Knowledge Management in Action

Jerome Martin

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Introduction

Bill Hole responded enthusiastically to my request to use their company as a case study for this book. He told me that knowledge and knowledge management were the keys to their operation which has changed from a small market garden to a large firm involved in testing, growing and marketing plants and seeds and now marketing knowledge in the form of books and other media.

Gardening was once a task that most children in North America dreaded: hoe the garden, pick and shell the peas (but don’t eat them), dig the potatoes. However, gardening has changed. It has become something we want to do rather than something we have to do, and it is now Canadians’ most popular leisure activity. Serving this market has become a major economic activity.

Hole’s Greenhouses & Gardens began as a small operation, with Lois and Ted Hole selling vegetables from their back step. They had purchased a mixed farm in St. Alberta in 1952 and by 1960 had begun their market garden business. In 1965, Ted convinced Lois that they should build a greenhouse. It was built of wooden planks and sheets of construction-grade plastic and provided 2,500 feet of floor space. Their business has grown rapidly since then, serving not only St. Albert and Edmonton and, through their mail order business, clients in other provinces as well.

"Knowledge has become the key economic resource and the dominant – and perhaps the only – source of comparative advantage."

– Peter Drucker, from Managing in a Time of Great Change
The company – and Lois Hole in particular – has become synonymous for gardening knowledge and excellent plants and other gardening merchandise. Lois Hole has become a household name because of her knowledge of gardening, her personality and her public service.

Lois’ and Ted’s sons, Bill and Jim, and their daughter-in-law Valerie provide most of the day direction of the company, with assistance from Lois and Ted.

Hole’s as a Knowledge-Based Company

“That’s what we are”

Jim remembers the day that he and Bill realized that Hole’s was a knowledge company rather than a company that sold just plants: “We were talking about how people wanted information and knowledge. Suddenly we realized that since our expertise was in demand we could sell it, and that knowledge was really our greatest resource.”

At that time Lois Hole’s six books on gardening were best sellers, published by Lone Pine in Edmonton. Bill and Jim decided to start Hole’s Publishing to produce more books and other material using the knowledge that people were requesting daily. This was the first step towards Hole’s becoming (or realizing that they were) a knowledge-based company.

Hansen, Nohria and Tierney, in their article What’s your strategy for managing knowledge? (Harvard Business Review, March-April, 1999) discuss two knowledge management strategies, codification and personalization, largely in the context of large consulting firms. They define codification as “…providing high quality, reliable and fast information systems by reusing codified knowledge.” Personalization, however, is “…providing creative, analytically rigorous advice on high-level strategic problems by channeling individual expertise.”

“The gardening business has changed in many ways in the last several decades. Consumers are now far more educated about plants and gardening – and, as a result, they demand more: more knowledge, more varieties, more assistance. However, they also give more in return. Clients share their experiences and their questions. These questions now come in via e-mail, phone, and letters.”

– Jim Hole
Until recently, Hole’s managed knowledge largely through a personalization strategy. If you wanted information on a particular subject you would ask Lois, Valerie, Jim, Bill or a staff member who had expertise in that particular area. They continue to use this personalized approach to sharing knowledge but are now using codification as well.

The Question and Answer Books are good examples of successful codification. Clients have been phoning, visiting and writing Hole’s with questions about gardening. Some of the questions are basic garden questions such as relating to adding fertilizer, covering plants to prevent frost damage etc. However, some of them have been difficult questions, reflecting the increasing knowledge levels of experienced gardeners.

Codifying the questions people have asked and the answers that Lois and Jim have given was a very logical step, but one that could be taken only after realizing that this material was knowledge and that it could be marketed.

The publishing program itself is an example of codification. Hole’s now captures their stories, experience and enthusiasm and codifies them for their clients – including those clients who live in other areas of Canada and in the United States and will never visit Hole’s Greenhouses & Gardens and buy bedding plants in the spring.

Hole’s obvious strength has always been personalization. Lois and Jim are the most visible of the Holes to the general public and their advice and enthusiasm have been the cornerstones of Hole’s operation. Valerie, Bill and the staff in the greenhouses and in the retail areas have been equally effective in providing personalized advice and expertise.

Much of Hole’s expertise still resides in individuals. They are currently conducting an assessment of the knowledge they have and working towards codifying as much of it as possible. But their personal information is and will continue to be one of their greatest resources.
Science and Experience

Gardening in the past has been somewhat of a folk art – plant by the moon, a bit of bone meal here and there, and, when in doubt, ask Aunt Martha. Ted Hole, a graduate of the Faculty of Agriculture at the University of Alberta, brought science into the family business. His son Jim and his daughter-in-law Valerie also graduated from the Faculty of Agriculture and continue to use the resources that agricultural science provided.

Hole’s markets a combination of practical knowledge and scientific rigour. The Q&A books feature a photo of Lois and Jim on the cover. Jim is holding a book. The subtitle is Practical Advice and the Science Behind It. There are two responses to each question in the book: one from Lois and one from Jim. Each of the responses is clear and easy to understand.

Embedding knowledge in products and services

Hole’s testing programs and advisory services give clients confidence in the plants and gardening products that they sell. They have shown that the plants and seeds they market are suitable to the area in which they are sold. One long term client of Hole’s said that she always feels a great responsibility towards the plants she buys every spring: “I know that Lois and the staff have put a lot of work and expertise into choosing and growing these plants and I want to make certain that I do my part in looking after them. I don’t want to let them (Hole’s) down by letting their plants die.”
Creating Knowledge at Hole’s

Variety Testing

Valerie Hole is in charge of this variety testing. She and her staff have tested 75 – 100 varieties of plants per year during the last twelve years, and the knowledge that Hole’s has gained from this allows them to market new varieties before anyone else does. Hole’s tests varieties free for growers and as a result they get access to the successful varieties before other growers/retailers (most companies are either one or the other, but Hole’s is both). Hole’s collects the test data and uses it to make decisions on which varieties to grow for the next year. These data will soon be put into a large database.

The testing often leads to Hole’s finding very successful varieties.

“One of our most successful finds is Tidal Wave petunias. Wave petunias have been very popular recently since they are very vigorous and spread rapidly. Tidal Wave not only spreads laterally but grows upwards as well. It’s been a phenomenal success for us,” said Valerie Hole.

Staff and Knowledge Management

Knowledge gets to the clients through educated, motivated staff. New employees are introduced to the company by supervisory staff and by a video orientation session on the office computers. The video production identifies key people in the company and deals with policies and procedures. Staff are also encouraged to study printed material relating to the section in which they are working. They may write exams in various areas (e.g. bedding plants) to help them and their supervisors assess their level of knowledge. Achievement is rewarded by higher pay.

The printed material will become part of the knowledge database on Hole’s computer system so that, in future, employees may access the information they need through the company computers.

Knowledge gives power and self-esteem to employees. They also know that they can have access to Jim, Valerie and Lois for more information. “We teach people skills,” says Valerie Hole, “and they enjoy their jobs more as a result.”

“People want to grow new and successful varieties. They come to us because we’ve tested these varieties. We’ve lived with them; our knowledge is not just data from a book.”

– Valerie Hole
Capturing and Coordinating Knowledge at Hole’s

Lois Hole is the most famous family member and horticultural advisor. She and her son Jim give most of Hole’s public presentations on gardening and write many of the articles about gardening. Her recent appointment as Lieutenant-Governor of the Province of Alberta will limit her public appearances to those related to her new office.

Lois’ is a storyteller and she uses stories to inform and entertain; but mostly she uses stories to pass on the knowledge which she and her family has accumulated over many years. The staff of Hole’s Publishing is now working with Lois to record her stories and observations.

Sharing Knowledge

Hole’s Publishing Program

In 1998 Hole’s decided to capitalize on the six best-selling gardening books that Lois Hole had written and established Hole’s Publishing. They published the premier edition of Spring Gardening that year and published the hard cover *I’ll Never Marry A Farmer in 1999.*

*Spring Gardening* was based on a catalogue which Hole’s had distributed free to anyone who requested it. Catalogues have long been a source of knowledge, both general and specific, and are now sold as well as given free by retailers. Hole’s changed the name of the catalogue, added articles and charged $5.00 per copy. A few customers grumbled but Spring Gardening was a success even in its first year. The 2000 issue of Spring Gardening sold 75,000 copies. Charging for this catalogue was a major step in the progress toward a knowledge-based company.

Hole’s realized that they needed skilled people to put information together and market it. They now employ two graphic designers, three writers and an editor to handle the publishing and writing work.
Question and Answer Books

Hole’s realizes that one of their greatest knowledge bases is the compendium of queries and answers that they have accumulated since they began their business. In addition to these queries and responses they have hundreds of articles which they and their staff have written for magazines and newspapers. Knowledge is often based on co-learning by clients and companies.

Hole’s clients are some of the most experienced gardeners in western Canada and elsewhere and their questions have provided opportunities for Hole’s to put their expertise to work.

The first volume of their Question and Answer (Q & A), books (Bedding Plants: Practical Advice and the Science Behind It) was published in April, 2000 and was followed quickly by Roses: Practical Advice and the Science Behind It. Other Q &A books will follow.

New Opportunities in Knowledge Management for Hole’s Greenhouses

Photographs: An Invaluable Visual Knowledge Base

Gardening is a visual medium, but has many other qualities as well. Customers buy plants not because they have read about them, but because they have seen them or seen photographs of them. Avid gardeners often photograph their gardens year by year, especially the plants that have done very well.

Gardeners understand photographs since much of gardening is a visual experience.

Hole’s has been photographing their plants for years, from the time Lois and Ted began their small market garden to the present where new varieties are being photographed by professional photographers and added to the collection. They have accumulated at least 75,000 prints, transparencies and electronic images.

A collection of photographs such as this is difficult to manage. Staff members in Hole’s Publishing are working with the images
from past years and creating a database so that they can be entered and accessed easily.

There may be a significant opportunity for Hole’s to market books of photographs as well as books in which photographs are used as illustrations only.

**Problems Resulting from Being the Experts**

Call Hole’s, They’ll know the answer.

“Providing free information is a costly process,” says Bill Hole. “We know this is worthwhile and we will continue to do it, but we have to work towards making the process as efficient as possible.”

Staff at information booths provide help for in-store clients. A new phone system is in place to direct calls to appropriate departments. Hole’s may also consider computerized kiosks in its garden centre for clients to browse information.

**Challenges in Knowledge Management**

**What knowledge do we have?**

Companies who decide that knowledge is their most important resource realize that one of the first challenges is to determine what knowledge they currently have. Jim Hole agrees: “Since we have realized that knowledge was our greatest asset we have been assessing what we as a company have in our knowledge base – and where it is. We are in the process of assessing that knowledge and how we can best capture and use it.”

As in any company, the majority of the knowledge in Hole’s is in the memory banks of its employees, not its computers.

“Indeed, the knowledge in our greenhouse is carried around in over a dozen different heads. Jim and I depend on all of them to provide advice on everything from the best remedy for blackspot on roses to how to plant a shade tree properly.”

– Lois Hole, Bedding Plants: Practical Advice and the Science Behind It, 2000
Reasons for Hole’s Success: Using Knowledge Effectively

Growing Hole’s Greenhouses & Gardens

In his best-selling book, Growing a Business Paul Hawken says: “Business is not about making money. It is a way to become who you are.”

The metaphor in Hawken’s title is certainly appropriate for Hole’s. Growing a garden requires knowledge and the experience that comes only from doing it, not just learning about it. The Hole family has a combination of skills and experience: Ted, Jim and Valerie have degrees in agriculture, while Bill has a degree in commerce, all from the University of Alberta. Lois has the experience and the wisdom of a master gardener, and the ability to communicate her passion for gardening to clients and the public.

Gardeners believe gardeners, and new gardeners believe people whom they hear on the radio and see on television. They also believe and trust in people who are passionate about gardening and who are active gardeners. Lois Hole, with her honesty and friendliness, is the person we all want to emulate as a gardener and as a person.

Gardening as an Experience

Joseph Pine and James Gilmore, in their book The Experience Economy (discuss what they call the progression of economic value: Commodities, Goods, Services, Experiences and Transformations. They contend that most of us have all the commodities, goods and services that we want or need and that we are spending more of our time and money on seeking experiences.

Gardening – buying seeds or plants and growing vegetables, flowers and trees – was once a necessary activity for our parents and grandparents. It is now primarily a recreational activity: we choose to do it. When people buy seeds, shrubs or bedding plants most of them are not looking for commodities, goods and services: they are looking for an experience.
Gardening is a multi-layered experience. It provides outdoor activities that are enjoyed by people of all ages; most gardeners are gardeners for life. We probably have some primordial urge to dig in the earth and work with plants, plants that provide us with food and aesthetic pleasures. We take pride in our marigolds, pansies, shrubs, and ornamental grasses – and we marvel at the taste of our fresh peas, asparagus and raspberries.

Hole’s provides and facilitates positive shopping and gardening experiences. They have made knowledge part of that experience. Experienced staff provide that knowledge – and, to make the Hole’s experience complete, Lois may wander through the garden centre chatting with clients about Tumbler tomatoes or how one should fertilize roses.

The experience continues as we learn about new varieties, read about them in books (Hole’s and others), try them at home and show the results to friends and neighbors.

Pine and Gilmore suggest that businesses that are selling experiences engage as many of the five senses as possible. Gardening engages most of those senses (visual, tactile, olfactory, and taste). It will likely continue to be Canada’s favourite leisure activity.

**Summary**

Hole’s Greenhouses & Gardens is an excellent example of a company which has been very successful as the result of the knowledge they have created, developed and shared. Knowledge is their greatest resource, and they found new ways of marketing it.

Their current challenge is to continue the process of assessing the knowledge they have, codifying it and developing methods to access and use it.

Hole’s has become a modern knowledge company in a very short time.