

Harvard Business Review

May-June 1956

The Manager's Span of Control

- What is it?
- Why can't you stretch it?
- How does it affect your efficiency?

By Lyndall F. Urwick

There is no question that in the last quarter century the work load of the executive has greatly increased. The top management man has new functions that he cannot possibly delegate completely; take, for instance, his new responsibilities in public relations and industrial relations. Businesses have grown in size, in complexity, and in geographical coverage; the duties and problems of the top executive have increased commensurately.

For this reason, one of the biggest tasks confronting the manager is that of reducing his overload of less important daily duties, thus giving himself time for reflection as well as for the personal contacts with his organization which are the mainspring of leadership -- the "personal touch" which makes the executive a business *leader*.

It is in connection with this organizational problem that the "span of control" concept has received so much attention. As the first writer to apply this principle formally to business, I propose here to re-examine the concept, to analyze the main criticisms that have been levied against it, and to demonstrate

why and how a restricted span of control can improve executive effectiveness, reduce pressure, inefficiency and incompetence, produce better employee cooperation, and build morale and a sense of unity within the organization.

The Principle

As far as I know, the first person to direct public attention to the principle of span of control was a soldier -- the late General Sir Ian Hamilton. His statement (which, of course, reflects his military association) is the basis for subsequent interpretations of the concept oriented to business:

"The average human brain finds its effective scope in handling from three to six other brains. If a man divides the whole of his work into two branches and delegates his responsibility, freely and properly, to two experienced heads of branches he will not have enough to do. The occasions when they would refer to him would be too few to keep him fully occupied. If he delegates to three heads he will be kept fairly busy whilst six heads of branches will give most bosses a ten hours' day. Those data are the results of centuries of the experiences of soldiers, which are

greater, where organization is in question, than those of politicians, business men or any other class of men . . .

“Of all the ways of waste there is none so vicious as that of your clever politician trying to run a business concern without having any notion of self-organization. One of them who took over munitions¹ for a time had so little idea of organizing his own energy that he nearly died of overwork *through holding up the work of others*; i.e., by delegating responsibility coupled with *direct access to himself* to seventeen sub-chiefs! Now it will be understood why a Battalion has four companies (and not seventeen); why a Brigade has three or four battalions (and not seventeen).

“Organizations are run by rule then; a rule whereby from three to six ‘hands’ are shepherded by one ‘head,’ each ‘head’ in turn being member of a superior group of from three to six who are being wheeled into line one by one . . .

“As to whether the groups are three, four, five or six it is useful to bear in mind a by-law: the smaller the responsibility of the group member, the larger may be the number of the group and vice versa. That is to say, one N.C.O. in charge of three private soldiers would be too idle; one lieutenant general in charge of six divisional generals would be too busy. The nearer we approach the supreme head of the whole organization, the more we ought to work towards groups of six.”²

I came across General Hamilton’s organizational rule in the early 1920’s and called it to the attention of friends interested in management problems. The principle made its initial and rather informal appearance in management literature in 1922. H. P. Kendall of Boston, addressing a meeting of the Taylor Society, stated:

“At a dinner the other evening, I heard the President of the General Electric Company asked how many people should report directly to the President of a large industrial company. He said that eight or nine were reporting at present, but that it was too many, and he was reorganizing his functions so that only four or five would report directly to himself; and I imagine that four or five is enough. Not that a chief executive should not have contact with others; but that is about as many general functions as should regularly and directly lead up to him.”³

Some eight years later I was walking in Paris with a friend, A. V. Graicunas,⁴ and he said, “Can you come back to my flat for a good talk? You know you’re always stating that the number of subordinates reporting in to an executive should be limited; I think there is mathematical proof of it. I shall want your help in presenting the idea.”

Group Relationships

The result of our discussion was Graicunas’ article “Relationship in Organization,” which appeared originally in the *Bulletin of the International Management Institute* in 1933.⁵

Graicunas’ idea was basically very simple. The superior, in dealing with his subordinates, must keep in mind not only the direct relationships between himself and each subordinate as an individual but also his relationships with different groupings of the subordinates and the cross relationships between all the subordinates. These relationships vary considerably with the size of the subordinate group. While the supervisor’s own direct relationships with individuals increase in proportion to the addition of subordinates, the group and cross relationships increase much more than proportionately. To illustrate:

If A supervises two persons, B and C, he can deal with them individually or as a pair. The behavior of B in the presence of C and of C in the presence of B will differ from their behavior when each is with A alone. Furthermore, what B thinks of C and what C thinks of B constitute two cross relationships which A must keep in mind when delegating work on which B and C must collaborate in A’s absence. In other words, even in this extremely simple unit of organization, with two subordinates, a superior must keep up to six relationships constantly in mind.

Then, when a third subordinate, D, is added, A’s direct relationships with individuals increase by only 1 (A-D), but the various groupings he may have to deal with increase by 7 (A-B-D, A-D-B, A-C-D, A-D-C, A-B-CD, A-C-BD, and A-D-BC), and the various cross relationships he may have to reckon with increase by 4 (B-D, D-B, C-D, D-C), making a total of 18.

A fourth subordinate brings the total up to 44. The situation really gets complex when a fifth subordinate is added -- even granting that many of the relationships will never need explicit attention. The superior again increases his direct relationships by 1 -- representing a 25% gain in

¹ The British Ministry of Munitions in World War I.

² Sir Ian Hamilton, *The Soul & Body of an Army* (London, Edward Arnold & Company, 1921), p. 229.

³ H.P. Kendall, “The Problem of the Chief Executive,” *Bulletin of the Taylor Society*, Vol. 7, No. 2, April 1922.

⁴ Believed dead. He was in Lithuania, his native country, when it was occupied by the Russians.

⁵ Reprinted in Luther Gulick and Lyndall F. Urwick, editors, *Papers on the Science of Administration* (New York, Institute of Public Administration, 1937), P. 183.

his *power to delegate*. But the number of group and cross relationships he may have to deal with has gone up from 44 to 100 -- more than a 100% increase in the burden of *supervision and coordination*.

If a sixth man is added, the group and cross relationships jump to about 200. A seventh subordinate puts the figure at between 450 and 500. And so on.

Graicunas, had he expanded on his principle, probably would have agreed that no executive should have to deal directly with more than a half-dozen men. Actually, because of the psychological concept known as "the span of attention," which limits the number of items that the human brain can keep within its grasp simultaneously, it seems doubtful if any individual can keep track of and understand the large number of group relationships involved with more than five subordinates.

Graicunas did qualify his observations to some degree. He noted that since it is the cross relationships between subordinates which render the task of supervision more complex, this difficulty will not occur to the same degree where the work is of such a nature as to require few working contacts between the subordinates concerned. This is the same premise which General Hamilton had stated earlier in his by-law: "The smaller the responsibility of the group member, the larger may be the group . . ."

In reducing Graicunas' work to a definite statement of principle a few years later, I was careful to include his exception to the rule, and the wording of the concept now stands as:

"No superior can supervise directly the work of more than five or, at the most, six subordinates *whose work interlocks*."⁶ [Italics added.]

Criticism of Concept

The "span of control" is not a rigid rule to be applied woodenly in all situations. But it is a very useful general principle and a valuable diagnostic instrument in cases where organizational weakness exists. However, the concept has met with substantial opposition, encountering objections both on theoretical and on practical grounds.

⁶ Lyndall F. Urwick, *Scientific Principles and Organization* (New York, American Management Association, Institute of Management Series No. 19, 1938), p. 8.

Theoretical Attack

Herbert A. Simon has questioned the validity of the span of control in terms of theoretical soundness. He writes:

" . . . A contradictory proverb of administration can be stated which, though it is not so familiar as the span of control, can be supported by arguments of equal plausibility. The proverb in question is the following:

" 'Administrative efficiency is enhanced by keeping at a minimum the number of organizational levels through which a matter must pass before it is acted on.'

"In many situations the results to which this principle leads are in direct contradiction to the requirements of the span of control."⁷

Mr. Simon finds further fault with the span of control, which inevitably produces, he thinks, excessive red tape. As he sees it, each contact between organization members must be carried upward until a common superior is found, thus involving needless waste of time and energy.

In general, industry is now tending to pay more attention to the inefficiencies of extended levels of organization than it is to those of the span of control. The International Business Machines Corporation, for example, recently removed one entire level of middle management from its organization and increased the span of control of the remaining executives. One organization expert, commenting on this type of action, has said, "You have a place in which good people can grow rather than stagnate when you discard this traditional idea of the span of authority."⁸

The drive to shorten the chain of command, which in effect denies the importance of careful limitations on the span of control, is an attempt to improve communications, as well as to force some authority and responsibility down into the organization structure. Both these objectives are commendable; nevertheless, the limits of the span of control are real and important restrictions. It is clear that a careful balancing of the inefficiencies of levels against those of spans is necessary -- and this is entirely possible, as I shall try to point out later.

⁷ Herbert A. Simon, *Administrative Behavior* (New York, The MacMillan Company, 1947), pp. 26-28.

⁸ Harold Koontz and Cyril O'Donnell, *Principles of Management* (New York, McGraw-Hill Book Company, Inc., 1955), p. 98.

Concern for Democracy

Other people object to the idea of a limited span of authority on the ground that it prohibits democratic participation within the organization. According to Burleigh B. Gardner of Social Research, Inc.:

“There is good reason to believe that the gain in productivity achieved by overspecialization and its twin brother, overcentralization of authority, has been lost in the debilitating and enervating effects they have had on employee morale and willingness to cooperate.”⁹

In current organization practice and experience, there seems to be a general concern with the relative merits of the highly centralized, pyramidal system with a tight span of control and the flat, more decentralized system. At present, there are many in favor of the flat setup. Proponents of this form of organization argue that it makes for a minimum of social and administrative “distance,” and that although the great number of subordinates creates a certain looseness of supervision, this same looseness promotes initiative in a way that no bonus system can match.

In fact, there appears to be a practical dilemma overshadowing management organization -- a dilemma between morale and efficiency. In this connection, psychologist Alex Bavelas and a group at M.I.T. have staged some interesting experiments with different types of communication networks in order to measure effects on performance:

Bavelas arranged one group of five people so that they communicated with each other in a circular pattern -- this would be representative of the flat, democratic organizational structure. He set up another group of five in a hierarchical pattern -- this representing the stricter, chain-of-command organization. Both groups were given the same problem and were instructed to solve it by exchanging messages.

Bavelas found that the group in the circular pattern was very happy -- but not very efficient; and that the hierarchical group got much more efficient results -- but was not very content or satisfied with the manner in which its decisions had been reached. This experiment did seem to prove that morale is very closely tied in with the degree of participation; it is understandable that many managements feel “there is a potential choice to be made. Which is to be emphasized -- morale or efficiency?”¹⁰

⁹ William H. Whyte, Jr., and the Editors of *Fortune*, *Is Anybody Listening?* (New York, Simon and Schuster, 1952), p. 129.

¹⁰ *Ibid.*, p. 134.

Actually, I do not think that efficiency is incompatible with organizational morale. In fact, I feel that one of the strongest arguments for the span of control is that it can, if used intelligently, combine these two vital elements.

Denial of Concept

In addition to the criticisms based on size of organization and lack of democracy, there is the type of criticism which merely states that a given organization is efficient despite apparent infraction of the span of control and that, therefore, the principle is incorrect. For instance, here is a statement describing a wartime administrative situation:

“With three squadrons on the station the C.O. had as many as eleven officers under his immediate control (the total strength being about 2500 men and women). Senior R.A.F. officers handle such concerns efficiently, thus denying the oft-repeated statements of leading businessmen that the span of control of one man should be a maximum of six. The Captain of a large battleship has the same wide span of control and can fight his ship just as well. Either the theory of the limited span of control [Graicunas'] is false, or the businessmen who make such statements would do well to learn from the Navy and the R.A.F.”¹¹

I have found after 20 years' experience as a management consultant, that the span of control is a principle which is very frequently broken in practice at all levels of business. The fact is, however, that neglect of the concept often underlies the severest management difficulties. When the principle is recognized as valid, it can point the way to simple changes in structure in organizations that are suffering from malmanagement. Such changes have, it is true, added to the number of administrative levels in the instances I have observed. But they have also proved most valuable in improving effectiveness and in rescuing individuals from misdirected charges of personal incompetence.

In some such situations, the manager or foreman concerned had simply been overstraining his capacity by trying to deal with too many subordinates directly. Once this was realized, and the stress was reduced by grouping a certain number of subordinates under an appropriate intermediate control, the effect was marked and almost instantaneous. In many such instances the individual who had previously been under

¹¹ T. F. Paterson, *Morale in War and Work* (London, Max Parrish, 1955), p. 23 (note).

criticism proved more than equal to his responsibilities after the change.

Human Failings

There are, of course, some very strong human temptations to ignore this principle of span of control in business:

(1) Business has so far failed to distinguish rank or status from function, and today we attach an exaggerated importance to unofficial symbols of status. To report directly to the chief rather than to some intermediate authority is such a symbol; subordinates feel they can enhance their status by doing this. Here is one reason why the span of control is not widely accepted in business circles.

(2) Businessmen have always been and always will be cost-conscious. There is sometimes pressure on management to avoid making new appointments, however necessary from the standpoint of better organization, because additional personnel will increase the company's overhead cost.

(3) Sometimes there is the higher level manager who cherishes a misleading stereotype of the "efficient executive." He sees his value as a businessman measured by his busyness; he feels that the number of individuals reporting to him directly is an index of his value to the organization. He likes the sense of power and self-importance generated by a queue on his doormat. Personal ambition sometimes finds an outlet in acquiring additional responsibilities, without too nice a regard for organizational refinements. This tendency, usually described as "empire-building," is universal in all forms of human organization.

Of course, the top executive cannot always take all the blame for the confusion. It is hard for him, as a human being, to resist pressure from his subordinates who want to be directly accountable to him, especially when these men are individuals of weight and value to the company. They may be creative men, whose new ideas and fresh departures need the personal attention of the boss if they are to be introduced successfully.

If, in addition to these pressures, the practical validity of the span of control is itself called into question and those who are tempted to ignore it can defend themselves as being more "democratic" and avoiding administrative and social "distance," the moral courage to enforce the principle sufficiently -- and this often requires real moral courage -- will be lacking. Business organization will suffer accordingly.

Utilizing the Concept

At this point, I should like to examine the criticisms of the principle more closely and show how it may and should be applied in organizational situations.

Taking first the apparent dilemma between managerial efficiency and democratic participation, this "practical" objection to the span of control is not really valid. There is no greater stimulant of morale than a collective consciousness of efficiency. There is nothing which rots morale more quickly and more completely than poor communication and indecisiveness -- the feeling that those in authority do not know their own minds. And there is no condition which more quickly produces a sense of indecision among subordinates or more effectively hampers communication than being responsible to a superior who has too wide a span of control.

Needed: A Leader

The choice in managerial practice should not be between the executive who wants to over-centralize - - i.e., the man who cannot delegate properly and therefore demands a tight span of control so that he can pass on every subordinate decision, important or not -- and the executive who is prepared to trust his subordinates and therefore wishes to see little of them. The first type of manager is simply one who does not know how to *lead* and hence tries to *dominate*. The latter type is one who does not realize that leadership calls for as much constant personal contact as circumstances permit.

However much responsibility may be delegated, subordinates like to have fairly frequent opportunities of ensuring that their chief's mind is in step with their own and vice versa. They need a chance to cement confidence between themselves and the boss, even though at such interviews they may not discuss actual administrative detail at all.

The chief with too wide a span of control tends to frustrate this very proper wish to cultivate mutuality; here is where the argument for "democratic participation" falls flat. In a loosely organized business with no strict limits on the executive's span of authority, subordinates will line up in his secretary's office and will be constantly frustrated when they want a word with him. They will feel that he is too absorbed in business to take time to get to know his men and to try to understand and appreciate their problems.

Both the man who cannot delegate and the man who neglects to make a point of meeting frequently with his subordinates have failed in exercising their leadership duties, and consequently confusion and inefficiency are rife. This situation occurs often in organization structures which, in principle, are quite satisfactory and should work well. The trouble can usually be traced to an insufficient appreciation on the part of the chief that leadership has other functions besides administration -- functions of representation, initiation, and interpretation.

Above all, the difficulty is due to an inability to see the business enterprise as a social group -- rather than only an organization with an economic purpose. This in turn is the reason for neglect of one of the major responsibilities of leadership, as expressed by an official regulation of the British Army in World War II: "The first duty of an officer is to care for, that is to know, his men."

Actually, the problem of morale is largely one of giving the business executive time to be a business leader, and this can only be accomplished through cutting down some of the other demands on him.

Misconceptions

Moreover, it is not true that a correct span of control necessarily results in "administrative distance"; that assumption is based on two unfortunately widespread misconceptions:

(1) "That a superior should never have direct contact with individuals at lower levels except through or in the presence of their immediate superior." This is nonsense, and is a clear indication of poor morale within the organization. It shows that the lower-level manager concerned is doubtful of the good sense and loyalty of both his subordinates and the higher executive. The intermediate manager may feel that his own authority is being bypassed by the superior; he has visions of his subordinates using this opportunity to criticize him and advance their own interests with the boss. All this indicates that the lower-level manager is sadly out of touch with his chief -- that there has been no chance for confidence and trust to be established -- and this condition is particularly apt to occur where the top manager's span of control is too wide.

(2) "That 'the official channels' should be the only avenues of communication." Official channels should, of course, be the only avenue of *official* communication which goes "on the record." But the individual who thinks they are the *only* means of communication has little notion of business as a social activity. He is probably preoccupied with the economic purpose of the undertaking and its formal structure; he doesn't recognize the importance of

the unofficial and informal relationships which occur at all levels of any organized activity and which are usually far more important to morale and effectiveness than the official relationships. In any organization where morale is high, most of the important work is done by verbal contracts between men who trust each other, talk the same language, and share the same doctrine. The "record" comes later.

There must, of course, be official records, but the recording procedure is a secondary one. It is the tendency to regard it as all-important which makes so many of our large businesses excessively bureaucratic, and it is because some chiefs elevate paper work to a position of significance which it should not occupy that they are overworked. Many managers spend too large a proportion of their time mulling over documents and too small a proportion cultivating good individual relations with their subordinates. The resulting lack of confidence between people forces them into an elaborate machinery of committees which further restricts their time for personal contacts.

Problem of Levels

Once businessmen have overcome their misconceptions about the span of control, the need for limiting the number of levels in an organization can be appraised in a clearer light.

Herbert Simon has said that the principle of minimizing organizational levels directly contradicts the requirements of the span of control. But the cure for "administrative distance" is not to extend the executive's span of authority beyond what he can reasonably handle in order to reduce the number of levels. Rather, the method is to ensure (a) that at each level the executive has a pattern of organization which enables him to devote ample time to getting to know and understand his immediate subordinates, and (b) that he regards maintaining such personal contacts as one of his principle duties -- in other words, that he is a leader before he is an administrator.

Subject to these two limitations it is, of course, desirable to restrict the number of levels as much as possible. Any level which is not vital is an organizational complication which should be eliminated. But in determining the number of levels which are necessary, prime regard should be paid to the span of control, not vice versa. Forcing managers to exceed their feasible span of control merely in order to reduce the number of levels will *increase* administra-

tive and social distance. In effect, the executives will no longer have time to meet with their subordinates and find out what is going on in the organization.

One good way of reducing the difficulties connected with structural divisions is to encourage lower-level personnel in developing cross relationships and communication to the maximum. There are many matters which never need come to the attention of a top executive, many problems which could be solved quickly and satisfactorily at the subordinate level if the habit of communication and cooperation is accepted and promoted. For example:

An employee at the third level of responsibility in Department A (let us call him A_3) who has business with an employee at the same level of responsibility in Department B (B_3) should not have to climb wearily up the hierarchy to the head of Department A, across to the head of Department B, and down that chain of command until he finally arrives at his destination -- his opposite number in Department B's third level. He should go to him direct.

"Excessive red tape" is easily avoided if cross-communication is fostered within an organization. Of course if either A_3 or B_3 thinks the matter is sufficiently important to interest an immediate superior -- A_2 or B_2 -- the superior should be informed and/or consulted. But action should not have to wait on an extended communication process justified only by the fact that the two department heads distrust each other or have no confidence in their subordinates.

Apparent Exception

At this point I might emphasize again the qualification to Graicunas' span of control principle -- that a superior's authority should extend over no more than six subordinates *whose work interlocks*.

In cases where there does not happen to be any interlocking of the work of subordinate units, there is most certainly less need for extensive subdivisions or levels of control. This can be demonstrated by a look at the organizational setup of Sears, Roebuck and Co. -- ostensibly a "flat" arrangement.

The chart of the organization of Sears' buying department (the company keeps such charts for the information of visitors) shows close to 100 buyers reporting directly to one manager. However, when the organization is examined more closely, we find that:

Each of these buyers purchases a clearly defined range of articles; there is no reason why the men should encroach on each others' bailiwicks.

Where the buyers have common problems or use common services (transport facilities, for example), the manager of the buying department has the aid of four assistants, each of whom specializes in one of these problems or services.

Thus, since there are five people dividing between them the work of supervising the buyers, the real span of control is nearer 20 than 100. And, since the buyers are each responsible for a clearly defined unit of goods, their areas of responsibility only touch occasionally and then just at the circumference. Provided that the buyers have been properly selected and trained, there is not too much for the supervisor to do except make sure that predetermined standards are being maintained and to deal with casualties.

Similar situations characterize most stores and departments within one store. There is no reason why 20 stores situated in different towns and operating on a more or less standardized pattern should not be controlled effectively by a single chief. These are isolated units with few working contacts with each other. Their departments sell different kinds of goods. Once appropriate personnel have been found and trained, there is little occasion for the type of interdepartmental or interbranch connections and conflicts which would occur in a manufacturing business set up along functional lines. This latter type of organization does demand authoritative supervision if failures in coordination are to be avoided.

I know of a case in Great Britain where the director of a parent company was controlling quite successfully some 30 or more subsidiary companies. Considerable autonomy was allowed to the boards of the subsidiary companies -- which were all in different countries. The top manager in this case had only to satisfy himself that each subsidiary was developing "according to plan"; he had none of the daily stresses found in the unified manufacturing concern organized on a functional basis.

The General Staff

The one criticism of the span of control which I have not yet touched on concerns the military experiences which seem to deny the need for any limitations on the top officer's scope of command. T.F. Paterson stated that an officer commanding an air force station in World War II had eleven immediate subordinates and that the captain commanding a battleship had just as many.

I could not agree more with Mr. Paterson that "businessmen . . . would do well to learn from the Navy and the R.A.F." But what businessmen should learn from the military services is how to organize so that the chief executive of a functionally arranged business can handle directly a larger number of specialized subordinates, all of whom have the right of direct access to him, without overstraining his span of control. The answer to this problem lies in the correct use of *general*, as opposed to *special*, staff officers -- a form of organization which business has, as yet, rarely understood or applied successfully. This form of relationship, though not necessarily with the title "general staff" is found in an air force station such as T.F. Paterson has described and also in the British Navy.

"Commanding Machine"

During 1917-1918 I had the opportunity to observe at firsthand the organization of a British infantry division. There were 18 persons directly responsible to our Divisional Commander -- a dozen more than we have said the ordinary business executive can effectively handle. And yet the Commander seldom spent more than a couple of hours a day in his office, and maintained very close contact with all his subordinates. How had this apparently successful neglect of the principle of span of control been made to work?

First of all, a clear distinction was drawn between the *nominal* right of direct access to the Commander and the *frequent* use of that right. Normally, heads of specialized branches, and indeed all subordinates, were expected to take up all *routine* business through the appropriate general staff officer in the first instance. Only if they regarded the matter as one of outstanding importance which justified them in approaching the Commander -- and only *after* they had failed to secure a satisfactory settlement with one of his general staff officers -- would the Commander accept a direct discussion. However, the subordinates' *right* to require direct access to the top officer was clearly recognized, and this safeguarded their independent responsibility in the exercise of their functions as well as their professional or organizational "status."

The Commander had thus only six immediate subordinates who usually approached him directly -- the three Brigadiers General in charge of infantry brigades, the Brigadier General of Artillery, and his two principal general staff officers. The latter were

able to relieve the Commander of all the routine work of coordinating line and specialist activities. They did virtually all the paper work, drafting operational and routine orders, conducting correspondence, etc. However, the responsibility for every word they wrote was the Commander's; they had no personal authority.

The Commander utilized much of the time saved him from office routine in visiting personally all 18 of his subordinates. The object of his visits was to give them the feeling that he was concerned with their progress. He did not encourage them to discuss routine business at these meetings. Indeed, if a subordinate did raise a routine question, the Commander almost invariably replied:

"Well, you know, I keep out of administrative detail. I'll have to look into it, but I'll see you tomorrow."

Then he would put the paper into his pocket and, when he got back to headquarters, would ask the general staff officer concerned for an explanation of the situation. The Commander would see the subordinate the next day and do his best to satisfy him that the matter had been dealt with correctly, and he would keep tabs on the situation to make sure that everything turned out well.

Thus, at one and the same time the Commander protected his general staff officers from resentment and unjust accusations and satisfied all his subordinates that they had constant access to him and that anything which went wrong would be taken care of promptly. The effect of this system was that while the Commander's nominal span of control was 18 persons, his actual span of control -- the number of people with whom he had constant personal contact on *business* matters -- was only 6.

Also, the problem of the multiplication of levels was avoided. The general staff officers did not constitute a separate level between the chief and the chief's immediate subordinates. The whole general staff setup was regarded as an extension of the Commander's personality, a "commanding machine" rather than an individual. Communications took place directly between the subordinate units and the Commander; the fact that a letter might be opened and answered by some general staff officer and that the Commander might never see it had no bearing on this principle or on the way in which the communications channel was regarded by subordinate units. All acts of Headquarters were the Commander's acts and no one else's.

Implications for Business

The principle that a chief may delegate a great deal of the daily business of commanding and coordinating to subordinate officers whose formal communications carry his authority is clearly understood in the combat services. Unfortunately, it is not so commonly appreciated in business circles.

What appears to have happened in business, particularly in the United States, is that, with the growth of industrial specialization, second-line positions in an organization have become increasingly functional or specialist positions. Different functions do have different orientations and interests which sometimes conflict -- take manufacturing and marketing, for example -- and these conflicts of interest have thrown a very much increased burden of coordination on chief executives. This fact is responsible for much of the pressure on the chief and on higher executives to enlarge their spans of control.

Also, the number of specializations which business must use is always growing, and this means that more and more line units want to have direct access to the top manager. If specialized ideas and methods, particular when they are new and untried, do not have the chief's interest and support, they cannot gain the recognition they need for successful entry into the field, and the criticisms of the limited span of control cited in this article are probably, in part, a reflection of this "pressure of specialization."

It seems to me that there is only one possible answer to the dilemma. Business should not weaken on the principle of the span of control in a vain attempt to induce already strained executives to stretch a little farther. Rather, it should re-examine its assumptions about organization, and it should give special attention to the use of general staff officers. As I have pointed out, military experience suggests a solution which, while not denying to the specialist his status and final right of access to the chief, allows the top executive to reduce his effective span of control.

The chief will then have time to consider important problems and proposed improvements. He will have the opportunity to see personally and talk with those subordinates who need his help and his approval. The result should be more "democratic participation," greater efficiency, and substantially improved organizational morale.

Note: This is a retyped facsimile of the original article. It has been carefully proofed to ensure its match with that original. It is impossible, however, to perfectly replicate the original typeface and line spacing, so there are some differences that result from these factors. However, insofar as the text is concerned, the match is perfect.