

# Customer Education: A New Frontier for Human Resource Development

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*In recent years, Human Resource Development has begun to focus on customers. Involving customers in traditional management development, team building, and value setting activities has enormous payoffs for firms. Customers and firms experience mutual learning, increased commitment, and long-term unity. Four cases of customer education inside General Electric illustrate the implications of customer education for HR and suggest ways in which firms can implement a customer education strategy.*

## INTRODUCTION

In recent years, businesses have been consumed with understanding and serving customers.\* Learning to better serve customers through marketing research, customer involvement in technology and design, and after product service have become keys to improved customer service (Heskett et al., 1990; Albrecht & Zemke, 1988). Recently, attention has begun to be paid not only to serving customer needs (Carlzon, 1987; Zemke & Schaaf, 1989), but anticipating them. Customer anticipation focuses on meeting tomorrow's customer needs today through predicting and acting on future, not present, needs. Customer anticipation expands traditional views of customer service by working to meet changing customer needs, not just present customer needs. Customer anticipation relies on understanding and predicting trajectories, not merely current requirements. Customer anticipation assumes that customer requirements are constantly evolving, and that successful customer service comes only by recognizing the customer trends and meeting anticipated needs. Customer education, or the active involvement of customers in all aspects of training efforts, is one way to enhance customer anticipation.

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\* Customers can be defined as both internal and external. Internal customers are those within the boundaries of the organization; external are revenue producing customers outside the organization. We are focusing our argument primarily on *external* customers, those which produce revenue for the organization.

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The concept of customer anticipation is not new. Firms have tried to identify technological trajectories for years. Suppliers succeed by predicting and anticipating what future technologies will be required (Hamel & Prahalad, 1989). We would argue, however, that an additional means of customer anticipation is through the explicit and active involvement of customers in Human Resource Development (management education, team building, and value creation and dissemination). When customers participate in a firm's management education activities, when customers participate in team building, and when customers participate in the creation and dispersion of values, a firm builds the capability of anticipating customer requirements through shared learning and commitment building. By participating in human resource development with customers, the firm learns more about current and future customer requirements. This learning translates to the firm being more sensitive and responsive to the customer requirements. In addition, by customers participating in management education, team building, and value setting, the firm and customer jointly commit to a course of action which may benefit both parties. Commitment comes when both parties to a transaction are aware of, accept, and act on common assumptions and values (Ulrich, 1989). As customers and suppliers unite around shared management education, team building, and value setting, a greater commitment to each other ensues.

In this article, we want to demonstrate by a series of case studies within one company how customer education may be the next frontier for human resource development. We realize that other companies have done and are doing similar interesting and creative work in customer education, but we feel that the case studies from General Electric offer insights into the changing role of HRD and suggest implications for senior HR executives.

## HUMAN RESOURCE DEVELOPMENT AND CUSTOMER EDUCATION

Building customer anticipation through customer education has a number of implications for Human Resource Development (HRD). First, the role and responsibility for HRD shifts when customers are involved in education. Rather than focusing training and education activities on employees, the focus of the activities is on joint training activities and customers. This focus implies a new role for HRD professionals which is focused outward more than inward, which requires increased customer contact, which requires that HRD know the business strategy and plans well enough to articulate and represent them to customers, and which has less to do with cognitive transfer of information and more to do with implementing business strategies. In addition, the design of training and education programs must be such that customers as well as internal

employees find value in them. This may imply that content of training needs to be adjusted for customer as well as employee needs and that delivery of training must use modern techniques. The training program itself is a reflection on the company to customers, so it must portray an image of competence and professionalism.

Second, as others have argued (Schuler & MacMillan, 1984; Ulrich, 1987, 1990a, 1990b), HR practices and professionals should be a source of competitive advantage for a firm. To lead to this competitive advantage, HRD professionals must learn to recognize the ways in which their work adds value to the firm. Adding value—by building relationships of trust between a firm and customers, by increasing the understanding of a customer's processes, by forging joint commitments between the firm and customers, and by helping shape new management processes for both the firm and customers—may occur as HRD professionals focus attention on educating customers (Ulrich & Lake, 1990). The HRD professional ensures that customer needs are anticipated and met through customer education, which translates to competitive advantage.

Third, a customer education lens forces a reassessment of traditional management education, team building, and value setting dialogues. Rather than use these HRD processes to build internal commitment and unity, they can and should be used to unite customers and suppliers (Ulrich, 1989). Traditionally, HRD practices are seen as effective if and when *internal* users respond favorably. With a customer focus lens, *external* customers must respond favorably—as evidenced in more open, candid, profitable, and enduring relationships.

To illustrate how HRD can and does use customer education to build customer commitment, we have drawn four cases from General Electric. These cases are indicative of how HRD may be used to interface with customers. These cases are also current. Since using HRD to build customer commitment is a long-term process, all of the cases are still "in process" and have few hard results. Nevertheless, they illustrate how customer education can be and is being used as the next frontier of HRD.

## GENERAL ELECTRIC CASE STUDIES

General Electric (GE) is using management development, team building, and value setting activities to forge new working relationships with customers which provide a process for anticipating future customer needs. Concrete advantages have been gained through leveraging GE's Management Development Institute in educational programs with customers. Offering courses to customers is an opportunity to build a network of personal and organizational relationships. These relationships, based on trust and familiarity resulting from a shared experience, can provide insight into a customer's market, managerial processes, and the

social and economic environment within which the customer exists. They can also be used to shape the customer's future managerial processes to be more aligned with those used by the supplier.

When a company involves customers in its management development programs, it begins to share a managerial competence with the customer. GE learns more about how customers think because GE has influenced the process. With this insight, GE is seen as a supplier who is more able to anticipate needs, not merely serve needs.

Involving customers in management development, team building and value setting activities is also a process for helping GE to achieve its objective of becoming a "boundaryless" organization. A "boundaryless" organization is GE's goal of creating an organization with fewer vertical layers of decision making, fewer horizontal barriers between functions, and fewer external boundaries between GE and its customers. Jointly conducting management development, team building, and value setting activities provides GE and its customers with the opportunity to cooperatively establish goals and objectives, align organizational processes, improve productivity and quality, and approach the market in a coordinated effort.

While efforts to intentionally involve customers in GE's management development activities are relatively new, over the past several years GE has conducted approximately a dozen key customer education programs at its Management Development Institute in Crotonville, New York. What follows are selected examples of GE's uses of customer education programs to understand customers and anticipate future customer needs. The Soviet Aviation Program and the China Management Training Program illustrate how management education programs have been helpful to GE in understanding two customers' organization, internal processes, and external political and economic environments. The Plastic Roofing Product Team Development seminar and the Sears-GE Appliance program demonstrate how involving customers in management development, team building, and value setting activities can help achieve a "boundaryless" relationship with a customer.

### **The Soviet Aviation Program**

Conducting business in the Soviet Union and China is difficult for Western firms. Lack of hard currency is frequently cited as a deterrent, but equally imposing are dilemmas associated with understanding Soviet and Chinese business practices. Questions associated with these unique business environments frequently include some of the following:

- How are buying decisions made and by whom?
- What role do the republics or provincial governments play in doing business?
- What role do the national ministries in Moscow or Beijing play?

The successful Western firm is one that can obtain the necessary information to answer such questions.

GE business strategy in the Soviet Union and China is based upon long-term opportunities and optimism. Populations of 350 million people in the Soviet Union and 1.2 billion people in China cannot be ignored. Yet the practicality of doing business today in these two nations dictates a strategy of pursuing business on a short-term opportunistic basis combined with a long-term strategy of establishing a position in the Soviet Union and China. GE wants to be viewed by both the Soviets and the Chinese as a long-term player committed to the development of both countries. Toward this objective, GE has committed its Management Development Institute to conduct management education programs for executives in each country.

GE Aircraft Engines is currently involved in negotiations in the Soviet Union to re-engine a Soviet built airliner, the IL-86, for Aeroflot. As part of the negotiations, GE Aircraft Engines has offered to conduct a high level management development program at GE's Management Development Institute for both Soviet and GE managers involved in the projected project. One of the objectives of the program is to develop and improve the capabilities of a potential customer by developing the management skills of key managers. GE's Aircraft Engine managers have many competencies which can be transferred to Aeroflot managers; and Aeroflot managers have competencies and knowledge of the Soviet market which can be shared with GE managers.

A second objective of the program is to begin the process of building relationships and trust between people who must work together if the project is to be successful. The joint training session will encourage these trusting relationships to emerge by the parties spending time together, by sharing tasks to do during the training, and by learning from each other in classroom discussions.

A third objective of the program is to provide GE Aircraft Engine managers with the opportunity to learn about the Soviet air industry and how it functions. Not surprisingly, preliminary exploration of the Soviet Air industry points to rather dramatic differences in product design, process flow, role of government ministries, and relationship between designers, manufacturers, and operators of aircraft.

Seventeen of the participants will be Soviets and ten will be GE Aircraft Engine personnel. Soviet participants will come from the Ilyushin Design Bureau, a Soviet air frame manufacturer, Aeroflot, the Ministry of Civil Aviation, and several other related agencies. The two-week course will be taught in English with simultaneous translation into Russian, although most Soviet participants have a fundamental knowledge of English.

The course has both an academic and practical focus. Mornings of the first seven days of the program are devoted to modules on such key business topics as manufacturing and quality, organizational design and

behavior, managerial accounting, customer service, and marketing. These sessions are taught by faculty from key American business schools. The marketing module will culminate with a two-day computer-based simulation that will enable participants to make choices regarding the allocation of resources, segmentation of markets, pricing, etc. Afternoons are devoted to GE speakers providing specifics of how GE operates on each of the topics covered during the morning (see Exhibit 1). Following the academic portion of the program, participants will travel to Cincinnati and Boston to visit GE's two major aircraft engine design, manufacturing, and testing facilities. The program will conclude in Washington, DC, with a tour of the Smithsonian Air and Space Museum and related relationship building activities.

The potential benefit of the program to GE managers is illustrated by the first module, one that provides an overview of the aviation industry in the United States. The morning session is facilitated by Michael Yoshino, a Harvard Business School professor. The afternoon session, also lead by Professor Yoshino, is based around a discussion by representatives of an air frame manufacturer, an airline, and a GE Aircraft Engine representative. Proposed topics to be discussed are:

- What is the relationship between airlines, airframe manufacturers, and engine manufacturers in the United States?
- How are investment decisions made and by whom?
- How are program development decisions made and budgets developed?
- How is the process coordinated between air frame manufacturer, airline design, and airline manufacturer?

Some of the major difficulties for GE Aircraft Engine representatives in the Soviet Union are obtaining answers to the above questions in the Soviet context. For example, it is very useful for GE Aircraft Engine participants to have clarity in understanding the relationship between the design bureaus, air frame manufacturers, Aeroflot, engine manufacturers, and government ministries.

Consequently, class discussion is mutually beneficial. Soviet participants learn about the aircraft industry in the United States and about GE Aircraft Engine processes. GE Aircraft Engine participants gain similar insight from their Soviet colleagues. Should the Il-86 re-engine project become a reality, both parties to the agreement will benefit from the knowledge of each other's processes and the foundation of personal relationships built throughout the course.

## **The China Management Training Program**

The customer management education program with which GE has had the longest experience is the China Management Training Program (CMTP). Jack Welch, GE Chairman, visited China in 1985 and as an outcome of his meeting with government officials pledged that GE

would commit to an education program to help develop top level Chinese managers in Western management practices.

Since 1986, four groups of Chinese managers have participated. The format for the CMTP has remained essentially consistent over the four offerings. Approximately 25 Chinese managers are selected by the six GE businesses currently represented in China. Each GE business active in the Chinese market selects four to five key Chinese managers whom they view as current or future leaders in an enterprise in which GE might anticipate future business. These Chinese managers then spend nine months in an intensive English language program conducted in Beijing.

Following the completion of their language training, the Chinese managers travel to the United States for the first phase of the CMTP conducted at the GE Management Development Institute. This month-long intensive program is taught by academic faculty, all of whom have travelled or taught in China. The academic modules focus on marketing, manufacturing, cost accounting, capital budgeting, technology, international trading practices, and management practices (see Exhibit 2 for an overview of the program). The program begins with a module on the free market economy and includes a session on American culture and society.

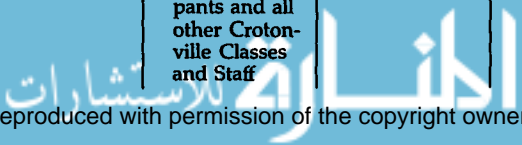
Each academic session has a corresponding module anchored in GE business practices. The session on making capital investment decisions is followed by a GE finance manager who shares with the Chinese a recent GE business investment and the criteria involved in making the decision. Participants travel to a GE turbine plant and a GE plastics processing facility for the manufacturing module. A visit to the GE Corporate Research and Development Center enables GE to demonstrate its commitment to technology and the large financial investment required for technological innovation. This visit enables GE to respond to a dilemma which frequently arises in negotiation with Chinese enterprises. As part of a negotiation, Chinese managers frequently insist on technology transfers of a propriety nature, without sufficiently valuing the cost to GE of developing the technology.

At the conclusion of the one-month classroom session, the Chinese participants spend two months with the GE business that selected them for participation in the program. These teams of four to five individuals have the opportunity for further classroom sessions and, more importantly, the opportunity to observe and shadow their GE hosts. GE Power Systems, for example, provides the opportunity for the Chinese managers to spend one week with managers in each of the following functions: design, engineering, manufacturing, marketing, sales, international, finance, and human resources.

The concluding week of the CMTP is spent at the GE Management Development Institute. Chinese managers share with their American counterparts what they have learned in their three months at GE. One of

**Exhibit 1. Soviet Aviation Management Course.**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
Orientation to Crotonville Overview of Course	Overview of US Aviation Industry  Discussion on "How US Aviation Industry functions" <i>Airframe Manufacturers</i> <i>Airline Representative</i> <i>GEAE Representative</i>  Reception for USSR Participants and all other Crotonville Classes and Staff	Organizational Design and Behavior  Organizational Practices and Development of GEAE Organization Structure <i>GEAE speaker</i>  Visit by Jack Welch, CEO	Managerial Accounting  Continued plus <i>GEAE speaker</i>	Concepts of Customer Service  <i>GEAE Customer Service example</i>  Visit to Airline Maintenance Facility at JFK Airport	Quality and Manufacturing  Quality and Manufacturing Technology <i>GEAE speaker</i> and an <i>Airframe Manufacturer speaker</i>	Marketing





Sunday	Day 8	Day 9	Day 10	Day 11	Day 12	Day 13
Trip to West Point	Computer-based Simulation  Continuation	Computer-based Simulation Wrap-up	Tour of Even- dale Manufac- turing Plant,	Tour of Quality Technology Lab, and Peebles Test Center	Tour of Lynn Manufactur- ing Plant	Depart for Washington DC  Tour of Washington DC
Sunday Feb. 24	Day 14 Feb. 25					
Tour of Smithsonian Air and Space Museum	Depart for Soviet Union					

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**Exhibit 2. China Management Training Program IV: Part 1.**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
Orientation to Crotonville Facility Tour	GE Philosophy/ Culture  Fundamentals of a Free Market Economy  Visit to NY Stock Exchange	Capital Markets  GE Speaker	Cost Accounting	Management and Motivation of the Workforce	Leadership and Organizational Change  GE Speaker	Application of Leadership and Organizational Change Concepts
Sunday	Day 8	Day 9	Day 10	Day 11	Day 12	Day 13
	Manufacturing Management  Visit GE Turbine Plant  eve. Manufacturing Management (cont'd.)	Manufacturing Management  Visit GE Plastics Plant Selkirk, NY  eve. Manufacturing Management (cont'd.)	Manufacturing Management  Return to Crotonville	Marketing Strategy	Marketing Strategy	Marketing Strategy

Sunday	Day 14	Day 15	Day 16	Day 17	Day 18	Day 19
Tour of New York City	International Finance	International Business Transfer of Technology Strategic Management	International Business Transfer of Technology Strategic Management	International Business Transfer of Technology Strategic Management	International Business Transfer of Technology Strategic Management  Dinner with GE Business Representatives	Depart for GE Businesses

**CMTP IV: Part 2.**

Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday
Individual Business to Washington, DC	Tour Washington, DC	Tour Washington, DC	GE Role in China	GE Role in China  Graduation Dinner	Washington, DC to JFK  Free Time Shopping	JFK to Beijing

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the key questions dealt with in the last week is: "How can GE work more effectively with my enterprise"? In preparation for this session, each group of Chinese managers presents an analysis of GE's market position in China relative to GE's competitors and makes suggestions for better performance in the Chinese market.

CMTP III participants from the aircraft industry contrasted Pratt and Whitney's (GE's biggest aircraft engine competitor) approach to the Chinese market with GE's and made four recommendations to make GE Aircraft Engines a more effective competitor in China. The CMTP II group that worked with GE Medical Systems provided insight into appropriate ministries to contact, suggested what they considered to be appropriate products for the Chinese market, and made recommendations on joint venture partners. The CMTP III Power Systems group went through the GE product line and recommended a China marketing strategy for each product. The Chinese working with GE Plastics recommended possible Chinese joint venture partners for each line of plastics.

The four China Management Training Programs since 1986 support GE's strategy of building long-term relationships with Chinese enterprises. The program demonstrates a commitment to the Chinese government and the business enterprises by assisting in the development of the next generation of China's top economic leadership. The benefits to GE are also significant. Relationships have been established that will help GE anticipate future market needs. When GE business representatives now call on a Chinese enterprise, they frequently have a contact within the enterprise with whom they have an established relationship. Thus, the CMTP has built a network of Chinese managers with a sense of affiliation with GE.

A CMTP alumni meeting was held in Beijing in March of 1989. Of the 47 total alumni of classes I and II, 39 attended. A Chinese representative from each industry gave an industry update. Many of the alumni reported on how they have utilized their GE experience. Each GE business hosted the alumni affiliated with that business as well as the incoming CMTP III participants. On the final day, at the alumni session, a press conference was held to announce the publication of CMTP II's book on their GE experience titled *Road to Success*. The press conference was attended by nearly 50 press representatives and resulted in considerable publicity for GE.

A major payoff for GE at this alumni session was an unsolicited meeting for the GE Group with Vice Premier Dr. Wei Youn Zing and a special banquet with various Chinese officials including the Minister of Aviation and Aeronautics, Minister of Machine Building, railroad, and top public health and pharmaceutical officials. This gave the GE delegation to the reunion some new and very valuable access and contacts.

In his remarks, Dr. Wei Yong Xing stated ". . . the most productive results of the GE China Manager's Training Program are not only that the Chinese have gained successful experiences in management, but

even more importantly, the Chinese trainees have laid a very good foundation for developing trade between China and GE." Such a mutual commitment clearly helps GE to anticipate the needs of the Chinese industries.

### **The Plastic Roofing Product Team**

A goal for GE in the 1990s is the creation of a boundaryless organization, one where barriers between functions and levels are minimized to enable the organization to respond swiftly to the market. A boundaryless company must level its external walls as well, and reach out to both key suppliers and key customers, making them part of a single process. This is an admittedly grand vision requiring unprecedented cultural change. To move towards a boundaryless organization, team building across boundaries has been attempted.

GE Plastics is developing a new product for the household roofing market. Not only is the product new, but the household building products market is one not previously served by GE Plastics. Further, the cross functional team developing the product and bringing it to market has not previously worked together and the customer, a manufacturer and distributor of household building products, is a first-time GE Plastics customer.

The GE Plastics team deemed this project an excellent opportunity to model a boundaryless relationship with their customer. The GE Management Development Institute was asked to design and deliver a team building and values setting activity with GE Plastics employees and their customer that would achieve the following objectives:

- increase the probability of success as a team and increase trust among team members,
- develop a team vision and values and establish market objectives, and
- provide the team with the opportunity to develop a "constitution" and develop role relationships appropriate to a boundaryless relationship.

The four-day program (see Exhibit 3 for a summary of the program) began with a day of outdoor team building activities to begin the process of working together, setting objectives, and managing the team process. Developing the team's mission turned out to be the most difficult task and discussions continued throughout the session. While debate was frequently animated and occasionally frustrated the team, the mission statement that emerged has the full commitment of the team, including the customer. While the mission statement may read like many other missions statements, the process used to develop it—joint discussions, dialogues, and debates with the customer—makes commitment to the mission statement much higher.

Other activities during the session included role negotiations, the development of a "constitution," a session on skills for facilitating group

### Exhibit 3. GE Plastics.

	Tuesday	Wednesday	Thursday	Friday
AM	Intro Video	Video Visioning & Value Exercises	Group Techniques	Outdoor Activity Discussion with Senior Manager Conclusion
PM	Outdoor Activities	Influence Model/ Feedback	Constitution (Putting it together) • Goals • Roles-Creating boundaryless organizations • Procedures-Constitutions • Interpersonal-Value	
EVE	Understanding and Valuing Personal Differences-Myers-Briggs Type Indicator	Role Negotiations	Celebration	

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projects, and the development of market specific objectives for the introduction of the new product (for a more complete discussion of team building tools and techniques, see the work by Larson and LaFasto, 1989).

While this product has not yet gone to market, the cooperation of the joint GE and customer team has improved working relationships, built trust, and should result in reduced cycle time. The benefits of a boundaryless organization are that both parties to the organization share goals and processes used to reach those goals (Devanna & Tichy, 1990).

### **Sears/GE Appliance Work-out Session**

The GE process for creating a boundaryless organization in the business is called Work-out. Work-out is a fluid and adaptable concept, not a program. It generally starts as a series of regularly scheduled "town meetings" within a business that brings together large cross sections of a business in terms of function and level. The initial purpose of these meetings is simple—to remove the more egregious manifestations of bureaucracy: multiple approvals, unnecessary paperwork, excessive reports, routines and measurements (see Jick et al., 1990 for a complete discussion of the goals, activities, and preliminary outcomes of Work-out).

The intent of these Work-out sessions is to empower people to express their opinions and ideas on how the organization can be made less bureaucratic. Once the organization has been cleared of bureaucratic impediments and distractions the Work-out session can focus on the more challenging tasks of examining the myriad processes that make up the business, identifying the crucial ones, discarding the rest, and then finding a faster, simpler, better way of doing things.

A number of businesses have held Work-out sessions with key customers. One of the most effective business–customer Work-out sessions was conducted in 1990 by GE Appliances with Sears at the Management Development Institute (Jick, 1990).

Sears is GE Appliances' largest customer, but this is not a relationship with a long history. The GE Appliance relationship with Sears has grown from a relatively modest one in 1986, to GE Appliance's biggest customer by 1989. As the GE Appliance–Sears relationship matured and both firms benefitted from the relationship, it was deemed advantageous to address some of the ways by which the Sears–GE Appliance relationship could be strengthened, particularly by:

- identifying and resolving business system issues via Work-out,
- creating an environment of candor, where individuals are willing and able to speak their mind and others listen, and
- improving communication at all levels and on all topics within the business

Twenty-five Sears managers plus sixteen GE managers participated in the workshop. Sears participants included buying teams for ranges, home laundry, refrigerators, microwave ovens, and dishwashers. GE Appliance participants, the vendors, were matched with their Sears counterparts, the buyers.

The three-day program began with participants divided into five separate problem solving teams focusing on potential causes of interpersonal team conflicts (see Exhibit 4 for an overview of the program). The teams then moved to a series of outdoor team challenges. Like the outdoor activities designed for the GE Plastics team building session, the small group challenges are primarily group decision making activities built around a physical metaphor. The focus is on team dynamics, what makes a team work well, and what can be done to create more effective teamwork.

Following the outdoor activities, the groups were reconfigured to be comprised of functional work relationships linking vendors with buyers. In these groups the following questions were discussed:

- What do I value about teamwork as experienced today that I would like to see more of in our relationship (Sears/GE Appliances)?
- What do I value in the Sears/GE Appliance relationships and what do I wish was happening differently?

Issues related to communication came out in these sessions (e.g., “. . . I thought we had an agreement . . .”) as did issues of candor, (e.g., “. . . this has been on my mind for some time now . . .”).

The second day of the session began with a discussion of leading by values and a shorter session on challenging existing paradigms that get in the way of what we want for ourselves, our businesses, and our partnerships. The intent was to encourage participants to challenge the existing Sears/GE Appliance relationship and to ask what could be done better and more effectively.

The Work-out session was initiated by both GE Appliance and Sears executives. Each of the five Work-out teams was given a key issue to work on that had been identified by both Sears and GE Appliances as a problem or area for improvement. Work-out teams had approximately a day to work on their issues. Following lunch on the third day, each team had 20 minutes to report out to the top level Sears and GE Appliance executives who had initiated the Work-out session. These executives committed to making the changes deemed necessary at their level and encouraged participants to do the same at their level. The joint Work-out program concluded with a session with Jack Welch at which he confirmed the discussions and encouraged future meetings.



		<b>DAY 1</b> Monday, February 5	<b>DAY 2</b> Tuesday, February 6	<b>DAY 3</b> Wednesday, February 7	<b>DAY 4</b> Thursday, February 8
<b>MORNING</b>		Breakfast	Breakfast	Breakfast	Real "Workout Projects" with Facilitators
		Myers Briggs - "Learning about Self/Others"	"Leading by Values"		
		Break	Break		
		Teams Form	"Leading by Values"		
<b>AFTERNOON</b>	Arrive - Register  Check out Facility	Box Lunch	Box Lunch	Box Lunch	Workout Presentations to Management
		Teamwork	"Discovering The Future"		
			Break		
			Prepare for "Workout"	J. Welch	
		Workout Teams get Organized	Depart		
<b>EVENING</b>	Reception/Dinner	Reception/Dinner	Reception/Dinner		
	Comments about: - Workshop: - Team Sessions: - Workout:	"Mystery Nite" (It's a secret)	"FUN NITE"		
	Free Time	Free Time	Free Time		

# IMPLICATIONS, LEARNINGS, AND CONCLUSIONS

## Implications for Human Resource Development

The four case illustrations have implications for the changing role of HRD. First, the cases demonstrate clearly a transition in HRD activities. Others have discussed a variety of roles and responsibilities for HRD (Exhibit 5). Traditionally, HRD has played a passive role, where the primary responsibility was to ensure that development programs were designed and delivered on schedule. From the passive role emerged a policeman role, where the HRD professional was responsible for making sure that participants attended programs and that programs met corporate standards. More recently (Noel & Charan, 1988), HRD professionals have played more of a partnership role, where through the design and delivery of action learning projects, participants can actually implement and improve business processes through management education, team building, and value setting activities.

While these three roles are viable, and to some extent, must continue to be played, they do not fully reflect the learnings from these GE experiences. If the GE experience is accurate, the next frontier for HRD may be a *pioneer* role, in which the HRD professional crosses boundaries and creates new insights from HRD activities. HR professionals as pioneers (Ulrich, Yeung, & Brockbank, 1990) imply that HR professionals are proactive, not reactive; take risks; manage by a shared mindset, not objectives; seek new ideas, rather than enforce rules; explore new frontiers, and learn to engage in new activities. Pioneers tend to be protagonists rather than passive observers. As protagonists, they have the

Exhibit 5. Changing HRD Roles.

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60's	PASSIVE	<ul style="list-style-type: none"><li>• Respond to training needs</li><li>• Sit in the back of the room, making sure all the logistics are done smoothly (lights, heating, chairs, notebooks, etc.)</li></ul>
70's	POLICE	<ul style="list-style-type: none"><li>• Ensure that training programs are well administered—that people attend, participate, and that all logistics are managed</li></ul>
80's	PARTNER	<ul style="list-style-type: none"><li>• Ensure that participants in training learn material that impacts the business, e.g., action learning, team building, projects</li><li>• Design action learning experiences which make sure that concepts lead to commitment and action</li></ul>
90's	PIONEER	<ul style="list-style-type: none"><li>• Prepare and deliver training that bridges boundaries between an organization and its customers and/or suppliers</li><li>• Involve customers actively in the management training, team building, and value setting activities</li></ul>

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responsibility to energize stale, mature relationships and to create enthusiasm and excitement in problem-solving activities.

In each of the four cases, HRD professionals were pioneers. In each of the four cases, the HRD professionals took risks by inviting key customers into traditional classroom settings, merged GE employees with external customers, and attempted to build new relationships between the two companies.

Key to the success of each customer program was the preprogram work done by Crotonville HRD professionals. Preprogram preparation included work with the GE businesses, to understand the needs and intent of the sponsoring business, as well as meetings with the customers. The Soviet Aviation program illustrates the preprogram needs analysis process.

Crotonville professionals met on several occasions with GE Aircraft Engines personnel. One of the key outcomes that GE Aircraft Engines hoped to get from the program was an understanding of the Soviet aviation industry. In addition, they wanted to learn how the key players—design bureau, engine manufacturer, air frame manufacturer, and governmental ministry worked together and made decisions. This need was reflected in the program, when after a case on the US aviation industry, class discussion focused on the same process in the Soviet Union. Crotonville HRD professionals also traveled to the Soviet Union to hold preprogram planning sessions with representatives of each of the Soviet aviation agencies. Cost accounting and marketing emerged as the Western management skills that were of the most interest.

These cases help illustrate the point that becoming a management pioneer is not an abstract set of concepts, but a specific set of innovative, value-based, and boundary-spanning activities. When accomplished, these activities combine to move HRD beyond partnering in action learning to creating more competitive, flexible organizations (Ulrich, 1990c).

Second, the cases illustrate the means by which HR can add value to a business. As these four cases unfolded, layers of competence (Pralhad & Hamel, 1990) were built between GE and Aeroflot, Chinese managers, Sears, and a Plastics customer. The most basic, and foundation, layer of competence was a shared understanding of technology and product. By participating in joint learning sessions, both GE and customer participants came to a common understanding of current and projected technological demands.

However, at a more central layer, competence was built and shared around managerial processes. Managerial process competencies refer to the processes used in the organization. As GE and customer participants shared common management development, team building, and value setting experiences, they came to a common understanding of managerial processes. As these managerial processes were shared, GE was bet-

ter able to anticipate the needs of their customers and make sure that GE managerial processes matched customer requirements.

A deeper and more fundamental competence was established through the training programs, that of shared values. As GE participants learned to understand the Soviet and Chinese management systems, and as Soviet and Chinese participants learned more about GE's management philosophy and values, the two groups drew closer together in sharing a common set of values, or paradigm, about how to do business. As this paradigm becomes more widely shared between GE and its customers GE will be better able to anticipate customer needs because of this common approach and mindset about solving business problems.

As technological, managerial, and value competence layers are built, the customer education experiences ensures that HRD adds value to the business. The relationships formed from the sessions become a primary form of competitive advantage. The trust that emerges from sharing managerial and paradigm competencies ensures that GE will be well received in future sales calls.

A third HR implication is that the HRD professionals become part of an internal business team dedicated to serving customers (Ulrich, 1987). In the Soviet Aviation program, HRD professionals joined a team of Aircraft Engine executives who visited the Soviet Union to design the program. HRD professionals ensured that the Chinese participants were treated with respect after the program by ensuring that follow-up visits occurred by the sales managers who worked the Chinese account. HRD professionals at Sears became intricately involved in quality, manufacturing, and distribution challenges as the Sears and GE participants engaged in joint problem-solving activities.

The overall HR implication is clear—HR professionals who used customer education positively spent less time in their offices designing programs and more time facilitating the interaction between customers and appropriate internal employees.

### **Learnings for Human Resource Development**

Several practical lessons have been learned from the GE experience with customer education programs that can be helpful to other HR professionals. Customer education programs should be tied to the long-term strategic interests of the firm. All of the GE customer programs cited in this article were not initiated by the GE Management Development Center. The initiation for the programs came from the businesses and were viewed as part of the businesses' overall strategic thrust. The proactive role of the Management Development Institute is to make the businesses aware of the potential benefits of customer education programs and the capabilities of the Management Development Institute to conduct customer programs.

Once a strategic thrust is articulated, potential key customers need to

be identified. In instances like Sears, where there is a very visible customer, the process is easy. In other cases, such as entering a new market, considerable thought should be given to identifying target customers. The first session of the China Management Training Program, the Chinese government made the majority of participant selections. The result was a class with a disproportionate number of government bureaucrats. In preparation for the second China Management Training Program, the GE businesses selected the participants. It was at this point that the businesses took ownership for the program and began to realize its full value. Customer education programs are not for all customers, but for those target accounts which represent a major share of a served market, a potential growth market, or a unique business opportunity. Target customers may be government agencies (e.g., Soviet Union and China) or private firms (e.g., Sears).

Customer education programs are not the sole responsibility of the HR professional. For the programs to realize their full potential to the firm, the primary contacts must be with people in the field. It is of little value to the organization if the customer remembers the HR or management development professionals when reflecting upon their course experience. Program space should be reserved for a combination of customers and the company's own people. Customers should be paired with their counterparts in the organization, whether sales, marketing, engineering, or manufacturing.

Initially, at GE, customer education programs were regarded as something "GE did for its customers." The benefit stream ran in one direction. Today, there is the realization that the benefit flow is in two directions. Course activities are not just a cognitive passing of information, but the building of relationships, sharing of organizational processes, and sharing of organizational culture and values.

A customer education program theoretically never ends. Relationships that have been established need to be continued and nurtured. The true benefit of the China Management Training Program is only now beginning to be realized. Four years after the first program, field sales people are calling on program alumni to understand the Chinese enterprise business environment and for knowledge on evolving markets. Having made the effort to build a customer network, it should be regarded as a long term investment—one that supplies information not only on products and services, but on the very core of an organization's existence, its organizational processes, environment, values, and culture. Customer education is a unique competitive competency that can give the firm the capability to anticipate a customer's needs.

## CONCLUSION

The arguments we present here are not complete. We have focused on the customer education role in building customer anticipation. We

hope that this focus encourages other questions which extend our understanding of customer partnerships which lead to customer anticipation. To understand how to operate these partnerships, some of the following questions will need to be addressed:

- How do you select the right customers? What criteria are used? What about customers who are not involved in immediate partnerships?
- Who determines the training design?
- How can other HR practices such as staffing, appraisal, and rewards be used to further support customer partnerships?
- What organization and job design features impact success? What changes in job and organization design need to be made?

These and other questions about customer anticipation require further study.

However, our conclusion is straightforward. As customer service becomes supplemented with customer anticipation, HR becomes an increasingly important tool for building competitive advantage. When management development, team building, and value setting activities can be jointly sponsored, attended, and enacted with customers and employees, learning and commitments increase. The end result is a bond between a firm and its customers which becomes the foundation for a long-term competitive advantage.

Our recommendation is equally straightforward. If HR executives want to leverage their resources and add value to the business, one useful tool is to advocate and deliver customer education. This set of activities enables HR professionals to demonstrate a pioneer mindset and explore a new frontier.

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