

AP4CTE AP Seminar: Building a Dynamic Workforce

Research Strategies for Innovating and Problem-solving Across Career Paths

Module 2

My Life and Work

Henry Ford

Selections from the Introduction

The welfare of the country is squarely up to us as individuals. That is where it should be and that is where it is safest. Governments can promise something for nothing but they cannot deliver. They can juggle the currencies as they did in Europe (and as bankers the world over do, as long as they can get the benefit of the juggling) with a patter of solemn nonsense. But it is work and work alone that can continue to deliver the goods—and that, down in his heart, is what every man knows.

There is little chance of an intelligent people, such as ours, ruining the fundamental processes of economic life. Most men know they cannot get something for nothing. Most men feel—even if they do not know—that money is not wealth. The ordinary theories which promise everything to everybody, and demand nothing from anybody, are promptly denied by the instincts of the ordinary man, even when he does not find reasons against them. He *knows* they are wrong. That is enough. The present order, always clumsy, often stupid, and in many ways imperfect, has this advantage over any other—it works.

Doubtless our order will merge by degrees into another, and the new one will also work—but not so much by reason of what it is as by reason of what men will bring into it. The reason why Bolshevism did not work, and cannot work, is not economic. It does not matter whether industry is privately managed or socially controlled; it does not matter whether you call the workers' share "wages" or "dividends"; it does not matter whether you regimentalize the people as to food, clothing, and shelter, or whether you allow them to eat, dress, and live as they like. Those are mere matters of detail. The incapacity of the Bolshevist leaders is indicated by the fuss they made over such details. Bolshevism failed because it was both unnatural and immoral. Our system stands. Is it wrong? Of course it is wrong, at a thousand points! Is it clumsy? Of course it is clumsy. By all right and reason it ought to break down. But it does not—because it is instinct with certain economic and moral fundamentals.

The economic fundamental is labour. Labour is the human element which makes the fruitful seasons of the earth useful to men. It is men's labour that makes the harvest what it is. That is the economic fundamental: every one of us is working with material which we did not and could not create, but which was presented to us by Nature.

The moral fundamental is man's right in his labour. This is variously stated. It is sometimes called "the right of property." It is sometimes masked in the command, "Thou shalt not steal." It is the other man's right in his property that makes stealing a crime. When a man has earned his bread, he has a right to that bread. If another steals it, he does more than steal bread; he invades a sacred human right. If we cannot produce we cannot have—but some say if we produce it is only for the capitalists. Capitalists who become such because they provide better means of production are of the foundation of society. They have really nothing of their own. They merely manage property for the benefit of others. Capitalists who become such through trading in money are a temporarily necessary evil. They may not be evil at all if their money goes to production. If their money goes to complicating distribution—totally raising barriers between the producer and the consumer—then they are evil capitalists and they will pass away when money is better adjusted to work; and money will become better adjusted to work when it

AP4CTE AP Seminar: Building a Dynamic Workforce

Research Strategies for Innovating and Problem-solving Across Career Paths

Module 2

is fully realized that through work and work alone may health, wealth, and happiness inevitably be secured.

There is no reason why a man who is willing to work should not be able to work and to receive the full value of his work. There is equally no reason why a man who can but will not work should not received the full value of his services to the community. He should most certainly be permitted to take away from the community an equivalent of what he contributes to it. If he contributes nothing he should take away nothing. He should have the freedom of starvation. We are not getting anywhere when we insist that every man ought to have more than he deserves to have—just because some do get more than they deserve to have.

There can be no greater absurdity and no greater disservice to humanity in general than to insist that all men are equal. Most certainly all men are not equal, and any democratic conception which strives to make men equal is only an effort to block progress. Men cannot be of equal service. The men of larger ability are less numerous than the men of smaller ability; it is possible for a mass of the smaller men to pull the larger ones down—but in so doing they pull themselves down. It is the larger men who give the leadership to the community and enable the smaller men to live with less effort.

...

The producer depends for his prosperity upon serving the people. He may get by for a while serving himself, but if he does, it will be purely accidental, and when the people wake up to the fact that they are not being served, the end of that producer is in sight. During the boom period the larger effort of production was to serve itself and hence, the moment the people woke up, many producers went to smash. They said that they had entered into a “period of depression.” Really they had not. They were simply trying to pit nonsense against sense which is something that cannot successfully be done. Being greedy for money is the surest way not to get it, but when one serves for the sake of service—for the satisfaction of doing that which one believes to be right—then money abundantly takes care of itself.

Money comes naturally as the result of service. And it is absolutely necessary to have money. But we do not want to forget that the end of money is not ease but the opportunity to perform more service. In my mind nothing is more abhorrent than a life of ease. None of us has any right to ease. There is no pace in civilization for the idler. Any scheme looking to abolishing money is only making affairs more complex, for we must have a measure. That our present system of money is a satisfactory basis for exchange is a matter of grave doubt. That is a question which I shall talk of in a subsequent chapter. The gist of my objection to the present monetary system is that it tends to become a thing of itself and to block instead of facilitate production.

My effort is in the direction of simplicity. People have so little and it costs so much to buy even the barest necessities (let alone that share of the luxuries to which I think everyone is entitled) because nearly everything that we make is much more complex than it needs to be. Our clothing, our food, our household furnishings—all could be much simpler than they now are and at the same time be better looking. Things in past ages were made in certain ways and makers since ten have just followed.

...

AP4CTE AP Seminar: Building a Dynamic Workforce

Research Strategies for Innovating and Problem-solving Across Career Paths

Module 2

Chapter V: Getting into Production

...

It is self-evident that a majority of the people in the world are not mentally—even if they are physically—capable of making a good living. That is, they are not capable of furnishing with their own hands a sufficient quantity of the goods which this world needs to be able to exchange their unaided product for the goods which they need. I have heard it said, in fact I believe it is quite a current thought, that we have taken skill out of work. We have not. We have put in skill. We have put a higher skill into planning, management, and tool building, and the results of that skill are enjoyed by the man who is not skilled. This I shall later enlarge on.

We have to recognize the unevenness in human mental equipments. If every job in our place required skill the place would never have existed. Sufficiently skilled men to the number needed could not have been trained in a hundred years. A million men working by hand could not even approximate our present daily output. No one could manage a million men. But more important than that, the product of the unaided hands of those million men could not be sold at a price in consonance with buying power. And even if it were possible to imagine such an aggregation and imagine its management and correlation, just think of the area that it would have to occupy! How many of the men would be engaged, not in producing, but in merely carrying from place to place what the other men had produced? I cannot see how under such conditions the men could possibly be paid more than ten or twenty cents a day—for of course it is not the employer who pays wages and it is the management that arranges the production so that the product may pay the wages.

...

A Ford care contains about five thousand parts—that is counting screws, nuts, and all. Some of the parts are fairly bulky and others are almost the size of watch parts. In our first assembling we simply started to put a car together at a spot on the floor and workmen brought to it the parts as they were needed in exactly the same way that one builds a house. When we started to make parts it was natural to create a single department of the factory to make that part, but usually one workman performed all of the operations necessary on a small part. The rapid press of production made it necessary to devise plans of production that would avoid having the workers falling over one another. The undirected worker spends more of his time walking about for materials and tools than he does in working; he gets small pay because pedestrianism is not a highly paid line.

The first step forward in assembly came when we began taking the work to the men instead of the men to the work. We now have two general principles in all operations—that a man shall never have to take more than one step, if possibly it can be avoided, and that no man need ever stoop over.

The principles of assembly are these:

- 1) Place the tools and the men in the sequence of the operation so that each component part shall travel the least possible distance while in the process of finishing.
- 2) Use work slides or some other form of carrier so that when a workman completes his operation, he drops the part always in the same place—which place must always be the most convenient place to his hand—and if possible have gravity carry the part to the next workman for his operation.
- 3) Use sliding assembling lines by which the parts to be assembled are delivered at convenient distances.

AP4CTE AP Seminar: Building a Dynamic Workforce

Research Strategies for Innovating and Problem-solving Across Career Paths

Module 2

The net result of the application of these principles is the reduction of the necessity for thought on the part of the worker and the reduction of his movements to a minimum. He does as nearly as possible only one thing with only one movement. The assembling of the chassis is, from the point of view of the non-mechanical mind, our most interesting and perhaps best known operation, and at one time it was an exceedingly important operation. We now ship out the parts for assembly at the point of distribution.

...

Chapter VI: Machines and Men

...

Now a business, in my way of thinking, is not a machine. It is a collection of people who are brought together to do work and not to write letters to one another. It is not necessary for any one department to know what any other department is doing. If a man is doing his work he will not have time to take up any other work. It is the business of those who plan the entire work to see that all of the departments are working properly toward the same end. It is not necessary to have meetings to establish good feeling between individuals or departments. It is not necessary for people to love each other in order to work together. Too much good fellowship may indeed be a very bad thing, for it may lead to one man trying to cover up the faults of another. That is bad for both men.

When we are at work we ought to be at work. When we are at play we ought to be at play. There is no use trying to mix the two. The sole object ought to be to get the work done and to get paid for it. When the work is done, then the play can come, but not before. And so the Ford factories and enterprises have no organization, no specific duties attaching to any position, no line of succession or of authority, very few titles, and no conferences. We have only the clerical help that is absolutely required; we have no elaborate records of any kind, and consequently no red tape.

We make the individual responsibility complete. The workman is absolutely responsible for his work. The straw boss is responsible for the workmen under him. The foreman is responsible for his group. The department head is responsible for the department. The general superintendent is responsible for the whole factory. Every man has to know what is going on in his sphere. I say "general superintendent." There is no such formal title. One man is in charge of the factory and has been for years. He has two men with him, who, without in any way having their duties defined, have taken particular sections of the work to themselves. With them are about half a dozen other men in the nature of assistants, but without specific duties. They have all made jobs for themselves—but there are no limits to their jobs. They just work in where they best fit. One man chases stock and shortages. Another has grabbed inspection, and so on.

This may seem haphazard, but it is not. A group of men, wholly intent upon getting work done, have no difficulty in seeing that the work is done. They do not get into trouble about the limits of authority, because they are not thinking of titles. If they had offices and all that, they would shortly be giving up their time to office work and to wondering why did they not have a better office than some other fellow.

Because there are no titles and no limits of authority, there is no question of red tape or going over a man's head. Any workman can go to anybody, and so established has become this custom, that a foreman does not get sore if a workman goes over him and directly to the head of

AP4CTE AP Seminar: Building a Dynamic Workforce

Research Strategies for Innovating and Problem-solving Across Career Paths

Module 2

the factory. The workman rarely every does so, because a foreman knows as well as he knows his own name that if he has been unjust it will be very quickly found out, and he shall no longer be a foreman. One of the things that we will not tolerate is injustice of any kind. The moment a man starts to swell with authority he is discovered, and he goes out, or goes back to a machine. A large amount of labour unrest comes from the unjust exercise of authority by those in subordinate positions, and I am afraid that in far too many manufacturing institutions it is really not possible for a workman to get a square deal.

...

Everything can always be done better than it is being done.

That pressing always to do work better and faster solves nearly every factory problem. A department gets its standing on its rate of production. The rate of production and the cost of production are distinct elements. The foremen and superintendent would only be wasting time were they to keep a check on the costs in their departments. There are certain costs—such as the rate of wages, the overhead, the price of materials, and the like, which they could not in any way control, so they do not bother about them. What they can control is the rate of production in their own departments. The rating of a department is gained by dividing the number of parts produced by the number of hands working. Every foreman checks his own department daily—he carries the figures always with him. The superintendent has a tabulation of all the scores; if there is something wrong in a department the output score shows it at once, the superintendent makes inquiries and the foreman looks alive. A considerable part of the incentive to better methods is directly traceable to this simple rule-of-thumb method of rating production. The foreman need not be a cost accountant—he is no better a foreman for being one. His charges are the machines and the human beings in his department. When they are working at their best he has performed his service. The rate of his production is his guide. There is no reason for him to scatter his energies over collateral subjects.

This rating system simply forces a foreman to forget personalities—to forget everything other than the work in hand. If he should select the people he likes instead of the people who can best do the work, his department record will quickly show up that fact.

There is no difficulty in picking out men. They pick themselves out because—although one hears a great deal about the lack of opportunity for advancement—the average workman is more interested in a steady job than he is in advancement. Scarcely more than five per cent, of those who work for wages, while they have the desire to receive more money, have also the willingness to accept the additional responsibility and the additional work which goes with the higher places. Only about twenty-five per cent are even willing to be straw bosses, and most of them take that position because it carries with it more pay than working on a machine. Men of a more mechanical turn of mind, but with no desire for responsibility go into the tool-making departments where they receive considerably more pay than in production proper. But the vast majority of men want to stay put. They want to be led. They want to have everything done for them and to have no responsibility. Therefore, in spite of the great mass of men, the difficulty is not to discover men to advance, but men who are willing to be advanced.

Henry Ford is arguably one of the most well-known entrepreneurs in American History. Famous for his economic model for car production, Ford changed the modern industrial concept of factory work and productivity, efficiency, and affordability. His autobiography details his thoughts and justifications for this model.