

10-1960

## Work Measurement as an Administrative and Managerial Tool

Jack P. Campbell

Follow this and additional works at: <https://egrove.olemiss.edu/wcpa>



Part of the [Accounting Commons](#), and the [Women's Studies Commons](#)

---

### Recommended Citation

Campbell, Jack P. (1960) "Work Measurement as an Administrative and Managerial Tool," *Woman C.P.A.*: Vol. 22 : Iss. 6 , Article 2.

Available at: <https://egrove.olemiss.edu/wcpa/vol22/iss6/2>

This Article is brought to you for free and open access by the Archival Digital Accounting Collection at eGrove. It has been accepted for inclusion in Woman C.P.A. by an authorized editor of eGrove. For more information, please contact [egrove@olemiss.edu](mailto:egrove@olemiss.edu).

# Work Measurement as an Administrative and Managerial Tool

By JACK P. CAMPBELL, Management Analyst  
Veterans Administration, Houston, Texas

The subject "Work Measurement as an Administrative and Managerial Tool" may have a rather formidable sound. Unfortunately, the problem of semantics seems to plague us throughout business today. Every profession and every phase of business seems to require its own language. In this respect management is no exception. Those of us engaged in management make it difficult for others to understand us because we add to or subtract from the normal understanding of words and terms, and acquire a completely new meaning which is applicable to our work alone. The term, "work measurement," seems to fall in this category. Actually, there is little to be puzzled about in this term. In reality, there has been, from time immemorial, some type of measurement of work. In its simplest definition, work measurement is the process of measuring work, and the recording of some accomplishment. However, when we speak of a work measurement system we are adding a major part to this term.

Before getting to the system itself, let us attempt to further define work measurement. Before we can have a measurement of work, we must have agreed upon what our work is; we must take the work to be accomplished and segregate it into definable parts. In the language of work measurement this is called the development of end products. Because of its key importance to the overall subject, let us leave this subject and return to it later.

Secondly, work measurement must have as an integral part some type of standard. Simply put, standards are the yardsticks to tell how much work should be done; how well it should be done, and within certain limitations, how long it should take to do it. Therefore, in this term, we have our work segregated into definable parts called end products, and yardsticks called standards which give quantitative, qualitative and time measurements.

Now let us add the word "system" to our definition. A system, of course, is a recurring operation—something that has a beginning and which has measurable points along which it can be controlled. Therefore, to make work measurement into a system, it is necessary to have a series of reports or other media for conveying information which tells how much work was done; how well it was done; how long it took, and how these accomplishments

compare to the standards which have been established. In other words, a work measurement system is a method of establishing an equitable relationship between the volume of work performed, the quality of the work performed, and the manpower utilized in completing that performance within a given period of time.

Any single part of this definition is meaningless by itself. For example, the development of standards has little purpose except as a part of a work measurement system. To know what can or should be done without knowing what is being accomplished certainly is an empty achievement. To know what is being done without the means of judging whether or not it is satisfactory, both as to quality and time, offers no incentive for betterment, no opportunity for management control, and no opportunity to detect situations requiring action. In order to provide a useful system for appraising and controlling operating performance, there must be a partnership between clearly defined end products, soundly developed standards, and a reporting system designed to relay information about the work in the same manner that the standards are related to the work. When all of these elements are present, the result is a work measurement system.

In discussing work measurement I should like to stress the word, "administrative." We have agreed that there has always been some type of measurement of work, but it has been concerned primarily with industrial application. "Industrial" means production line assembly work; work which is performed on a product by an industrial operative worker, which is repetitive in nature, easily measured, and for which standards can be readily established. Such names as Frederick W. Taylor, the Galbraiths of "Cheaper by the Dozen" fame, and many others, come to mind in connection with the scientific development of work measurement as it has applied to industrial work.

However, strange though it may be, very little progress has been made in applying any type of measurement to the administrative work of industry, government, and other organizations. Today we are all aware that the problem of administrative expense, and overhead or indirect labor is a tremendous one. Management throughout industry, in analyzing

its business costs, is becoming more perturbed each day with its inability to control these ever increasing administrative expenses. There seems to be some "Holier Than Thou" attitude concerning the so-called "white collar" occupations that administrative work is too complex, too different, and not susceptible to measurement against a standard. To be sure, there have been some exceptions, particularly in the insurance and banking industries. However, one finds that where measurement has been installed in administrative work, it stops at the lowest clerical level, usually the typist or the clerk. If one looks at this problem with a jaundiced eye, it is easy to suspect that management is not particularly interested in applying measurement tools to administrative work because that might mean many levels of management itself could be measured.

The general type of measurement as it is used today normally is tied to standards which have been established for the individual worker and his production. In this manner, the employees who are involved in an operation, but who do not do production-type work, continue to float in an unmeasurable void. For example, many offices measure against an established standard the number of letters typed by typists, the number of cylinders transcribed by transcription operators, etc. But how many of these same offices have a standard against which they measure the production of the real responsibilities of the office, be it issuing insurance policies, processing liability claims, or any other type of basic responsibility? When one measures only the letters or cylinders, how does one determine how many supervisors are necessary; how many messengers; how many supply clerks; how much of this undefinable indirect labor is required? Would it not be more logical to establish end products defined on the primary objectives of a department, a laboratory, a section or some other segment, and then establish standards which would include the total time required to produce such end products? Obviously, it would be necessary, in establishing such standards, to include the number of letters, records, and every other single activity that goes into making up the production of the prime objectives. In other words, if we are going to measure, if we are going to establish standards, we should be all inclusive; we should cover all the expenses and all the labor involved in any given production.

I hesitate to say that it is an easy task to establish comprehensive end products and standards against which to measure, particularly in the field of administrative work. There is a certain amount of complexity to the work, and further it is an unfortunate fact that

many of our professions and semi-professions feel that this type of proposal is degrading in some manner, that it detracts from the individual judgment which they claim is attached to each part of their work. No, this task is not easy, but if we are to begin to control the ever increasing burden of administrative costs, we must begin to apply some of these basic tools of management.

Certainly there are few experts in this field, and I do not profess to be one of them. However, there are some who, because of experience and exposure, are a little more familiar with this particular tool. My familiarity with the subject arises from the fact that the Veterans Administration installed a complete system of administrative work measurement throughout its entire agency. It covers every phase of the work of this agency with the exception of medicine and surgery.

To show the magnitude of the job, a word should be said about the Veterans Administration as an organization. This agency is part of the Executive Branch of the Government operating directly under the President. It is concerned with the administration of laws providing benefits to veterans, their dependents, and the beneficiaries of deceased veterans. When one considers that there are today approximately twenty-two million living veterans and an average of three dependents to each veteran, one can readily see that the clientele, customers if you will, of this business is a tremendous total of over eighty million people. The Veterans Administration is allocated over four billion dollars each year. Only the Department of Defense and the Mutual Aid Program cost more money. Therefore, it is highly important that this operation be efficient and effective. This agency accomplishes its far-flung responsibilities and objectives through three basic departments; Medicine and Surgery, Insurance, and Veterans Benefits. The first two have single responsibilities; namely, medicine and surgery, and insurance. The Department of Veterans Benefits has all other benefits as its responsibility. The work measurement system we are discussing was installed in the third department, that of Veterans Benefits. This department is organized with a central office in Washington, D.C., and 70 regional offices. The department has approximately twenty thousand employees who perform every conceivable phase of administrative work from the most simple clerical operation to complex, legal and adjudicative tasks.

As might well be imagined, the problem of segregating the work accomplished in an organization of this size and scope, and the establishing of fair and equitable standards for

such work, has been a tremendous task. Further, it has been complicated by the fact that the standards must be met by employees of every level of education, of every level of knowledge and experience, and must be applicable in every part of this United States not to mention the Philippines and Puerto Rico. Tremendous though the job was, it has been done, and the entire work of the Department is now a measurable factor.

There is no restriction at any level in this system, but rather an attempt is made to place every part of the organization in a position whereby measurements can be obtained; measurements which are clear-cut and from which such factors as cost, quality and performance effectiveness, can be obtained. It is now possible through the work-measurement reporting media to compare the effectiveness and cost of one regional office against another. Each function in each regional office throughout the agency has, at the end of each reporting period a quantitative, qualitative and cost record. It is now possible to know the percentage distribution of available man hours. From this can be obtained the time spent on supervision, on clerical overhead, on leave, and many other factors. Further, it is possible to know the actual productive time which is obtainable from available time. In other words, out of each 8-hour day, how much actual productive time results? Since this system is all inclusive, it covers the work of such professional people as lawyers, construction appraisers, claim adjudicators, and many others. Yes, it also includes the work of accountants.

Let me be the first to hasten to say that the development of this system, its installation, and its operation, has been anything but a simple task. Mistakes have been and will continue to be made; inequities have arisen; changes have been required, and management analysts have aged at a rate that would put Darwin's theory to shame!

As an aside, the problems, especially during installation, were myriad and, in many instances, quite amusing. We spent a great deal of time validating our standards. In doing so, we actually studied minutely what certain employees were doing with their time, minute for minute. I had an instance where one of our older employees indignantly and emphatically told me that it was none of my business when he went to the men's room, how many times he went, and how long he stayed! We found a few employees who favored the system simply because they were humanly jealous and curious about the production of other employees—they were quite willing to volunteer information about what someone else wasn't doing. And, inevitably, we found a few using

the "heavy pencil." You know what a "heavy pencil" is—one used by an honest man, but the figures it writes just happen to be slightly erroneous. You can readily see that reporting accuracy is essential to a system of this type. We made continual checks, and still do, to insure this accuracy. When we questioned a report, you can imagine the hurt "Who Me" look, the injured innocence that resulted. I am sure you are familiar with this type of look in your profession, particularly during the income tax period! But with all of these difficulties, the system has worked and it increased in effectiveness with each passing period.

Need I enumerate the advantages of work measurement? The mere fact that we are able to define costs, and this includes all costs, from the manager of a regional office to the janitor, speaks for itself. In the field of budgeting, work measurement eliminates much of the guess work. The only guess will be based on the volume of future work. How many people it will take; how much space, and how much material—all these are self-evident from the system. Therefore, the greatest part of budget work, the so-called crystal ball gazing, is a thing of the past. In a government agency this is highly important. It would appear to be just as important to any phase of industry.

Let us for just a moment take a look at a few of the more common objections which are raised to work measurement in any form.

1. The general concept exists among business executives that a system of this type will bring about a leveling of performance of employees. From the standpoint of the experience in our agency, this is a fallacious objection. Conversely, the program has raised production and stimulated initiative. Unfortunately, executives too often will place upon mere managerial tools the blame for loss of initiative and dropping of production rather than face the bitter fact that they themselves have failed. Remember we are talking about the use of a managerial tool, not something that replaces good supervision.

2. Objection often voiced is that work measurement or the use of standards will increase personnel turn-over inasmuch as employees refuse, in the opinion of many, to be measured or to work against some theoretical standard. This objection has not proven valid in our experience. Rather, it has been found that once employees are properly indoctrinated and convinced that the standards are fair, sensible, and obtainable, they do not object to being measured.

3. Another objection that has been raised is that this is a system of speed-up; that is, a system of forcing employees to increase production at the expense of quality. Investigation

reveals that there is a certain truth to this objection. However, again the system is blamed rather than those responsible for the system. It is foolhardy in any organization, in any industry to increase quantitative production at the expense of quality. This is not only costly but it denotes foolishness on the part of supervisors and management as a whole.

4. There is the objection that a system of this type will become too important. It must be re-emphasized that work measurement—the use of standards, and the use of comparisons—is merely a tool which helps management accomplish its responsibilities. The program, once it is installed, must take its normal place among all other tools. It must not be allowed to become too important in its application.

5. The objection has been raised that a system of this type is not flexible enough and cannot change rapidly with shifting workloads and changing objectives. This objection also has certain points of validity. There is no question but that it is difficult to change standards, to add or subtract from standards. However, to be successful, the system must be kept flexible. This is the only way it can remain equitable and valuable.

In summary then, a work measurement system can be devised and utilized so as to measure the prime objectives in an organization. Setting standards for operative employees alone gives only a very partial answer. Further, it is just as logical to apply a system of work measurement to all administrative

operations as it is to apply it to purely industrial production phases. Finally, successful design, installation, and operation of a program of this type are based on the successful accomplishments of all other managerial responsibilities. They relieve management of nothing. In fact they make the successful performance of other managerial functions even more important. Let me emphasize that this is not an easy tool to design and apply, but when proper objectives are established, when proper attitudes are fostered and when sufficient desire and effort exist, a system of work measurement can prove of tremendous value to any organization.

#### Pearl Scherer, Member of Council AICPA

To the roster of those women who can claim significant firsts in the advancement of women in the field of accounting, add the name of Pearl A. Scherer. As president of the Alaska Society of Certified Public Accountants, Mrs. Scherer was the first woman to serve as a member of the Council of the American Institute of Certified Public Accountants, which met last September.

Mrs. Scherer is a charter member of the Alaska Society of CPA's, which was formed in 1954 with fifteen members. Currently there are some forty members in this group from our 49th State, and it is interesting to note that all are also members of AICPA.

---

**STATEMENT REQUIRED BY THE ACT OF AUGUST 24, 1912, AS AMENDED BY THE ACTS OF MARCH 3, 1933, AND JULY 2, 1946 (Title 39, United States Code, Section 233), SHOWING THE OWNERSHIP, MANAGEMENT, AND CIRCULATION OF**

THE WOMAN C.P.A., published bi-monthly—Dec.-Feb.-Apr.-June-Aug. and October at Chicago, Illinois, for October 1, 1960.

1. The names and addresses of the publisher, editor, managing editor, and business managers are: Publisher, American Woman's Society of Certified Public Accountants and American Society of Women Accountants, 327 South LaSalle Street, Chicago 4, Illinois. (Both incorporated not for profit.) Editor: Marguerite Reimers, 418 Loretta Place, Seattle 2, Wash. Business manager: Beatrice C. Langley, 327 S. LaSalle St., Chicago, Illinois.
2. The owner is: American Woman's Society of Certified Public Accountants, 327 S. LaSalle Street, Chicago 4, Ill. American Society of Women Accountants, 327 S. LaSalle Street, Chicago 4, Ill. (Both incorporated not for profit).
3. The known bondholders, mortgagees, and other security holders owning or holding 1 percent or more of total amount of bonds, mortgages, or other securities are: None.
4. Paragraphs 2 and 3 include, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting; also the statements in the two paragraphs show the affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner.
5. The average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the twelve months preceding the date shown above was: (This information is required by the act of June 11, 1960, to be included in all statements regardless of frequency of issue.) 3,800.

MARGUERITE REIMERS, Editor

Sworn to and subscribed before me this 9th day of September, 1960.

[SEAL]

Mabel E. Chute  
(My commission expires October 23, 1960)