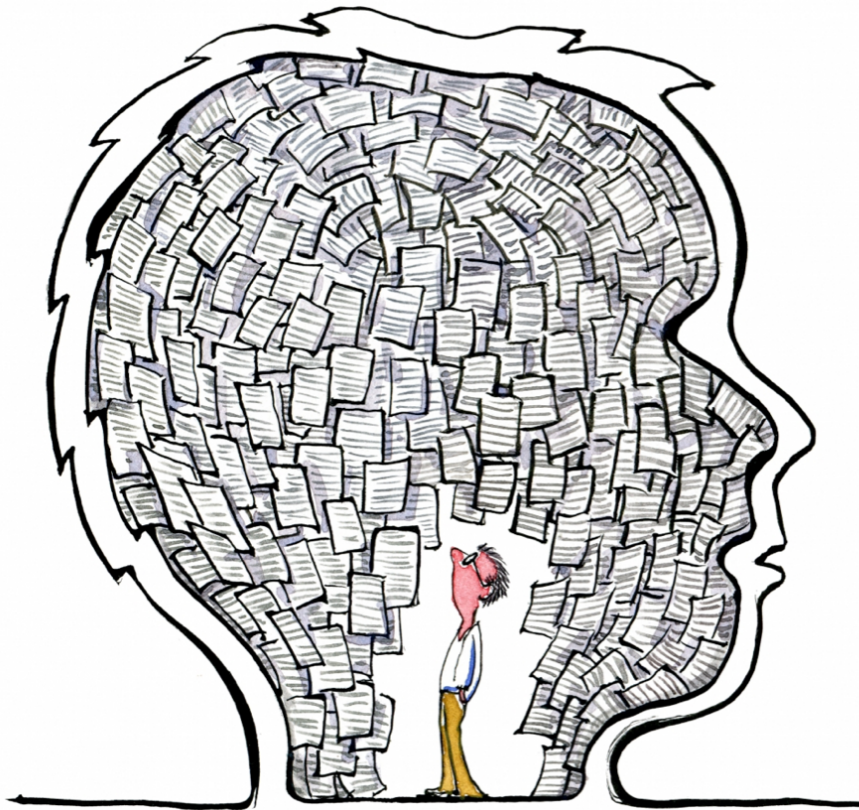


Theories of Work: Origins of the Design and Management of Work



By David Joyce

www.theoriesofwork.com

Copyright © 2013-2018 by David Joyce.

All rights reserved.

This material, or any part thereof, may not be reproduced, or transmitted, in any form or by any means, electronic, mechanical, photo-copying, recording or otherwise, without prior written permission.

— **Chapter Five** —
Administration,
Bureaucracy and Numbers

Design and Management — Concepts —

- Financial Reporting Systems, Continual Financial/ Operational Planning and Measurement.
- Key Performance Indicators, Performance Measures, Functional Revenue and Costs Accounting, Return on Investment, Return on Sales - and Sales to Assets, Return on Equity, Financial Targets Against Operational Targets.
- Standard Financial Ratios
- Modern Cost Accounting Practices; Cost Accounts for Labor, Material and Overhead, Standard Costs, Variance Analysis
- Corporate Budgeting, Budgets for Cash, Income and Capital, Flexible Budgeting, and the Program Budget System
- Market Forecasting, Sales Forecasts and Planning
- In Company Pricing Structures - Same Producer Cannibalization
- Pricing Formulas and Market Based Pricing Systems

Design and Management — Concepts —

- Autonomous Functional Divisions and Inter-Divisional Relations Committees
- Mass Production Coupled With Customer Satisfaction
- Planned Obsolescence; Annual Product Changes
- Management Efficiency; a Reliable, Efficient, Machine-Like Process
- Executive Education Programs, Management Schools
- Coordinated Control and Decentralization
- Management by Numbers, Financial Controls and Finance as a Dominant Function
- Dispersal of Company Ownership and Shareholders
- Classic Organizational Theory; Scientific Management, Bureaucratic Theory, and Administrative theory
- Hierarchical Structure of Power, Clear Lines of Authority and Control
- Rules and Regulations

Design and Management — Concepts —

- Organizational Principles
- Bureaucracy, Bureaucratic Principles, the Role of a Bureaucratic Official
- Administrative Management Principles
- Management Functions; Forecasting and Planning, Organizing, Commanding or Directing, Coordinating, and Controlling
- The Seven Activities of Management - POSDCORB; Planning, Organizing, Staffing, Directing, Coordinating, Reporting and Budgeting
- Short, Medium and Long Range Planning; Annual, Two-Year, Five-Year and Ten-Year Plans.
- Sociological Management and the Informal Organization
- The Executive Function
- Authority and Incentives
- The Acceptance Theory of Management
- Span of Control

THE GREAT AUTOMOBILE MANUFACTURES

We discussed in chapter two how the great railway companies had become the models for good design and management of work, having built themselves on the foundations laid in chapter one.

It was now turn of the great automobile manufactures to become the model for good design and management of work. Their success would propel others around the world to use the same methods in their operations.

At the end of our last chapter we discussed how Henry Ford had built his highly successful enterprise on these foundations, and how his methods had become known the world over as Fordism.

²⁷⁹ www.systemsthinking.co.uk Copyright © Vanguard Consulting Limited

³³ The Puritan Gift: triumph, collapse and revival of an American dream, Kenneth Hopper and William Hopper, I. B. Tauris (April 3, 2007) p.43-44 By permission of Ken Hopper and Will Hopper

³¹ en.wikipedia.org/wiki/DuPont

However, Ford's outstanding success contained the seeds of later difficulties when Ford's great rival General Motors began to exploit the consumers emerging desire for wider choice.²⁷⁹

GM soon swept past Ford as [they] ... revolutionized the young car industry and Ford has never regained the dominance it enjoyed in the infancy of mass production.⁵⁴²

DUPONT

To discuss General Motors however, we need to go a little further back in time, prior to Ford, and meet a company whom we met back in chapter one, E. I. du Pont de Nemours and Company, commonly referred to [today] as DuPont.³³

⁵⁴² The Toyota Phenomenon, by Ernst C. Glauser, THE SWISS DEMING INSTITUTE
December 2006 www.deming.ch/downloads/E_Toyota.pdf

In chapter one we learned that DuPont, was founded in July 1802 as a gunpowder mill by³¹ E.I. du Pont (Éleuthère Irénée du Pont de Nemours) a French immigrant.³³

Du Pont noticed that the industry in North America was lagging behind Europe.³¹

Du Pont brought an expertise in chemistry and gunpowder making, during a time when the quality of American-made gunpowder was very poor.³²

What du Pont introduced [in 1804] to the American explosives industry was quality in manufacture.³³

The company grew quickly, and by the mid 19th century had become the largest supplier of gunpowder to the United States military, supplying half the powder used by the Union Army during the American Civil War.³¹

³¹ en.wikipedia.org/wiki/DuPont

³² en.wikipedia.org/wiki/Éleuthère_Irénée_du_Pont

DuPont continued to expand, moving into the production of dynamite and smokeless powder.

³¹

In 1902, DuPont's president, Eugene du Pont, died, and the surviving partners sold the company to three great-grandsons of the original founder; ³¹ Alfred I. du Pont, T. Coleman du Pont, and Pierre Samuel du Pont.

Pierre, his cousin Coleman and their associates brought the ways of both Carnegie and Taylor to the Du Pont Company, modifying them to meet the special needs of the explosives industry.^{567 568}

They set about buying smaller powder firms.⁵⁶⁶

³³ The Puritan Gift: triumph, collapse and revival of an American dream, Kenneth Hopper and William Hopper, I. B. Tauris (April 3, 2007) p.43-44 By permission of Ken Hopper and Will Hopper

⁵⁶⁷ Chandler Jr., A.D. and Salsbury, S., Pierre S. Du Pont and the Making of the Modern Corporation, BeardBooks, Washington, DC, 1971, p. xxi.

⁵⁶⁸ The Puritan Gift: triumph, collapse and revival of an American dream, Kenneth Hopper and William Hopper, I. B. Tauris (April 3, 2007) pp. 82-84 By permission of Ken Hopper and Will Hopper

⁵⁶⁶ en.wikipedia.org/wiki/Pierre_S._du_Pont

THE FIRST MODERN BUSINESS ENTERPRISE

Pierre would be responsible for completing the conversion of the loose association of businesses patched together by his uncle, General Henry, into the first 'modern business enterprise'⁵⁶⁸

In doing so, they were influenced by scientific management.

In 1896 Taylor began working for Arthur J. Moxham in Johnstown, PA, who was reorganizing the Johnson Company, an electric motor factory ... All kinds of efficiencies were started, using Taylorism and cost-accounting.²⁶³

Moxham later joined with Pierre and Coleman Du Pont to create in 1902 E.I. Du Pont de Nemours conglomerate, and took Taylorism with him, in creating the country's first true corporation.²⁶³

Alfred, Coleman, and Pierre du Pont enjoyed a successful relationship until Coleman became ill leading to Pierre to take a more pivotal role.



⁵⁶⁸ The Puritan Gift: triumph, collapse and revival of an American dream, Kenneth Hopper and William Hopper, I. B. Tauris (April 3, 2007) pp. 82-84 By permission of Ken Hopper and Will Hopper

²⁶³ Taylor Timeline. Author: Bill Barry, Community College of Baltimore County, used with kind permission.

Image: **Thomas Coleman du Pont** circa 1902. {{PD-US}}
www2.dupont.com/Phoenix_Heritage/en_US/1902_b_detail.html
en.wikipedia.org/wiki/File:Thomas_Coleman_du_Pont_1902.jpg

Until 1914, during Coleman du Pont's illness, Pierre du Pont served as treasurer, executive vice-president, and acting president. In 1915, a group headed by Pierre, which included outsiders, bought Coleman's stock.⁵⁶⁶

Alfred was offended and sued Pierre for breach of trust.⁵⁶⁶

The case was settled in Pierre's favor four years later, but his relationship with Alfred suffered greatly, and they did not speak after that.⁵⁶⁶

Pierre served as DuPont's president until 1919⁵⁶⁶ and served on its Board of Directors until 1940.⁵⁶⁶



AUTONOMOUS FUNCTIONAL DIVISIONS

In the previous chapters we have seen the notions of functional separation arise, which became manifest in organisations as autonomous departments; each with their own department head and their own targets.

Pierre Dupont would take this idea one stage further.

Pierre reorganized Dupont into autonomous and largely self-sufficient functional divisions, each headed by its own president. Central control was achieved by creating a powerful executive committee, chaired by himself, which was responsible for group strategy.⁵⁶⁸

An elaborate financial reporting system was brought into being to keep this body informed about what was going on, in cost and revenue terms, throughout the group.⁵⁶⁸

This committee was forbidden to meddle directly in the details of divisional work but that did not mean it was remote from the factory floor; on the contrary, most of its members were, simultaneously, divisional presidents or had been so in the recent past.⁵⁶⁸

The executive committee's outlook and *modus operandi* was therefore quite different from that of a present-day corporate Board composed, mostly, of financially oriented directors who identify themselves with the shareholders rather than other employees ...⁵⁶⁸

Having saved Dupont from implosion, Pierre would go on to save General Motors from extinction ...⁵⁶⁹

⁵⁶⁸ The Puritan Gift: triumph, collapse and revival of an American dream, Kenneth Hopper and William Hopper, I. B. Tauris (April 3, 2007) pp. 82-84 By permission of Ken Hopper and Will Hopper

⁵⁶⁹ *ibid.*, p. 85

GENERAL MOTORS

General Motors was founded on September 16, 1908, in Flint, Michigan, as a holding company for Buick, then controlled by William C. Durant.^{570 572}

GM's co-founder was Charles Stewart Mott, whose carriage company was merged into Buick prior to GM's creation.⁵⁷⁰

Over the years Mott became the largest single stockholder in GM ...⁵⁷⁰

GM acquired Oldsmobile later that year. In 1909, Durant brought in Cadillac, Elmore, Oakland and several others.⁵⁷⁰

Also in 1909, GM acquired the Reliance Motor Truck Company of Owosso, Michigan, and the Rapid Motor Vehicle Company of Pontiac, Michigan, the predecessors of GMC Truck.⁵⁷⁰



Image: **William C Durant**, Courtesy of General Motors Archive, Copyright © General Motors LLC, 300 Renaissance Center, Detroit, Michigan 48265

⁵⁷⁰ en.wikipedia.org/wiki/General_Motors

⁵⁷² "History of General Motors, Company profile". General Motors. Retrieved April 4, 2011.

Durant lost control of GM in 1910 to a bankers' trust, because of the large amount of debt taken on in its acquisitions coupled with a collapse in new vehicle sales.^{570 573}

The next year, Durant started the Chevrolet Motor Car Company and through this he secretly purchased a controlling interest in GM. Durant took back control of the company after one of the most dramatic proxy wars in American business history.⁵⁷⁰

In 1914, Pierre S. du Pont invested in the fledgling automobile industry, buying stock of General Motors.³¹

The following year he was invited to sit on GM's board of directors and would eventually be appointed the company's chairman.³¹

⁵⁷⁰ en.wikipedia.org/wiki/General_Motors

⁵⁷³ history.gmheritagecenter.com/wiki/index.php/1942,_Production_Goes_to_War

³¹ en.wikipedia.org/wiki/DuPont

This was a position he held for over thirteen years, from November 16, 1915, to February 7, 1929.⁵⁷¹

The du Pont interests in General Motors grew until it became roughly equal to that of Mr. Durant and resulted in a sharing of control.⁵⁷¹

Durant reorganized General Motors Company into General Motors Corporation in 1916.⁵⁷⁰

Shortly after, he again lost control, this time for good, after the new vehicle market collapsed.⁵⁷⁰

The DuPont company would assist the struggling automobile company further with a \$25 million purchase of GM stock.³¹

⁵⁷¹ The turning wheel; the story of General Motors through twenty-five years, 1908-1933 (1934), Author: Pound, Arthur, 1884-1966, Publisher: Garden City, N.Y., Doubleday, Doran & Company, Inc. pp. 157-161
archive.org/details/turningwheelstoropounrich

In particular the du Pont connection gave reassurance to the financial community that General Motors would continue ...⁵⁷¹

The Depression of 1920–21 was an extremely sharp deflationary recession in the United States.⁶⁸³

It was biting hard.

In 1920, the automobile manufacturer was teetering on the point of collapse.⁵⁶⁹

DU PONT SAVES THE COMPANY

Using the vast profits Dupont had generated in World War I, Pierre du Pont recapitalized and decentralized it, becoming president in 1920 ...⁵⁶⁹

⁵⁷¹ The turning wheel; the story of General Motors through twenty-five years, 1908–1933 (1934), Author: Pound, Arthur, 1884–1966, Publisher: Garden City, N.Y., Doubleday, Doran & Company, Inc. pp. 157–161
archive.org/details/turningwheelstoroopounrich

⁵⁷⁴ *ibid.*, pp. 192–200

⁶⁸³ en.wikipedia.org/wiki/Depression_of_1920-21

This saved the company. As Arthur Pound wrote in “The turning wheel; the story of General Motors through twenty-five years” (1934):

“... a receivership might have been asked for except for the high degree of confidence in which the new management was held by the banking fraternity.

*Mr. du Pont began his presidency by telling his associates that the Corporation was now operating under the most delicate and honorable relationship known to industry, ‘a receivership of our own,’ and in this spirit the Corporation carried on.”*⁵⁷⁴

With the presidency of Mr. du Pont, General Motors history entered a new phase.⁵⁷⁴

⁵⁶⁹ The Puritan Gift: triumph, collapse and revival of an American dream, Kenneth Hopper and William Hopper, I. B. Tauris (April 3, 2007) p. 85 By permission of Ken Hopper and Will Hopper

At General Motors, as at Du Pont, he was responsible for bringing together a managerial group, and this team became one of the most successful in American industrial history.⁵⁶⁷

By January 1921, all but two of the senior positions at General Motors had been filled by former Dupont employees.⁵⁶⁹

He visited plants and talked to groups of employees and associations of citizens.⁵⁷⁴

Meantime, the Corporation undertook a comprehensive study of its inter-relationships.

⁵⁷⁴

AN ENORMOUS GANGLION

General Motors' early growth was swift and chaotic.⁵⁷⁴

⁵⁶⁷ Chandler Jr., A.D. and Salsbury, S., *Pierre S. Du Pont and the Making of the Modern Corporation*, BeardBooks, Washington, DC, 1971, p. xxi.

⁵⁶⁹ *The Puritan Gift: triumph, collapse and revival of an American dream*, Kenneth Hopper and William Hopper, I. B. Tauris (April 3, 2007) p. 85 By permission of Ken Hopper and Will Hopper

⁵⁷⁴ *The turning wheel; the story of General Motors through twenty-five years, 1908-1933* (1934), Author: Pound, Arthur, 1884-1966, Publisher: Garden City, N.Y., Doubleday, Doran & Company, Inc. pp. 192-200 archive.org/details/turningwheelstoropounrich

In that stage it was a hybrid rather than a unified organization. Attempts to organize it had been partially successful, but never wholly so, and for obvious reasons.⁵⁷⁴

Here was an enormous ganglion of highly active units, each of which faced problems peculiar to itself, each of which made its own approach to the public in the market place, and each of which had its own distinctive pride.⁵⁷⁴

Too much concentration of authority might very well reduce the initiative of plant managers and the efficiency of their staffs. On the other hand, since many of these units were dealing with one another, were buying similar goods and services, and all of them in the last analysis were taking their goods to the same market, the intelligent cooperation of the units was desirable up to the point of diminishing returns.⁵⁷⁴

INTER-DIVISIONAL RELATIONS COMMITTEES

Pierre Du Pont would reapply similar methods to those that had served him well before, where he had reorganized Dupont into autonomous and largely self-sufficient functional divisions, each headed by its own president.⁵⁶⁸

Once again, central control was achieved by creating a powerful executive committee, chaired by himself, which was responsible for group strategy.⁵⁶⁸

In GM these were known as Inter-Divisional Relations Committees.

They were described by Donaldson Brown, (whom we shall hear much more of later) as follows:

“Serving in the direction of crystalizing the important Corporation policies and making them effective, and to facilitate the adaptation of engineering improvements and operating methods, there are various so-called inter-divisional relations committees.

They have suitable representation from the most important divisions, and are as follows:

General Purchasing Works Managers

General Technical General Sales

Institutional Advertising

These committees meet separately once a month.

The President of General Motors is a member of each one and besides, there is at least one other member of the Executive Committee. ... ⁵⁷⁴

⁵⁶⁸ The Puritan Gift: triumph, collapse and revival of an American dream, Kenneth Hopper and William Hopper, I. B. Tauris (April 3, 2007) pp. 82-84 By permission of Ken Hopper and Will Hopper

⁵⁷⁴ The turning wheel; the story of General Motors through twenty-five years, 1908-1933 (1934), Author: Pound, Arthur, 1884-1966, Publisher: Garden City, N.Y., Doubleday, Doran & Company, Inc. pp. 192-200 archive.org/details/turningwheelstoroopounrich

The work of the committees clears through various central office staff organizations, maintained so as to perfect the flow of information back and forth and to facilitate the orderly consideration of common problems of important policy and procedure.”⁵⁷⁴

BECOMING THE NUMBER ONE AUTOMOBILE COMPANY

Following the end of the Depression of 1920–21, the Roaring Twenties brought a period of economic prosperity.

Revived economic prosperity and du Pont’s organizational changes had had a profound impact.

One by one the Corporation’s great producers had been taken in hand, tuned up, and placed in a position of market leadership.⁵⁷⁵

Progress had been made toward integrating a key control at headquarters.⁵⁷⁵

“The two and a half years of Mr. du Pont’s presidency saw the Corporation rise swiftly from a perilous position to new levels of profits and financial stability. Dead wood had been cut away, and the weak properties brought to increased efficiency.”⁵⁷⁵

Arthur Pound (1934)

Under du Pont’s guidance, GM became the number one automobile company in the world.³¹

⁵⁷⁴ The turning wheel; the story of General Motors through twenty-five years, 1908-1933 (1934), Author: Pound, Arthur, 1884-1966, Publisher: Garden City, N.Y., Doubleday, Doran & Company, Inc. pp. 192-200 archive.org/details/turningwheelstoroopounrich

⁵⁷⁵ *ibid.*, pp. 204-208

³¹ en.wikipedia.org/wiki/DuPont

A NEW PRESIDENT - ALFRED SLOAN

On May 10, 1923, Pierre S. du Pont retired as president.⁵⁷⁵

With the Corporation in this favorable condition, President du Pont, certain that the situation he went in to remedy had been fully cured, laid down the responsibilities of the presidency to return to his other large affairs.⁵⁷⁵

He was to remain chairman of the board for six years more.⁵⁷⁵

It is not too much praise to say that he saved General Motors by taking the helm in bad weather and effecting such reforms that it could not fail to reap the rewards of many of the policies he formulated.⁵⁷⁵

When Pierre retired from its Board of Directors, GM was the largest company in the world.⁵⁶⁶

When du Pont laid down the reins, there was never any question who would be chosen to succeed him as president.⁵⁷⁵

On leaving the presidency he attributed a large measure of the Corporation's successful development to Mr. Alfred P. Sloan, Jr., vice-president in charge of operations, who succeeded him in office.⁵⁷⁵

... from a tribute reported B. C. Forbes in the New York American, September 21, 1927:

*“When he was selected president, in 1923, to succeed Pierre S. duPont, the latter made this public announcement: “The greater part of the successful development of the Corporation’s operations and building up of a strong manufacturing and sales organization is due to Mr. Sloan.” ”*⁵⁷⁵

⁵⁷⁵ The turning wheel; the story of General Motors through twenty-five years, 1908-1933 (1934), Author: Pound, Arthur, 1884-1966, Publisher: Garden City, N.Y., Doubleday, Doran & Company, Inc. pp. 204-208

⁵⁶⁶ en.wikipedia.org/wiki/Pierre_S._du_Pont

In him the Corporation secured an operating head possessing a combination of technical training, executive experience, and financial sense.⁵⁷⁵

Sloan was both a brilliant engineer and a forward-thinking manager.⁵⁷⁶

He had excelled at both before joining General Motors.

When at Hyatt Roller Bearing Company, a company that made roller and ball bearing,⁵⁸⁶ the firm was in financial difficulties, and with help from his father Sloan bought a controlling interest.⁵⁷⁶

The ambitious young man soon brought his influence to bear on his new company.⁵⁷⁶

⁵⁷⁵ The turning wheel; the story of General Motors through twenty-five years, 1908-1933 (1934), Author: Pound, Arthur, 1884-1966, Publisher: Garden City, N.Y., Doubleday, Doran & Company, Inc. pp. 204-208

⁵⁸⁶ en.wikipedia.org/wiki/Alfred_P._Sloan

⁵⁷⁶ Management Thought, By Jayanta K Nanda, Publisher Sarup & Sons, New Delhi (1 Jan 2005) pp. 269-270

Aged 24, Sloan became president of Hyatt and proposed that the company manufacture a new anti-friction bearing for automobiles.⁵⁷⁶

With this move to manufacturing products for the rapidly growing automobile market, Sloan forged a connection with the industry that would propel him to greatness.⁵⁷⁶

Oldsmobile was Hyatt's first automotive customer, with many other companies soon following suit.⁵⁸⁶

In 1916 Hyatt merged with other companies into United Motors Company.⁵⁸⁶

After transforming the fortunes of Hyatt Roller Bearing Company, Sloan became president of the United Motors Corporation,⁵⁷⁶ Sloan entered the [General Motors] Corporation as a director on November 7, 1918, incident to the merging of United Motors ...⁵⁷⁵

It was here, as discussed, that Sloan succeeded Pierre Du Pont as President of General Motors in 1923.⁵⁷⁶

From this position Sloan created one of the most influential organizational designs of the 20th Century.⁵⁷⁶

Sloan rebuilt General Motors along his own lines.⁵⁷⁶

GROWING TO GREATER HEIGHTS

By 1923 General Motors had gained an important part of a trade already of gigantic proportions and destined to grow to even greater heights. America was just beginning to realize what the motor car meant to it economically and socially.⁵⁷⁵

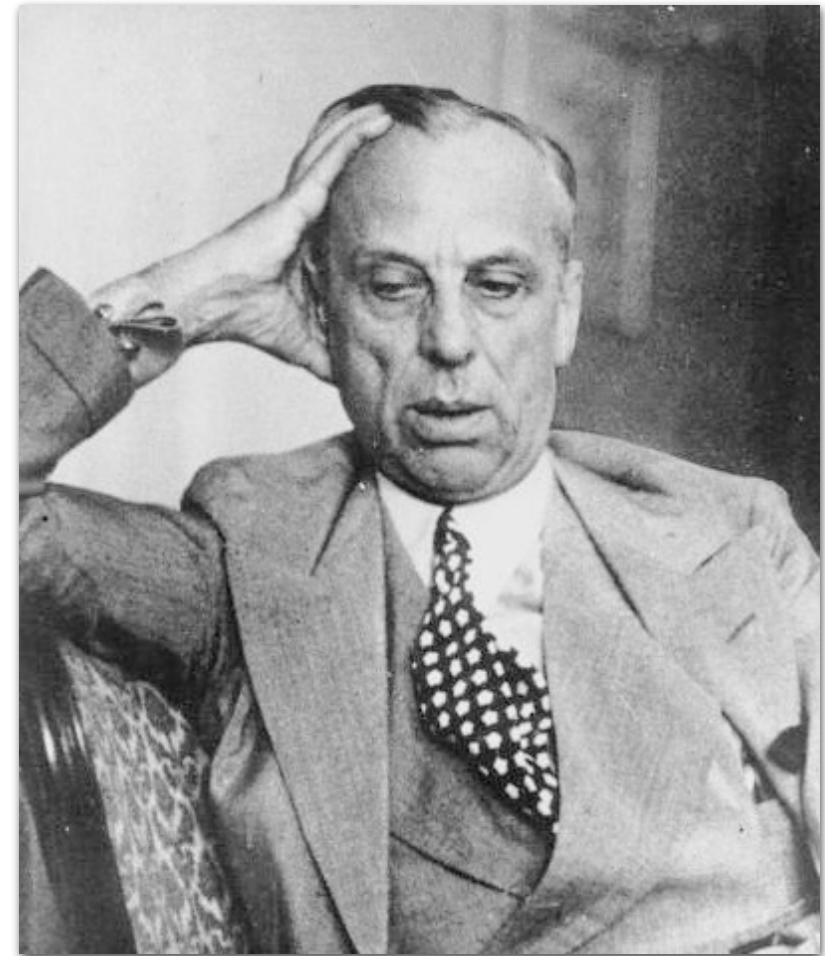


Image: **Alfred Sloan**, American business executive Alfred P. Sloan (1875-1966), Date: 1937,
Source: Bibliothèque nationale de France, Author: Agence de presse Meurisse,
Permission (Reusing this file) PD: "domaine public"
en.wikipedia.org/wiki/File:Alfred_Pritchard_Sloan_1937.jpg

⁵⁷⁵ The turning wheel; the story of General Motors through twenty-five years, 1908-1933 (1934), Author: Pound, Arthur, 1884-1966, Publisher: Garden City, N.Y., Doubleday, Doran & Company, Inc. pp. 204-208

⁵⁷⁶ Management Thought, By Jayanta K Nanda, Publisher Sarup & Sons, New Delhi (1 Jan 2005) pp. 269-270

The magnitude of the ever-growing industry is revealed in these statistics drawn from the 1923 census of manufactures:⁵⁷⁵

“Three hundred and fifty-one factories were operated by the automobile industry in the United States ...

More than 318,000 persons were directly employed in the manufacture of vehicles in that year and 3,105,000 were benefited indirectly by the industry.

A billion dollars was being spent on highways and more than \$142,000,000 in the transportation by rail of completed vehicles.

Eighty-five percent of the gasoline consumed in the United States during that year was used in cars and trucks.

More than 10 percent of the products of the steel and iron industry were used in the production of motor cars or of their parts and accessories.

*One hundred and sixty establishments were engaged in the manufacture of tires and inner tubes while a total of 528 manufactured rubber products.”*⁵⁷⁵

Of the thriving automotive trade General Motors already enjoyed a large share.⁵⁷⁵

After fifteen years of growth, punctuated by two stressful periods, General Motors in 1923 had reached unquestioned financial stability, had discovered the formula by which decentralized operations could be correlated and controlled within limits of efficiency, and had acquired the good-will of millions of satisfied buyers.⁵⁷⁵

⁵⁷⁵ The turning wheel; the story of General Motors through twenty-five years, 1908-1933 (1934), Author: Pound, Arthur, 1884-1966, Publisher: Garden City, N.Y., Doubleday, Doran & Company, Inc. pp. 204-208

Mr. Sloan told the automobile editors in his Proving Ground address in 1927, in discussing the so-called saturation point, that "The industry has not grown much during the past three or four years. It is practically stabilized at the present [1927]. What has taken place is a shift from one manufacturer to another."⁵⁷⁹

The trend from 1923 to 1927 meant a basic shift of the industry's attitude to the market. Henceforth the motor cars would have to be sold, instead of merely demonstrated.⁵⁷⁹

A CAR FOR EVERY PURSE AND EVERY PURPOSE

With Ford cornering the mass market, the accepted wisdom was that the only alternative for competitors lay in the negligibly sized luxury market. Sloan thought otherwise and concentrated GM's attentions on the, as yet non-existent, middle market.⁵⁷⁷

His aim was a car for 'every purse and every purpose'.⁵⁷⁷

Alfred Sloan advanced the concept of mass production but noted that consumers were raising the standard for customer satisfaction.⁵⁷⁸

He recognized that quality had begun to mean that a product had to meet customer expectations, not just a manufacturer's standards.⁵⁷⁸

During his tenure he consistently out-thought his main competitor, Ford, turning GM into the world's greatest automobile manufacturer.⁵⁷⁶

⁵⁷⁶ Management Thought, By Jayanta K Nanda, Publisher Sarup & Sons, New Delhi (1 Jan 2005) pp. 269-270

⁵⁷⁹ The turning wheel; the story of General Motors through twenty-five years, 1908-1933 (1934), Author: Pound, Arthur, 1884-1966, Publisher: Garden City, N.Y., Doubleday, Doran & Company, Inc. p. 210
archive.org/details/turningwheelstorooopounrich

⁵⁷⁷ The Ultimate Business Guru Guide: The Greatest Thinkers Who Made Management, 2nd Edition, Stuart Crainer, Des Dearlove, John Wiley and Sons, Oct 1, 2002, pp. 220-223
Copyright © 2002, John Wiley and Sons

⁵⁷⁸ Juran's Quality Handbook, Fifth Edition, Joseph M. Juran, A. Blanton Godfrey, Publisher: McGraw-Hill Professional; 5th edition (September 1, 2000), p. 29.2

PLANNED OBSOLESCENCE

As an example of out-thinking and out-innovating his competitors; Sloan is credited with establishing annual styling changes, from which came the concept of planned obsolescence.⁵⁸⁶

As the leader in “planned obsolescence”, the frequent changes in design ... tempted customers to switch to a new model every year or so.⁵⁴²

This is a concept we still see today, not only in the automobile industry, but also in, for example, the mobile phone industry; each year a new “refreshed” model being introduced.

Watch video vimeo.com/74520646

**THE LADDER OF SUCCESS**

He also established a pricing structure in which (from lowest to highest priced) Chevrolet, Pontiac, Oldsmobile, Buick and Cadillac - referred to as the ladder of success - did not compete with each other, and buyers could be kept in the GM “family” as their buying power and preferences changed as they aged.⁵⁸⁶

⁵⁴² The Toyota Phenomenon, by Ernst C. Glauser, THE SWISS DEMING INSTITUTE
December 2006
www.deming.ch/downloads/E_Toyota.pdf

⁵⁸⁶ en.wikipedia.org/wiki/Alfred_P._Sloan

Video: General Motors Around the World (Part II) (1927) Producer: Handy (Jam)
Organization This movie is part of the collection: Prelinger Archives
archive.org/details/GeneralM1927_2

GENERAL MOTORS PROWESS

Sloan had taken Ford's innovations in mass production; make and sell, the moving assembly line, breaking complex work into simple repetitive tasks, and the deskilling of labour, and then coupled them with his own innovations.

These concepts, along with Ford's resistance to the change in the 1920s, propelled GM to industry sales leadership by the early 1930s, a position it retained for over 70 years.⁵⁸⁶

By 1925, with its new organization and commitment to annual changes in its models, GM had overtaken Ford ... ⁵⁷⁷

We can see the prowess of General Motors in this film, from its production lines, to its mass exportation of automobiles.

Watch video vimeo.com/75590130



⁵⁸⁶ en.wikipedia.org/wiki/Alfred_P._Sloan

Video: From Dawn to Sunset (1937), This movie is part of the collection: Prelinger Archives, Producer: Handy (Jam) Organization, Sponsor: Chevrolet Division, General Motors Corporation
archive.org/details/0560_From_Dawn_to_Sunset_14_01_40_00

⁵⁷⁷ The Ultimate Business Guru Guide: The Greatest Thinkers Who Made Management , 2nd Edition, Stuart Crainer, Des Dearlove, John Wiley and Sons, Oct 1, 2002, pp. 220-223
Copyright © 2002, John Wiley and Sons

FORD - BEYOND THE MODEL T

But what of General Motor's great rival the Ford Motor Company? At the end of chapter four we had seen the 15 millionth Model T Ford roll off the assembly line at his factory in Highland Park, Michigan.⁴⁰⁷

We had left Ford riding high on a wave of success.

Though he was a brilliant engineer and equitable leader, [Ford] detested bureaucracy, org charts, and so called 'financeering'; as a result, he bought back all of his company's stock in 1919 and took the firm private.⁴⁰⁵

Ford did not believe in accountants; he amassed one of the world's largest fortunes without ever having his company audited under his administration.⁴¹²

⁴⁰⁵ Alfred Sloan and Organizational Management www.melodiesinmarketing.com/2008/01/28/alfred-sloan-and-organizational-management/

⁴⁰⁷ en.wikipedia.org/wiki/Ford_Model_T

Ford was the proud individualist who understood practical economics, but two conditions slowly brought his firm down.⁴⁰⁵

First, his centralized management style couldn't adapt to the unique needs of a much larger corporation of its operational nature.⁴⁰⁵

Secondly, his complete lack of a customer and market-orientation led Ford to make few model updates and new brands, causing a steady drop in market share from 56% in 1921 to 21% by 1937.⁴⁰⁵

By 1926, flagging sales of the Model T finally convinced Henry to make a new model.^{582 412}

⁴¹² en.wikipedia.org/wiki/Henry_Ford

⁵⁸² Sorensen, Charles E.; with Williamson, Samuel T. (1956), *My Forty Years with Ford*, New York, New York, USA: Norton, LCCN 56010854. Various republications, including ISBN 9780814332795. p. 223.

He pursued the project with a great deal of technical expertise in design of the engine, chassis, and other mechanical necessities, while leaving the body design to his son.^{582 412}

Edsel also managed to prevail over his father's initial objections in the inclusion of a sliding-shift transmission.^{582 412}

The result was the successful Ford Model A, introduced in December 1927 and produced through 1931, with a total output of more than 4 million.⁴¹²

Subsequently, the Ford company adopted an annual model change system similar to that recently pioneered by its competitor General Motors.⁴¹²



Not until the 1930s did Ford overcome his objection to finance companies, and the Ford-owned Universal Credit Corporation became a major car-financing operation.⁴¹²

Unfortunately for Ford, it was too little too late.

Image: 1931 **Model A Ford** Deluxe Tudor Sedan owned by Rick & Dana Black, El Paso Texas. Photographed in 2003 next to abandoned railroad freight station near downtown El Paso Texas. Date: 2003. Source: Transferred from en.wikipedia to Commons by User:Spyder_Monkey using CommonsHelper. Author: Rickblack at en.wikipedia en.wikipedia.org/wiki/File:1931_Ford_Model_A_Deluxe_Tudor.jpg

⁴¹² en.wikipedia.org/wiki/Henry_Ford

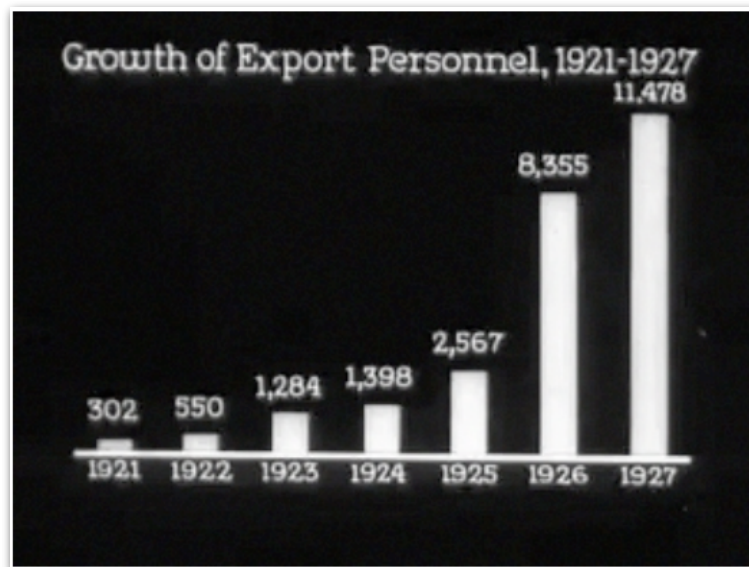
⁵⁸² Sorensen, Charles E.; with Williamson, Samuel T. (1956), *My Forty Years with Ford*, New York, New York, USA: Norton, LCCN 56010854. Various republications, including ISBN 9780814332795. p. 223.

GM - THE WORLDS LARGEST INDUSTRIAL ENTERPRISE

Six years after Sloan took over the GM presidency, net sales were \$1.5 billion and the stock prices was up by 480%⁵⁷⁶

Under Sloan's direction, GM became the largest industrial enterprise the world had ever known.⁵⁸⁶

In this graph you can see that GM export growth was phenomenal, from 302 export personnel required in 1921, to 11, 478 by 1927.⁵⁸⁰



A NEW MODEL FOR MANAGEMENT

Sloan is remembered for being a rational, shrewd, and very successful manager, who led GM to become the largest corporation on earth, a position it held for many years after his death.⁵⁸⁶

Sloan was also a pioneer in organisational management.

The industry had come of age and, with maturity, competition brought new responsibilities for management.⁵⁷⁹

Sloan made his name by revolutionizing the structure of the corporation and, in doing so, making General Motors the greatest automobile company in the world.⁵⁷⁶

⁵⁸⁶ en.wikipedia.org/wiki/Alfred_P._Sloan

⁵⁷⁹ The turning wheel; the story of General Motors through twenty-five years, 1908-1933 (1934), Author: Pound, Arthur, 1884-1966, Publisher: Garden City, N.Y., Doubleday, Doran & Company, Inc. p. 210 archive.org/details/turningwheelstoropounrich

⁵⁸⁰ and Image: General Motors Around the World (Part II) (1927) Producer: Handy (Jam) Organization This movie is part of the collection: Prelinger Archives archive.org/details/GeneralM1927_2

⁵⁷⁶ Management Thought, By Jayanta K Nanda, Publisher Sarup & Sons, New Delhi (1 Jan 2005) pp. 269-270

Alfred Sloan's ideas for running General Motors provided the model for the great corporations that grew up to dominate the second half of the 20th century.⁵⁴²

From a managerial point of view, Sloan and Henry Ford had entirely different approaches. Ford ignored management. Sloan sought to make management highly efficient.⁵⁷⁷

MULTI DIVISIONAL STRUCTURE

As discussed, it was common business tradition before the 1920s, that divisions would be organized not according to product, but by function.⁴⁰⁵

This meant centralized command over all purchasing, manufacturing, and sales across multiple lines, brands, and regions.⁴⁰⁵

⁵⁷⁷ The Ultimate Business Guru Guide: The Greatest Thinkers Who Made Management , 2nd Edition, Stuart Crainer, Des Dearlove, John Wiley and Sons, Oct 1, 2002, pp. 220-223
Copyright © 2002, John Wiley and Sons

Sloan turned this system on its head by creating a multi-divisional structure with dozens of divisions, each operated by a chief executive responsible for the operations, marketing, and finance of their business unit.

⁴⁰⁵

In his words, decentralization allowed for

*“initiative, responsibility, development of personnel, decisions close to the facts, flexibility...”*⁴⁰⁵

As a result of his organization study, in the early 1920s Sloan organized the company into eight divisions – five car divisions and three component divisions ⁵⁷⁷ with an executive committee sitting above the divisions.⁵⁷⁶

⁴⁰⁵ Alfred Sloan and Organizational Management www.melodiesinmarketing.com/2008/01/28/alfred-sloan-and-organizational-management/

⁵⁴² The Toyota Phenomenon, by Ernst C. Glauser, THE SWISS DEMING INSTITUTE December 2006
www.deming.ch/downloads/E_Toyota.pdf

⁵⁷⁶ Management Thought, By Jayanta K Nanda, Publisher Sarup & Sons, New Delhi (1 Jan 2005) pp. 269-270

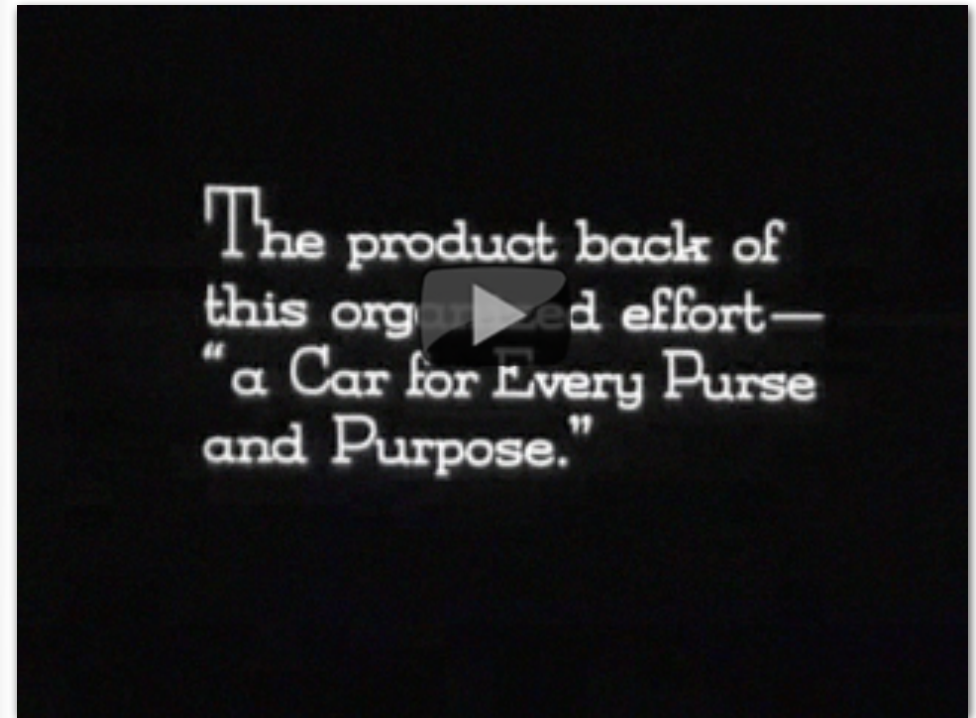
Each of the units was made responsible for all their commercial operations with their own engineering, production and sales departments, but was supervised by a central staff responsible for overall policy and finance.

577

This policy, which Sloan labeled 'federal decentralization', marked the invention of the decentralized, divisionalized organization.⁵⁷⁷

Decentralisation led to the formation of autonomous vehicle divisions ... which persist to the present day.²⁷⁹

These divisions were the product of "a car for Every Purse and Purpose".⁵⁸⁰



Here we can see a film produced by General Motors for each of these newly formed divisions.

⁵⁷⁷ The Ultimate Business Guru Guide: The Greatest Thinkers Who Made Management, 2nd Edition, Stuart Crainer, Des Dearlove, John Wiley and Sons, Oct 1, 2002, pp. 220-223 Copyright © 2002, John Wiley and Sons

²⁷⁹ www.systemsthinking.co.uk Copyright © Vanguard Consulting Limited

⁵⁸⁰ and Video: General Motors Around the World (Part II) (1927) Producer: Handy (Jam) Organization This movie is part of the collection: Prelinger Archives archive.org/details/GeneralM1927_2

CO-ORDINATING COMMITTEES

The challenge then as now was to find a balance between centralised and decentralised management authority and responsibility.²⁷⁹

The key question Sloan tried to continually address was: "How could we exercise permanent control over the whole corporation in a way consistent with the decentralized scheme of organization?"⁴⁰⁵

The compromise sought by General Motors was to give the divisions wide ranging powers but to maintain central oversight by use of co-ordinating committees.²⁷⁹

“From decentralization we get initiative, responsibility, development of personnel, decisions close to the facts, flexibility - in short all the qualities necessary for an organisation to adapt to new conditions.

From co-ordination we get efficiencies and economies.”⁵⁸³

Alfred P. Sloan

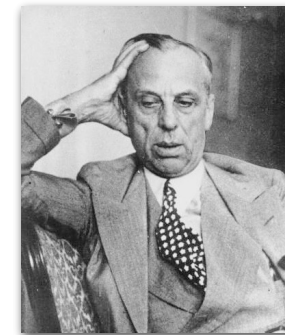


Image: **Alfred Sloan**, American business executive Alfred P. Sloan (1875-1966), Date: 1937, Source: Bibliothèque nationale de France, Author: Agence de presse Meurisse, Permission (Reusing this file) PD: "domaine public" en.wikipedia.org/wiki/File:Alfred_Pritchard_Sloan_1937.jpg

⁴⁰⁵ Alfred Sloan and Organizational Management www.melodiesinmarketing.com/2008/01/28/alfred-sloan-and-organizational-management/

⁵⁸³ Managing People and Organizations: Peter Drucker's Legacy By Guido Stein, Pedro Nueno, Emerald Group Publishing p. 118

²⁷⁹ www.systemsthinking.co.uk Copyright © Vanguard Consulting Limited

Just as Du Pont had done, and as Donaldson Brown had discussed with his Inter-Divisional Relations Committees, Sloan created a series of cross-divisional committees that forced high-ranking executives to regularly communicate with one another and be greater in touch with the company at large.⁴⁰⁵

It has been argued that this committee system was partly responsible for General Motors early failures to respond effectively to the growing Japanese threat.²⁷⁹

We shall discuss this further in Part II “Beyond our Mindset”.

⁴⁰⁵ Alfred Sloan and Organizational Management www.melodiesinmarketing.com/2008/01/28/alfred-sloan-and-organizational-management/

²⁷⁹ www.systemsthinking.co.uk Copyright © Vanguard Consulting Limited

⁵⁷⁷ The Ultimate Business Guru Guide: The Greatest Thinkers Who Made Management, 2nd Edition, Stuart Crainer, Des Dearlove, John Wiley and Sons, Oct 1, 2002, pp. 220-223 Copyright © 2002, John Wiley and Sons

⁵⁷⁶ Management Thought, By Jayanta K Nanda, Publisher Sarup & Sons, New Delhi (1 Jan 2005) pp. 269-270

⁶⁸⁴ ‘The changing nature of leadership’, The Economist, 10 June 1995.

AN ORGANIZATIONAL BLUEPRINT

‘Alfred Sloan did for the upper layers of management what Henry Ford did for the shop floor: he turned it into a reliable, efficient, machine-like process’, recently observed The Economist.^{577 684}

Sloan may justifiably be remembered for his contribution to the US automobile industry because of his work at General Motors. He should be remembered equally for his role in the evolution of management and corporate structure.⁵⁷⁶

Sloan’s design became the organizational blueprint for corporations for the next 50 years, [and beyond].⁵⁷⁶

Today many organizations are structured the same way. Sloan’s “Federal Decentralization” has become a norm.

The car industry has been ahead of its time in many respects.⁵⁴²

To describe this phenomenon, Peter Drucker, ... who first made his name with a study of GM in 1945, coined the phrase “industry of industries”.⁵⁴²

His first book *Concept of the Corporation* (1946) was a ground breaking examination of the intricate internal working of General Motors and revealed the auto-giant to be a labyrinthine social system rather than an economical machine.⁵⁸¹

While enabling financing for dealers and customers, and establishing a solid product development and positioning strategy for GM’s

⁵⁴² The Toyota Phenomenon, by Ernst C. Glauser, THE SWISS DEMING INSTITUTE December 2006 www.deming.ch/downloads/E_Toyota.pdf

⁵⁸¹ The Ultimate Business Guru Guide: The Greatest Thinkers Who Made Management, 2nd Edition, Stuart Crainer, Des Dearlove, John Wiley and Sons, Oct 1, 2002, p. 49 Copyright © 2002, John Wiley and Sons

⁴⁰⁵ Alfred Sloan and Organizational Management www.melodiesinmarketing.com/2008/01/28/alfred-sloan-and-organizational-management/

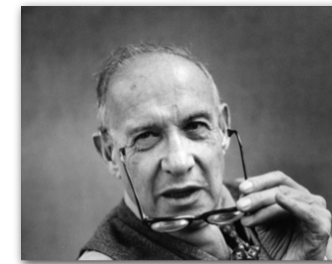
brands remain two of Sloan’s notable accomplishments, it was his management design that remains his legacy.⁴⁰⁵

He was a true innovator, achieving this without the need for outside management thinking influence.

Drucker once said of Sloan;

“He asked for my opinions and carefully listened, and he never once took my advice.”⁵⁸⁴

Peter Drucker



⁵⁸⁴ Sloan, Alfred P. (1964), McDonald, John, ed., *My Years with General Motors*, Garden City, NY, USA: Doubleday, LCCN 64011306, OCLC 802024. Republished in 1990 with a new introduction by Peter Drucker (ISBN 978-0385042352) foreword, pp. v-vi.

Image: **Peter Drucker**, Photograph Courtesy of The Drucker Institute at Claremont Graduate University

Sloan retired as GM chairman on April 2, 1956.⁵⁴²

During his period as chairman he was the highest paid business executive and ran the largest business in the world.²⁷⁹

From 1956, until his death in 1966, he was honorary Chairman of the corporation.²⁷⁹

CODIFICATION OF METHOD

His memoir and management treatise, *My Years with General Motors*,⁶⁶⁸ was more or less finished around this time; but its publication was held up for nearly a decade longer by GM's legal staff, who feared that it would be used to support an antitrust case against GM.⁵⁸⁶

⁵⁴² The Toyota Phenomenon, by Ernst C. Glauser, THE SWISS DEMING INSTITUTE December 2006 www.deming.ch/downloads/E_Toyota.pdf

⁵⁸⁶ en.wikipedia.org/wiki/Alfred_P._Sloan

²⁷⁹ www.systemsthinking.co.uk Copyright © Vanguard Consulting Limited

⁶⁶⁸ Sloan, Alfred P. (1964), McDonald, John, ed., *My Years with General Motors*, Garden City, NY, USA: Doubleday, LCCN 64011306, OCLC 802024. Republished in 1990 with a new introduction by Peter Drucker (ISBN 978-0385042352).



Image: Alfred P. Sloan, Courtesy of General Motors Archive, Copyright © General Motors LLC, 300 Renaissance Center, Detroit, Michigan 48265

It was finally published in 1964.⁵⁸⁶

This set out in detail how General Motors developed over the decades covered by his administration and was a complete and thorough analysis of the forces impacting on General Motors, the outcomes they achieved and the thinking behind their many ground-breaking innovations.²⁷⁹

Just as Ford had done previously with *My Life and Work*, Sloan's book would become a means by which others could copy his design and management methods, and thereby attempt to replicate his success.

The world's first university-based executive education program - the Sloan Fellows - was created in 1931 at MIT under the sponsorship of Sloan.⁵⁸⁶

A Sloan Foundation grant established the MIT School of Industrial Management in 1952 with the charge of educating the "ideal manager", and the school was renamed in Sloan's honor as the Alfred P. Sloan School of Management, one of the world's premier business schools.⁵⁸⁶

MANAGEMENT BY NUMBERS

Our story doesn't end there however.

There was another major innovation created at General Motors that had a major impact on how we design and manage work today; management by numbers.

This is so important that it deserves its own section in this chapter.

⁵⁸⁶ en.wikipedia.org/wiki/Alfred_P._Sloan

²⁷⁹ www.systemsthinking.co.uk Copyright © Vanguard Consulting Limited

By the 1930s, General Motors had outgrown Ford. They achieved this through the application of Ford's principles, but on a bigger scale.⁴¹³

Everything from their iron ore mines to the dealerships were run according to Ford's principles but, financially, General Motors was a mess.⁴¹³

As we discussed, Ford did not believe in accountants; he amassed one of the world's largest fortunes without ever having his company audited under his administration.⁴¹²

This was not the case for Sloan, who had a different problem to solve.

⁴¹³ Designing a customer-driven system: Change management thinking, Barry Wrighton © Henry Stewart Publications 1754-1662 (2008) Vol. 1, 3 000-000 Journal of Telecommunications Management

⁴¹² en.wikipedia.org/wiki/Henry_Ford

⁵⁷⁶ Management Thought, By Jayanta K Nanda, Publisher Sarup & Sons, New Delhi (1 Jan 2005) pp. 269-270

A prudent man who took measured risks,⁵⁷⁶ Sloan, an accountant by training, ... put [financial] 'rigour' into the organisation. He did this by 'putting in the numbers'.⁴¹³

In addition to his automobile innovations, and his revolutionary organizational structure, Sloan created the first management system capable of leading a large corporation; managing by the numbers.⁵⁸⁵

Coordinated control was exercised through: 1) Continual financial/operational planning, measurement, and reporting, and 2) Capital allocations.⁴⁰⁵

Adjustments to production lines were continually made based on what the numbers were telling top management ...⁴⁰⁵

⁵⁸⁵ May Alfred Sloan R.I.P. By Mark Edmondson www.leanlibrary.com/alfred_sloan.htm

⁴⁰⁵ Alfred Sloan and Organizational Management www.melodiesinmarketing.com/2008/01/28/alfred-sloan-and-organizational-management/

Leading by monitoring key performance indicators was a breakthrough that enabled his senior management to understand their business units well enough to make strategic decisions.⁵⁸⁵

A system run by KPI's is still very much the norm today.

It was Alfred Sloan who coined the phrase 'management by the numbers' (Chandler 1977).¹

For him it solved a problem – in the 1930s he could not tell which parts of the amorphous General Motors were making money.¹

To find out, he introduced revenue and cost accounting to functions and sites. Sloan considered it unnecessary, even inappropriate, for senior managers to know much about the details of operations – how the work worked in operating divisions.¹

⁴⁰⁵ Alfred Sloan and Organizational Management www.melodiesinmarketing.com/2008/01/28/alfred-sloan-and-organizational-management/

If the numbers were bad, managers were replaced; if they were good, managers were promoted.¹

Another of his contribution to today's theory of work; financial targets aligned to each function, with serious consequences for managers who failed to hit their targets.⁴¹³

ACCOUNTING

GM became an expert in its use of financial ratios and budget targets.⁴⁰⁵

But what were the roots of this thinking?

In our previous chapters we have discussed the roots of accounting, lets briefly return to that subject here.

⁵⁸⁵ May Alfred Sloan R.I.P. By Mark Edmondson www.leanlibrary.com/alfred_sloan.htm

¹ 540-A brief history of Western management thought, Copyright © Vanguard Consulting Limited

⁴¹³ Designing a customer-driven system: Change management thinking, Barry Wrighton © Henry Stewart Publications 1754-1662 (2008) Vol. 1, 3 000-000 Journal of Telecommunications Management

So far, we have discussed that in the New York and Erie Railroad, McCallum devised methods of cost accounting and improved the flow of information.¹¹⁷

J. Edgar Thomson began the development of cost accounting on the [Pennsy] railroad, which determined the cost of each operation.¹³⁵

His innovations were popularized in railroad trade journals such as Henry Varnum Poor's American Railroad Journal.¹²⁷

Andrew Carnegie [who] led the enormous expansion of the American steel industry in the late 19th century applied detailed cost accounting – that he had absorbed at the Pennsy, and which the Pennsy had in turn learned through Poor from the Erie.¹⁴⁰

²⁵⁴ Encyclopedia of Management, 5th Edition, Edited by Marilyn M. Helms, D.B.A.
© 2006 Thomson Gale, a part of The Thomson Corporation. pp. 651-653

³⁵⁷ Management Thought, By Jayanta K Nanda, Publisher Sarup & Sons,
New Delhi (1 Jan 2005) pp. 79-82

Under the umbrella of scientific management Harrington Emerson made other contributions in the areas of cost accounting ...²⁵⁴

Alexander Hamilton Church ... published his first work, 'The Proper Distribution of Expense Burden', as a series of articles in 'The Engineering Magazine' in 1901 and later as a book in 1916. These articles are regarded by many as a reference work in accounting literature both in the United States and in Great Britain.³⁵⁷

¹¹⁷ The Puritan Gift: triumph, collapse and revival of an American dream, Kenneth Hopper and William Hopper, I. B. Tauris (April 3, 2007) p.67-68 By permission of Ken Hopper and Will Hopper

¹⁴⁰ *ibid.*, p.72.

¹³⁵ Development of Modern Management Chapter A For Additional Information
staff.jccc.net/vclark/addinfo-L.htm Johnson County Community College

¹²⁷ Handbooks of Management Accounting Research, Volume 2 edited by Christopher S. Chapman, Anthony G. Hopwood, Michael D. Shields p. 1074

Church explained that

*“ It began to be realized that manufacturing is, in fact, made up of a long series of very small steps, and that it is desirable to ascertain the money value of these steps, so that comparisons may be made. In this way the movement towards cost accounting began, and presently reached a high state of development. ”*²⁴⁹

Church's improvements in the machine-rate method for allocating overhead expenses along with his pointing a way to the technique of standard costs were a major contribution to the development of managerial costs concepts.

³⁵⁷

Henry Gantt was determined that no worker should be idle otherwise you will suffer the resulting loss in profits, classic costs based accounting.

²⁴⁹ The Science and Practice of Management (1918), Author: Church, A. Hamilton (Alexander Hamilton), 1866-1936, Publisher: New York : The Engineering magazine co. pp. 11-12 archive.org/details/sciencepractice000ochur

The Taylor Society published “Scientific Management in American Industry” in which was described functions and department heads, accounting, and targets:

*“ If the organization outline represents the units of responsibilities and duties upon which the success or failure of the enterprise depends, then obviously it represents the units in which all costs and records should be kept if the chief executive is to exercise an effective control over the situation.*³⁶⁴

They are the ways of defining and deepening the meaning of activity.

*Having an end or aim is thus a characteristic of present activity. ...*⁵⁸⁹

³⁵⁷ Management Thought, By Jayanta K Nanda, Publisher Sarup & Sons, New Delhi (1 Jan 2005) pp. 79-82

³⁶⁴ Scientific Management in American Industry, by the Taylor Society, H. S. Person, editor (1929), Author: Taylor Society; Person, Harlow S. (Harlow Stafford), 1875-1955, Publisher: New York and London, Harper & Brothers pp. 269-271 archive.org/details/scientificmanageootayl

⁵⁸⁹ *ibid.*, pp. 152-155.

It is the means by which an activity becomes adapted when otherwise it would be blind and disorderly, or by which it gets meaning when otherwise it would be mechanical. ...

Men don't shoot because targets exist, but they set up targets in order that throwing and shooting may be more effective and significant... .⁵⁸⁹

Today every function is provided with a definite target at which to aim. ”³⁷²

Returning back to General Motors, the tenets underlying modern cost accounting can be traced back to GM in 1923.

³⁷² Scientific Management in American Industry, by the Taylor Society, H. S. Person, editor (1929), Author: Taylor Society; Person, Harlow S. (Harlow Stafford), 1875-1955, Publisher: New York and London, Harper & Brothers pp. 389-397
archive.org/details/scientificmanageootayl

⁵⁸⁹ Scientific Management in American Industry, by the Taylor Society, H. S. Person, editor (1929), Author: Taylor Society; Person, Harlow S. (Harlow Stafford), 1875-1955, Publisher: New York and London, Harper & Brothers pp. 152-155.
archive.org/details/scientificmanageootayl

⁵⁹⁸ en.wikipedia.org/wiki/Donaldson_Brown

⁶⁰⁰ WHO WAS THE FIRST ACCOUNTANT? acct.tamu.edu/giroux/first.html

Under Controller Donaldson Brown and Chairman Alfred Sloan, General Motors adopted or developed the major cost accounting techniques that would be used by big business for the next half century and beyond. These included return on investment, return on equity calculations and flexible budgeting.⁶⁸⁵

We have already met Sloan, but what of Brown?

FRANK DONALDSON BROWN

Frank Donaldson Brown was a financial executive and corporate director with both DuPont and General Motors Corporation.⁵⁹⁸

An electrical engineer by training and initially an electrical equipment salesman for Du Pont, Brown became assistant treasurer in 1914.⁶⁰⁰

⁶⁸⁵ Great Events in Accounting & Business, Posted by : Ludella Lewis, Ludella Lewis & Company www.stanfordwhoswho.com/view.blog.php?id=164



In 1918 he assisted in arranging DuPont's purchase of a substantial stake in General Motors from previous chairman William C. Durant, and later that year became treasurer of DuPont replacing Raskob.⁵⁹⁸

According to Mr Brown, by the time DuPont made its investment in General Motors, DuPont was already using something very much like a program budget system.⁵⁹⁹

And this type of planning and budgeting was one of the major innovations in General Motors after the takeover.⁵⁹⁹

Whilst at DuPont, Brown created what is known as the DuPont Model; an expression which breaks ROE (Return On Equity) into three parts.⁵⁹⁴

⁵⁹⁹ Program Budgeting Program Analysis and the Federal Budget By David Novick Publisher: Holt, Rinehart and Winston; 2nd edition (1969) p. xxi

Image: **Donaldson Brown**, Courtesy of General Motors Archive, Copyright © General Motors LLC, 300 Renaissance Center, Detroit, Michigan 48265

⁵⁹⁴ en.wikipedia.org/wiki/DuPont_analysis

⁵⁹⁸ en.wikipedia.org/wiki/Donaldson_Brown

His basic formula was as follows:

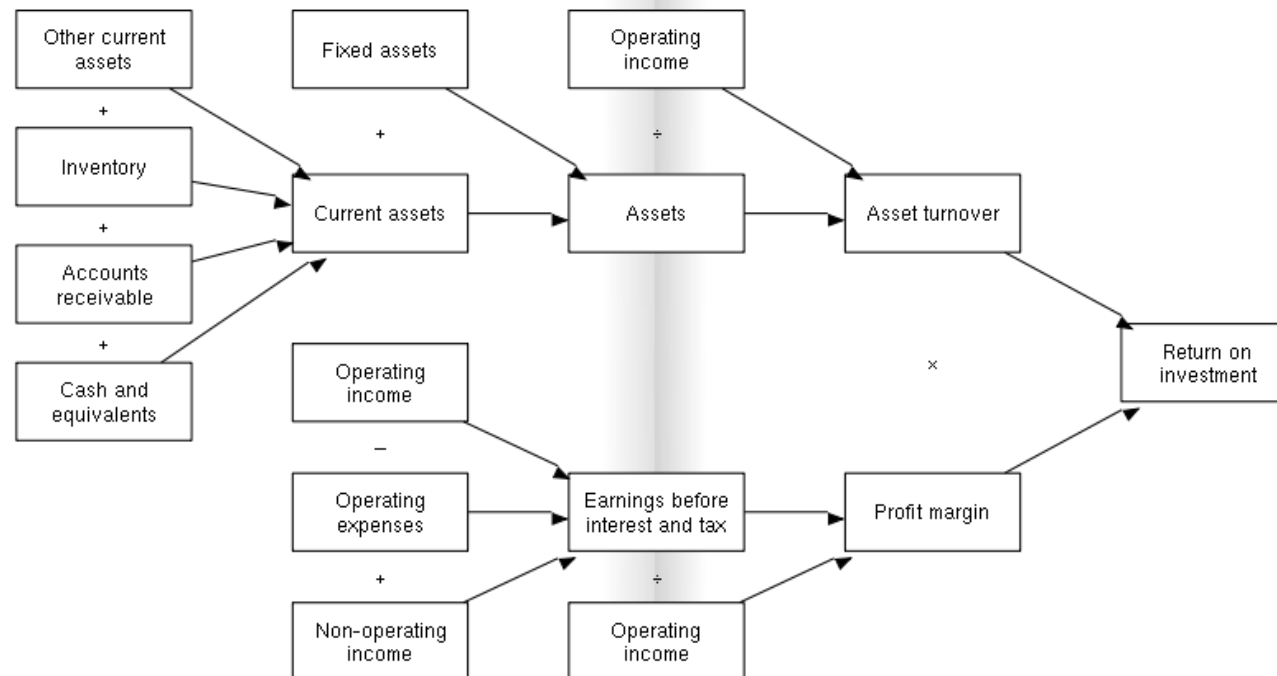
$$\text{ROE} = (\text{Profit margin}) * (\text{Asset turnover}) * (\text{Equity multiplier}) =$$

$$(\text{Net profit/Sales}) * (\text{Sales/Assets}) * (\text{Assets/Equity}) = (\text{Net Profit/Equity})^{594}$$

Where; Profitability (measured by profit margin), Operating efficiency (measured by asset turnover), Financial leverage (measured by equity multiplier).⁵⁹⁴

We can see the DuPont Model below.

DuPont Model



⁵⁹⁴ en.wikipedia.org/wiki/DuPont_analysis

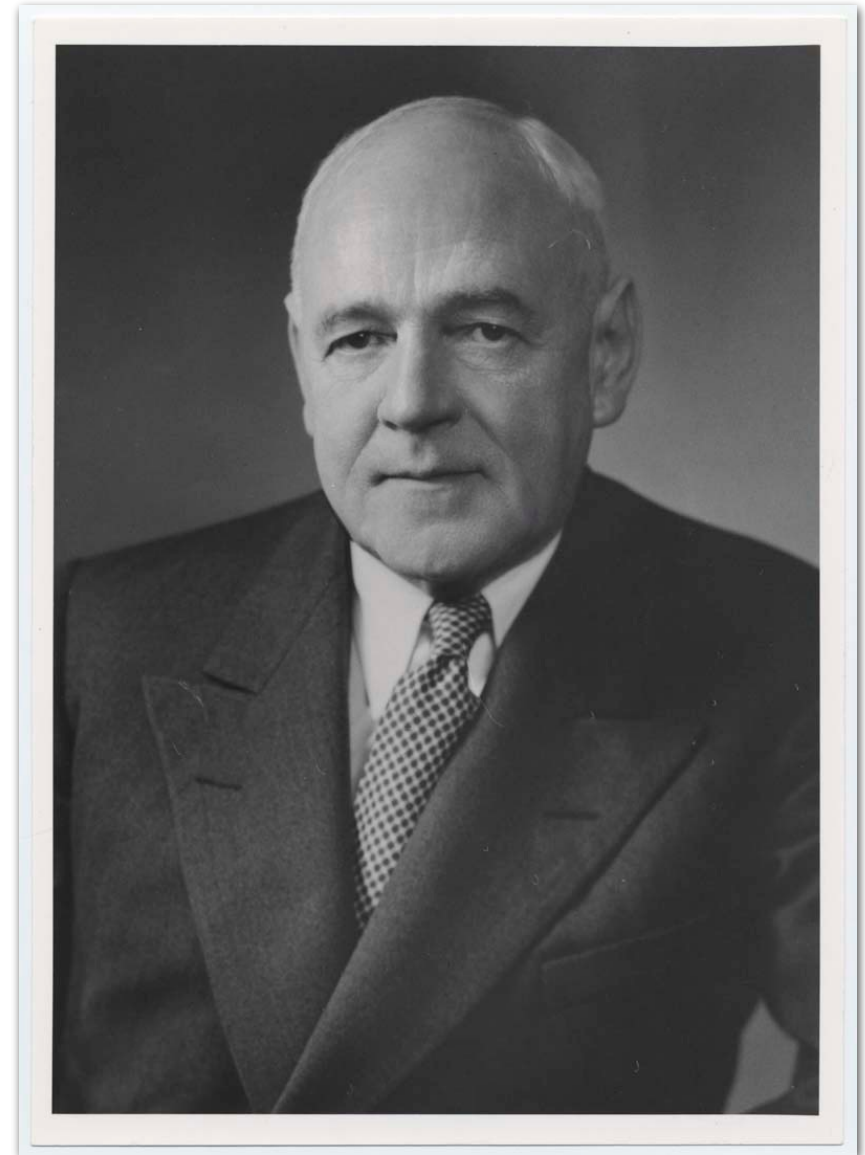
In 1921 he became treasurer of GM to help protect DuPont's investment in the struggling auto maker, and in 1924 he was appointed to the executive board of GM.⁵⁹⁸

Brown as Chief Financial Officer brought Du Pont's accounting system and added additional sophistication.⁶⁰⁰

A BUDGETING SYSTEM

An advanced flexible budgeting system, uniform performance criteria, a pricing formula to determine target prices to yield a specific ROI under standard volume, incentive and profit sharing plans, and a market based pricing system ... [were] put into place.⁶⁰⁰

His introduction of standard financial ratios (return on investment and return on equity) and flexible budgeting allowed the company to effectively manage its decentralized empire.⁵⁹⁸



⁶⁰⁰ WHO WAS THE FIRST ACCOUNTANT? acct.tamu.edu/giroux/first.html

⁵⁹⁸ en.wikipedia.org/wiki/Donaldson_Brown

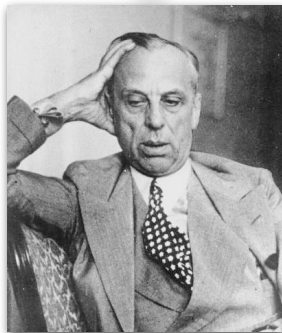
Image: **Donaldson Brown**, VT ImageBase (imagebase.lib.vt.edu/), housed and operated by Digital Library and Archives, University Libraries; scanning by Digital Imaging, Learning Technologies, Virginia Tech | spec.lib.vt.edu/imagebase/o8UA/screen/VTo604201011.jpg

Sloan wrote in My Years with General Motors:

“It was on the financial side that the last necessary key to decentralization with coordinated control was found.

That key, in principle, was the concept that if we had the means to review and judge the effectiveness of operations, we could safely leave the prosecution of these operations to those in charge of them.⁵⁹¹”

Alfred P. Sloan



Brown is credited with modernizing cost accounting for business.⁵⁹⁰

MCKINSEY INSTITUTIONALIZING BUDGETING

He had created the budget system, but it was James O. McKinsey who institutionalized it.⁶⁰²

McKinsey is credited with the first textbook in management accounting [entitled] Managerial Accounting, published in 1924, and the book on business budgeting, Budgetary Control, published in 1922.⁶⁰⁷

⁶⁰⁷ en.wikipedia.org/wiki/James_O._McKinsey

⁶⁰² The Budget (1922-2009) DuPont created it. McKinsey institutionalized it. Drucker overlooked it. R.I.P. By Jack Sweeney, Business Finance, www.bfinag.com, May/June 2009, Best Practices for Finance Executives, A Penton Publication

⁵⁹⁰ 125 people of impact in accounting, Leaders who left a mark on the profession, by Ken Tysiac, June 2012, Journal of Accountancy www.journalofaccountancy.com/Issues/2012/Jun/20124960.htm

⁵⁹¹ Management Control Systems, Joseph A. Maciariello and Calvin J. Kirby. Publisher: Prentice Hall; 2 edition (March 17, 1994) p.123

Image: **Alfred Sloan**, American business executive Alfred P. Sloan (1875-1966), Date: 1937, Source: Bibliothèque nationale de France, Author: Agence de presse Meurisse, Permission (Reusing this file) PD: "domaine public" en.wikipedia.org/wiki/File:Alfred_Pritchard_Sloan_1937.jpg

He was also one of the main contributors to the development of accounting education in the United States during the first third of the twentieth century.⁶¹³

He became president of the American Association of University Instructors in Accounting, the predecessor of the American Accounting Association, in 1924 when only 35 years of age.⁶¹³

Although his contributions to the field were many, McKinsey's career in accounting education was rather short. Following his year as president of the American Accounting Association's predecessor organization, he changed his interest from accounting to management.⁶¹³

He began his prolific writing career in 1919.⁶¹³

⁶¹³ Accounting in your city, James O. McKinsey, Tonya K. Flesher and Dale L. Flesher, UNIVERSITY OF MISSISSIPPI JAMES O. MCKINSEY The Accounting Historians Journal Vol 12 No. 2 Fall 1985
www.accountingin.com/accounting-historians-journal/volume-12-number-2/james-o-mckinsey/

In 1920, he and A. C. Hodges wrote Principles of Accounting, published by the University of Chicago Press. Also in 1920, McKinsey published the first volume of Bookkeeping and Accounting, followed by the second volume a year later.⁶¹³

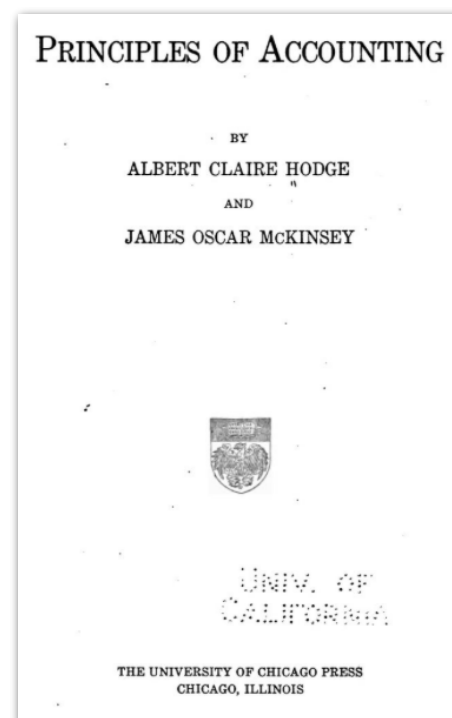


Image: Bookkeeping and accounting (1920), Author: McKinsey, James Oscar, Volume: 2, Publisher: Cincinnati : South-Western Pub. Co. Title Page
archive.org/details/bookkeepingaccou02mckiuoft

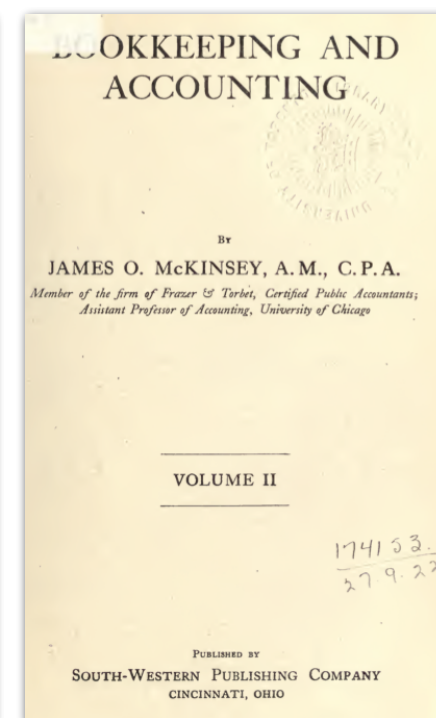


Image: Principles of accounting (1920), Author: Hodge, Albert Claire; McKinsey, James Oscar, Publisher: Chicago, University of Chicago Press, Title Page
archive.org/details/principlesaccou00mckigoog

He required students to view accounting as a manager rather than as a bookkeeper, and he believed that all educated people should be able to understand accounting data.⁶¹³

He produced three more books in 1922: a case study of a manufacturing company; a two-volume Financial Management; and Budgetary Control.⁶¹³

A BUDGETING STANDARD

McKinsey's book was the first standard work on budgeting and the first attempt to cover the entire budgetary program.⁶¹³

[It] was actually a compilation of several of his articles that had been published over the two preceding years.⁶¹³

⁶¹³ Accounting in your city, James O. McKinsey, Tonya K. Flesher and Dale L. Flesher, UNIVERSITY OF MISSISSIPPI JAMES O. MCKINSEY The Accounting Historians Journal Vol 12 No. 2 Fall 1985
www.accounting-in.com/accounting-historians-journal/volume-12-number-2/james-o-mckinsey/

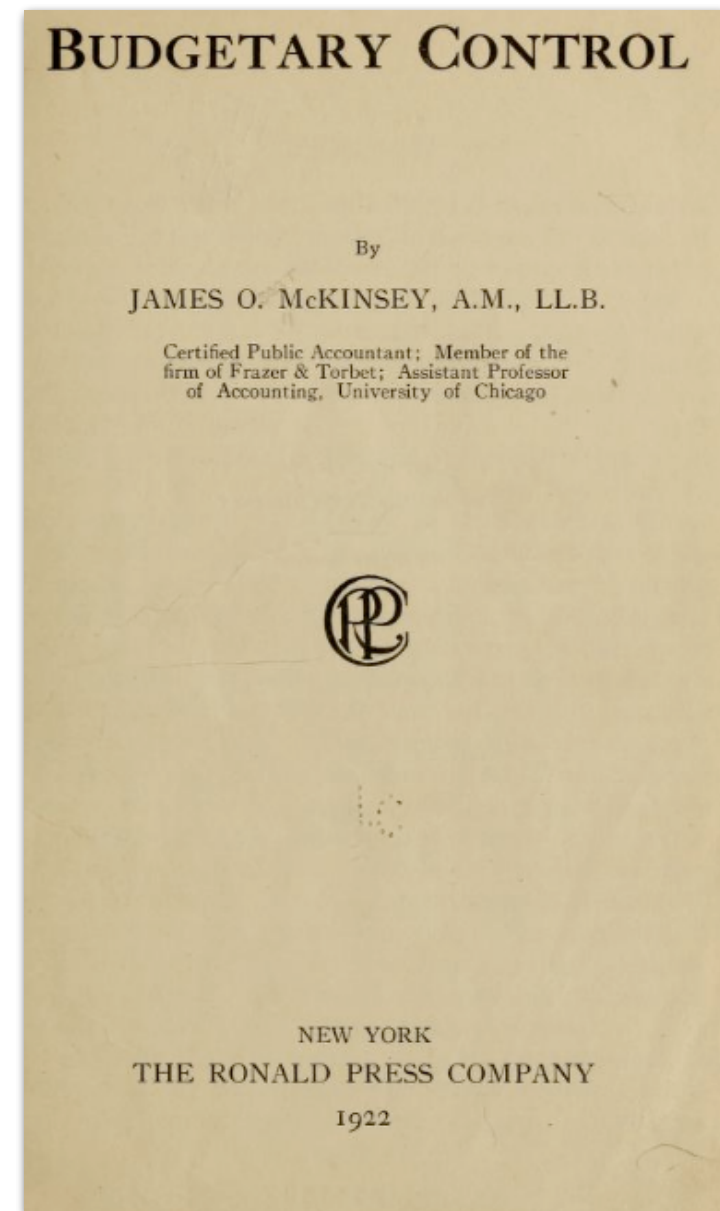


Image: **Budgetary Control** (1922), Author: McKinsey, James Oscar, 1889-1937, Publisher: New York, The Ronald press company Title Page
archive.org/details/budgetarycontrolmcki

He was aware that his book was a pioneer effort, and the first paragraph of the preface acknowledged that

“Although much has been written of budgetary control as applied to particular phases of a business, this is the first attempt, so far as the author is aware, to present the subject as a whole, and cover the entire budgetary program.

*It is to be regarded as an effort to state clearly the problems involved, rather than to offer full solutions.”*⁵⁹⁵

He opened the book with a chapter entitled The Meaning of Budgetary Control:

“That comprehensive planning is necessary for efficient administration may be regarded as an axiom of the present-day philosophy of business administration. Business executives have come to realize that they can perform properly the tasks of today only if they have already planned those

tasks yesterday, and planned also the tasks of tomorrow.

There are many who do not yet plan scientifically, but there are few who will deny the merits of the system.

The planning which may be done in connection with any particular business may be classified into three broad over-lapping groups:

1. *That which deals with the operations of the separate departments, such as production, sales, and finance. Such planning has been described loosely in the past, as “industrial engineering.”*

*That which deals with the coordination of the operations of the several departments to the end that a well-formulated program maybe made, for the business as a whole. ...*⁶¹⁴

⁵⁹⁵ Budgetary control (1922), Author: McKinsey, James Oscar, 1889-1937, Publisher: New York, The Ronald press company p.iii archive.org/details/budgetarycontroloimcki

⁶¹⁴ *ibid.*, pp.3-8

Such planning may well be termed “budgetary control.”

1. *That which deals with the determination of future conditions as reflected in the business cycle and the shaping of the plans of the business to meet these conditions. Such planning is known as “forecasting” or “business predicting.”*

While the discussion in the following pages is restricted primarily to a consideration of planning of the second kind, it must be realized of course that these various kinds of plans are all very closely related and must be coordinated if proper results are to be obtained.

The budgetary plans are vitally affected by the business cycle, and the departmental plans are equally affected by the budgetary plan... .

In the past, budgetary control has been considered primarily in connection with governmental units.

There has been much discussion of the “budgets” of cities and states, and during recent years much interest has been manifested in the budget of the national government... .

As a consequence many people have come to think of budgetary control as an instrument for governmental administration.

Not only is this the popular view but practically all the literature on budgetary control is confined to a discussion of governmental budgets.

*Although practically all people who have given thought to the subject will admit that there should be budgetary control of public finances, very few have thought of budgetary control with reference to the individual business unit. ...*⁶¹⁴

⁶¹⁴ Budgetary control (1922), Author: McKinsey, James Oscar, 1889-1937, Publisher: New York, The Ronald press company pp.3-8 archive.org/details/budgetarycontroloimcki

It is the purpose of these chapters to show that the principles of budgetary control are as applicable to the individual business unit as to the governmental unit, and to explain/ the method by which these principles may be applied... .

Probably the best way to show "what budgetary control is" is to outline how it operates... .

- 1. Each department prepares an estimate of its activities for the budget period... . Because of the interdependence of these departments, some will need to use the estimates of other departments in making their own estimates.*
- 2. The departmental heads will transmit the departmental estimates to an executive who has supervision of the budgetary procedure... .*

This official combines the estimates of all the departments into a proposed financial budget for the business. ... The proposed financial budget should show the estimated receipts from all sources and the estimated expenditures by all departments of the business.

- 3. The executive in charge of the budget procedure makes a comparison between the estimated receipts and the estimated expenditures as shown by the proposed budget. If the estimated expenditures exceed the estimated receipts, one of the following courses of action must be taken:*
 - (a) The departmental expenditures may be reduced. ...*
 - (b) Additional receipts may be secured. ...*
 - (c) Additional capital may be secured. ...* ⁶¹⁴

⁶¹⁴ Budgetary control (1922), Author: McKinsey, James Oscar, 1889-1937, Publisher: New York, The Ronald press company pp.3-8 archive.org/details/budgetarycontroloimcki

4. *The executive in charge of the budgetary procedure prepares from the departmental estimates an estimated balance sheet and an estimated statement of profit and loss, showing respectively the anticipated financial condition at the end of the budget period and the anticipated result of the operations of the period.*
5. *The departmental estimates, together with the proposed financial budget, and the estimated financial statements, are submitted by the executive in charge of the budgetary procedure to a budget committee, composed of the principal executives of the company and presided over by the president.*

This committee considers the proposed estimates and makes such revisions as it thinks necessary. ...

After the proposed estimates have been approved, they constitute the working program for the budget period.

The budgets as adopted set limits upon the expenditures of all the departments, and these limits cannot be exceeded without the permission of the budget committee.

The budgets also setup standards of performance for certain departments. ...

6. *Each department makes plans which will enable it to carry out its program as outlined by its budget. ...*
7. *Records are established so that the performance of each department may be properly recorded and comparisons made between the estimated and the actual performance. ...*⁶¹⁴

⁶¹⁴ Budgetary control (1922), Author: McKinsey, James Oscar, 1889-1937, Publisher: New York, The Ronald press company pp.3-8 archive.org/details/budgetarycontrol/mckin

*Periodic reports, showing a comparison between the estimated and the actual performance of each department for the budget period, are made to the executive in charge of the budgetary procedure and are by him transmitted to the budget committee and in some cases to the board of directors. ... ”*⁶¹⁴

McKinsey intended for this process to be illustrative only:

“The foregoing procedure is intended to be suggestive only.

Each organization must adopt a procedure which is fitted to its particular needs.

*The purpose of the foregoing outline is to indicate what budgetary control is by suggesting how it operates.”*⁶¹⁴

⁶¹⁴ Budgetary control (1922), Author: McKinsey, James Oscar, 1889-1937, Publisher: New York, The Ronald press company pp.3-8 archive.org/details/budgetarycontroloimcki

⁶¹³ Accounting in your city, James O. McKinsey, Tonya K. Flesher and Dale L. Flesher, UNIVERSITY OF MISSISSIPPI JAMES O. MCKINSEY The Accounting Historians Journal Vol 12 No. 2 Fall 1985 www.accountingin.com/accounting-historians-journal/volume-12-number-2/james-o-mckinsey/

For anyone involved in the budgeting cycle today, his suggested procedure mirrors the what has been used year on year, decade upon decade up to the present time.

A COMPLETE BUDGETARY PROGRAM FOR INDUSTRY

After explaining why budgetary control was needed the rest of the book was devoted to an explanation of its installation and operation.

In effect, he saw the budget as a device to integrate all of the decision areas of business administration.⁶¹³

World War I and the resultant drive for efficiency provided added stimulus for acceptance of McKinsey's work, which summarized experimentation to date to provide a complete budgetary program for industry.⁶¹³

His book *Budgetary Control* ... has been credited by business historians as being the first printed text that connected market forecasting, the feedback loop of planning, and outturn in an organic whole. The book put forth the notion that budgeting was a powerful management framework.⁵⁹²

In 1945, *Budgetary Control* was included in a list of the twelve most indispensable books in the field of management.^{613 688}

The author of that selection apologized for including such an old book on the list, but stated that McKinsey's work had lost none of its value with the passage of time.⁶¹³

⁶¹³ Accounting in your city, James O. McKinsey, Tonya K. Flesher and Dale L. Flesher, UNIVERSITY OF MISSISSIPPI JAMES O. MCKINSEY The Accounting Historians Journal Vol 12 No. 2 Fall 1985
www.accountingin.com/accounting-historians-journal/volume-12-number-2/james-o-mckinsey/

McKinsey also authored the first edition of what later became, according to industry sources, the most successful accounting principles textbook in America.⁶¹³

McKinsey's philosophy of accounting was that it should serve as a basis of functional control in a business.⁶¹³

Although McKinsey's first managerial accounting textbook was not published until 1924, he publicly espoused his philosophy of managerial accounting education in a 1919 article in the *Journal of Political Economy*.^{613 686}

⁶⁸⁶ McKinsey, J. O., "Accounting as an Administrative Aid," *Journal of Political Economy* (November, 1919), pp. 759-781.

⁵⁹² The Budget (1922 - 2009), Jun. 1, 2009 Jack Sweeney | Business Finance, a Penton publication
businessfinancemag.com/planning-budgeting-amp-reporting/budget-1922-2009

⁶⁸⁸ Hopf, H. A., "Soundings in the Literature of Management," *Some Classic Contributions to Professional Management: Historical Perspectives*, Vol. 2 (General Electric Co., 1956). p. 501.

In the preface to *Managerial Accounting*, McKinsey divided the subject into the following seventeen major topics:^{613 687}

- I. The Need and Nature of Standards and Records
- II. The Organization for Standards and Records Control
- III. Administrative Reports
- IV. Sales Control
- V. Purchasing Control
- VI. Traffic Control
- VII. Production Control
- VIII. Personnel Control
- IX. Plant and Equipment Control
- X. Branch-House Control
- XI. Investment Control
- XII. Control of Liabilities

- I. Expense Control
- II. Financial Control
- III. The Financial and Operating Program
- IV. Proprietorship Control
- V. Profits Control and Distribution

MANAGEMENT ACCOUNTING CONSULTING

After its publication, McKinsey would turn his attention away from academia to providing advice on organisation and management issues.⁶⁰⁷

Management theory was still in its infancy when McKinsey (or Mac, as he was known by friends and colleagues) founded the firm that bears his name in 1926.⁶⁰⁷

⁶¹³ Accounting in your city, James O. McKinsey, Tonya K. Flesher and Dale L. Flesher, UNIVERSITY OF MISSISSIPPI JAMES O. MCKINSEY The Accounting Historians Journal Vol 12 No. 2 Fall 1985
www.accountingin.com/accounting-historians-journal/volume-12-number-2/james-o-mckinsey/

⁶⁰⁷ en.wikipedia.org/wiki/James_O._McKinsey

⁶⁸⁷ McKinsey, J. O., *Managerial Accounting* (University of Chicago Press, 1924).

Mac was determined to help senior management in American companies solve their most important business problems.⁶⁰⁷

McKinsey, was, an early practitioner of the principles of “scientific management,” or the detailed study of work flow and the division of labor.⁶⁰⁸

However, in an era when “management engineers” were largely efficiency experts, Mac set out to enlarge the profession’s scope by persuading clients that his young firm could not only help inefficient companies but also assist healthy companies in reorienting themselves to thrive in a turbulent business environment.⁶⁰⁷

⁶⁰⁷ en.wikipedia.org/wiki/James_O._McKinsey

⁶⁰⁸ The Answer Men, Duff McDonald Jul 25 2009 nymag.com/news/intelligencer/topic/58091/

⁶⁸⁹ "Global Locations". McKinsey & Company. Retrieved April 10, 2012.

⁶¹¹ en.wikipedia.org/wiki/McKinsey_%26_Company

⁶¹² www.forbes.com/companies/mckinsey-company/

His methods were the beginning of budgeting as a method for control.

They were remarkably successful.

Once again, as with the scientific management proponents, the methods chosen would go onto become today’s status quo and quell subsequent innovation.

The company not only survived the Depression, it thrived, until the untimely death of McKinsey in 1937.⁶⁰⁸

After his death his company has gone from strength to strength.

McKinsey & Company has about 100 offices in over 50 countries.^{611 689}

It has 17,000 Employees (9,000 consultants) ⁶¹¹ and Revenue of \$7.5 Bn as of November 2012.⁶¹²

THE MANAGEMENT ACCOUNTING CAGE

Today, McKinsey is considered to be the father of managerial accounting.⁶⁰⁴

By 1925, virtually all management accounting practices used today had been developed: cost accounts for labor, material, and overhead; budgets for cash, income, and capital; flexible budgets; sales forecasts; standard costs; variance analysis; performance measures. ... At that point, the pace of innovation seemed to stop.⁵⁹⁷

Perhaps there was little incentive to continue to develop innovative management accounting procedures, since the corporate organizational forms developed by companies such as DuPont and General Motors proved to be the model for many corporations for the next half-century⁵⁹⁷ and beyond.

⁶¹⁸ Best Practices to Streamline the Annual Budgeting Process, By Don Howren, Senior Vice President, Global Marketing and Support, ADERANT
www.sterlinghoffman.com/newsletter/articles/article300.html

Today these management accounting practices are manifest in the - annual budget planning process, whereby every department needs to justify the continued use of resources throughout a fiscal year.⁶⁰³

To do that, managers often need to show how the individuals are dedicated to tasks well into the future.⁶⁰³

To do that, they need to create more detailed plans that justify the annual budget.⁶⁰³

The annual budgeting process is a painful lengthy process that consumes teams for weeks and results in a marginally useful plan that isn't revisited until the next year when the process is repeated.⁶¹⁸

⁶⁰⁴ McKinsey: The Company australia.top-consultant.com/Career-Advice/Company-Profiles/McKinsey.aspx

⁵⁹⁷ Relevance Lost: The Rise and Fall of Management Accounting, H. Thomas Johnson, Robert S. Kaplan, Publisher: Harvard Business Review Press (March 1, 1991) pp.11-12

⁶⁰³ Leffingwell, Dean, "Agile Software Requirements", Addison-Wesley, 2011. p.440

“Harvard Business Review” said it best when they described the budgeting process as “something that tends to conjure up in the minds of many managers images of inaccurate estimates, produced in tedious detail, which are never exactly achieved, but whose shortfalls and overruns require explanations.”⁶¹⁸

THE NUMBERS MEN

If Sloanism was built on decentralization, it was controlled decentralization. Sloan created a powerful general office full of numbers men ...⁵⁹³

With decentralisation the Finance division, and financial controls, became more dominant. This dominance and management by numbers have today become entrenched.

⁶¹⁸ Best Practices to Streamline the Annual Budgeting Process, By Don Howren, Senior Vice President, Global Marketing and Support, ADERANT
www.sterlinghoffman.com/newsletter/articles/article300.html

⁵⁹³ The Company: A Short History of a Revolutionary Idea, John Micklethwait and Adrian Wooldridge, Publisher: Modern Library; 2005 Modern Library Paperback Edition edition (January 11, 2005)

Today, managers are held accountable for the financial targets given to their departments.⁶⁰⁹

This creates internal competition that can drive individual departments to make decisions that generate a local profit but cause a greater loss across the company.⁶⁰⁹

In this environment, people can be more reluctant to share information across departments, hindering overall performance.⁶⁰⁹

Typically, each department is considered to be a profit, investment or cost centre, and overall financial performance is judged as the sum of the financial performances of these individual departments.⁶⁰⁹

⁶⁰⁹ No Bull, After twelve agile years has the world of software development really changed?
An Energized Work Production, by Simon Baker April 2012
nobull.energizedwork.com

This is an accounting abstraction^{609 610} that has shaped [today's] business planning, financial analysis, budgeting and management thinking⁶⁰⁹

Departmental financial targets are set against operational targets relating to the role performed. When individuals are judged and rewarded against such targets there's an incentive to cheat, by interfering with data or manipulating events to produce favourable data.⁶⁰⁹

When the numbers alone become all-important, almost any behaviour can be justified if it results in targets being met.⁶⁰⁹

⁶⁰⁹ No Bull, After twelve agile years has the world of software development really changed?
An Energized Work Production, by Simon Baker April 2012
nobull.energizedwork.com

⁶¹⁰ Profit Beyond Measure, by H. Thomas Johnson, Anders Broms

²⁴³ Springer, A Systemic View of Transformational Leadership", Ackoff R.L. Systemic Practice and Action Research, Vol. 11, No. 1, February 1998, pp. 23-36(14) Publication date: 1998-02-01 1094-429X/98/0200-0023\$15.00/0 © 1998 Plenum Publishing Corporation with kind permission from Springer Science+Business Media B.V.

FINANCE AS THE DOMINANT FUNCTION

As we discussed in chapter three, owners of early enterprises had the power to run their businesses with virtually no constraints.²⁴³

They were god-like in the small worlds they had created.²⁴³

When an enterprise went public, its god disappeared.²⁴³

Stockholders were numerous, dispersed, anonymous, and unreachable by members of the work force.²⁴³

The principal effect of the dispersion of "ownership" was to give effective control of enterprises to their managers.²⁴³

James Burnham (1941) referred to this as a “managerial revolution.” He argued that enterprises were now run by managers primarily for their own benefit, not the owners. Profit came to be thought of as a means, not an end.²⁴³

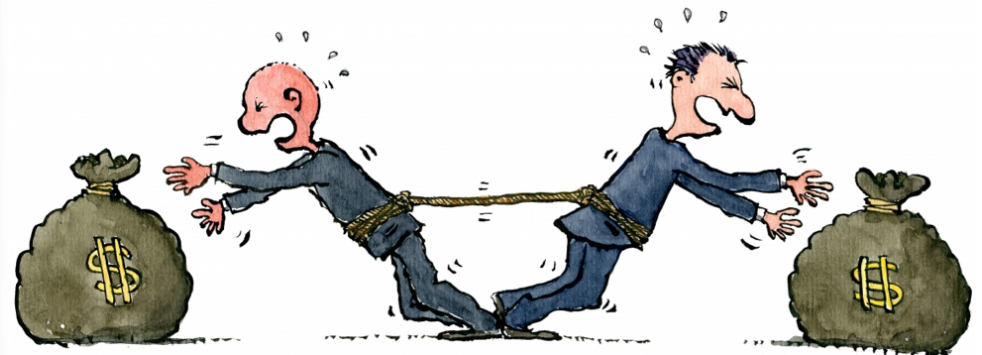
Making numbers had become all important.

Eventually for GM, stringent targets and narrow measures of success stultified initiative.⁵⁷⁷

... the delicate balance, which Sloan had brilliantly maintained between centralization and decentralization, was lost – finance emerged as the dominant function – and GM became paralyzed by what had once made it great.⁵⁷⁷

This is the legacy left in today’s organisations by Sloan, Brown and McKinsey.

Many of today’s organisations are run by the Finance department, and as a result, are equally paralyzed due to the prison of management by numbers.



⁵⁷⁷ The Ultimate Business Guru Guide: The Greatest Thinkers Who Made Management, 2nd Edition, Stuart Crainer, Des Dearlove, John Wiley and Sons, Oct 1, 2002, pp. 220-223
Copyright © 2002, John Wiley and Sons

²⁴³ Springer, A Systemic View of Transformational Leadership", Ackoff R.L. Systemic Practice and Action Research, Vol. 11, No. 1, February 1998, pp. 23-36(14) Publication date: 1998-02-01 1094-429X/98/0200-0023\$15.00/0 © 1998 Plenum Publishing Corporation with kind permission from Springer Science+Business Media B.V.

CLASSICAL ORGANIZATION THEORY

In this final section of this chapter we will meet the remaining protagonists who fathered two important fields that are still in use today; bureaucracy and administration.

What is called Classical organization theory evolved during the first half of this century.⁶¹⁶

It represents the merger of scientific management, bureaucratic theory, and administrative theory.⁶¹⁶

The philosophy of “production first, people second” has left a legacy of declining production and quality, dissatisfaction with work, loss of pride in workmanship, and a near complete loss of organizational pride.⁶¹⁶

Enter Max Weber.

⁶²³ en.wikipedia.org/wiki/Max_Weber

⁶¹⁹ "Max Weber." Encyclopædia Britannica. 2009. Encyclopædia Britannica Online. 20 April 2009. Britannica.com

Weber was a German sociologist, philosopher, and political economist whose ideas influenced social theory, social research, and the entire discipline of sociology.^{619 623}

Weber is often cited, with Émile Durkheim and Karl Marx, as among the three founding architects of sociology.^{620 621 622 623}

Max Weber ... expanded on Taylor's theories, and stressed the need to reduce diversity and ambiguity in organizations.⁶¹⁶

The focus was on establishing clear lines of authority and control.⁶¹⁶

⁶¹⁶ Organizational Theory and Behavior, 1993, David S. Walonick, Ph.D. rapidbi.com/management/organizational-theory-and-behavior-walonick/ and statpac.org/walonick/organizational-theory.htm

⁶²⁰ Kim, Sung Ho (24 August 2007). "Max Weber". Stanford Encyclopaedia of Philosophy. Retrieved 17 February 2010.

⁶²¹ Max Weber; Hans Heinrich Gerth; Bryan S. Turner (7 March 1991). From Max Weber: essays in sociology. Psychology Press. p. 1. ISBN 978-0-415-06056-1. Retrieved 22 March 2011.

⁶²² Radkau, Joachim and Patrick Ca miller. (2009). Max Weber: A Biography. Trans. Patrick Ca miller. Polity Press. (ISBN 9780745641478)

BUREAUCRATIC THEORY

Weber argued that the most efficient form of organization resembled a machine. It was characterized by strict rules, controls and hierarchies and driven by bureaucracy.⁶¹⁷

This, Weber termed the 'rational-legal model'.⁶¹⁷

This ideal type rested on a belief in the "legality" of patterns of normative rules and the right of those elevated to authority to issue commands (legal authority).²⁶⁷

At the opposite extreme were the 'charismatic' model and the 'traditional' model.⁶¹⁷

In the charismatic model, a single dominant figure ran the organization.⁶¹⁷

⁶¹⁷ The Ultimate Business Guru Guide: The Greatest Thinkers Who Made Management, 2nd Edition, Stuart Crainer, Des Dearlove, John Wiley and Sons, Oct 1, 2002, pp. 260-261
Copyright © 2002, John Wiley and Sons

In the traditional model ... things were done as they always have been done – such as in family firms in which power is passed down from one generation to the next.⁶¹⁷

Weber's bureaucratic theory emphasized the need for a hierarchical structure of power.⁶¹⁶

A formal set of rules was bound into the hierarchy structure to insure stability and uniformity.⁶¹⁶

It recognized the importance of division of labor and specialization.⁶¹⁶

Weber also put forth the notion that organizational behavior is a network of human interactions, where all behavior could be understood by looking at cause and effect.⁶¹⁶

²⁶⁷ Questions on Organizational Behavior Stephen W. Hartman, Ph.D. iris.nyit.edu/~shartman/mbao299/12o_o299.htm

⁶¹⁶ Organizational Theory and Behavior, 1993, David S. Walonick, Ph.D. rapidbi.com/management/organizational-theory-and-behavior-walonick/ and statpac.org/walonick/organizational-theory.htm



Weber believed all bureaucracies have certain characteristics which are listed below:

- a. A well defined hierarchy. All positions within a bureaucracy are structured in a way permitting the higher positions to supervise and control the lower positions.

This provides a clear chain of command facilitating control and order throughout the organization.

- b. Division of labor and specialization. All responsibilities in an organization are rationalized to the point where each employee will have the necessary expertise to master a particular task.

This necessitates granting each employee the requisite authority to complete all such tasks.⁶¹⁶

⁶¹⁶ Organizational Theory and Behavior, 1993, David S. Walonick, Ph.D. rapidbi.com/management/organizational-theory-and-behavior-walonick/ and statpac.org/walonick/organizational-theory.htm

- c. Rules and regulations. All organizational activities should be rationalized to the point where standard operating procedures are developed to provide certainty and facilitate coordination.
- d. Impersonal relationships between managers and employees. ... it is necessary for managers to maintain an impersonal relationship with the employees because of the need to have a rational decision making process rather than one influenced by favoritism and personal prejudice.

This organizational atmosphere would also facilitate rational evaluation of employee outcomes where personal prejudice would not be a dominant consideration.

- e. Competence. Competence should be the basis for all decisions made in hiring, job assignments, and promotions.

This would eliminate personal bias and the significance of “knowing someone” in central personnel decisions. This fosters ability and merit as the primary characteristics of a bureaucratic organization.

- f. Records. ... it is absolutely essential for a bureaucracy to maintain complete files regarding all its activities.

This advances an accurate organizational “memory” where accurate and complete documents will be available concerning all bureaucratic actions and determinations.⁶¹⁶

⁶¹⁶ Organizational Theory and Behavior, 1993, David S. Walonick, Ph.D. rapidbi.com/management/organizational-theory-and-behavior-walonick/ and statpac.org/walonick/organizational-theory.htm

We can see many of the foundations laid thus far in this book manifest, it is also easy to see how today's organizations follow these same characteristics.

BUREAUCRATIC PRINCIPLES

His bureaucratic organization was governed by certain principles:

1. Official business is conducted on a continuous basis
2. Official business is conducted with strict accordance to the following rules:
 - the duty of each official to do certain types of work is delimited in terms of impersonal criteria
 - the official is given the authority necessary to carry out his assigned functions

- the means of coercion at his disposal are strictly limited and conditions of their use strictly defined
1. Every official's responsibilities and authority are part of a vertical hierarchy of authority, with respective rights of supervision and appeal
 2. Officials do not own the resources necessary for the performance of their assigned functions but are accountable for their use of these resources
 3. Official and private business and income are strictly separated
 4. Offices cannot be appropriated by their incumbents (inherited, sold, etc.)
 5. Official business is conducted on the basis of written documents⁶²⁶

BUREAUCRATIC ROLES

In addition, the role of the bureaucratic official was defined:

- is personally free and appointed to his position on the basis of conduct
- exercises the authority delegated to him in accordance with impersonal rules, and his or her loyalty is enlisted on behalf of the faithful execution of his official duties
- appointment and job placement are dependent upon his or her technical qualifications
- administrative work is a full-time occupation
- work is rewarded by a regular salary and prospects of advancement in a lifetime career ...⁶²⁶

⁶²⁸ Historical Development of Organizational Structures, by Payam Babazadeh Kurdistan, Organizational Theory Dr. Begg
academia.edu/3115038/Historical_Development_of_Organizational_Structures

An official must exercise his or her judgment and his or her skills, but his or her duty is to place these at the service of a higher authority; ultimately he/she is responsible only for the impartial execution of assigned tasks ...⁶²⁶

We see Weber's principles and role definitions still in common use today in the form of role profiles, job descriptions, delegated authority and accountability.

BUREAUCRACY

The word "bureaucracy" stems from the word "bureau", used from the early 18th century in Western Europe not just to refer to a writing desk, but to an office, i.e., a workplace, where officials worked⁶²⁶ and Greek word of 'kratos' meaning rule that together means rule by office or a political power.⁶²⁸

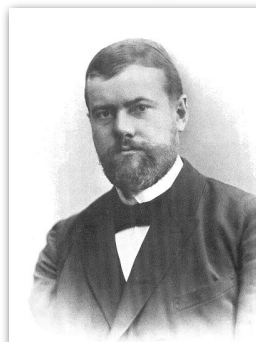
⁶²⁶ bureaucracy.askdefine.com

The term bureaucracy came into use shortly before the French Revolution of 1789, and from there rapidly spread to other countries.⁶²⁶

Bureaucracy thus basically means office power or office rule, the rule of the officialdom.⁶²⁷

“The decisive reason for the advance of the bureaucratic organisation has always been its purely technical superiority over any other form of organisation.”^{629 623}

Max Weber



It was Weber who began the studies of bureaucracy and whose works led to the popularisation of this term.^{631 623}

As the most efficient and rational way of organising, bureaucratisation for Weber was the key part of the rational-legal authority and furthermore, he saw it as the key process in the ongoing rationalisation of the Western society.

^{630 629 623}

⁶²⁷ www.newworldencyclopedia.org/entry/bureaucracy

⁶²⁶ bureaucracy.askdefine.com

⁶²⁹ Liesbet Hooghe (2001). The European Commission and the integration of Europe: images of governance. Cambridge University Press. p. 40. ISBN 978-0-521-00143-4. Retrieved 23 March 2011.

⁶³¹ Marshall Sashkin; Molly G. Sashkin (28 January 2003). Leadership that matters: the critical factors for making a difference in people's lives and organisations' success. Berrett-Koehler Publishers. p. 52. ISBN 978-1-57675-193-0. Retrieved 22 March 2011.

⁶³⁰ George Ritzer (29 September 2009). Contemporary Sociological Theory and Its Classical Roots: The Basics. McGraw-Hill. pp. 38–42. ISBN 978-0-07-340438-7. Retrieved 22 March 2011.

⁶²³ en.wikipedia.org/wiki/Max_Weber

Max Weber described many idealized types of public administration and government in his 1922 work *Economy and Society*.⁶²⁴

His critical study of the bureaucratisation of society became one of the most enduring parts of his work.^{669 670 624}

Many aspects of modern public administration go back to him, and a classic, hierarchically organized civil service of the Continental type is called “Weberian civil service”.^{671 624}

Weber listed several preconditions for the emergence of the bureaucracy:⁶³² The growth in space and population being administered, the growth in complexity of the administrative tasks being carried out and the existence of a monetary economy – these resulted in a need for a more efficient administrative system.^{632 623}

⁶²⁶ bureaucracy.askdefine.com

⁶²⁷ www.newworldencyclopedia.org/entry/bureaucracy

According to Weber, the attributes of modern bureaucracy include its impersonality, concentration of the means of administration, a leveling effect on social and economic differences and implementation of a system of authority that is practically indestructible.⁶²⁶

Thus, bureaucracy goes beyond division of labor in a broad sense, although that is a necessary condition for the existence of bureaucratic systems.⁶²⁷

⁶²⁴ en.wikipedia.org/wiki/Bureaucracy

⁶⁶⁹ Richard Swedberg; Ola Agevall (2005). *The Max Weber dictionary: key words and central concepts*. Stanford

⁶⁷⁰ George Ritzer (29 September 2009). *Contemporary Sociological Theory and Its Classical Roots: The Basics*. McGraw-Hill. pp. 38–42. ISBN 978-0-07-340438-7. Retrieved 22 March 2011.

⁶⁷¹ Liesbet Hooghe (2001). *The European Commission and the integration of Europe: images of governance*. Cambridge University Press. p. 40. ISBN 978-0-521-00143-4. Retrieved 23 March 2011.

⁶³² Kenneth Allan; Kenneth D. Allan (2 November 2005). *Explorations in Classical Sociological Theory: Seeing the Social World*. Pine Forge Press. pp. 172–176. ISBN 978-1-4129-0572-5.

⁶²³ en.wikipedia.org/wiki/Max_Weber

It involves precise, detailed definitions of the duties and responsibilities of each person or office. Administrative regulations determine areas of responsibility and control the allocation of tasks to each area.⁶²⁷

In terms of management theorizing Max Weber has become ... the sociological twin of Frederick Taylor, the king of scientific rationality.⁶¹⁷

Taylor recognised the requirement for the ... setting up of a more “...elaborate organisation and system...” which sowed the seeds for Max Weber’s bureaucratic organisation structure.²⁶⁵

Weber did not dote on bureaucracy. He was not the dotting type. Instead, he simply observed what he saw emerging in the fledgling industrial world.⁶¹⁷

He died in 1920.

Many of Weber’s works famous today were collected, revised and published posthumously.⁶²³

For many decades [after his death] America, and Europe, dominated world markets.⁶³³

They both practiced a management philosophy based on the scientific management by Fredrick Winslow Taylor, and the bureaucracy model of the German sociologist Max Weber.⁶³³

⁶²³ en.wikipedia.org/wiki/Max_Weber

⁶²⁷ www.newworldencyclopedia.org/entry/bureaucracy

²⁶⁵ Frederick Winslow Taylor - Chartered Management Institute - www.mbsportal.bl.uk/taster/subjareas/busmanhist/mgmtthinkers/taylor.aspx

⁶¹⁷ The Ultimate Business Guru Guide: The Greatest Thinkers Who Made Management 2nd Edition, Stuart Crainer, Des Dearlove, John Wiley and Sons, Oct 1, 2002, pp. 260-261 Copyright © 2002, John Wiley and Sons

⁶³³ "QUALITY: QUO VADIS?", The Swiss Deming Institute (December 2006): Ernst C. Glauser, p.5 www.deming.ch/downloads/E_quo_vadis.pdf Used with kind permission.

ADMINISTRATIVE THEORY

As discussed, Classical organization theory represents the merger of scientific management, bureaucratic theory, and administrative theory.

⁶¹⁶

Taylor was the father of scientific management, Weber the father of bureaucratic theory, but what of administrative theory?

Henri Fayol was the most notable of all contributors⁶³⁴

Fayol was a successful French industrialist.²⁶⁷

His entire working career was spent with a mining company,²⁶⁷ “Compagnie de Commentry-Fourchambeau-Decazeville” in Commentry⁶³⁵

⁶¹⁶ Organizational Theory and Behavior, 1993, David S. Walonick, Ph.D. rapidbi.com/management/organizational-theory-and-behavior-walonick/ and statpac.org/walonick/organizational-theory.htm

²⁶⁷ Questions on Organizational Behavior Stephen W. Hartman, Ph.D. iris.nyt.edu/~shartman/mbao299/120_0299.htm

⁶³⁷ Morgen Witzel (2003). Fifty key figures in management. Routledge, 2003. ISBN 0-415-36977-0 p.96.



By 1900 the company was one of the largest producers of iron and steel in France and was regarded as a vital industry.⁶³⁷

Fayol became managing director in 1888, when the mine company employed over 10,000 people, and held that position over 30 years until 1918.⁶³⁵

⁶³⁴ Administrative Theory www.introduction-to-management.24xls.com/en126

⁶³⁵ en.wikipedia.org/wiki/Henri_Fayol

Image: **Henri Fayol**, Source: centre-histoire.sciences-po.fr/archives/fonds/henri_fayol.html en.wikipedia.org/wiki/File:Fonds_henri_fayol.jpg

He is credited with turning the company around from a threatened bankruptcy into a strong financial position by the time of his retirement at age 77.²⁶⁷

He and his colleagues developed [administrative] theory independently of scientific management, but roughly contemporaneously.⁶³⁵

Whereas scientific management focused on the productivity of the individual worker, administrative theory focused on the total organization.⁶³⁴

In France, Le Chatelier translated Taylor's work and introduced scientific management throughout government owned plants during World War I.²⁸¹

⁶³⁵ en.wikipedia.org/wiki/Henri_Fayol

⁶³⁴ Administrative Theory www.introduction-to-management.24xls.com/en126

²⁸¹ en.wikipedia.org/wiki/Frederick_Winslow_Taylor



Fayol referred to Taylor in his writing and considered him to be a visionary and pioneer in the management of organizations.⁶⁴¹

However, Fayol differed from Taylor in his focus. Taylor's main focus was on the task, whereas Fayol was more concerned with management.⁶⁴¹

²⁶⁷ Questions on Organizational Behavior Stephen W. Hartman, Ph.D. iris.nyit.edu/~shartman/mbao299/120_0299.htm

⁶⁴¹ en.wikipedia.org/wiki/Fayolism

Image: **Henry Le Chatelier** (1850-1936), an influential French chemist of the 19th century
en.wikipedia.org/wiki/File:Lechatelier.jpg

Another difference between the two theorists is their treatment of workers.⁶⁴¹

Fayol appears to have slightly more respect for the worker than Taylor had, as evidenced by Fayol's proclamation that workers may indeed be motivated by more than just money. Fayol also argued for equity in the treatment of workers.⁶⁴¹

Fayol wrote that "Taylor's approach differs from the one we have outlined in that he examines the firm from the "bottom up." He starts with the most elemental units of activity - the workers' actions - then studies the effects of their actions on productivity, devises new methods for making them more efficient, and applies what he learns at lower levels to the hierarchy..."^{638 281}

⁶³⁸ Fayol, H. (1987). General and industrial management: Henri Fayol's classic revised by Irwin Gray. Belmont, CA: David S. Lake Publishers. p. 43

²⁸¹ en.wikipedia.org/wiki/Frederick_Winslow_Taylor

He suggests that Taylor has staff analysts and advisors working with individuals at lower levels of the organization to identify the ways to improve efficiency.²⁸¹

According to Fayol, the approach results in a "negation of the principle of unity of command."^{640 641}

Fayol criticized Taylor's functional management in this way. "... the most marked outward characteristics of functional management lies in the fact that each workman, instead of coming in direct contact with the management at one point only, ... receives his daily orders and help from eight different bosses..."^{639 641}

⁶⁴¹ en.wikipedia.org/wiki/Fayolism

⁶⁴⁰ Fayol, H. (1987). General and industrial management: Henri Fayol's classic revised by Irwin Gray. Belmont, CA: David S. Lake Publishers. p. 44

⁶³⁹ Fayol, General and Industrial Administration, 1949, p. 68

Those eight, Fayol said, were (1) route clerks, (2) instruction card men, (3) cost and time clerks, (4) gang bosses, (5) speed bosses, (6) inspectors, (7) repair bosses, and the (8) shop disciplinarian.^{639 641}

This, Fayol said, was an unworkable situation, and that Taylor must have somehow reconciled the dichotomy in some way not described in Taylor's works.²⁸¹

Fayol believed by focusing on managerial practices he could minimize misunderstandings and increase efficiency in organizations.^{641 642}

He enlightened managers on how to accomplish their managerial duties, and the practices in which they should engage.⁶⁴¹

²⁸¹ en.wikipedia.org/wiki/Frederick_Winslow_Taylor

⁶⁴² Pietri, P. H (1974). "ORGANIZATIONAL COMMUNICATION: The Pioneers". Journal Of Business Communication 11 (4): 3-6.

Fayol outlined his theory of general management, which he believed could be applied to the administration of myriad industries.⁶⁴¹

His concern was with the administrative apparatus (or functions of administration), and to that end he presented his administrative theory, that is, principles and elements of management.⁶⁴¹

Like Taylor he believed in the controlling of workers in order to achieve a greater productivity over all other managerial considerations.⁶⁴¹

Fayol advocated a flexible approach to management, one which he believed could be applied to any circumstance whether in the home, the workplace, or within the state.⁶⁴¹

⁶³⁹ Fayol, General and Industrial Administration, 1949, p. 68

⁶⁴¹ en.wikipedia.org/wiki/Fayolism

He stressed the importance and the practice of forecasting and planning in order to apply these ideas and techniques which demonstrated his ability and his emphasis in being able to adapt to any sort of situation.⁶⁴¹

14 PRINCIPLES OF MANAGEMENT

Fayol developed 14 principles of management in order to help managers manage their affairs more effectively.⁶⁴¹

It is remarkable to see how many of these principles are still in use in today's organisations considering they were published in 1916.

1. Division of Work

Division of work, specialization, produces more and better work with the same effort. It focuses effort while maximizing employee efforts.

⁶⁴⁸ Henri Fayol 14 Principles of Management Year 1916, Post: Gaurav Akarani, Date: 4/21/2011 01:32:00 PM IST kalyan-city.blogspot.com/2011/04/henri-fayol-14-principles-of-management.html

It is applicable to all work including technical applications. There are limitations to specialization which are determined by its application.²⁶⁷

2. Discipline

Discipline means a respect for the rules and regulation of the organisation. Discipline may be Self-discipline, or it may be Enforced discipline.⁶⁴⁸

Obedience and respect between a firm and its employees based on clear and fair agreements is absolutely essential to the functioning of any organization.

Good discipline requires managers to apply sanctions whenever violations become apparent.²⁶⁷

No organisation can survive without discipline.⁶⁴⁸

⁶⁴¹ en.wikipedia.org/wiki/Fayolism

²⁶⁷ Questions on Organizational Behavior Stephen W. Hartman, Ph.D. iris.nyit.edu/~shartman/mbao299/120_0299.htm

3. Authority and responsibility

Authority is the right to give orders and the power to exact obedience.

Distinction must be made between a manager's official authority deriving from office and personal authority created through individual personality, intelligence and experience. Authority creates responsibility.²⁶⁷

Authority must be equal to Responsibility. If the authority is more than responsibility then chances are that a manager may misuse it. If responsibility is more than authority then he may feel frustrated.⁶⁴⁸

²⁶⁷ Questions on Organizational Behavior Stephen W. Hartman, Ph.D. iris.nyit.edu/~shartman/mbao299/12o_0299.htm

⁶⁴⁸ Henri Fayol 14 Principles of Management Year 1916, Post: Gaurav Akrani, Date: 4/21/2011 01:32:00 PM IST kalyan-city.blogspot.com/2011/04/henri-fayol-14-principles-of-management.html

4. Subordination of Individual Interest to General Interest

In an organisation, there are two types of interest, viz., the individual interest of the employees, and the general interest of the organisation.⁶⁴⁸

The interests of one employee or group of employees are subordinate to the interests and goals of the organization and cannot prevail over it.²⁶⁷

5. Remuneration

Salaries are the price of services rendered by employees. It should be fair and provide satisfaction both to the employee and employer.²⁶⁷

The rate of remuneration is dependent on the value of the services rendered as determined by the employment market.

If an organisation wants efficient employees and best performance, then it should have a good remuneration policy. This policy should give maximum satisfaction to both employer and employees.⁶⁴⁸

6. Centralisation

No organisation can be completely centralised or decentralised... Therefore, there should be a balance between centralisation and decentralisation.⁶⁴⁸

The optimum degree of centralization varies according to the dynamics of each organization. The objective of centralization is the best utilization of personnel.²⁶⁷

²⁶⁷ Questions on Organizational Behavior Stephen W. Hartman, Ph.D. iris.nyit.edu/~shartman/mbao299/12o_0299.htm

⁶⁴⁸ Henri Fayol 14 Principles of Management Year 1916, Post: Gaurav Akrani, Date: 4/21/2011 01:32:00 PM IST kalyan-city.blogspot.com/2011/04/henri-fayol-14-principles-of-management.html

7. Order

There should be an Order for Things and People in the organisation. Order for things is called Material Order. Order for people is called Social Order. Material Order refers to “a place for everything and everything in its place.” Social Order refers to the selection of the “right man in the right place”.⁶⁴⁸

There must be orderly placement of the resources such as Men and Women, Money, Materials, etc. Misplacement will lead to misuse and disorder.⁶⁴⁸

8. Equity

In organizations equity is a combination of kindness and justice. The desire for equity and equality of treatment are aspirations to be taken into account in dealing with employees.²⁶⁷

The managers should use the equity while dealing with the employees. Equity is a combination of kindness and justice. Equity creates loyalty and devotion in the employees.⁶⁴⁸

9. Initiative

Management should encourage initiative. That is, they should encourage the employees to make their own plans and to execute these plans. This is because an initiative gives satisfaction to the employees and brings success to the organisation.⁶⁴⁸

10. Esprit De Corps

Teamwork is fundamentally important to an organization.²⁶⁷

²⁶⁷ Questions on Organizational Behavior Stephen W. Hartman, Ph.D. iris.nyit.edu/~shartman/mbao299/12o_0299.htm

⁶⁴⁸ Henri Fayol 14 Principles of Management Year 1916, Post: Gaurav Akrani, Date: 4/21/2011 01:32:00 PM IST kalyan-city.blogspot.com/2011/04/henri-fayol-14-principles-of-management.html

Esprit de Corps means "Team Spirit". Therefore, the management should create unity, co-operation and team-spirit among the employees.⁶⁴⁸

11. Stability of Tenure

In order to attain the maximum productivity of personnel, it is essential to maintain a stable work force. Management insecurity produces undesirable consequences. Generally the managerial personnel of prosperous concerns is stable, that of unsuccessful ones is unstable.²⁶⁷

12. Unity of Direction

All activities which have the same objective must be directed by one manager, and he must use one plan.⁶⁴⁸

13. Scalar Chain

A chain of authority exists from the highest organizational authority to the lowest ranks.²⁶⁷

This line joins all the members (managers and employees) from top to bottom.⁶⁴⁸

While needless departure from the chain of command should be discouraged, using the “gang plank” principle of direct communication between employees can be extremely expeditious and increase the effectiveness of organizational communication.²⁶⁷

The Scalar Chain is shown by a double ladder A to G and A to Q.⁶⁴⁸

A is the head of the organisation. B and L are the next level, and so on.⁶⁴⁸

If quick action is necessary, then a “Gang Plank” “FP” is made. Now F and P can contact each other directly but they should inform E and O about their decisions.⁶⁴⁸

Every member must know who is his superior. He must also know who is his subordinate.⁶⁴⁸



Image: **Scalar Chain** is shown in diagram ... with Gang plank as dotted line FP.

Source: Henri Fayol 14 Principles of Management Year 1916, Post: Gaurav Akrani, Date: 4/21/2011 01:32:00 PM IST

kalyan-city.blogspot.com/2011/04/henri-fayol-14-principles-of-management.html

²⁶⁷ Questions on Organizational Behavior Stephen W. Hartman, Ph.D. iris.nyit.edu/~shartman/mbao299/12o_0299.htm

⁶⁴⁸ Henri Fayol 14 Principles of Management Year 1916, Post: Gaurav Akrani, Date: 4/21/2011 01:32:00 PM IST
kalyan-city.blogspot.com/2011/04/henri-fayol-14-principles-of-management.html

14. Unity of Command

According to this principle, a subordinate (employee) must have only one superior (boss or manager).⁶⁴⁸

A subordinate must receive orders from only one superior. In other words, a subordinate must report to only one superior.⁶⁴⁸

Employees cannot adapt to dual command.²⁶⁷

5 ELEMENTS OF MANAGEMENT

Drawing upon his years of experience as the managing director of a large company he suggested there are Five Elements of Management that are universal to all managers of all organizations.⁶⁴³

⁶⁴⁸ Henri Fayol 14 Principles of Management Year 1916, Post: Gaurav Akrani, Date: 4/21/2011 01:32:00 PM IST
kalyan-city.blogspot.com/2011/04/henri-fayol-14-principles-of-management.html

They are, in his words: 'to manage is to forecast and plan, to organize, to command, to co-ordinate and to control'.⁶⁴³

1. Planning: creating a plan of action for the future, determining the stages of the plan and [what is] ... necessary to implement it.
2. Organizing: Once a plan of action is designed, managers need to provide everything necessary to carry it out; including raw materials, tools, capital and human resources.
3. Command: Managers need to implement the plan. They must have an understanding of the strengths and weaknesses of their personnel.⁶⁴¹

⁶⁴¹ en.wikipedia.org/wiki/Fayolism

²⁶⁷ Questions on Organizational Behavior Stephen W. Hartman, Ph.D. iris.nyit.edu/~shartman/mbao299/120_0299.htm

⁶⁴³ Supervisory management: principles and practice By David Evans Publisher: Cengage Learning EMEA; 3rd edition (May 21, 1992) p. 129

3. Coordination: High-level managers must work to “harmonize” all the activities to facilitate organizational success. Communication is the prime coordinating mechanism.
4. Control: The final element of management involves the comparison of the activities of the personnel to the plan of action, it is the evaluation component of management.⁶⁴¹

These 5 elements are commonplace as the management theory in use today.

THE ADVENT OF STRATEGIC PLANNING

Fayol wrote that all activities of business enterprises could be divided into six groups: technical, commercial, financial, accounting, security and administrative or managerial.⁶⁴⁴

Fayol initiated the concepts of long-range planning and forecasting that were used by many firms with consultants' assistance.⁶⁴⁷

It was Henri Fayol who perceived the three traditional phases of planning as short-range, medium-range and long-range.⁶⁴⁶

Fayol developed annual, two-year, five-year and ten-year plans, that were updated on a rolling-revised basis.⁶⁴⁵

Thus, many “modern” concepts of strategic planning unquestionably were initiated by Henri Fayol.⁶⁴⁵

⁶⁴¹ en.wikipedia.org/wiki/Fayolism

⁶⁴⁴ Principles Of Management, P N Reddy P C Tripathi. Publisher: Tata Mcgraw Hill (2008) p.18

⁶⁴⁵ Strategic Management Methodology: Generally Accepted Principles for Practitioners (Guidelines for Strategists), Curtis W. Roney Praeger (January 3, 2004) p.6

⁶⁴⁶ Fire Department Strategic Planning: Creating Future Excellence, 2nd Edition By Mark Wallace p. 223 (March 17, 2006)

⁶⁴⁷ Principles and Practices of Professional Consulting, By Steven C. Stryker. Publisher: Government Institutes (January 16, 2011) p. 11

MANAGEMENT EDUCATION

As a result of his management experience, Fayol strongly believed management theories could be developed and taught to others.²⁶⁷

His first writing on administration, *Administration Industrielle et Generale*, was published in 1916 in the Bulletin of the Society of Mineral Industries and later appeared as a book.²⁶⁷

The book became prominent in the United States after a second English translation appeared in 1949 under the title *General and Industrial Management*.²⁶⁷

[It] had a major impact on the emerging field of management.⁶⁴⁹

²⁶⁷ Questions on Organizational Behavior Stephen W. Hartman, Ph.D. iris.nyit.edu/~shartman/mbao299/120_0299.htm

⁶⁴⁹ Administrative Theory, Ryszard Barnat www.introduction-to-management.24xls.com/en126

⁶⁴¹ en.wikipedia.org/wiki/Fayolism

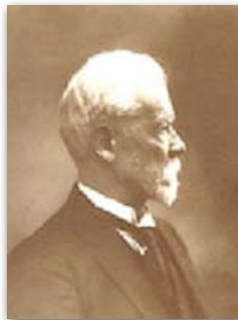
In *General and Industrial Management* he outlines an agenda whereby, under an accepted theory of management, every citizen is exposed and taught some form of management education and allowed to exercise management abilities first at school and later on in the workplace.⁶⁴¹

His book represented an attempt to develop a universal theory of management, applicable both in government and private business which could be a basis for teaching this most important subject.⁶⁵⁰

⁶⁵⁰ Dunlevy, John H. *Management control systems : a short history from Fayol to Forrester*. (April 1, 1965) George Washington University archive.org/details/managementcontroodunl

“Everyone needs some concepts of management; in the home, in affairs of state, the need for managerial ability is in keeping with the importance of the undertaking, and for individual people the need is everywhere in greater accordance with the position occupied.”⁶⁴¹

Henri Fayol



⁶⁴¹ en.wikipedia.org/wiki/Fayolism

Fayol's desire for teaching a generalized theory of management stemmed from the belief that each individual of an organization at one point or another takes on duties that involve managerial decisions. Unlike Taylor, however, who believed management activity was the exclusive duty of an organizations dominant class.⁶⁴¹

Fayol presented his concept of the universal nature of management, developed the first comprehensive theory of management, and stressed the need for teaching management in schools and colleges in his book.

It is hard to overestimate the influence Fayol has brought to bear on management thinking, and management thinkers.⁶⁵¹

⁶⁵¹ Management Thought, By Jayanta K Nanda, Publisher Sarup & Sons, New Delhi
(1 Jan 2005) p.76

FURTHER CONTRIBUTIONS

There were other contributors to administrative theory.

Many of the protagonists we met in chapter four described their need for sound administrative activity. For example, Alexander Church stated in *The Science and Practice of Management* (1918):

*“I undertook an attempt to reduce the regulative principles of management to their simplest terms - that is, to express them in the broadest and most general way - and thus to provide a basic classification for administrative activity on which a detailed structure could subsequently be built up.”*³⁸⁵

However, beyond Fayol, the most notable contributors were Chester Barnard, Luther Gulick, James D. Mooney and Lyndall Urwick.

We will meet each in turn before drawing this chapter to a close.

BARNARD - SCHOLARLY AND INSIGHT

Chester Barnard was an American business executive, public administrator, and the author of pioneering work in management theory and organizational studies.⁶⁵⁵

Barnard was a practitioner. He was the president of the New Jersey Bell Telephone Company. Barnard looked upon the organisation as a system of consciously coordinated activities needed by the individual to overcome his biological, physical and social limitations.⁶⁵⁴

In analyzing the qualities of forces at work in an organisation, Barnard started with those of the individual, analyzed the functions of the executive, and included both in his analysis of the total organization concept.⁶⁵⁴

⁶⁵⁵ en.wikipedia.org/wiki/Chester_Barnard

⁶⁵⁴ *Management Thought*, By Jayanta K Nanda, Publisher Sarup & Sons, New Delhi (1 Jan 2005) pp.110-111

³⁸⁵ *The Science and Practice of Management* (1918), Author: Church, A. Hamilton (Alexander Hamilton), 1866-1936, Publisher: New York : The Engineering magazine co. pp. iv-v archive.org/details/sciencepractice00ochur

To him, an organization was a system of interactions, whose continuance depended on the balance between the individual member's contributions and the satisfactions he derived.⁶⁵⁴

Thus, recognizing individual behavior, he saw the manager's job as one of allocating "satisfactions" - money, status, and the like-to elicit individual coordinated and prescribed behaviour.⁶⁵⁴

By this type of analysis, Barnard brought more scholarly and insight into the totality of managerial organizations than any prior individual.⁶⁵⁴

Highly sociological in his approach to management, Barnard nevertheless repeatedly emphasized the individual and his importance as the strategic factor which must be induced to incorporate.⁶⁵⁴

⁶⁵⁵ en.wikipedia.org/wiki/Chester_Barnard

Barnard looked at organizations as systems of cooperation of human activity, and noted that they are typically short-lived.⁶⁵⁵

According to Barnard, organizations are not long-lived because they do not meet the two criteria necessary for survival: effectiveness and efficiency.⁶⁵⁵

After giving a series of lectures on management, Barnard published his only book, *The Functions of the Executive*, in 1938.²⁶⁷

His landmark 1938 book, ... sets out a theory of organization and of the functions of executives in organizations. The book has been widely assigned in university courses in management theory and organizational sociology.^{656 655}

⁶⁵⁴ Management Thought, By Jayanta K Nanda, Publisher Sarup & Sons, New Delhi (1 Jan 2005) pp.110-111

²⁶⁷ Questions on Organizational Behavior Stephen W. Hartman, Ph.D. iris.nyit.edu/~shartman/mbao299/120_0299.htm

⁶⁵⁶ Chester (Irving) Barnard Biography (1886 - 1961) on biography.com. Retrieved 16 June 2008.

Barnard summarized the functions of the executive as follows:⁶⁵⁵

- Establishing and maintaining a system of communication;
- Securing essential services from other members;
- Formulating organizational purposes and objectives.⁶⁵⁵

Barnard formulated two ... theories: one of authority and the other of incentives. Both are seen in the context of a communication system grounded in seven essential rules:⁶⁵⁵

- The channels of communication should be definite;
- Everyone should know of the channels of communication;

- Everyone should have access to the formal channels of communication;
- Lines of communication should be as short and as direct as possible;
- Competence of persons serving as communication centers should be adequate;
- The line of communication should not be interrupted when the organization is functioning;
- Every communication should be authenticated.⁶⁵⁵

Contrary to Weber beliefs that communication flows from the top of the organization to the bottom, Barnard feels organizational communication flows from the bottom to the top.²⁶⁷

⁶⁵⁵ en.wikipedia.org/wiki/Chester_Barnard

²⁶⁷ Questions on Organizational Behavior Stephen W. Hartman, Ph.D. iris.nyit.edu/~shartman/mbao299/120_0299.htm

He [stated] there are four factors affecting the willingness of employees to accept authority:

1. ... employees must understand the communication.
2. ... employees accept the communication as being consistent with the organization's purposes.
3. ... employees feel their actions will be consistent with the needs and desires of the other employees.
4. ... employees feel they are mentally and physically carry out the order from the higher authority.²⁶⁷

⁶⁵⁵ en.wikipedia.org/wiki/Chester_Barnard

²⁶⁷ Questions on Organizational Behavior Stephen W. Hartman, Ph.D. iris.nyit.edu/~shartman/mbao299/12o_0299.htm

⁶⁵⁴ Management Thought, By Jayanta K Nanda, Publisher Sarup & Sons, New Delhi (1 Jan 2005) pp.110-111

He also introduced the concepts of informal organisation;⁶⁵⁴ informal organizations within formal organizations perform necessary and vital communication functions for the overall organization.²⁶⁷

This is consistent with his belief that the executive's main organizational function is acting as a channel of communication and maintaining the organization in operation.²⁶⁷

He stressed in role of the executive in creating an atmosphere where there is coherence of values and purpose.⁶¹⁶

He is credited with developing the acceptance theory of management emphasizing the willingness of people to accept those having authority to act.²⁶⁷

⁶¹⁶ Organizational Theory and Behavior, 1993, David S. Walonick, Ph.D. rapidbi.com/management/organizational-theory-and-behavior-walonick/ and statpac.org/walonick/organizational-theory.htm

As for incentives, he proposed two ways of convincing subordinates to cooperate: tangible incentives and persuasion.⁶⁵⁵

He gives great importance to persuasion, much more than to economic incentives. He described four general and four specific incentives. The specific incentives were:⁶⁵⁵

1. Money and other material inducements;
2. Personal non-material opportunities for distinction;
3. Desirable physical conditions of work;
4. Ideal benefactions, such as pride of workmanship etc.⁶⁵⁵

The general incentives were:

1. Associated attractiveness (based upon compatibility with associates)

2. Adaptation of working conditions to habitual methods and attitudes
3. The opportunity for the feeling of enlarged participation in the course of events
4. The condition of communing with others (personal comfort with social relations, opportunity for comradeship etc.,)⁶⁵⁵

His treatment of management differentiated with Taylor and Fayol.⁶⁵⁷

Barnard started with the individual, moved to cooperative organised endeavour and ended with executive functions.⁶⁵⁷

⁶⁵⁵ en.wikipedia.org/wiki/Chester_Barnard

⁶⁵⁷ Management Principles And Practices, M.Sakthivel Murugan Publisher: New Age International Pvt Ltd Publishers (December 1, 2008) p.56

GULICK - 7 ACTIVITIES OF MANAGEMENT

Luther Gulick (1937) expanded on Fayol's management functions in his introduction of the "seven activities of management" - planning, organizing, staffing, directing, coordinating, reporting and budgeting - as denoted by the mnemonic POSDCORB.⁶⁵³

Eventually, theorists began to refer to these functions as the management process.⁶⁵³

Gulick was an expert on public administration.⁶⁵²

In a time where the prevalent theme was the separation of politics and administration, Gulick advocated that it was impossible to separate the two.⁶⁵²

Based upon fifty years of his analysis, he notes that "after all, governments are

constituted of human beings, are run by human beings and have as their main job helping, controlling and serving human beings."⁶⁵²



Image: **Luther Gulick**, Date Created/Published: [19]39 January 19, This image is available from the United States Library of Congress's Prints and Photographs division under the digital ID hec.25912. Library of Congress Prints and Photographs Division Washington, D.C. 20540, www.loc.gov/pictures/item/hec2009012610/ Rights Advisory: No known restrictions on publication.

⁶⁵³ Leadership Roles and Management Functions in Nursing: Theory and Application, Bessie L. Marquis, Carol Jorgensen Huston Publisher: Lippincott Williams & Wilkins; Seventh, North American Edition edition (February 9, 2011) p.35

⁶⁵² [en.wikipedia.org/wiki/Luther_Gulick_\(social_scientist\)](http://en.wikipedia.org/wiki/Luther_Gulick_(social_scientist))

**MOONEY - THE PRINCIPLES OF
ORGANISATION**

The name James D. Mooney is seldom mentioned in texts on management. Yet it was he who coauthored the 1931 classics on the nature and development of organization entitled 'Onward Industry' ⁶⁵⁸ later re-worked and re-titled The Principles of Organisation. ⁶⁹³

The book is considered by many scholars to be a significant contribution to administrative management theory. ⁶⁵⁹

Mooney studied mechanical engineering and eventually became a key member of General Motor's top management team. ⁶⁵⁹

Mooney ... teamed-up with a historian-turned-executive, Alan C. Reiley to expose the true principles of an organisation in their book ... ⁶⁵⁸

⁶⁵⁸ Management Thought, By Jayanta K Nanda, Publisher Sarup & Sons, New Delhi (1 Jan 2005) pp. 118-119

They stated that organisations should be studied from two viewpoints: (i) the employees who create and utilize the process of organisation, and (ii) the objective of the process. ⁶⁵⁸

They proposed three organizational principles: (1) Coordination (2) Scalar Principle (3) Functional Distinctions. ⁶⁵⁸

For Mooney and Reiley the efficient organisation was based on formalism, which means "the efficient coordination of all relationships". ⁶⁵⁸

Curiously, the title does not do justice to the contents. ⁶⁵⁸

⁶⁹³ MR JAMES D MOONEY A MAN OF MISSIONS, David Hayward's Automotive History www.gmhistory.chevytalk.org/James_D_Mooney_by_David_Hayward.html

⁶⁵⁹ What Is Administrative Management Theory? - Definition, Functions & Quiz Taught by Shawn Grimsley education-portal.com/academy/lesson/what-is-administrative-management-theory---definition-functions-quiz.html

In 1926 Mooney conceived of the idea that the principles of organization employed by all great leaders throughout history must surely be the same; [he] therefore set out on a search of all available literature, reading sources on such leaders as Alexander the Great, Caesar, and Aristotle.⁶⁵⁸

What he found was that all sound organization structures, including the Catholic Church, are based on a system of superior-subordinate relationships arranged in a hierarchical fashion, which he called the scalar principle.⁶⁵⁸

His contribution was strictly one of a tight engineering approach to the age-old problem of harnessing human effort to achieve an objective.⁶⁵⁸

⁶⁵⁸ Management Thought, By Jayanta K Nanda, Publisher Sarup & Sons, New Delhi (1 Jan 2005) pp. 118-119

⁵³⁸ en.wikipedia.org/wiki/Lyndall_Urwick

⁶⁶⁰ Management: Theory And Practice, Gerald A. Cole, Publisher: International Thomson Business Press; 7 edition (April 28, 2011) p.4

Subsequent writers, however, have freely borrowed from Mooney's analysis ...⁶⁵⁸

URWICK - PROMOTION OF THEORIES

As discussed, Taylor's and Fayol's focus and approach differed, however they were both to have a profound impact on the theory of work.

At first these ideas were developed separately, Fayol in France and Taylor in the United States. By the 1930s their work was being promoted and developed by writers such as L.F. Urwick and E.F.L. Brech on both sides of the Atlantic.

660

Lyndall Fownes Urwick was an influential business management consultant and thinker in the United Kingdom.⁵³⁸

He is recognized for integrating the ideas of earlier theorists like Henri Fayol into a comprehensive theory of management administration.⁵³⁸

He wrote an influential book called *The Elements of Business Administration*, published in 1943. With Luther Gulick, he founded the academic journal *Administrative Science Quarterly*.⁵³⁸

His growing reputation as a British thinker on management and administration won him appointment in 1928 as Director of the International Management Institute in Geneva.⁵³⁸

The Institute may have proven short-lived, closing in 1933, but it provided Urwick the opportunity not only to lecture widely but to produce his books *The Meaning of Rationalisation* and *The Management of Tomorrow*.⁵³⁸

It was also the time that he became particularly keen to promote the writings of Henri Fayol to an English audience.⁵³⁸

⁵³⁸ en.wikipedia.org/wiki/Lyndall_Urwick

When Urwick returned to Britain, he established a management consultancy, Urwick Orr and Partners, which came to be one of the leading companies of its type in the 1940s and 1950s.⁵³⁸

He was an eminent supporter of bureaucracy and 'machine model' of organisation.⁶⁶⁵

He, in his later work, identified 29 principles applicable to all organisations. He forcefully advocated the demands for improved management training in industrial undertaking.⁶⁶⁵

Urwick's book, *The Elements Of Administration* is considered a significant contribution to management theory for two reasons: first, he attempted to blend scientific management and administrative theory into a more comprehensive package.⁶⁶⁵

⁶⁶⁵ *Management Thought*, By Jayanta K Nanda, Publisher Sarup & Sons, New Delhi (1 Jan 2005) p.78

Second, like Fayol, he stated that the management processes consisted of three functions: planning, organizing, and controlling.⁶⁶⁵

He added further that these functions are guided by the sub functions of forecasting, coordination, and command.⁶⁶⁵

In 1945, he made his most lasting contribution to management literature with the publication of his three-volume *Making of Scientific Management*.⁵³⁸

It was the first treatise to present a clear and focused discussion of the development and applications of management science.⁵³⁸

Urwick was the first writer to apply the concept of span of control formally to business.⁵³⁸

⁵³⁸ en.wikipedia.org/wiki/Lyndall_Urwick

⁶⁶⁵ *Management Thought*, By Jayanta K Nanda, Publisher Sarup & Sons, New Delhi (1 Jan 2005) p.78

Urwick asserted that the reduction of less important daily duties is essential for enhancing the personal touch that makes a business executive an effective leader.^{666 538}

Using the work of General Sir Ian Standish Monteith Hamilton, Urwick maintained that limiting the number of subordinates reporting to an executive (i.e. restricting the span of control) can do the following: improve executive effectiveness; reduce pressure, inefficiency and incompetence; produce better employee cooperation; and build morale and sense of unity within the organization.^{666 538}

BRECH - THE RESPONSIBILITIES OF MANAGEMENT

Together with L.F. Urwick, E.F.L. Brech co-authored “The making of scientific management”.

⁶⁶⁶ *The Manager's Span of Control*, Lyndall F. Urwick, Harvard Business Review, May-June 1956 www.nickols.us/Span.pdf

Edward Franz Leopold Brech wrote several books; “Principles and Practice of Management”, and “Organisation: the framework of management”.

In “Principles and Practice of Management” E.F.L. Brech defined management as:

*“A social process entailing responsibility for the effective and economical planning and regulation of the operations of an enterprise, in fulfillment of a given purpose or task, such responsibility involving ... Judgement and decision in determining plans and in using data to control performance ... The guidance, integration, motivation and supervision of personnel.”*⁶⁶¹

Regarding administration Brech defined it as:

“Administration is that part of management which is concerned with the installation and carrying out of the procedure by which the

*progress of the activities is regulated and checked against plans.”*⁶⁶²

Brech was clear on the responsibilities of management:

“... It is the contention of the present author that the responsibilities of management forming an organization structure should always be written down in properly constituted standards or “schedules”.

*This, it is maintained, is the only practical means of delegation, the only effective way of making known the patters of responsibilities and relationships, both to the holders of the positions concerned and to all others who together form the management team. ... ”*⁶⁶⁴

⁶⁶¹ Principles Of Management, V.S.Bagad, Publisher: Technical Publications; Third edition (2009) p. 1-3

⁶⁶² Industrial Sociology, Economics & Management, TR Jain, OP Khanna, M L Grover and R K Singla p.131

⁶⁶⁴ Business Organization, John O'Shaughnessy, Publisher: Harper Collins Publishers Ltd (November 1976)

Brech, like his colleague Urwick, surveyed the whole field of management. Like his senior partner, he ... elaborated or clarified the views of earlier writers.⁶⁶³

INTO THE MAINSTREAM

Administrative theory coupled with scientific management, and bureaucratic theory was propelled into the mainstream.

Classical organization theory has since been replaced by other organizational theories.

For example Neoclassical Organization Theory; where - the human relations movement evolved as a reaction to the tough, authoritarian structure of classical theory.⁶¹⁶

Contingency Theory; where - Classical and neoclassical theorists viewed conflict as something to be avoided because it interfered with equilibrium.⁶¹⁶

Contingency theorists view conflict as inescapable, but manageable,⁶¹⁶ and Systems Theory which we will discuss in a future chapter.

However, it is my view, that although these theories have been proposed, in practice they have rebounded off the dominant Classical organization theory of scientific management, bureaucratic theory and administrative theory, which in itself is intertwined with Sloan's management by numbers.

⁶⁶³ Company Organization, M . C. Barnes, A. H. Fogg, C. N. Stephens, L. G. Titman pp. 47-50

⁶¹⁶ Organizational Theory and Behavior, 1993, David S. Walonick, Ph.D. rapidbi.com/management/organizational-theory-and-behavior-walonick/ and statpac.org/walonick/organizational-theory.htm

— **Summary** —

Administration,
Bureaucracy and Numbers

Sloan's unique contribution to organisational development was the decentralised divisional structure, and the use of financial controls.²⁷⁹

The challenge then as now was to find a balance between centralised and decentralised management authority and responsibility.²⁷⁹

The compromise sought by General Motors was to give the divisions wide ranging powers but to maintain central oversight by use of co-ordinating committees.²⁷⁹

The autonomous and largely self-sufficient functional divisions, each headed by its own president⁵⁶⁸, with central control, and a powerful executive committee, is a common model used in today's organizations.

²⁷⁹ www.systemsthinking.co.uk Copyright © Vanguard Consulting Limited

⁵⁶⁸ The Puritan Gift: triumph, collapse and revival of an American dream, Kenneth Hopper and William Hopper, I. B. Tauris (April 3, 2007) pp. 82-84 By permission of Ken Hopper and Will Hopper

Sloan's "Federal Decentralization" has become a norm.

Unfortunately this has led to some unwanted side effects, with middle management able to exercise some level of control, however they are trapped by the structure from within they exist.

This is known as the - 'frozen middle,' a term coined by former GM Chairman Roger Smith to describe an unmotivated middle management.⁵⁸⁸

Sloan created the first management system capable of leading a large corporation; managing by the numbers.⁵⁸⁵

⁵⁸⁸ Golf And The Game Of Leadership By Mchugh, Donald E, Publisher: AMACOM (May 20, 2007) p.33

⁵⁸⁵ May Alfred Sloan R.I.P. By Mark Edmondson www.leanlibrary.com/alfred_sloan.htm

In the 1920s General Motors introduced operating and capital budgets, an important management innovation that has persisted to current times.⁵⁹⁶

Coordinated control was exercised through: 1) Continual financial/operational planning, measurement, and reporting, and 2) Capital allocations.⁴⁰⁵

They used budgets to coordinate and control the diverse business units in the General Motors system.⁵⁹⁶

It was Alfred Sloan who coined the phrase 'management by the numbers' (Chandler 1977).¹

⁴⁰⁵ Alfred Sloan and Organizational Management www.melodiesinmarketing.com/2008/01/28/alfred-sloan-and-organizational-management/

¹ 540-A brief history of Western management thought, Copyright © Vanguard Consulting Limited

⁵⁸⁵ May Alfred Sloan R.I.P. By Mark Edmondson www.leanlibrary.com/alfred_sloan.htm

Leading by monitoring key performance indicators was a breakthrough that enabled his senior management to understand their business units well enough to make strategic decisions.⁵⁸⁵

Sloan was ruthless with his managers. Through his financial reporting system he was able to tell which managers were performing and which weren't.

If the numbers were bad, managers were replaced; if they were good, managers were promoted.¹

Imagine the consequences (they are with us today): 'unlucky' managers out on the scrap heap; 'lucky' managers promoted to senior positions.¹

⁵⁹⁶ The Execution Premium: Linking Strategy to Operations for Competitive Advantage, Robert S. Kaplan and David P. Norton, Publisher: Harvard Business School Press; 1st edition (July 14, 2008) pp.185-186

Management by the numbers facilitated the spread of the command-and-control, hierarchical philosophy; it formed the 'rule book' for the relationship between operating and senior managers.¹

A system run by KPI's is still very much the norm today.

Today, managers of subsidiaries, divisions and functions are given prescriptions for reporting and action by staff in senior or head office functions, with little room for debate about whether these things help or hinder.¹

For the 'junior' players in the relationship to voice such concerns may be a career-limiting move. Such prescriptions often go beyond the budget numbers; head office functions frequently demand a series of reports, 'scores' and standards to be implemented and reported.¹

In this book so far, we have seen the origins of such thinking.

The tenets underlying modern cost accounting can be traced back to 1923.

Under Controller Donaldson Brown and Chairman Alfred Sloan, General Motors adopted or developed the major cost accounting techniques that would be used by big business for the next half century and beyond. These included return on investment, return on equity calculations and flexible budgeting.⁶⁸⁵

Brown as Chief Financial Officer brought Du Pont's accounting system and added additional sophistication.⁶⁸⁶

¹ 540-A brief history of Western management thought, Copyright © Vanguard Consulting Limited

⁶⁸⁵ Great Events in Accounting & Business, Posted by : Ludella Lewis, Ludella Lewis & Company www.stanfordwhoswho.com/view.blog.php?id=164

⁶⁸⁶ McKinsey, J. O., "Accounting as an Administrative Aid," *Journal of Political Economy* (November, 1919), pp. 759-781.

An advanced flexible budgeting system, uniform performance criteria, a pricing formula to determine target prices to yield a specific ROI under standard volume, incentive and profit sharing plans, and a market based pricing system ... [were] put into place.⁶⁸⁶

Thus, the “modern” cost system used during much of the 20th century was developed (or refined) by Brown.⁶⁰⁰

Brown is credited with modernizing cost accounting for business.⁵⁹⁰

He had created the budget system, but it was James O. McKinsey who institutionalized it.⁶⁰²

⁶⁸⁶ McKinsey, J. O., “Accounting as an Administrative Aid,” *Journal of Political Economy* (November, 1919), pp. 759-781.

⁶⁰⁰ WHO WAS THE FIRST ACCOUNTANT? acct.tamu.edu/giroux/first.html

⁵⁹⁰ 125 people of impact in accounting, Leaders who left a mark on the profession, by Ken Tysiac, June 2012, *Journal of Accountancy*
www.journalofaccountancy.com/Issues/2012/Jun/20124960.htm

His budgeting process was intended for illustrative purposes only, however for anyone involved in the budgeting cycle today his suggested process mirrors the procedure they use year on year, decade on decade.

By 1925, virtually all management accounting practices used today had been developed: cost accounts for labor, material , and overhead; budgets for cash, income, and capital; flexible budgets; sales forecasts; standard costs; variance analysis; performance measures. ... At that point, the pace of innovation seemed to stop.⁵⁹⁷

⁶⁰² The Budget (1922-2009) DuPont created it. McKinsey institutionalized it. Drucker overlooked it. R.I.P. By Jack Sweeney, *Business Finance*, www.bfmag.com, May/June 2009, Best Practices for Finance Executives, A Penton Publication

⁵⁹⁷ Relevance Lost: The Rise and Fall of Management Accounting, H. Thomas Johnson, Robert S. Kaplan, Publisher: Harvard Business Review Press (March 1, 1991) pp.11-12

“With a better understanding of consulting’s true genealogy, we can see that cost accountants did not cease their investigations.

They simply shifted their professional jurisdiction from monitoring costs as accountants to lowering costs as consultants,”

McKenna wrote in the *The World’s Newest Profession: Management Consulting in the Twentieth Century* (Cambridge University Press, 2005).^{592 685}

With this new focus, it did not take long for the new accounting and budgeting practices to take hold, and numbers to be used to hold management accountable.

As an example, in the 1929 Taylor Society book “Scientific Management in American Industry”, devices to appraise executive performance were described, of which it stated; “Most important are the budget”³⁷²

Thirty years after their inception, the dictums of budgetary control were being disseminated to every part of the world, reshaping organizations and tasking finance executives (or putting a bit in their mouths) for generations to come.⁵⁹²

To date, there have been three generations of executives that grew up in an age of budgetary control.⁵⁹²

Today these management accounting practices are manifest in the annual budget planning process, whereby every department needs to justify the continued use of resources throughout a fiscal year.⁶⁰³

⁶⁰³ Leffingwell, Dean, “Agile Software Requirements”, Addison-Wesley, 2011. p.440

³⁷² Scientific Management in American Industry, by the Taylor Society, H. S. Person, editor (1929), Author: Taylor Society; Person, Harlow S. (Harlow Stafford), 1875-1955, Publisher: New York and London, Harper & Brothers pp. 389-397
archive.org/details/scientificmanageootayl

⁵⁹² The Budget (1922 - 2009), Jun. 1, 2009 Jack Sweeney | Business Finance, a Penton publication
businessfinancemag.com/planning-budgeting-amp-reporting/budget-1922-2009

⁶⁸⁵ (Cambridge University Press, 2005).

To do that, managers often need to show how the individuals are dedicated to tasks well into the future. To do that, they need to create more detailed plans that justify the annual budget.⁶⁰³

[As a result this leads to] managers at all levels to commit to delivering specified outcomes, even though many variables underpinning those outcomes are beyond their control ...⁵⁹²

Over the last 50 years the accounting profession has ascended to the highest executive ranks.²⁷⁹

It is now normal to assume that chief executives could and perhaps should come from the accounting profession.²⁷⁹

⁶⁰³ Leffingwell, Dean, "Agile Software Requirements", Addison-Wesley, 2011. p.440

⁵⁹³ The Company: A Short History of a Revolutionary Idea, John Micklethwait and Adrian Wooldridge, Publisher: Modern Library; 2005 Modern Library Paperback Edition edition (January 11, 2005)

The rise of the accounting profession has been coupled with ability to get more detailed financial information through computers.²⁷⁹

Further, for many companies it's about running business of excelling in financial engineering instead of operations/engineering.²⁷⁹

If Sloanism was built on decentralization, it was controlled decentralization. Sloan created a powerful general office full of numbers men ...⁵⁹³

With decentralisation, the Finance division and financial controls became more dominant.

²⁷⁹ www.systemsthinking.co.uk Copyright © Vanguard Consulting Limited

⁵⁹² The Budget (1922 - 2009), Jun. 1, 2009 Jack Sweeney | Business Finance, a Penton publication
businessfinancemag.com/planning-budgeting-amp-reporting/budget-1922-2009

This dominance and management by numbers have today become entrenched.

An idea that solved a problem for Alfred Sloan has become a disease within our organizations.²⁷⁹

Numbers have achieved ascendancy over purpose.²⁷⁹

[Future] accounting historians will likely someday remember the budget not only for what it brought to business, but also for how tightly it clung to it.⁵⁹²

This makes it extremely difficult for those that wish to escape.

As Jeremy Hope, one of the founders of the Beyond Budgeting Round Table states;

“If people are going to be recognized and rewarded based on meeting the budget, then it's very difficult to change anything else...⁵⁹²”

Jeremy Hope, BBRT Co-founder and Director



⁵⁹² The Budget (1922 - 2009), Jun. 1, 2009 Jack Sweeney | Business Finance, a Penton publication
businessfinancemag.com/planning-budgeting-amp-reporting/budget-1922-2009

Most accountants are more aware than managers of the flaws in management accounting.²⁷⁹

Bjarte Bogsnes, a leading proponent of Beyond Budgeting, and Vice President Performance Management Development at Statoil states:

“With today’s dynamic, unpredictable, and demanding environment, managers require more freedom and responsibility.

*Processes must be more continuous and responsive, and managers must have more discretion on how to achieve results, not just meet budgeted performance.”*⁶⁹⁴

For the most part though, his words have gone unheeded.

²⁷⁹ www.systemsthinking.co.uk Copyright © Vanguard Consulting Limited

⁶⁹⁴ B. Bognes, "Blowing up the Budget: Statoil's Journey Beyond Budgeting," Palladium Planning and Budgeting Conference, Amsterdam (October 2006).

Bureaucracy has become synonymous with today’s organizations.

Weber’s bureaucratic theory emphasized the need for a hierarchical structure of power.⁶¹⁶

A formal set of rules was bound into the hierarchy structure to insure stability and uniformity.⁶¹⁶

Weber’s bureaucratic principles have been widely adopted throughout the world.²⁶⁷

His well defined hierarchy, division of labor and specialization, rules and regulations, impersonal relationships, competent decisions making and recording of activities are still characteristics of organizations today.

⁶¹⁶ Organizational Theory and Behavior, 1993, David S. Walonick, Ph.D. rapidbi.com/management/organizational-theory-and-behavior-walonick/ and statpac.org/walonick/organizational-theory.htm

²⁶⁷ Questions on Organizational Behavior Stephen W. Hartman, Ph.D. iris.nyit.edu/~shartman/mbao299/120_0299.htm

His principles and role definitions are commonly used today in the form of role profiles, job descriptions, delegated authority and accountability.

He worked extensively on organizational patterns and authority structures.⁶²⁵

According to Weber, bureaucracy represents the most efficient organizational design.⁶²⁵

He proposed it as a normative mode - an ideal that should be adopted as widely as possible.⁶²⁵

The norm it has become.

⁶²⁵ Source: 208 Management Thought, By Jayanta K Nanda, Publisher Sarup & Sons, New Delhi (1 Jan 2005) p.45

¹ 540-A brief history of Western management thought, Copyright © Vanguard Consulting Limited

⁶²⁶ bureaucracy.askdefine.com

However, Weber was also pessimistic about the impact a bureaucracy would have on workers.¹

He emphasized that bureaucracy becomes inefficient when a decision must be adopted to an individual case.⁶²⁶

He could see the dehumanizing effects of what has been characterized as his 'iron cage' of bureaucracy which 'succeeds in eliminating from official business love, hatred, and all purely personal, irrational and emotional elements which escape calculation.'¹

He was right to be pessimistic; customers and workers are human.¹

We have seen how Henri Fayol belongs to the administrative management branch of the classical school.²⁶⁷

Fayol outlined his theory of general management, which he believed could be applied to the administration of myriad industries.⁶⁴¹

Fayol developed 14 principles of management in order to help managers manage their affairs more effectively;⁶⁴¹ division of work, discipline, authority and responsibility, subordination of individual interest to general interest, remuneration, centralisation, order, equity, initiative, team spirit, stability of tenure, unity of direction, chain of command and unity of command.

It is remarkable to see how many of these principles are still in use in today's organisations considering they were

published in 1916.

His management elements or functions; to forecast and plan, to organize, to command or direct, to coordinate, to control⁶³⁵ are commonplace as the elements of management theory today.

Fayol was one of the most influential contributors to modern concepts of management,⁶³⁶ and has been called the father of management.²⁶⁷

He also was the first to develop the importance of lateral communications with his gang plank theory of communications in organization.²⁶⁷

²⁶⁷ Questions on Organizational Behavior Stephen W. Hartman, Ph.D. iris.nyit.edu/~shartman/mbao299/12o_0299.htm

⁶⁴¹ en.wikipedia.org/wiki/Fayolism

⁶³⁵ en.wikipedia.org/wiki/Henri_Fayol

⁶³⁶ Organisation Development: Principles, Process & Performance, By Amitabh Mehta. Publisher: Global India Publications Pvt Ltd; First edition (December 31, 2009) p.158

It was Henri Fayol who perceived the three traditional phases of planning as short-range, medium-range and long-range.⁶⁴⁶

Fayol developed annual, two-year, five-year and ten-year plans, that were updated on a rolling-revised basis.⁶⁴⁵

Thus, many “modern” concepts of strategic planning unquestionably were initiated by Henri Fayol.⁶⁴⁵

What organisation today doesn't have a 5 year plan? We treat something that was invented in 1916 as the norm.

The problem is, as John Seddon states;

“Have you ever seen a 5 year plan that says we are going to get worse? Do we ever go back to our plans to see if we achieved them?²⁷⁹”

John Seddon - Occupational Psychologist



⁶⁴⁶ Fire Department Strategic Planning: Creating Future Excellence, 2nd Edition By Mark Wallace p. 223 (March 17, 2006)

⁶⁴⁵ Strategic Management Methodology: Generally Accepted Principles for Practitioners (Guidelines for Strategists), Curtis W. Roney Praeger (January 3, 2004) p.6

²⁷⁹ www.systemsthinking.co.uk Copyright © Vanguard Consulting Limited

Image: John Seddon, Provided by Charlotte Pell, Vanguard

Weber's vertical hierarchy of authority and Fayol's scalar chain of authority are still in place today, for example the line of people you have to go through to gain approval, as well as having to inform your one up manager is common place today.

Looking more closely at the details of Fayol's five management activities, it is obvious that the conflicts and concerns, responsibilities and duties, styles, and problems that he identified a century ago are still just as relevant today.⁶⁵¹

How do we 'ensure that individual interests are subordinated to (harmonized with) the general interest'? And if the 'fight against an excess of regulation, red tape, and paperwork' was problematic enough for Fayol to regard as a management duty in his day, he would surely be disappointed at how little progress has been made.⁶⁵¹

Barnard's theory of authority; understandable and consistent communication, ability to do the job; and his theory of incentives; money and other material inducements, working conditions, feeling of participation, communing with others and comradeship are still regarded as good management practice today.

Gulick's "seven activities of management" - planning, organizing, staffing, directing, coordinating, reporting and budgeting - as denoted by the mnemonic POSDCORB⁶⁵³ are still taught by management schools and practiced by executives in organizations today.

⁶⁵¹ Management Thought, By Jayanta K Nanda, Publisher Sarup & Sons, New Delhi (1 Jan 2005) p.76

⁶⁵³ Leadership Roles and Management Functions in Nursing: Theory and Application, Bessie L. Marquis, Carol Jorgensen Huston Publisher: Lippincott Williams & Wilkins; Seventh, North American Edition edition (February 9, 2011) p.35

As discussed, Urwick was the first writer to apply the concept of span of control formally to business.⁵³⁸

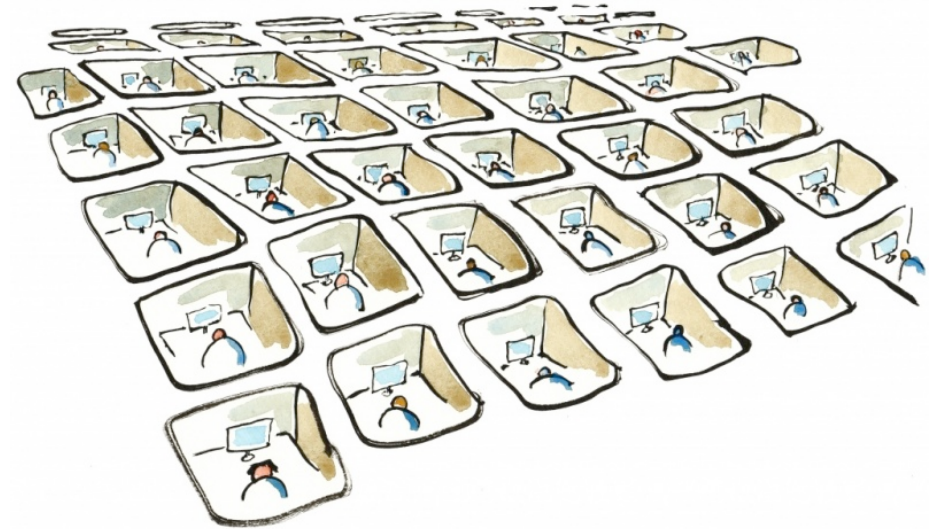
It refers to the number of subordinates a supervisor has.⁶⁶⁷

Span of control is the term now used more commonly in business management, particularly human resource management.⁶⁶⁷

We discussed at the end of the last chapter that it's remarkable Taylors mental revolution did indeed take hold and subsequently hasn't been replaced.

It has been reinforced by the dominant Classical organization theory of scientific management, bureaucratic theory and administrative theory, which in itself has become intertwined with Sloan's management by numbers.

Each of these have become a series of iron cages within our organisations; trapping people in systems based purely on teleological efficiency, rational calculation and control.⁶⁹⁰



⁵³⁸ en.wikipedia.org/wiki/Lyndall_Urwick

⁶⁶⁷ en.wikipedia.org/wiki/Span-of-control

⁶⁹⁰ en.wikipedia.org/wiki/Iron_cage

Design and Management — Concepts —

- Financial Reporting Systems, Continual Financial/ Operational Planning and Measurement.
- Key Performance Indicators, Performance Measures, Functional Revenue and Costs Accounting, Return on Investment, Return on Sales - and Sales to Assets, Return on Equity, Financial Targets Against Operational Targets.
- Standard Financial Ratios
- Modern Cost Accounting Practices; Cost Accounts for Labor, Material and Overhead, Standard Costs, Variance Analysis
- Corporate Budgeting, Budgets for Cash, Income and Capital, Flexible Budgeting, and the Program Budget System
- Market Forecasting, Sales Forecasts and Planning
- In Company Pricing Structures - Same Producer Cannibalization
- Pricing Formulas and Market Based Pricing Systems

Design and Management — Concepts —

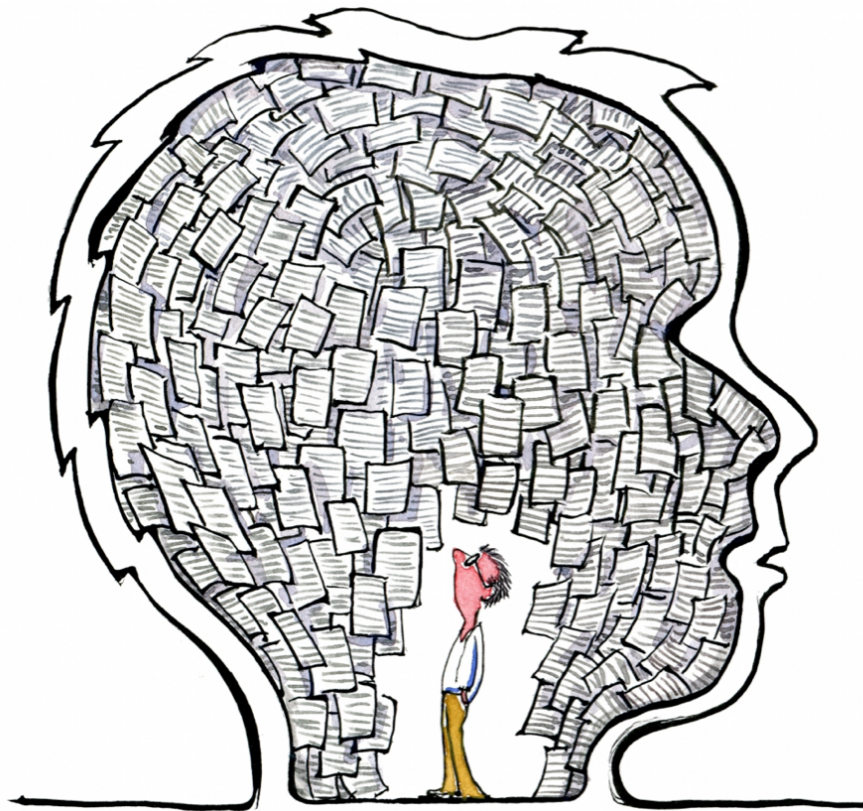
- Autonomous Functional Divisions and Inter-Divisional Relations Committees
- Mass Production Coupled With Customer Satisfaction
- Planned Obsolescence; Annual Product Changes
- Management Efficiency; a Reliable, Efficient, Machine-Like Process
- Executive Education Programs, Management Schools
- Coordinated Control and Decentralization
- Management by Numbers, Financial Controls and Finance as a Dominant Function
- Dispersal of Company Ownership and Shareholders
- Classic Organizational Theory; Scientific Management, Bureaucratic Theory, and Administrative theory
- Hierarchical Structure of Power, Clear Lines of Authority and Control,
- Rules and Regulations

Design and Management — Concepts —

- Organizational Principles
- Bureaucracy, Bureaucratic Principles, the Role of a Bureaucratic Official
- Administrative Management Principles
- Management Functions; Forecasting and Planning, Organizing, Commanding or Directing, Coordinating, and Controlling
- The Seven Activities of Management - POSDCORB; Planning, Organizing, Staffing, Directing, Coordinating, Reporting and Budgeting
- Short, Medium and Long Range Planning; Annual, Two-Year, Five-Year and Ten-Year Plans.
- Sociological Management and the Informal Organization
- The Executive Function
- Authority and Incentives
- The Acceptance Theory of Management
- Span of Control

Our next chapter will summarise what we have discovered about the origins of the design and management of work.

Chapter Five: Administration, Bureaucracy and Numbers



By David Joyce

— Bibliography —

- 542 The Toyota Phenomenon, by Ernst C. Glauser, THE SWISS DEMING INSTITUTE December 2006
www.deming.ch/downloads/E_Toyota.pdf
- 279 www.systemsthinking.co.uk
Copyright © Vanguard Consulting Limited
- 33 The Puritan Gift: triumph, collapse and revival of an American dream, Kenneth Hopper and William Hopper, I. B. Tauris (April 3, 2007)
p.43-44 By permission of Ken Hopper and Will Hopper
- 568 *ibid.*, pp. 82-84
- 569 *ibid.*, p. 85
- 117 *ibid.*, pp.67-68
- 140 *ibid.*, p.72.
- 567 Chandler Jr., A.D. and Salsbury, S., Pierre S. Du Pont and the Making of the Modern Corporation, BeardBooks, Washington, DC, 1971, p. xxi.
- 566 en.wikipedia.org/wiki/Pierre_S._du_Pont
- 570 en.wikipedia.org/wiki/General_Motors
- 572 "History of General Motors, Company profile". General Motors. Retrieved April 4, 2011.
- 683 en.wikipedia.org/wiki/Depression_of_1920-21

- 573 history.gmheritagecenter.com/wiki/index.php/1942,_Production_Goes_to_War
- 571 The turning wheel; the story of General Motors through twenty-five years, 1908-1933 (1934), Author: Pound, Arthur, 1884-1966, Publisher: Garden City, N.Y., Doubleday, Doran & Company, Inc. pp. 157-161
archive.org/details/turningwheelstoroopounrich
- 574 *ibid.*, pp. 192-200
- 575 *ibid.*, pp. 204-208
- 579 *ibid.*, p. 210
- 31 en.wikipedia.org/wiki/DuPont
- 586 en.wikipedia.org/wiki/Alfred_P._Sloan
- 657 Management Principles And Practices, M.Sakthivel Murugan Publisher: New Age International Pvt Ltd Publishers (December 1, 2008) p.56
- 652 [en.wikipedia.org/wiki/Luther_Gulick_\(social_scientist\)](http://en.wikipedia.org/wiki/Luther_Gulick_(social_scientist))
- 538 en.wikipedia.org/wiki/Lyndall_Urwick
- 614 Budgetary control (1922), Author: McKinsey, James Oscar, 1889-1937, Publisher: New York, The Ronald press company pp.3-8
archive.org/details/budgetarycontroloimcki

- 577 The Ultimate Business Guru Guide: The Greatest Thinkers Who Made Management , 2nd Edition, Stuart Crainer, Des Dearlove, John Wiley and Sons, Oct 1, 2002, pp. 220-223 Copyright © 2002, John Wiley and Sons
- 581 *ibid.*, p. 49
- 617 *ibid.*, pp. 260-261
- 405 Alfred Sloan and Organizational Management www.melodiesinmarketing.com/2008/01/28/alfred-sloan-and-organizational-management/
- 412 en.wikipedia.org/wiki/Henry_Ford
- 582 Sorensen, Charles E.; with Williamson, Samuel T. (1956), *My Forty Years with Ford*, New York, New York, USA: Norton, LCCN 56010854. Various republications, including ISBN 9780814332795. p. 223.
- 580 General Motors Around the World (Part II) (1927) Producer: Handy (Jam) Organization This movie is part of the collection: Prelinger Archives archive.org/details/GeneralM1927_2
- 684 The changing nature of leadership', *The Economist*, 10 June 1995.

- 583 Managing People and Organizations: Peter Drucker's Legacy By Guido Stein, Pedro Nueno, Emerald Group Publishing p. 118
- 668 Sloan, Alfred P. (1964), McDonald, John, ed., *My Years with General Motors*, Garden City, NY, USA: Doubleday, LCCN 64011306, OCLC 802024. Republished in 1990 with a new introduction by Peter Drucker (ISBN 978-0385042352).
- 413 Designing a customer-driven system: Change management thinking, Barry Wrighton © Henry Stewart Publications 1754-1662 (2008) Vol. 1, 3 000-000 *Journal of Telecommunications Management*
- 585 May Alfred Sloan R.I.P. By Mark Edmondson www.leanlibrary.com/alfred_sloan.htm
- 135 Development of Modern Management Chapter A For Additional Information staff.jccc.net/vclark/addinfo-L.htm Johnson County Community College
- 127 Handbooks of Management Accounting Research, Volume 2 edited by Christopher S. Chapman, Anthony G. Hopwood, Michael D. Shields p. 1074
- 32 en.wikipedia.org/wiki/Elleuthère_Irénée_du_Pont

- 254 Encyclopedia of Management, 5th Edition, Edited by Marilyn M. Helms, D.B.A. © 2006 Thomson Gale, a part of The Thomson Corporation. pp. 651-653
- 364 Scientific Management in American Industry, by the Taylor Society, H. S. Person, editor (1929), Author: Taylor Society; Person, Harlow S. (Harlow Stafford), 1875-1955, Publisher: New York and London, Harper & Brothers
pp. 269-271
archive.org/details/scientificmanageootayl
- 372 *ibid.*, pp. 389-397
- 589 *ibid.*, pp. 152-155.
- 685 Great Events in Accounting & Business, Posted by : Ludella Lewis, Ludella Lewis & Company
www.stanfordwhoswho.com/view.blog.php?id=164
- 598 en.wikipedia.org/wiki/Donaldson_Brown
- 600 WHO WAS THE FIRST ACCOUNTANT?
acct.tamu.edu/giroux/first.html
- 591 Management Control Systems, Joseph A. Maciariello and Calvin J. Kirby. Publisher: Prentice Hall; 2 edition (March 17, 1994) p.123
- 594 en.wikipedia.org/wiki/DuPont_analysis

- 590 125 people of impact in accounting, Leaders who left a mark on the profession, by Ken Tysiac, June 2012, Journal of Accountancy
www.journalofaccountancy.com/Issues/2012/Jun/20124960.htm
- 599 Program Budgeting Program Analysis and the Federal Budget By David Novick Publisher: Holt, Rinehart and Winston; 2nd edition (1969) p. xxi
- 597 Relevance Lost: The Rise and Fall of Management Accounting, H. Thomas Johnson, Robert S. Kaplan, Publisher: Harvard Business Review Press (March 1, 1991) pp.11-12
- 602 The Budget (1922-2009) DuPont created it. McKinsey institutionalized it. Drucker overlooked it. R.I.P. By Jack Sweeney, Business Finance, www.bfmag.com, May/June 2009, Best Practices for Finance Executives, A Penton Publication
- 607 en.wikipedia.org/wiki/James_O._McKinsey
- 653 Leadership Roles and Management Functions in Nursing: Theory and Application, Bessie L. Marquis, Carol Jorgensen Huston Publisher: Lippincott Williams & Wilkins; Seventh, North American Edition edition (February 9, 2011) p.35

- 613 Accounting in your city, James O. McKinsey, Tonya K. Flesher and Dale L. Flesher, UNIVERSITY OF MISSISSIPPI JAMES O. MCKINSEY The Accounting Historians Journal Vol 12 No. 2 Fall 1985
www.accountingin.com/accounting-historians-journal/volume-12-number-2/james-o-mckinsey/
- 595 Budgetary control (1922), Author: McKinsey, James Oscar, 1889-1937, Publisher: New York, The Ronald press company p.iii
archive.org/details/budgetarycontroloimcki
ibid., pp.3-8
ibid., pp.
- 686 McKinsey, J. O., "Accounting as an Administrative Aid," Journal of Political Economy (November, 1919), pp. 759-781.
- 687 McKinsey, J. O., Managerial Accounting (University of Chicago Press, 1924).
- 688 Hopf, H. A., "Soundings in the Literature of Management," Some Classic Contributions to Professional Management: Historical Perspectives, Vol. 2 (General Electric Co., 1956). p. 501.

- 608 The Answer Men, Duff McDonald Jul 25 2009
nymag.com/news/intelligencer/topic/58091/
- 604 McKinsey: The Company
australia.top-consultant.com/Career-Advice/Company-Profiles/McKinsey.aspx
- 689 "Global Locations". McKinsey & Company. Retrieved April 10, 2012.
- 612 www.forbes.com/companies/mckinsey-company/
- 603 Leffingwell, Dean, "Agile Software Requirements", Addison-Wesley, 2011. p.440
- 618 Best Practices to Streamline the Annual Budgeting Process, By Don Howren, Senior Vice President, Global Marketing and Support, ADERANT
www.sterlinghoffman.com/newsletter/articles/article300.html
- 593 The Company: A Short History of a Revolutionary Idea, John Micklethwait and Adrian Wooldridge, Publisher: Modern Library; 2005 Modern Library Paperback Edition edition (January 11, 2005)
- 611 en.wikipedia.org/wiki/McKinsey_%26_Company

- 609 No Bull, After twelve agile years has the world of software development really changed? An Energized Work Production, by Simon Baker April 2012 nobull.energizedwork.com
- 610 Profit Beyond Measure, by H. Thomas Johnson, Anders Broms
- 243 Springer, A Systemic View of Transformational Leadership", Ackoff R.L. Systemic Practice and Action Research, Vol. 11, No. 1, February 1998 , pp. 23-36(14) Publication date: 1998-02-01 1094-429X/98/0200-0023\$15.00/0 © 1998 Plenum Publishing Corporation with kind permission from Springer Science+Business Media B.V.
- 616 Organizational Theory and Behavior, 1993, David S. Walonick, Ph.D. rapidbi.com/management/organizational-theory-and-behavior-walonick/ and statpac.org/walonick/organizational-theory.htm
- 620 Kim, Sung Ho (24 August 2007). "Max Weber". Stanford Encyclopaedia of Philosophy. Retrieved 17 February 2010.
- 624 en.wikipedia.org/wiki/Bureaucracy

- 621 Max Weber; Hans Heinrich Gerth; Bryan S. Turner (7 March 1991). From Max Weber: essays in sociology. Psychology Press. p. 1. ISBN 978-0-415-06056-1. Retrieved 22 March 2011.
- 622 Radkau, Joachim and Patrick Ca miller. (2009). Max Weber: A Biography. Trans. Patrick Ca miller. Polity Press. (ISBN 9780745641478)
- 623 en.wikipedia.org/wiki/Max_Weber
- 626 bureaucracy.askdefine.com
- 628 Historical Development of Organizational Structures, by Payam Babazadeh Kurdistan, Organizational Theory Dr. Begg academia.edu/3115038/Historical_Development_of_Organizational_Structures
- 627 www.newworldencyclopedia.org/entry/bureaucracy
- 629 Liesbet Hooghe (2001). The European Commission and the integration of Europe: images of governance. Cambridge University Press. p. 40. ISBN 978-0-521-00143-4. Retrieved 23 March 2011.
- 663 Company Organization, M . C. Barnes, A. H. Fogg, C. N. Stephens, L. G. Titman pp. 47-50

- 631 Marshall Sashkin; Molly G. Sashkin (28 January 2003). Leadership that matters: the critical factors for making a difference in people's lives and organisations' success. Berrett-Koehler Publishers. p. 52. ISBN 978-1-57675-193-0. Retrieved 22 March 2011.
- 630 George Ritzer (29 September 2009). Contemporary Sociological Theory and Its Classical Roots: The Basics. McGraw-Hill. pp. 38-42. ISBN 978-0-07-340438-7. Retrieved 22 March 2011.
- 669 Richard Swedberg; Ola Agevall (2005). The Max Weber dictionary: key words and central concepts. Stanford
- 670 George Ritzer (29 September 2009). Contemporary Sociological Theory and Its Classical Roots: The Basics. McGraw-Hill. pp. 38-42. ISBN 978-0-07-340438-7. Retrieved 22 March 2011.
- 671 Liesbet Hooghe (2001). The European Commission and the integration of Europe: images of governance. Cambridge University Press. p. 40. ISBN 978-0-521-00143-4. Retrieved 23 March 2011.

- 632 Kenneth Allan; Kenneth D. Allan (2 November 2005). Explorations in Classical Sociological Theory: Seeing the Social World. Pine Forge Press. pp. 172-176. ISBN 978-1-4129-0572-5.
- 265 Frederick Winslow Taylor - Chartered Management Institute - www.mbsportal.bl.uk/taster/subjareas/busmanhist/mgmtthinkers/taylor.aspx
- 633 "QUALITY: QUO VADIS?", The Swiss Deming Institute (December 2006): Ernst C. Glauser, p.5 www.deming.ch/downloads/E_quo_vadis.pdf Used with kind permission.
- 635 en.wikipedia.org/wiki/Henri_Fayol
- 637 Morgen Witzel (2003). Fifty key figures in management. Routledge, 2003. ISBN 0-415-36977-0 p.96.
- 407 en.wikipedia.org/wiki/Ford_Model_T
- 640 Fayol, H. (1987). General and industrial management: Henri Fayol's classic revised by Irwin Gray. Belmont, CA: David S. Lake Publishers. p. 44
- 655 en.wikipedia.org/wiki/Chester_Barnard

- 634 Administrative Theory
www.introduction-to-management.24xls.com/en126
- 281 en.wikipedia.org/wiki/Frederick_Winslow_Taylor
- 641 en.wikipedia.org/wiki/Fayolism
- 638 Fayol, H. (1987). General and industrial management: Henri Fayol's classic revised by Irwin Gray. Belmont, CA: David S. Lake Publishers. p. 43
- 639 Fayol, General and Industrial Administration, 1949, p. 68
- 642 Pietri, P. H (1974). "ORGANIZATIONAL COMMUNICATION: The Pioneers". Journal Of Business Communication 11 (4): 3-6.
- 648 Henri Fayol 14 Principles of Management Year 1916, Post: Gaurav Akrani, Date: 4/21/2011 01:32:00 PM IST kalyan-city.blogspot.com/2011/04/henri-fayol-14-principles-of-management.html
- 643 Supervisory management: principles and practice By David Evans Publisher: Cengage Learning EMEA; 3rd edition (May 21, 1992) p. 129

- 644 Principles Of Management, P N Reddy P C Tripathi. Publisher: Tata McGraw Hill (2008) p.18
- 645 Strategic Management Methodology: Generally Accepted Principles for Practitioners (Guidelines for Strategists), Curtis W. Roney Praeger (January 3, 2004) p.6
- 646 Fire Department Strategic Planning: Creating Future Excellence, 2nd Edition By Mark Wallace p. 223 (March 17, 2006)
- 647 Principles and Practices of Professional Consulting, By Steven C. Stryker. Publisher: Government Institutes (January 16, 2011) p. 11
- 649 Administrative Theory, Ryszard Barnat
www.introduction-to-management.24xls.com/en126
- 650 Dunlevy, John H. Management control systems : a short history from Fayol to Forrester. (April 1, 1965) George Washington University
archive.org/details/managementcontroodunl
- 656 Chester (Irving) Barnard Biography (1886 - 1961) on biography.com. Retrieved 16 June 2008.
- 664 Business Organization, John O'Shaughnessy, Publisher: Harper Collins Publishers Ltd (November 1976)

- 385 The Science and Practice of Management (1918),
Author: Church, A. Hamilton (Alexander Hamilton),
1866-1936, Publisher: New York : The Engineering
magazine co.
pp. iv-v
archive.org/details/sciencepracticeoooochur
- 249 *ibid.*, pp. pp. 11-12
- 578 Juran's Quality Handbook, Fifth Edition, Joseph M.
Juran, A. Blanton Godfrey, Publisher: McGraw-Hill
Professional; 5th edition (September 1, 2000), p. 29.2
- 659 What Is Administrative Management Theory? -
Definition, Functions & Quiz
Taught by Shawn Grimsley
education-portal.com/academy/lesson/what-is-administrative-management-theory---definition-functions-quiz.html
- 660 Management: Theory And Practice, Gerald A. Cole,
Publisher: International Thomson Business Press; 7
edition (April 28, 2011) p.4
- 693 MR JAMES D MOONEY A MAN OF MISSIONS,
David Hayward's Automotive History
[www.gmhistory.chevytalk.org/
James_D_Mooney_by_David_Hayward.html](http://www.gmhistory.chevytalk.org/James_D_Mooney_by_David_Hayward.html)

- 576 Management Thought, By Jayanta K Nanda, Publisher
Sarup & Sons, New Delhi (1 Jan 2005) pp. 269-270
- 357 *ibid.*, pp. 79-82
- 651 *ibid.*, p. 76
- 654 *ibid.*, pp. 110-111
- 658 *ibid.*, pp. 118-119
- 665 *ibid.*, p.78
- 625 *ibid.*, p.45
- 666 The Manager's Span of Control, Lyndall F. Urwick,
Harvard Business Review, May-June 1956
www.nickols.us/Span.pdf
- 661 Principles Of Management, V.S.Bagad, Publisher:
Technical Publications; Third edition (2009) p. 1-3
- 662 Industrial Sociology, Economics & Management, TR
Jain, OP Khanna, M L Grover and R K Singla p.131
- 588 Golf And The Game Of Leadership By Mchugh,
Donald E, Publisher: AMACOM (May 20, 2007) p.33

- 596 The Execution Premium: Linking Strategy to Operations for Competitive Advantage, Robert S. Kaplan and David P. Norton, Publisher: Harvard Business School Press; 1st edition (July 14, 2008) pp. 185-186
- 592 The Budget (1922 - 2009), Jun. 1, 2009 Jack Sweeney | Business Finance, a Penton publication
businessfinancemag.com/planning-budgeting-amp-reporting/budget-1922-2009
- 694 B. Bognes, "Blowing up the Budget: Statoil's Journey Beyond Budgeting," Palladium Planning and Budgeting Conference, Amsterdam (October 2006).
- 636 Organisation Development: Principles, Process & Performance, By Amitabh Mehta. Publisher: Global India Publications Pvt Ltd; First edition (December 31, 2009) p.158
- 667 en.wikipedia.org/wiki/Span-of-control
- 690 en.wikipedia.org/wiki/Iron_cage
- 584 Sloan, Alfred P. (1964), McDonald, John, ed., My Years with General Motors, Garden City, NY, USA: Doubleday, LCCN 64011306, OCLC 802024. Republished in 1990 with a new introduction by Peter Drucker (ISBN 978-0385042352) foreword, pp. v-vi.

- 1 540-A brief history of Western management thought, Copyright © Vanguard Consulting Limited
- 263 Taylor Timeline. Author: Bill Barry, Community College of Baltimore County, used with kind permission.
- 267 Questions on Organizational Behavior Stephen W. Hartman, Ph.D. iris.nyit.edu/~shartman/mbao299/120_0299.htm
- 619 "Max Weber." Encyclopædia Britannica. 2009. Encyclopædia Britannica Online. 20 April 2009. Britannica.com
- 685 (Cambridge University Press, 2005).

Thomas Coleman du Pont circa 1902. {{PD-US}} www2.dupont.com/Phoenix_Heritage/en_US/1902_b_detail.html
en.wikipedia.org/wiki/File:Thomas_Coleman_du_Pont_1902.jpg

Pierre S. du Pont, Copyright © 2013 DuPont www2.dupont.com/Phoenix_Heritage/en_US/1915_a_detail.html

William C Durant, Courtesy of General Motors Archive, Copyright © General Motors LLC, 300 Renaissance Center, Detroit, Michigan 48265

Alfred Sloan, American business executive Alfred P. Sloan (1875-1966), Date: 1937, Source: Bibliothèque nationale de France, Author: Agence de presse Meurisse, Permission (Reusing this file) PD: "domaine public"
en.wikipedia.org/wiki/File:Alfred_Pritchard_Sloan_1937.jpg

Office Cubes, Brave new World, HikingArtist, Added: Feb 13, 2013, color illustration
Copyright © 2013 HikingArtist, All Rights Reserved. www.hikingartist.net

Jeremy Hope, BBRT - Beyond Budgeting Roundtable www.bbrt.org/images/jeremyhope.gif

Growth of Exports Personnel 1921-1927, General Motors Around the World (Part II) (1927) Producer: Handy (Jam)
Organization This movie is part of the collection: Prelinger Archives archive.org/details/GeneralM1927_2

Peter Drucker, Photograph Courtesy of The Drucker Institute at Claremont Graduate University

Alfred P. Sloan, Courtesy of General Motors Archive, Copyright © General Motors LLC,
300 Renaissance Center, Detroit, Michigan 48265

Donaldson Brown, Courtesy of General Motors Archive, Copyright © General Motors LLC, 300 Renaissance Center, Detroit, Michigan 48265

Donaldson Brown, VT ImageBase (imagebase.lib.vt.edu/), housed and operated by Digital Library and Archives, University Libraries; scanning by Digital Imaging, Learning Technologies, Virginia Tech |
spec.lib.vt.edu/imagebase/o8UA/screen/VTo6o42o1o11.jpg

Bookkeeping and accounting (1920), Author: McKinsey, James Oscar, Volume: 2, Publisher: Cincinnati : South-Western Pub. Co. Title Page archive.org/details/bookkeepingaccouo2mckiuoft

Principles of accounting (1920), Author: Hodge, Albert Claire; McKinsey, James Oscar, Publisher: Chicago, University of Chicago Press, Title Page archive.org/details/principlesaccouoomckigoog

Budgetary Control (1922), Author: McKinsey, James Oscar, 1889-1937, Publisher: New York, The Ronald press company, Title Page archive.org/details/budgetarycontroloimcki

Money Donkeys, Color illustration, Added: Apr 9, 2013 Copyright © 2013 HikingArtist, All Rights Reserved.
www.hikingartist.net/media.details.php?mediaID=ODUwMWU4OTBkYjU1ZmY=#.Ugmr8hYspJa

Max Weber, Català: Max Weber al 1894, Date: 1894 en.wikipedia.org/wiki/File:Max_Weber_1894.jpg

Henri Fayol, Source: centre-histoire.sciences-po.fr/archives/fonds/henri_fayol.html
en.wikipedia.org/wiki/File:Fonds_henri_fayol.jpg

John Seddon, Provided by Charlotte Pell, Vanguard

Henry Le Chatelier (1850-1936), an influential French chemist of the 19th century
en.wikipedia.org/wiki/File:Lechatelier.jpg

Scalar Chain is shown in diagram ... with Gang plank as dotted line FP.

Source: Henri Fayol 14 Principles of Management Year 1916, Post: Gaurav Akrani, Date: 4/21/2011 01:32:00 PM IST kalyan-city.blogspot.com/2011/04/henri-fayol-14-principles-of-management.html

Luther Gulick, Date Created/Published: [19]39 January 19, This image is available from the United States Library of Congress's Prints and Photographs division under the digital ID [hec.25912](https://www.loc.gov/pictures/item/hec2009012610/). Library of Congress Prints and Photographs Division Washington, D.C. 20540, www.loc.gov/pictures/item/hec2009012610/ Rights Advisory: No known restrictions on publication.

1931 Model A Ford Deluxe Tudor Sedan owned by Rick & Dana Black, El Paso Texas. Photographed in 2003 next to abandoned railroad freight station near downtown El Paso Texas. Date: 2003. Source: Transferred from en.wikipedia to Commons by User:Spyder_Monkey using CommonsHelper. Author: Rickblack at en.wikipedia
en.wikipedia.org/wiki/File:1931_Ford_Model_A_Deluxe_Tudor.jpg

THEORIES OF WORK:
ORIGINS OF THE DESIGN AND MANAGEMENT OF WORK

Henry Ford
Éleuthère Irénée du Pont de Nemours
Eugene du Pont
Alfred I. du Pont
T. Coleman du Pont
Pierre Samuel du Pont
General Henry du Pont
Carnegie
Taylor
Arthur J. Moxham
William C. Duran
Arthur Pound
Donaldson Brown
Alfred P. Sloan
Edsel Ford
John J. Raskob
James O. McKinsey
Max Weber
Émile Durkheim
Karl Marx

ADMINISTRATION, BUREAUCRACY AND NUMBERS
INDEX OF NAMES

Henri Fayol
Henry Louis Le Châtelier
Chester Barnard
Luther Gulick
James D. Mooney
Lyndall Fownes Urwick
General Sir Ian Standish Monteith Hamilton
Jeremy Hope
Bjarte Bogsnes
John Seddon