

The first is how to deal with the challenges facing the implementation of a virtual knowledge network intended as clearinghouse and facilitator for the creation of value added for the network stakeholders. This is primarily intended for the "client" stakeholders, but it is also recognized that significant value added may be created as "public good" for the community at large and also for the "academic" and "professional" stakeholders and partners. This "multi-benefit" proposition is perhaps one of the primary advantages of PKN. In essence: how can it be made into a win-win proposition? What are the best drivers that could be used to secure its success? How can these drivers be best nourished? What are the key potential structural weaknesses of a structure such as PKN?

Best practices: building alliances

The second challenge is the identification and adoption of best practices for a structure such as PKN. These best practices should focus on how to ensure the most flexible, timely and least bureaucratic structure possible. Crucial is also to define how to integrate proprietary and public goods activities. PKN's gamble is that it can facilitate the formation of specialized teams capable of delivering solutions which would be extremely expensive and time consuming if sought within existing traditional processes. PKN intends to facilitate, complement and assist, not to antagonize, criticize and engage in destructive competition with traditional academia, consulting companies, and other established entities. PKN's objective is to reduce transaction costs and improve efficiency for its stakeholders and partners, and therefore it can invite these part-

ners to the table... but how best to do and how to so is such that that they do come to the table and accept to become productive partners? In essence, how well can the PKN model work for a global food and agribusiness systems?

A pre-competitive environment: selling its benefits

PKN is intended primarily as a pre-competitive initiative. This works well on paper, but may not work at all in reality unless it is presented in a credible and substantive manner. What is the best way to do so? What are the key challenges affecting the selling of this innovative model to stakeholders and partners at large. What are the best recommendations to build an interdisciplinary, international, flexible and competitive knowledge based network?