



THE ROYAL BANK OF CANADA

MONTHLY LETTER

HEAD OFFICE: MONTREAL JULY 1953

MAKING WORK BETTER AND EASIER

THESE are days when North American people are likely to indulge in the complacent thought of their abundance of material resources, their intelligent workers, their versatile production equipment, and their leadership of the world in making great quantities of all sorts of things from pins to electronic calculators. All this, and the ease of living too, can be mightily enhanced by applying an equally high quality of efficiency.

Anything that is said here is not intended as criticism of the past. We tend to think disparagingly of preceding periods in history: even, in such fast-moving days, to deprecate last month's or last year's attainments. But that is futile and sometimes unfair, because what was done a hundred years ago was excellent under the flickering lights of the time, and what we did in 1952 measured up to the knowledge and skill we then had.

We are looking forward to getting better products with less effort, in less time, with greater safety, and at lower cost, counting upon our continually increasing knowledge to show us the way.

It would be foolish to set up efficient production as a remedy for all human problems and woes. To make work-people and jobs standard would rob life of its diversity, take away its beauty, and infringe upon its freedom—and it would not bring about perfect mechanical efficiency.

To standardize or not, to simplify work or not, to have time and motion studies or not—these are not the alternatives given us. The picture is not all black and white: it has the indefinable shadings of a Doré engraving or of a halftone screen such as is used in reproducing photographs in newspapers and books.

The person who approaches the matter with an open mind, drawing no hard-and-fast lines between "right" and "wrong", is likely to find that some standardization, some simplification and some study will increase productivity and at the same time benefit the employees, the supervisors, the executive, the company the customers and the stockholders.

The problem, essentially, is to get everyone into the habit of looking for better ways of doing things.

What do we Want?

There are some people, of course, who believe that instead of extending our wants and then striving to satisfy them we should reduce our needs and be content. This is an ancient idea. Plato the philosopher held that a reasonable man would moderate his wants.

Most people in the western world wish to live as richly as they possibly can, and when they observe the continually increasing quantity and variety of commodities their work produces, they see no reason why they should not go ahead and do so.

A measure of the increase in productivity in Canada is provided by government statistics. From 1926 our production in manufacturing increased from \$3,101 million to \$16,271 million in 1951, and the number of workers from 559,000 to 1,248,000. Figures that are easier to grasp are those showing the production per worker: 1926, \$5,545; 1946, \$7,594; 1951, \$13,043. At the same time, our standard of living has risen, and the social status of all sorts of people has been raised a notch or two.

Not everyone is yet contented and free from worry, but the general effect has been, where the industrial revolution made itself effective, to give workers more of good than of evil.

The mechanical revolution eliminated the human being as a drudge. It provided tools to which the operator transferred his skill, thus producing more goods with less expenditure of human energy. Only 35 years ago when a man left his home on Monday morning he had a 58-hour work week ahead of him; today, the average work week is 40 hours—and the missing 18 hours have been transferred to the man himself.

But with all this improvement we do not yet produce enough so that all can be cared for in the best way possible according to modern standards. People collectively cannot buy twice as much goods as before

unless they produce twice as much goods. That production can be brought about by co-ordination of men, management and machines.

Standardization

The result of diligent effort by men, wise planning by management, and efficient running of machines, is mass production of things people want.

It may be said that the great value of standardization to both producer and user is that it relegates the problems that have been already solved to their proper place, namely, to the field of routine, thus leaving our critical and constructive faculties free for problems that are still unsolved.

When the housewife can telephone for a tin of so-and-so's something, knowing that that brand is a standard; when the executive can order an engine or a machine, knowing that it will mesh with his other machinery; when the accountant can turn with confidence to the side-by-side comparison of his findings with those of other accountants in other firms, knowing that they are working to identical standards: then we see standardization as an indispensable ally of modern living.

Judging by nature we may be sure that if there is a fault in standardization it lies rather in the application than in fundamental principles. It is not wise, for example, as has been pointed out so often in our Monthly Letters dealing with conservation, to aim at an increase in our immediate material production if this can be had only by the sacrifice of greater ultimate values.

Looking at the matter from another viewpoint, let us consider standards and standardization in relation to performance: if a machine can do what it is supposed to do in competition with other machines isn't it satisfactory, whatever it may look like alongside another more streamlined model? After all, as was said facetiously, "the length of a man's legs does not have to be standardized. It is necessary only that they reach the ground."

Simplification

We humans have an instinct or an urge to do things the easiest way. In some remote age our ancestors likely were unrefined enough to call it plain laziness, but today we refer to it as "increased production efficiency." Simplification has an important role in catering to our natural inclination, because it affects not only the character of the product of our hands but the way in which we apply the skill of our hands.

When we use our talent, resources, skill and time in the best possible way then we may say that our task has been simplified. To simplify is to organize common sense to find better and easier ways of doing a job without waste of time, energy and materials.

Allan H. Mogensen, Director of Work Simplification Conferences at Lake Placid, recommends five steps toward making a job simpler: (1) Select the job to be improved; (2) Break down the job in detail—

make a flow process chart; (3) Question the job, and then each detail of the job; (4) Develop the new method; (5) Apply the new method.

Vital to success is step (3). A questioning attitude toward the job will reveal opportunities for improvement, whereas the all-so-common belief "things are going along all right so why meddle" will bring only a falling-off, or at least a lack of advancement and consequent stagnation, in production.

This is definitely top-management's responsibility, but top management should go right down the line to the machine operator in search of ideas for improvement. Any executive who has under him people who are doing a job that gives trouble by causing bottlenecks, or consumes the time of "expeditors" who must chase around after it, or requires numerous forms, reports and tracing memos—that executive might well give his personal attention to remedial measures.

What should he seek to do? He needs to find out how to eliminate useless handling, how to combine processes, how to change the sequence of operations, how to simplify procedures, so that the job "marches" from order form to delivery sheet.

The real programme of work simplification is getting everyone into the act. Make it everyone's programme, says Mr. Mogensen, and you'll find that you'll get the response you need and the results you want.

The Executive

Who is to organize all this? An army must have its chief and its consulting aids as well as men in its ranks. There must be cog-wheels as well as fly-wheels on a machine.

The organizer and chief in business is the executive. He is the man who sees visions and knows how to make them come true in concrete: he is the man who observes clearly and turns his observations into fact.

It is fatal to any plan for plant efficiency if it is based upon the idea that only the man at the machine needs to be improved. The executive must be on his toes continually for his own improvement, to keep his mind alert and open, to improve his job, and to work from there on down.

Today's executive requires technical knowledge about his business, but much more than that he needs planning and organizing ability, the ability to win his staff to his way of thinking, skill in conveying his ideas, power of leadership to inspire team work, and a long view of his job and his business.

In applying these qualities toward making work easier and better, the executive needs to follow sound principles and to avoid expedients which, while serving for the time being, store up trouble for the future. He needs patience, because it may take months or years for his new methods to seep down to machine level and become routine. He will make allowances for

efforts, though they fail, and give praise for successes, however little. He will have learned the art of conceding lesser points in order to gain greater.

The Supervisor

The supervisor, the man on the floor-level of the workers, needs qualities that are much the same. He must have sympathy, imagination, interest, eagerness, and a sense of justice. To take the executive's plan, suggest improvement based upon his day-to-day contact with workers and machines, and put it into effective use, is primarily the responsibility of the supervisor.

Both executive and supervisor should have, pre-eminently, judgment. Having laid a plan on the line, they need to know what variable to alter as the experiment proceeds. Technical knowledge and intellectual skill make judgment easier, but do not replace the seemingly intuitive wit to stand up for the right thing, to make the right changes, and to decide how far to go.

Executives need the ability to control without restricting.

Delegation of responsibility is an important management function. It should be done in such a way that the duty and authority of every subordinate is clearly understood by him and by those who work with him.

Delegation doesn't consist in calling in department heads and telling them: "This is what I want done; this is the way to do it." It means, rather, inviting them to confer, and asking them: "Is this the best thing to do? is this the best way to do it?" and then saying: "Now go and get it done."

The old-fashioned executive is always overworked and he is borne down by the weight of responsibility he insists on carrying. The modern executive and supervisor spend a lot of their time doing things no one else can do, and thinking about the development of their business. Only a minor fraction of their time is taken up by directing and checking up on their subordinates.

In doing their jobs well, management people recognize the value and need of adequate helpers. They know that the best practice depends on such a vast range of experience and knowledge that no one man can master it all. No ship's captain has a pilot's license for all harbours.

Efficiency

Here are two definitions of "efficiency".

Efficiency is the expenditure of a given amount of energy so wisely directed that a task is completed in the least possible space and after the least possible lapse of time.

The efficiency of an engine is the ratio of the total useful work done by the engine to the total heat energy of the fuel consumed.

The first is from volume one of the Modern Business Library of the Alexander Hamilton Institute; the second was given in an address by Lewis S. Beattie, Superintendent of Secondary Schools in the Province of Ontario.

Either definition is a good working guide for executives seeking to work better and easier.

There are many efficiency principles, but none stands alone. Each supports and strengthens all the others; each is supported and strengthened by the rest. They take note of the fact that to eliminate loss is just as much of an efficiency measure as to increase gain. They recognize that a balance must be kept so that customers get a good product, workers have job satisfaction, and investors receive attractive returns.

Carrying the definitions of efficiency into the realm of people, we find that our task is to discover the conditions under which a worker is most likely to attain his full self-realization and—as a result—reach the highest degree of efficiency in achievement, with consequent benefit to his firm.

An aid toward this ideal is the making of routine tasks as habitual and automatic as possible, thus leaving the thinking part of us unfettered for enjoyment and improvement. Some self-training will increase efficiency vastly. For example, there are many executives who have found their whole day made easier by tackling their most unpleasant or most difficult task first, and disposing of it. Other have learned to change direction frequently, moving from one area of their responsibility to another. Still others have no particular order of business, but do make it a rule to work steadily and relax periodically.

Ability to concentrate is a great help. It is developed by getting down to work at once, without the wasteful "warming up" period some temperamental people profess to believe is necessary. Tackling one job at a time, devoting to it whatever time is necessary, is the acme of concentration.

Planning

Organization designed to make one's own work or one's firm's work better and easier is composed of several factors, among them being: analysis, planning, consulting, convincing, instructing, reviewing, and revising.

First of all there must be an objective. If a man doesn't know to what port he is steering, no wind is favourable to him and it doesn't make much difference how hard he pulls on the oars.

What the objective shall be is a matter for decision after analysis. Where are the weak spots in your organization? As a first breakdown it might be well to list all areas of possible trouble: purchasing, scheduling, machining, recording, selling, relations with the staff and with the public, and so on.

Then take each of these and break it down into segments. For example, consider the purchase of raw materials (whether for a giant factory or for a small

household) in this way: are we getting the best value in price, quality, dependable supply, nearness of source? Then take each of these and divide it further: is the price right in view of competitive conditions; is it enhanced by some requirement of ours which might be eliminated without harming our product; could we use a substitute, or part substitute, without lowering our finished-product quality? The nature of the questions to be asked will depend upon the kind of business that is being analysed, but some sort of effective questioning by a searching and competent and open mind is necessary.

The executive or the supervisor or the manager who carries out such an analysis, even in the seemingly most efficient plant, will uncover bottlenecks, red tape, unnecessary paper work, waste of time through crooked-line progress of material, and loss of energy due to unneeded activity.

Having made the analysis, the inquisitive executive will wish to ask of every detail: what is actually being done; is it being done in the right place by the right person at the right stage of manufacture—or how can it be improved? W. R. Clark, of Simpson-Sears Ltd., would have executives pursue the questioning train even further. In an article in *Business Management* of April he urges that the person seeking improvement in organization or performance should ask: "Why is this so?" and continue asking "Why?" until he is sure that he has a satisfactory answer.

Having reached this point it is time to work out a better method than the one in force, and this is done, after consultation with all who might help in the change or who will be affected by it, by eliminating, rearranging, combining, simplifying, standardizing.

Work simplification, as developed by Mr. Mogensen and taught to top business managers at Lake Placid, is simply a means of getting everyone in your company to think about better methods and to suggest workable ideas for improvement. The best suggestions invariably come from the people doing the job, once they have been given the incentive and taught the habit.

The story of a successful plant should be not merely a story of mass production, but an example of enthusiastic creative teamwork. That spirit is engendered and fostered when workers learn what is going on and why, what is the trouble, who is off the beam, and what can be done about it.

Communication of Ideas

This demands adequate communication of ideas throughout the organization. Channels up, down and across the board from machine-tender to president need to be kept open.

Executives who tried the consultative method in conjunction with communication of ideas after long years of authoritarian management were surprised by what they found out. Few employees realized that problems existed—and how could they be expected to, if they were not told? Few knew of the benefit they

would share by making their jobs easier. Many did not know their jobs, or the significance of their jobs, in any great detail.

A humorous example given by a steel corporation executive was quoted in *Office Executive*, the official publication of NOMA, the National Office Management Association: "In one of our plants a few years ago," he said, "an alert head of one of our office departments heard a lady typist say, 'For years I have been writing these reports about the daily, weekly, monthly and yearly ingot production. What in the world is an ingot?'"

Simple language is needed, and definite content. Anyone in charge of a department should be qualified to issue suggestions, instructions, and requests in such simple language that they cannot be misunderstood.

The object may be to describe some discovery, to convey some idea, to stir up interest, to invite participation, to incite to action, or to persuade: the rule is the same. Abstractions and argument are equally unsuited to communication of ideas in business: much more useful is the capacity to divine the essential interest and responsibilities of co-workers and weld them to the interests of the firm, and then impart the thought in terms that will be understood.

The End Result

It is essential, in trying to make work better and easier, to keep direction. The central part in rail-roading is the locomotive. The one essential for a locomotive is to stay on the track.

The business man, too, needs a track. He has to have a philosophy, a code of values, a sense of direction, that are in keeping with his personality, his business and his environment.

Where is he going? He must be going somewhere. This age does not lend itself to having anyone say of anything material: "That settles that!" New criteria are set up every day: of efficiency, of social worth, of financial success, of working with people.

What difficulties are in the way? Good management will set out to determine the circumstances with which it is or will be or may be confronted, and then establish a plan or a technique for meeting those conditions.

What is the reward? The man, whether worker or executive, who is alert to the facts of his immediate personal situation, aware of his immediate business responsibilities, and who foresees the possibilities the future holds for him and his business, has worthwhile reward in store.

The promise of our way of life to such a man is that his work, well done at this stage, shall become more creative at the next, until it becomes the mother of work still more wonderful than itself. There is no "end" to betterment of work, and yet every step forward confers satisfaction, not only ease of a physical sort but happiness that only intellectual and imaginative living have to give.