

What Are Shippers and Carriers Looking For?

Gayton E. Germane

First, let us refine the question "What Are Shippers and Carriers Looking For?" I have interpreted this to mean ". . . When Looking for Applicants for Entry Level, Management Positions." This, I believe, is the market that most of us from the academic community are especially interested in because it is the market for which our students are preparing. A further consideration is the time horizon involved. The organizations are looking for entry-level management personnel, but the firms are also hoping that they will be able to select people who will have the ability to become senior executives in later years. Thus, what the shippers and carriers would like to find is a here-and-now set of qualifications, and a later-years prospect of substantial advancement and responsibility in the organization. These are the criteria that should be kept in mind in considering the views that will be expressed in this paper.

This paper is based in part on the views and experience of a number of outstanding senior executives from rail, highway, and water transport, and from the shippers. The purpose was not to determine the general view, but to obtain the best advice and guidance on the question: "What Are Shippers and Carriers Looking For?" This was a series of views, selected for excellence, in terms of the background and performance of the spokesmen. They will not be identified, but some examples from their experience will be noted in this discussion.

I have been fortunate to know well a number of capable senior executives in the various modes of transportation. This was one of the advantages of my 13 years in the Transportation Association of America, as Chairman of the Coordinating Committee and as Moderator of the Cooperative Project on National Transportation Policy. In these activities, I became well acquainted with the leaders from four modes of transportation, plus users and investors with special interests in transportation. This led to many exchanges of candid and informal views individually and within groups. It is this background, supplemented by some specific recent questions to many of these executives, that has shaped the views expressed here. Let us turn now to a discussion of customer preferences or market demands.

SELECTION CRITERIA

Carriers and shippers generally have very definite ideas about what they want, but sometimes find it difficult to evaluate accurately the real attributes of the persons being considered. This is in part a result of the need to use indirect measures rather than direct evidence of the qualities sought.

For example, it was generally believed among my acquaintances that the following characteristics were important among the desirable qualifications. They believed that the prospective entry-level management person should be

- Intelligent,
- Industrious,
- Personable, and
- Should have the necessary basic knowledge and skills.

Intelligent apparently meant quick to learn and also having considerable common sense. Intelligent was inferred from grades in school, honors and awards, and so forth. Common sense was evaluated by response to questions in interviews and also by the questions raised by the applicant. Recommendations from previous supervisors and employers were also weighed, along with work experience and results achieved, in seeking to evaluate the quick to learn and considerable common sense characteristics.

Industrious was a characteristic that was judged from the applicant's work record and recommendations, and to some extent from academic grades. For example, a conclusion might be "If he made grades as good as that, and worked part time at the plant, he has got to be intelligent and industrious."

Personable appeared to mean that the individual made a good appearance and conversed comfortably with the interviewers. References often mentioned special qualifications in this regard, but personal observation by the interviewing team generally carried the most weight.

Basic knowledge and skills were generally evaluated by the nature of the courses taken and the work experience of the applicant. However, the response to questions during the interview might cancel the impressions given by academic criteria and previous employment. For example, a personable young man, with a graduate degree from a prominent university, disqualified himself totally with the chief financial officer of a steamship company when he gave a vague answer about how he would interpret a coefficient of correlation of +1.25. Because the possible range is -1.00 to +1.00, it was clear that the applicant was missing some basic concepts that even an average student should remember, given the courses allegedly taken by the candidate.

The Decision Process

The cross checking of grade performance, telephoning of references, presentation of recommendations, verification of work experience, and discussion by several interviewers of their impressions, is a general practice. This usually leaves the prospective carrier or shipper employer with a strong impression of an applicant's capacity. If that impression is strong and favorable, then the firm has an acceptable prospect. If the impression is less than strong and favorable, the applicant is not likely to be offered a position with the firm. Although this whole process deals with indirect measures of the qualities sought, most of the executives I have talked with are comfortable with the ability of their organizations to make selections on that basis. The important difficulty is not in selecting to meet the requirements of the entry-level management positions, but in evaluating the probability of future development; that is, the potential for promotion to senior management in the years ahead.

PROSPECTS FOR SIGNIFICANT ADVANCEMENT

Among the military officers I was fortunate to know well was the former chief transportation officer of an overseas theater in World War II. Some years ago,

when I was in the Defense Department, I asked him, "When you served on general officer selection boards, what did you look for in reaching your decision?" His reply was as follows:

To get to the Selection Board, every candidate had to have good efficiency reports so that was not likely to be a crucial difference. I always looked first to see if the candidate had several Commendations in his record. That's essential. We must have senior officers with initiative and imagination. Then I'd look to see if he had any Reprimands. If there were no Reprimands, I would be very concerned. It probably meant that we had there a smart, play-it-safe, SOB who would never take action on an idea or opportunity unless it was a "sure thing." We can't afford that approach at the General Officer level. There are too many decisions that are not "open-and-shut" matters. You have to take risks to win in combat. The officer that will get my enthusiastic support for stars is one whose record includes a good many Commendations and a few Reprimands, in addition to all of the relevant schools, command and staff experience, interservice assignments, etc.

In talking with my friends in commercial transportation and user enterprises, I found a similar concern about determining the qualities needed for senior executive positions. Putting their views together, most of the considerations appeared to fall under three headings: determination, imagination and initiative, and judgment. My business sources believed that these were qualities that were hard to evaluate by interviews, preemployment qualifications, and records. They believed that they had to watch the person grow, work under difficult conditions, or rise to seize opportunities in order to get a good sense of the existence and extent of these particular qualities. They also recognized that in part these qualities were developed by experience. In any event, they were hard to assess without specific examples, and they generally required management assignments in which the necessary challenges were likely to arise. Thus, a member of management probably would be moved along and tested at several levels of authority over a period of years to determine his or her responses. Good performance at one level normally lead to promotion to a higher level. In the following paragraphs are some examples of these tests or events that contributed to qualification for fast-track promotions, and ultimately for senior executive positions.

DETERMINATION

This may be one of the easier qualities to identify in young management personnel because opportunities to observe the presence or absence of determination are not rare. Here are some examples I have heard about that illustrate this extra drive to get the job done. When the individual worked alone, this attribute was often referred to as guts, but when he worked as a team leader, it was usually called leadership.

Railroad

A young railroad attorney was assigned to handle a series of line abandonment cases scattered over the West. He was determined to win and worked hard to under-

stand all the details of each case. He conducted an intensive study of crops and harvest patterns and of agricultural and other traffic services and rates. In the process he became well acquainted with many key people and business prospects for the railroad. His determination and field work paid off and he won nearly all of his abandonment cases. This received attention. His broad knowledge of the regional economics and his information contacts in the area soon made him one of the leading business strategists for the railroad. He ended his career as chairman and chief executive officer (CEO), and the principal architect of the carrier's diversification and profit improvement programs.

Ocean Shipping

The new employee had been hired by a reluctant executive because the young man had some background in marine engineering. An early special assignment was to get an ancient chartered ship running again. This took him from the air-conditioned U.S. headquarters to an anchorage off Saipan. He worked on the old rust bucket for nearly 2 weeks in 110-degree heat with two native helpers. He vividly remembers sweating in the filthy engine room, armed with a Stillson wrench and an oily rag, and wondering if that was what he had earned two graduate degrees to do. His determination and success were appreciated, and he was considered to have paid his dues to the organization. With continued success, he later became executive vice president of the steamship company.

Shipper

A young transportation specialist was assigned to work on the problem of iron ore freezing in the railroad hopper cars. The railroad operating staff and the user plant personnel had no satisfactory explanation or remedy. The young specialist's determination to understand the problem required a great deal of work, but resulted in both an immediate remedy and a long-term solution for the problem. In any event, he advanced in a series of promotions and became chairman and (CEO) of a large firm.

Note that in the last two cases the subject not only showed determination in getting a difficult job done, but possibly benefited from the dramatically unpleasant working conditions that drew extra attention to the results.

IMAGINATION

Shipper

A group of college students, working under the direction of the logistics staff of a large integrated paper company, developed a novel plan for moving paper products on the West Coast. It included a piggyback train to run overnight to a transfer point near Los Angeles. There, the containers would be unloaded sideways into flatbed trailers parked parallel to the tracks. The trucks would make direct deliveries to major paper product customers in the greater Los Angeles area, or to warehouses. A reduced southbound rail rate would be available to the paper company because it would organize a return load for the train from various truck-

ing operators who had empty trailers returning northbound. The empty trailers would be parked on the other side of the train and could be loaded as soon as rail cars were available. Double decking of empty paper product containers on the train was feasible so there would be plenty of train space for empty truck trailers.

While this load exchange was taking place, the locomotive set would refuel, receive a new crew, change ends on the train, and be ready for the northbound trip. This plan would provide high equipment utilization and good loads in both directions for the railroad. The paper company would be able to match the speed and convenience of truck service southbound, at less than truckload costs, and would also reduce its warehouse space requirements in Los Angeles as a result of the direct-to-customer deliveries. This kind of innovation had given the paper company logistics group a strong position in the company and considerable individual recognition. For the logistics group, imagination and innovation were identified with personal success.

Trucking

An interesting example of imagination applied to operating equipment was provided by a young marketing manager with a midwestern trucking company. He was concerned about the low profitability of the large volume of business from a manufacturer of small gasoline engines. On investigation, he found that truck competition was severe for the traffic and that the freight was high density. Because of the small engines' irregular upper surfaces, it was impractical to load other cargo on top of them. His imaginative solution was a movable second deck, or adjustable additional floor, for trucks in this service. The second deck could be secured so that it just cleared the loaded engines. Then, low-weight, high-cube cargo could be loaded on the second deck without damage in transit. The result was that nearly two truckloads of earning capacity could be generated in the same one-truck trip. When the second deck was not needed, it was secured next to the roof of the van. The cost of the second deck was minor, and the reduction in cargo space was negligible. This idea, and other noteworthy innovations, led to early promotion of the young marketing manager.

Ocean Carrier

The steamship company computer services group had been working on a central system to plan and control all container movements in several marine terminals. Unfortunately, the computerized system was less than half finished, but was already more than 2 years behind schedule and over budget by a huge amount. As a kind of insurance policy against further delays, one young operations executive suggested to his vice president that he be given 1 year, a couple of young terminal management staff members, and be permitted to hire a couple of programmers--to see if this little team could develop a system using a personal computer.

The outcome was a highly successful computerized container-terminal operating system. It provided on call, historical data, current operating information, or future plans and contingency arrangements. Physical layout and space availability were shown in color on a video screen. The computer also optimized container loading and unloading sequences to take account of necessary in-ship positions,

and on-land locations and stacking, to minimize total elapsed time. The results were better than anyone had expected, including the innovators, and the project was completed ahead of schedule and under budget. Of course, the young operating manager was promoted and had the pleasure of seeing his system adopted throughout the company. Note, however, that if he had failed, it is likely that those he had embarrassed would have ensured that, at a minimum, his career was severely handicapped.

JUDGMENT

Here are some other examples of young management personnel who "passed the test" by demonstrating good judgment to a degree that warranted consideration for further promotion.

Ocean

A young woman in the finance department of a large steamship company had shown a great deal of competence in various financial planning, management, and negotiating assignments. As an additional responsibility, she was given the task of investing short-term cash balances from various accounts. At first, her results were a source of surprise and satisfaction to senior officers that she had been so lucky. However, as time passed she built a record far better than many of the investment firms specializing in the field. Her superiors became convinced that her performance was a matter of extraordinary good judgment. Additional funds were placed under her control, and she continued to produce astonishing results--to the degree that senior officials needed their banking and investment friends to try and match her. With her performance record well established, the only question now is whether she will receive substantial advancement within the organization, or in another firm. Her proven judgment has made her a standout in the field.

Railroad

This is a case in which cutting back on business was a demonstration of outstanding judgment. A young railroad intermodal official was in the midst of a complete rebuilding of his railroad's principal piggyback yard. In anticipation of increased capacity and service improvements, he had also recently completed negotiations to handle a large percent of the intermodal container traffic for several large steamship companies. Then one of the worst storms in years broke in the mountains. At first, it shut off nearly all rail traffic. When the storm cleared and the backlog of traffic was pushed over the passes, it resulted in the delivery of about 10 days' traffic volume in 2 days. With the new facilities not yet completed and much of the old layout removed, the intermodal yard was in danger of becoming so jammed that movement in or out would be almost impossible. The young executive promptly went to his new big steamship accounts, explained the situation fully, and canceled most of the new arrangements. Fortunately, he was able to demonstrate to their satisfaction that any other course would be disastrous for them and for the railroad.

By these draconian measures, taken swiftly, he was able to keep the intermodal yard functioning, complete the relocation of track and expansion of capacity, and later return to his erstwhile customers with the capability of improved service and a record of sound judgment in calling the shot correctly. His cancelled accounts returned, and he performed better than ever with his new facilities. He claims that the outstanding intermodal financial performance for the year was a result of holding the yard conversion downtime to a minimum so that he could run at greater capacity and efficiency later. Yes, he was promoted, but he had his superiors worried for a while.

Truck

A few years ago, a trucking executive accepted responsibility for corporate planning at the time the company was well launched on a program to become a transcontinental carrier. The planner had grave reservations about that strategy. He noted the trend toward deregulation and its probable unfavorable impact on trucking revenues, plus the difficulty in getting union wage rates reduced to match the freight rate reductions he expected. His proposed strategy was to sell off promptly many of the recently acquired companies and operating rights before their value declined dramatically. He recommended reinvestment in good regional, nonunion, trucking companies. These, he believed would have a better chance to cut costs as required. Specializing in regional service, they would avoid head-on competition with the majors and the need for heavy capital investment in the communications, computer equipment, and consolidation centers required for top efficiency in transcontinental service. The planner had a very tough selling job, but his recommendations were adopted. His judgment was vindicated during the next few years when the value of the properties the company had sold dropped sharply, while the new regional and nonunion operations continued to prosper, although they too suffered from the industry distress.

This is an impressive example of wise judgment. It is difficult to urge abandonment of a currently successful program and the adoption of a very different strategy. In such cases, the stakes are high, and for those who succeed, so are the rewards. In this illustration the planner is now the chief executive officer of the firm.

WHAT CAN WE DO?

By "we," I mean people like ourselves--educators, government officials, and business executives. We all have a stake in the development of the qualities of determination, imagination, and judgment in the next generation. Indeed, I believe that we will improve our own abilities by participating in this process.

No one has all of the answers. Therefore, I would like to make a few suggestions on what we can do. These ideas may be useful as examples, or as triggers to fire still better ideas in your minds, or those of your associates. Here are some examples of methods to enhance the development of determination, imagination, and judgment.

Determination

1. Arrange for speakers to discuss the role of determination and leadership in reaching objectives. A question period would be desirable to get further views

and discussion. Speakers could be invited to class, or to a business or government office, or to a seminar.

2. Review biographies and history for incidents in which individual determination was a critical factor in reaching goals. In terms of transportation, situations can be identified from ancient times, through the era of sailing ships, the covered wagon, the railroads, to the development of space. Summarize examples. Circulate the summaries, or arrange for discussions. Ask for suggestions on other examples. Ask for estimates of the importance of the contributions noted, or how their significance should be evaluated. The immediate objective is to get people to think about the significance of determination in effecting change, carrying out a successful project, and so forth.

3. Use problem cases (where some tough decisions must be made) in classes or executive seminars to make the problem analysis real and the role of determination clear to the participants. The problem case, with its setting and the active role of the student or executive in reaching a decision, focuses attention and provides an emotional involvement with the problem. These factors make it more likely that the lessons of the case discussion will become a part of the participant's pattern of thinking and his or her attitude to problems.

Imagination

1. Focus on the rate of change by using materials for reading and discussion that include a description of current developments and a discussion of their potential effects. Try to get people involved in the analysis and forecasting. A good example is to ask persons to prepare a graph on the rate of change in some aspect of development. Place time on the horizontal axis and a measure of the development being considered on the vertical axis. An upward sweeping curve will likely appear, showing not just change, but an increasing rate of change.

Transportation is a spectacular illustration of this. Let me give a few details, based on the speed with which man can travel. Through all recorded history, man could travel no faster than a good horse could carry him--until about 1830. Thus, our graph would show a horizontal line for top speed of about 35 to 40 mph extending as far back into history as you choose. In 1830 a locomotive named The Best Friend of Charleston went into scheduled service and provided a new standard of perhaps 50 mph. In 1898 the Empire State Express engine 999, with a train of four passenger cars, set a record of about 112 mph. When Lindberg flew across the Atlantic in 1927, one newspaper reported that he reached 150 mph. That speed was more than doubled in 1949 by the Lockheed Constellation (model L-649) with a speed of 350 mph. Ten years later, the Boeing 707 was flying at 550 mph. By 1975 the British Concord was flying to the United States with passengers at 1,350 mph, and military jets far exceeded that speed. Now astronauts circle the globe at speeds well above 25,000 mph. The rate of change in the last 150 years (since we broke the Oat Barrier) has been impressive in terms of speed and also in many other aspects of modern civilization.

Grandfather's experience is now almost useless in many circumstances, and much of our own is already outdated. We must emphasize change and the problems and methods of living with change, if future generations are to be both comfortable and efficient. I believe that we should place more emphasis on development of imagination in order to ensure that we, and especially those who follow after us, are oriented to live and work effectively with the increasing rate of change.

2. Obtain information on the Commercial Development of Space project for discussion and for development of imagination. There is now emphasis by the federal government on commercial development of space, and the various NASA centers are actively involved. A great deal of material and support is available. These materials can provide the basis for excellent exercises in analysis and in the application of imagination to new opportunities. The possible subjects include choices of plans, equipment selection, and project priorities for various space activities and facilities. Imagination can be stimulated by considering the possible applications and the potential benefits and problems involved in the many different commercial development of space ventures being considered.

3. Develop problem cases based on current innovations. These materials would provide readers and discussants a simulation of experience in anticipating possible results and in suggesting various recommendations. Here again, there appears to be a potential for further development of imagination in connection with current and near-future situations. Examples would include: applying the French TGV (high speed) train to certain routes in the United States, assessing the potential opportunities and problems of triple-trailers on U.S. highways, planning for substantial crew reductions on American ships, reviewing the prospects for fully automated subway trains.

4. Use problem situations with no standard solution for analysis and discussion. These situations can be taken from many fields of endeavor. Although they might be presented in the form of problem cases, that format is not required. An example follows. Published materials can be useful for development of team recommendations for the movement of natural gas from the North Slope of Alaska (Prudhoe Bay area) to commercial markets in North America and Europe. Some major options include (a) a pipeline for natural gas from the North Slope, parallel to the present oil pipeline; (b) use of ice-breaking tankers to carry liquified natural gas (at least two organizations have proposed designs); (c) construction of huge submarine tankers--nuclear-powered or natural-gas powered--that would load underwater, as proposed by the General Dynamics Corporation; and (d) airplanes, such as the 12-engine Large Resource Transport airplane (four times the gross weight of a B-747) proposed by the Boeing Company. Evaluations of the various transport systems can be in terms of the various types of problems involved. The prospects for a suitable solution to these problems can be rated "good", "fair", or "poor" because the information available and the technical expertise of the study group are not likely to permit greater distinctions.

This type of project appears to have great potential for stimulating constructive use of imagination in problem solving. Continued practice may also increase the imaginative capacity of the participants.

Judgment

Of the personal attributes I have chosen to discuss, this one is probably the most difficult on which to offer suggestions for training and development. Although most people would agree that judgment is developed by experience, there remains the question "What kind of experience is most useful?" We all remember the old saying that "there is a big difference between twenty years experience and one year's experience twenty times." The comment appears to have substantial merit, so let us determine what might be done to provide new and useful experiences that may be valuable in developing judgment.

1. Practice in evaluation of choices. This can be done with either problem cases or with less structured research projects. For example, the research project on transportation of natural gas from Alaska would be carried a bit further. Having identified the elements to be evaluated (judgment), consider their relative importance (judgment) and estimate their feasibility in terms of problems to be resolved (judgment). From these considerations, a priority ranking or overall rating of the options (judgment) for actual use can be derived.

Some problem cases that represent practice in analysis and development of judgment are: gas turbine versus diesel locomotives, analysis of poor truck terminal performance, evaluation of high-speed monorail service between the San Francisco Airport and the city center, choosing between roll-on/roll-off ships and large tug barge roll-on/roll-off combinations for particular routes. Many good cases are available. The question is really which cases will provide the greatest stimulation and advantage for the person or group involved.

2. Work experience in creating a plan. I believe that when persons are actively involved in developing a plan, the intellectual and emotional aspects of making the various decisions substantially enhances the development of judgment. Here is an example.

Professor Peter Banks of the Stanford School of Engineering has been running a two-quarter class each year in which the students (30 or more) design and plan for the use of a new device. This year the new device was a remote sensing satellite for agriculture. Naturally it was called AGSAT. The satellite appears to be distinctly superior to anything now available, thus serious consideration is being given to establishing a business and producing and marketing the product. The student teams had to analyze, design, coordinate, and make judgments on myriad matters in developing the plans for the satellite. The details are being published in a book that will be about 400 printed pages; so it is obvious that there was plenty of room for decision making in determining the concepts, capacities, trade-offs, and design features of the satellite, plus its launching and communications systems.

3. Guest speakers on analysis of tough decisions. Business and government organizations, as well as colleges and universities, can easily use guest speakers to help those interested to improve their judgment and decision making. These events, including question periods, could be organized as luncheon meetings, after-work sessions, or as lectures to large groups. With large audiences, questions are often sent forward from the floor to the session chairman; the questions can then be sorted by frequency and importance and handed to the speaker(s) in some priority order for discussion after the prepared talk(s).

As an example with a small audience, the vice president and general counsel of Consolidated Freightways agreed to speak to a class at Stanford University about the decision to sue the state of Iowa to permit the use of tandem trailers in that state. The students had already read a problem case concerning the matter. The case put them in the position of an editorial writer for the Des Moines Register, the largest newspaper in Iowa, after the case had gone to the U.S. Supreme Court. Robert Stetson, the vice president and general counsel of Consolidated Freightways, described the various decisions that had to be made in connection with the case. He responded frankly to such questions as "Why did you pick Iowa?" "Why didn't any other company in the trucking industry support you?", "If you were doing it again, would you change your approach?", "What did you do about the general issue after winning the Iowa case, and why?". It was very instructive. Stetson developed tremendous interest with his frank comments. I am certain

that his talk contributed more to the students' understanding of decision making, and to their personal skill, than could have been accomplished with a large number of cases lacking an "I was there" speaker.

CONCLUSION

I always find it encouraging to exchange ideas with friends in the business world, government, and academe. This process of exchange can be counted on to generate insight and to create new approaches. For maximum benefit, we need to shape our questions and comments carefully because they structure the responses we will obtain. For this reason, my coverage in this paper has been broad and at the same time specific. If the remarks I have made stimulate further ideas among you, my goal has been accomplished.