

Unit- I: Chapter 3 – C Span of Control

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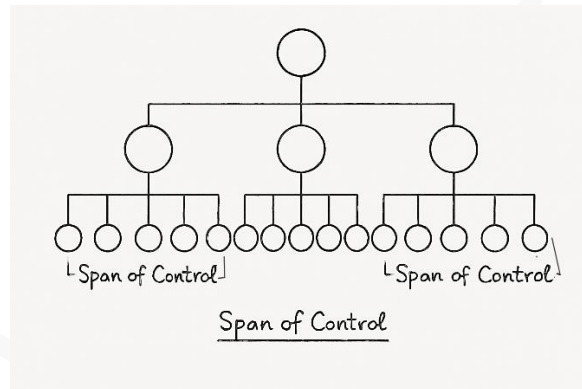
Objectives

Objectives of this chapter are to make the students aware of:

- The concept of Span of Control;
- Types of Span of Control; and
- Factors Affecting the Span of Control.

Introduction

The span of control is the number of subordinates a superior can effectively direct and supervise. It is also known as Span of Management, Span of Supervision or Span of Attention. According to Dimock, the Span of Control is the number and range of direct, habitual communication between the chief executive of an enterprise and his principal fellow officers. The span of control at the higher levels of the hierarchy is 'less' and as one goes down to the lower levels the span 'increases'. The concept, related to the Span of Attention has also been studied and described in detail by V. A Graicunas. Peter Drucker refers to this principle as the span of managerial responsibility.



Definition

Following are some definitions of Span of Control given by social scientists:

1. **Peterson and Plowman:** Span of control is the maximum number of subordinates which can be positioned under the jurisdiction of one executive immediately superior to them.
2. **Haimann and Scott:** Span of control is the number of subordinates who can be effectively supervised and managed by a superior.
3. **Spiegel:** Span of Control means the number of people directly reporting to an authority.
4. **Longenecker:** Span of control is the number of immediate subordinates reporting to a given manager.
5. **Lois Allen:** Span of control refers to the number of people that a manager can effectively supervise.

Span of Control is thus the range or the number of immediate subordinates a supervisor can

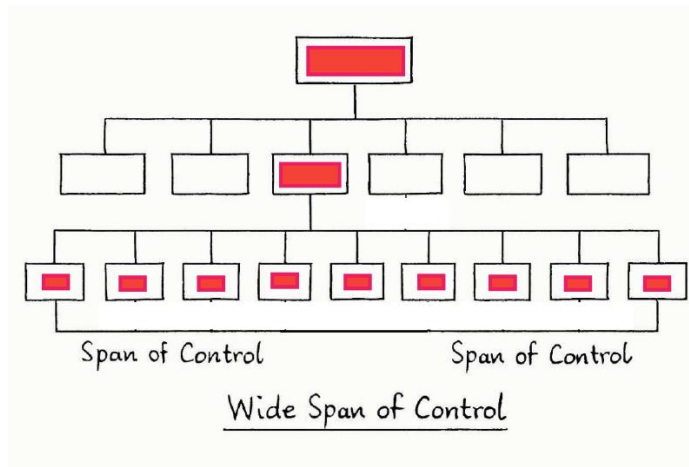
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effectively control and supervise. It is dependent on the position a person holds in an organisation due to limited power of attention, time and energy. If the Span of Control is more then, it can have an impact on the effective utilization of the human resources in that organisation.

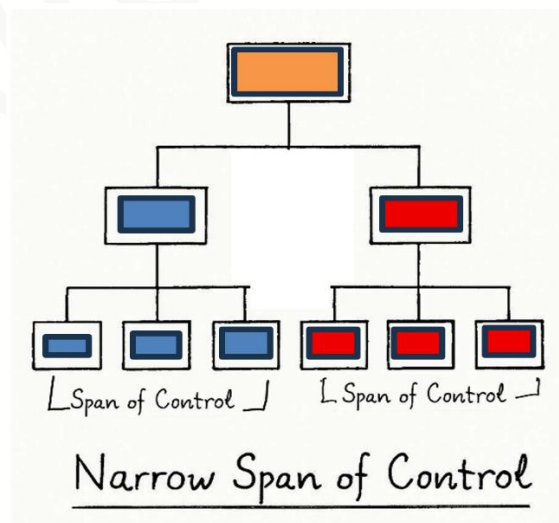
Types of Span of Control

Span of Control is of two types – Wide Span of Control and Narrow Span of Control.

1. **Wide Span of Control:** The diagram shows an organization having a wider span of control. The wider span of control means that a superior has to supervise and control a relatively large number of subordinates. The hierarchy becomes a flat hierarchy due to a wider span of control. Due to the wider span, it may not be possible to effectively supervise all the subordinates manually.



2. **Narrow Span of Control:** The diagram shows an organisation having a narrower span of control. The wider span of control means that a superior has to supervise and control a relatively large number of subordinates. The hierarchy, in this case, is a tall hierarchy due to a lesser span of control. Due to a narrower span, the number of levels in the hierarchy is more and it may result in delays in the decision-making when following the proper channel.



The distinction between Wider and Narrower Span of Control

Basis	Wider Span of Control	Narrower Span of Control
Number of Subordinates	Relatively more number of Subordinates	Relatively less number of Subordinates
Hierarchy	Flat Hierarchy	Tall Hierarchy
Activities	Possible if routine activities are undertaken	Preferred if activities undergo frequent changes
Competence of Employees	Is possible if all employees are competent and require less supervision	Is not possible if employees are not similarly competent
Communication	Timely due to lesser number of hierarchical levels	Maybe distorted and/or delayed due to more number of hierarchical levels
Coordination	Better Coordination due to the competence of employees and a lesser number of levels	May have problems in coordinating activities due to lack of similar competency and more number of hierarchical levels

Ideal Span of Control

Due to limitations of the human capacity to perform mentally and physically, there are limits to the number of subordinates that can be supervised by a superior. Several scholars have given their views on Span of Control and there is no consensus on the ideal span of control. Let us now look into the views given by scholars.

- Sir Ian Hamilton sets the limit from 3 to 4.
- Haldane and Graham Wallace believe that a supervisor can supervise between 10 to 22 subordinates.
- Urwick felt that at the higher levels the span can be 5-6, while at the lower levels it can go vary from 8 to 12.

There is no agreement on the number of universally applicable limits to the span of control. It differs from country to country; it depends on the type of work, and the type of organisations and has been discussed in the latter part of the chapter. Mackenzie and others too, stated that there is no universally applicable optimal span of control, and several factors influence it. However, the scholars feel that a small span will be better for effective control; they advocated for a Span of Control ranging from 3 to 10.

Span of Control given by V.A. Graicunas

In 1933, V.A. Graicunas, a French Management consultant, described the concept of 'Span of Attention', which is similar to the principle of Span of Control. He based his concept on the hypothesis that a supervisor can attend to only a limited number of things at the same time. According to him, if the number of subordinates increases arithmetically, the number of relationships increases almost geometrically. He identified three types of superior-subordinate relationships, namely Direct Single Relationship, Direct Group Relationship and Cross Relationships.

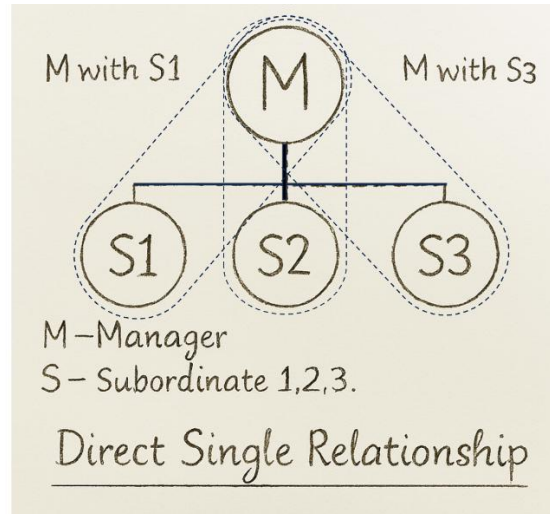
1. Direct Single Relationship: It is the relationship between the superior and his subordinate as shown

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in the figure –

- Manager (M) with Subordinate (S₁);
- Manager (M) with Subordinate (S₂); and
- Manager (M) with Subordinate (S₃).

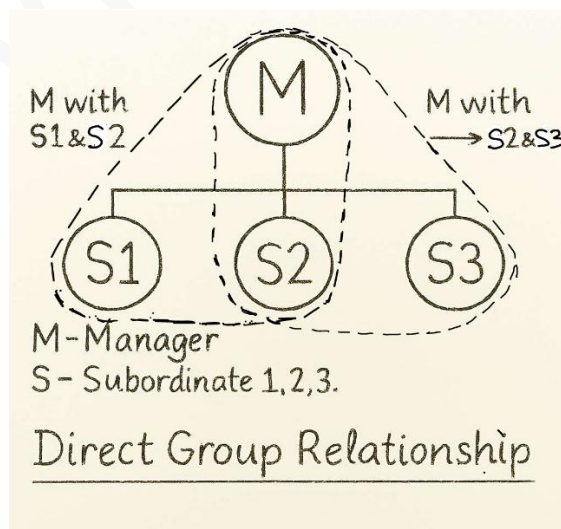
So there are a total of three direct single relationships in the stated figure.



2. Direct Group Relationship: It is the relationship between the superior and his workgroups in all possible combinations as shown in the figure –

- Manager (M) with Subordinate (S₁ & S₂);
- Manager (M) with Subordinate (S₁ & S₃); and
- Manager (M) with Subordinate (S₂ & S₃) and so on

The formula for this is $n(2^n/2-1)$. If the number of subordinates is 3 then $3(2^3/2-1) = 9$. There are a total of 9 relationships.

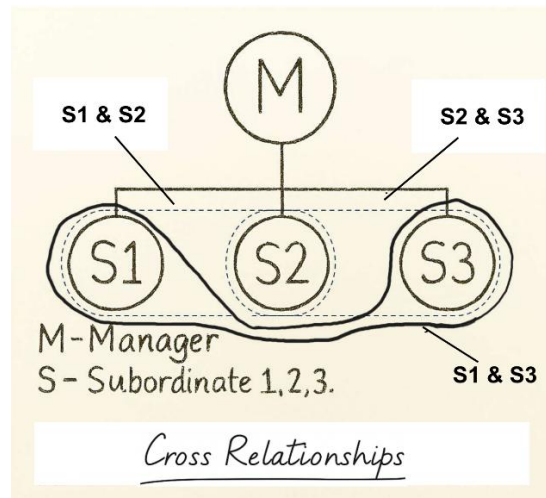


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3. Cross Relationships: It is a relationship that arises amongst the subordinates of a common superior, as shown in the figure –

- Subordinate S₁ with S₂;
- Subordinate S₂ with S₃;
- Subordinate S₁ with S₃; and
- So on

The formula for this is $n(n-1)$. If the number of subordinates is 3, then $3(3-1) = 6$.



Total Number of Interactions

The total number of interactions in an organisation having one superior and three subordinates will be 18. On the addition of one more subordinate, the total number of interactions will increase to 44. If the number of subordinates is 5, then the total number of interactions is 100, and for 6 it is 222. The mathematical formula of Graicunas to calculate the total number of relationships is as follows:

$$r = n(2^{n-1} + n - 1)$$

r- total number of relationships.

n- no. of subordinates reporting directly to the superior.

Graicunas opined that a superior can effectively supervise 6 subordinates or 222 relationships. At the senior positions, the number of subordinates should be 5 or 6, while at the junior level, the number of subordinates can be 20.

Span of Control in the Age of ICTs

Span of Control in the current times, i.e. the age of Information and Communication Technologies and higher use of computers and other electronic devices, has increased manifold. There is a lot of automation in inventory control, record keeping, accounting and reporting software, communication and financial aspects. This enables the superior to supervise a comparatively large number of subordinates.

Factors affecting the Span of Control

1. Nature of work: If the nature of work is routine i.e. once standard practices are formulated and the nature of work is not going to change frequently, then the span of control can be more/wide. But if work is not of a routine nature and it changes frequently, then several decisions will have to be taken at short

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intervals, the span of control will be less/narrow. If the nature of work is complex, even then the span will be narrow.

2. Age of the organisation: If an organisation is new, then span is narrow, but if the organisation is old and they have standard operating practices that are firmly installed and stable, then the span of control is wider.
3. Level of management: The higher the level of management, wherein the management has to look after several functions, then the span is narrow. As we come down the hierarchy, the span increases. At the supervisory level, the span is greater. At the top-level span is between 3 to 7 subordinates, and at the supervisory level, depending on the work performed, the span can range from 10 to 20 subordinates.
4. Geographical Dispersion: If the organisation functions from one place, then span can be wider, but if the organisation or its branches are at different geographical locations, then the span of control is narrower.
5. Supervisory Techniques: If there are standard supervisory techniques of planning and programming, then the span of control is wider, but if there are no such techniques, then the span is narrower.
6. Use of ICTs: If an organisation is making use of Information and Communication Technologies, then the span of control is wide. But if most of the work is undertaken manually, then the span is narrower. Moreover, nowadays a lot of work is also undertaken by making use of artificial intelligence; the span in such cases can be very wide.
7. Channels of Communication: Well-identified and demarcated channels of communication can lead to a higher span of control.
8. Competence of the Supervisor: If the superior has the requisite qualifications and training, then the span of control is wide, as he is competent enough to handle more number of subordinates. In case the superior is less competent and new to the job then his span is narrow.
9. Competence of the Subordinates: If the subordinates are competent and can perform the given task without close supervision, then the superior can have wider control. In contrast, if the subordinates are less competent and the superior has to teach them to do the work as well as supervise closely, then the span is narrower; and
10. Delegation of Authority: If both the superior and the subordinates are competent, then the superior can delegate his authority to his subordinates, and his span of control becomes wide. If either is not competent, then less delegation of authority leads to a narrower span. Sometimes the superior doesn't want to delegate authority, resulting in a narrower span and vice versa.

Conclusions

Span of Control, thus, is the number of subordinates who can be effectively supervised by a superior manually. It is dependent on the level of the position within the hierarchy; the higher the position, the smaller the span, and the lower the position larger the span. In current times, the span of control has increased manifold due to technological advancements.

Important Terms/Concepts/Information

1. **Span of Control**: According to Lois Allen, Span of control is the number of people that a manager can effectively supervise.
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Short and Long Questions

Short Answer Type Questions

1. Explain Span of Control.
2. What is the maximum number of subordinates that a superior can manually supervise?
3. Give three factors affecting Span of Control.

Long Question

1. Write a note on Unity of Command.

Suggested Readings

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