

A STUDY OF IN-HOUSE ARCHITECTURAL DESIGN  
CAPABILITIES OF INDUSTRIAL CORPORATIONS

by

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B. Int. Arch., Kansas State University, 1974

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A MASTER'S REPORT

Submitted in partial fulfillment of the  
requirements for the degree

MASTER OF ARCHITECTURE

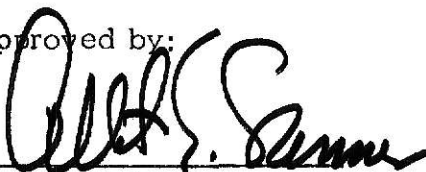
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Manhattan, Kansas

1976

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## ACKNOWLEDGMENT

Sincere thanks and appreciation are extended to the following members of my advisory committee for their direction, encouragement and assistance in the preparation of this report. Their review is greatly acknowledged.

Al Sanner	-	Major Professor
John Graham	-	Committee Member
Emil Fischer	-	Committee Member

## INTRODUCTION

As a part of today's highly competitive world, many business concerns seem to grow increasingly larger and more complex. In keeping with this trend, the practice of architecture is certainly no exception, and the practice of architecture within the confines of the large industrial corporation is an even more interesting development.

The American Institute of Architects observing the establishment of such "in-house" architectural design departments within major industrial corporations saw an opportunity to organize the specific talents of designers associated with these firms. Within the Institute's Commission on Design and International Relations, a new committee was formed in 1973. An outgrowth of the old "Committee on Industry and Commerce", the new "Architects in Industry Committee", became a reality.

The "Architects in Industry Committee", was formed with the purpose of bringing together architects with common areas of interest and common problems. Several meetings a year are held, along with special seminars for members dealing with unique aspects of the "in-house" type of practice.

The standing committees of the American Institute of Architects Commission on Design and International Relations are as follows:

Committee on Architecture for Arts and Recreation

Architects for Education Committee

Architects for Health Committee

Historic Resources Committee

Architects in Industry Committee

Architects in Government Service Committee

Task Force on Correctional Architecture

Capitol Architect Advisory Committee

Task Force on Health Facilities Laboratory

Aerospace and Hostile Environment Architecture

AHA/AIA Joint Commission <sup>1</sup>

The variety of specialized committees within the Commission is quite apparent from this list. By comparing the various groups one can more easily grasp the organizational environment from which the "Architects in Industry Committee", operates.

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<sup>1</sup> The American Institute of Architects, Structure and Services, (Washington, D.C., 1972).

The basic objectives of this study are:

- 1) To describe "Architects in Industry Committee" Programs
- 2) To compare three specific studies of architecture within the corporate setting
- 3) To show distinctions between Industrial Corporate and Traditional Private forms of architectural practice
- 4) To generate some predictions about the future of architecture within the corporate setting

Three major corporations with distinctly different types of architectural practice have been used for this study. They are: Hallmark Cards, Inc., Southwestern Bell Telephone Co., and American Multi-Cinema, Inc., all with offices in Kansas City, Missouri. Various aspects of the practices and procedures of each will be inserted throughout the discussion.

## CURRENT PROGRAMS OF THE "ARCHITECTS IN INDUSTRY COMMITTEE"

At the Fall 1975 meeting of the "Architects in Industry Committee", several items of importance were acted upon. A part of the agenda was a rather involved determination of the professional liability incurred by architects serving in practice within the industrial corporation.

The problem of liability for errors and omissions is a growing one in nearly every area of the country, and practitioners everywhere are faced with problems similar to those encountered by medical doctors and their malpractice insurance. Available legal opinions have indicated that architects in industry have the same exposure to liability as the private architect, and the use of the stamp or seal only increases this exposure as it provides additional evidence of professional responsibility.<sup>2</sup>

A representative from the Victor O. Schinnerer Co., specialists in professional liability research, pointed out to the group present at the

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<sup>2</sup> Robert Packard and a representative of The Office of Professional Liability Research, address before the Architects in Industry Seminar, October 7, 8, 1975.

conference that the exposure of corporate architects is somewhat limited, because presumably personal assets of individual designers are significantly less than that of the corporations, and consequently most persons would sue the party with the most money.

Another situation brought to the attention of the group was in regard to liability exposure incurred by the inspection of buildings owned or leased by the respective corporation. Even though the building may have been in existence for some time, if code infractions are noted by the architect and brought to the attention of management and subsequently ignored by the owner, there is still no release of liability individually as a professional.

At current rates, one of every four design firms has a claim filed against it in regard to errors and omissions each year, and about seventy percent result from design mistakes or errors.<sup>3</sup> With this knowledge, it is very important to note that many corporate architectural projects require the hiring of private design firms, and that each of these design firms should be fully covered for the specific project with liability insurance. The

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<sup>3</sup> Victor O. Schinnerer Co., Presentation to Architects in Industry Seminar, October 7, 8 1975.



cost of such insurance can, and should, be passed along to the owner as a necessary precaution.

Assuming a different type of coverage might be deemed a good idea for a corporation employed architect, and if sufficient numbers requested it, a new type of liability policy might be established. Until then the best precaution is for the architects within the corporation to contact their respective legal departments and obtain a written statement of the action to be taken by the company if such a suit were to be brought against them as a corporate employee.

Another concern of the committee is the ever increasing number of graduates from the architectural schools. In 1975 there were approximately six thousand graduates from these institutions. In the same year the estimated number of registered architects in the United States totaled about fifty thousand. Comparing these figures, the placement situation seems somewhat bleak at best. There are approximately thirty five thousand students now enrolled in architectural schools around the country.

Obviously, alternative career opportunities will need to be explored soon, and hopefully will satisfy the placement needs of these graduates.

In response to this concern, the "Architects in Industry Committee", has developed a subcommittee on research and education. The subcommittee has established five goals:

- 1) Assist in the education of architects in careers in industry
- 2) Educate business students in conjunction with architectural activities within a corporation so they can obtain the best possible use of their staff architects
- 3) To develop continuing education seminars with leadership furnished by people that are specialized in the various facets of architecture in industry
- 4) Provide continuing education programs for awareness in business management, regarding the advantages of architects in industry
- 5) Develop awareness in the construction industry of architects within corporations that develop projects for those same corporations<sup>4</sup>

A program currently under development by the American Institute of Architects, would grant a Masters of Business Administration degree upon

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<sup>4</sup> Robert Kirk, address before the Architects in Industry Committee Meeting, October 5, 6 1975.

completion of a three year combination program in which the practitioner would spend one week each year at a specified university and one day a month at a local college, with special correspondence courses covering the additional related work. The subcommittee recommends that architectural students opt for a greater number of business related courses, and/or give careful consideration to obtaining an MBA degree.<sup>5</sup>

One program currently under study is now in operation at Washington University in St. Louis. It offers a combination Masters of Business Administration/Master of Architecture plan. Graduates of the program have apparently been quite successful in presenting a dual image to potential employers of both "architect" and "manager".

Several other areas of importance which are receiving attention are membership, documents used by corporate architectural departments, communications, and management awareness.

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<sup>5</sup> Research and Education Subcommittee Meeting, Minutes of Meeting, October 5, 6 1975.

The membership subcommittee in trying to establish local chapter "Architects in Industry" groups have not been extremely successful. To date only New York City, Detroit, and Chicago have developed structured "Industry" groups. Efforts are continuing though to organize local chapters around the country.

The documents subcommittee is collecting various contract documents used by corporate departments to compile for review by the American Institute of Architects Document Study Group. It is very important that the various altered documents avoid legal loopholes, errors and/or omissions. Legal review of the documents is a very helpful service of the Institute.

The communications subcommittee plans two newsletters per year to be sent to the more than four hundred known architects serving in capacities within industrial corporations.

Finally, the management and awareness subcommittee is preparing to issue a new memorandum to the top management of the country's one thousand largest corporations. It will be accompanied by a cover letter from the President of the Institute and will attempt to bring about awareness on the part of management of the possible effects on the corporate budget and improvements to environmental and aesthetic conditions.

From this description of various programs within the "Architects in Industry Committee", one can begin to see the unique qualities and situations involved in this type of practice. Certainly the fact that the committee is aware of some of these problems and the knowledge of action on their part to bring about new solutions is an encouraging development.

In the next section the relationship between the corporation (owner) and the architect (design department) will be explored.

## DESIGN SERVICES ORGANIZATION AND MANAGEMENT

The architectural design services department of a major corporation can be a truly unique entity, for while it acts as architect, many times it also acts as client too.

To show the similarities and differences of the three firms involved in this study, Hallmark Cards, Inc., Southwestern Bell Telephone Co., and American Multi-Cinema, Inc., information about all three will be integrated into the discussion. To indicate the positioning of the design services department of each, brief organizational breakdowns will be included.

In the Hallmark Cards organization, the Department of Architecture and Planning is a part of the Building Management Division. The Building Management Division is directly under the supervision of the Executive Vice-President of Services. Other departments within the Building Management Division are Construction and Engineering, Building Maintenance (repair), Building Services (janitorial), Real Estate, Fleet Operations, Telecommunications, and Security Operations. The Division is responsible for management of all properties and buildings within the corporate control.

Southwestern Bell Telephone Co. has a somewhat longer chain of command. The Architectural Department is part of the Chief Engineer's jurisdiction. The Chief Engineer is responsible to the Vice-President and General Manager of the Kansas City Area, who is in turn responsible to the Vice-President of Operations for Missouri. The Vice-President of Operations for Missouri is responsible to the Corporate Vice-President of Operations.

The Architectural Department is the only department under the supervision of the Chief Engineer directly involved with construction and management of corporate space. Various Planning engineers cooperate in the need analysis for new expansion. Other departments under the supervision of the Chief Engineer relate to various equipment engineering elements of the company operations.

The American Multi-Cinema organization is a less complex one by comparison. The Associate Director of Architecture is directly responsible to the Vice-President of Development.

In these three very different situations, the possibility of control exerted by management officials higher up in the organization becomes apparent. In the case of Southwestern Bell, the fact that the Kansas City Office is in just one of eight corporate geographic areas, each with an architectural department, makes it somewhat more complex.

Responsibilities of the respective managers of the departments are also different in several respects. The corporate responsibilities of the Manager of Architecture and Planning for Hallmark include long range planning on a five year basis updated yearly, budgeting departmental expenses, and assigning jobs to the designers. The Southwestern Bell Head Architectural Engineer reviews and verifies acceptability of design work submitted by outside design firms, matches building contractors to job requirements, and assists the Real Estate Department in feasibility studies of possible building sites.

Objectives and goals of the architectural design services department are essential to progress of the corporate building and property management function. The Hallmark department develops a statement of objectives which lists goals, key programs, resource requirements, and long term recommendations each year. The basic objectives of the Architecture and Planning Department for 1976 are as follows:

- 1) To provide architectural services for accomplishment of corporate construction projects as per the Master Facilities Plan
- 2) To eliminate the need for outside architectural services on all projects insofar as possible



- 3) To continue corporate facilities master planning in conjunction with corporate goals
- 4) To intensify the training of staff to broaden their job knowledge and awareness of current trends, new materials, etc.<sup>6</sup>

The Southwestern Bell objectives are stated in a much broader context. The department has a goal to provide adequate development to maintain quality of service without extravagance.

The American Multi-Cinema has a very similar philosophy, one which proposes to portray a correct public image, appropriate to the individual locale, with quality but not extravagance.

The Hallmark departmental philosophy is probably the most interesting, proposing to provide the best possible environment with the resources available. Due to the highly visually oriented nature of the manufacturing function of Hallmark, the design department also seems to carry out the slogan which has long been associated with the corporation.

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<sup>6</sup> Hallmark Cards, Inc., Department of Architecture and Planning, Functional Plan for 1976.

## THE DESIGN SERVICES STAFF

By examination of the departmental staff and back-up personnel one might discover some of the experience and capabilities present. Both Southwestern Bell and Hallmark will be studied.

In the case of Southwestern Bell, the Architectural Engineer, (Head Architect) supervises a staff of four project architects. For purposes of this study no names will be given. The staff consists of architects with the following background:

No.	School Attended	Previous Experience
1)	Washington University	Housing & Urban Development
2)	Trade School	17 Years With Southwestern Bell
3)	Kansas State University	Falstaff Brewing Co. (in-house) Bank Contracting Firm General Contractor
4)	Oklahoma University	General Architectural Firm 3 Years

Except in extreme circumstances, Southwestern Bell only hires graduates of accredited architectural schools and generally those with some working experience. The new associates spend from six months to two years in the corporation general architectural office at headquarters in St. Louis before being placed in one of the area offices as project architects.

Hallmark has a similar staff of designers with these credentials:

- |    |                         |  |
|----|-------------------------|--|
| 1) | Kansas University       | General Architectural Firm<br>7 Years      |
| 2) | Kansas State University | General Architectural Firm                 |
| 3) | Nebraska University     | Burlington Northern Railroad<br>(in-house) |
| 4) | Kansas State University | General Architectural Firm<br>2 Years      |
| 5) | Kansas State University | General Architectural Firm<br>2 Years      |
| 6) | Kansas State University | Direct from school                         |

The Hallmark operation has grown significantly in the last decade. In the early sixties when the department was formed only one architect was needed. With rapid expansion of the corporation the need has expanded to the present level of seven designers. However, the growth trend seems to be leveling off somewhat now.

Certainly the responsibilities of the designers in each of these corporations would be much greater were it not for the assistance of back-up and related personnel.

At American Multi-Cinema for example, the Construction and Engineering Department is very involved in the project as it progresses from inception

to final completion. The Real Estate and Marketing Departments also play a significant role in the feasibility studies for future expansions.

Southwestern Bell also uses many other resource people in the design process. Building and Equipment Engineers, the Corporate Planning Group, Real Estate Department, and many others are instrumental in providing the proper information and data for the successful planning and completion of needed facilities.

Hallmark probably has the most comprehensive set of resource people within a single division of the three firms studied. Mechanical, Acoustical, Electrical, and some Structural Engineering are done in-house by the Department of Construction and Engineering. Also included in this group are Construction Managers who represent the owner on the various job sites, thus freeing the designers for development of other projects.

Each of the departments also has secretarial and clerical help to manage the abundance of correspondence that takes place relative to the variety of projects underway.

## PERSONNEL DEVELOPMENT

Very highly developed personnel continuing education programs characterize both the Hallmark and Southwestern Bell personnel development package.

An elaborate system of college tuition payment is available. Up to two hundred dollars per semester is allowable for job related coursework from Southwestern Bell.

Hallmark on the other hand, pays one hundred percent of tuition and fees if the coursework is specifically and directly related to job performance, with fifty percent paid if of indirect benefit. Hallmark also provides scholarships through the Hallmark Foundation Scholarship Fund and sponsors educational loans as well.

Orientation of the new employee to the corporation is also quite an important factor in allowing him to function more effectively. Both Hallmark and Southwestern Bell have corporate orientations. Hallmark has a three day corporate and a one day departmental program. Due to the nature of the corporation, American Multi-Cinema has a much less formalized procedure.

Once the designer is in service, additional training is often recommended. Southwestern Bell provides several special schools for their architectural designers. Among these are:

Basic Building Engineering School	Three Weeks
Building Engineering Electrical Design School	Three Weeks
Building Engineering Mechanical Design School	Three Weeks
Space Planning and Equiping Buildings School	Three Weeks
Space Planning of Administrative Buildings	Three Weeks
Engineering Money Management School	One Week
Real Estate Management School	One Week <sup>7</sup>

These schools are conducted by Bell Labs in Illinois and also in Texas.

Internal education through interaction with others in the department and related areas is also encouraged by regular conferences and departmental meetings. A regularly scheduled meeting is held weekly at Southwestern Bell to review all projects in progress and to inform each designer of unique and critical elements of each. Hallmark has a very similar session once a month. Project designers meet together much more frequently on an informal basis to discuss projects in progress, and every

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<sup>7</sup> Personal Interview, December 23, 1975, Mr. Thor Rygaard  
Architectural Engineer, Southwestern Bell Telephone Co.

project is checked by two other designers and the department head before the documents leave the office. This procedure is also a potential learning experience. It exposes concepts and techniques to each designer regardless of whether he had a role in the development of the project.

Another beneficial element that keeps designers current with changing materials and technologies is visitation by various sales and manufacturers representatives. The Southwestern Bell office encourages visits by these representatives for exactly that reason. Each designer is in control of the number and specific representatives that may call on him.

Hallmark on the other hand, seemed somewhat reluctant to receive visitors of this nature. Generally the Manager of Architecture and Planning meets with them and if the presentation is of a suitable nature, other designers are invited to participate. One project designer indicated that much more could be gained by developing business contacts with these representatives on a personal basis.<sup>8</sup>

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<sup>8</sup> Personal Interview, November 24, 1975, Mr. Don Eastwood  
Project Architect, Hallmark Cards, Inc.

Probably one of the most notable professional developmental tools , membership in professional and civic groups , is given great consideration by Southwestern Bell in dealing with project designers . One qualification placed on such membership before expenses can be assumed by the company is that the designer must be an active participant and not just a passive member .

A variety of professional magazines and journals are also made available to the designer on a regular basis . Subscriptions by the department can be a very useful aid to the development of professional skills and attitudes in their design personnel .

Each of the firms indicated encouragement that each designer who had not already done so , should complete Architectural Registration requirements . This is actually somewhat self-defeating in that once the designer is registered he is much more likely to leave the corporation and break out on his own .

Another consideration in dealing with personnel development is the concept of evaluation , compensation , and benefits . Once again , Southwestern Bell and Hallmark have similar programs . The Hallmark job evaluation and salary administration is a complex one and is



patterned after a program developed by Hay Associates, an international consulting firm recognized as a leader in the field of compensation services.<sup>9</sup> The end results, duties, and accountabilities determine the relative value of each position rather than the job-holder's individual performance. Each job position is then set into the salary structure on the basis of knowledge and skills required, problem solving capability, and responsibility and/or accountability. A given salary range is pre-determined for the position (job). Upon salary review of the employee by the supervisor of the department, adjustments are made within the given salary range. Salaries are compared regularly with other similar positions in other industries throughout the country by Hay Associates, and Hallmark salaries are adjusted to remain competitive.

Southwestern Bell salary ranges for new associates in the Architecture Department are currently in the twelve thousand dollars per year range, and project architects with experience have a salary range near twenty thousand dollars per year. Southwestern Bell also uses comparative nationwide salary information to adjust compensation scales.

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<sup>9</sup> Hallmark Cards, Inc., "Treasury Job Evaluation and Salary Administration Program", 1975.

Benefits are becoming an increasingly important part of the corporate compensation package. American Multi-Cinema offers several benefits of interest. A company car with service furnished and an adequate expense account are examples. Southwestern Bell allows one line plus one extension telephone for the employee's residence, along with various insurance and retirement provisions. Hallmark offers an assortment of benefits. Life, Travel and Accident, and Medical policies as well as retirement, savings thrift plan of five percent of pay (company contributes an additional twenty percent of employees percentage), profit sharing, and assistance in estate planning are elements of the overall program.<sup>10</sup>

Finally, in regard to staffing and personnel development, "Affirmative Action" and "Equal Opportunity" employment practices are followed by Southwestern Bell and Hallmark. The size of these corporations necessitate hiring through a corporate personnel department that is well informed on current developments in personnel legislation and federal wage standards. The design department usually initiates recommendations to the personnel department of potential employees of interest.

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<sup>10</sup> Hallmark Cards, Inc., "Career Rewards Package", 1975.

## THE DESIGN SERVICES OFFICE PHYSICAL FACILITIES

A necessary element in the operation of any architectural practice is physical space in which projects may be efficiently developed. In the architectural practice within an industrial corporation, the competition for working space is a greater factor than in the traditional private practice. Functional requirements include design space, services and storage space, filing and printing areas, conference capabilities, and secretarial services spaces. Both Southwestern Bell and Hallmark have enclosed space offices for the department administrator, and open plan (office landscape system) spaces for designers. Southwestern Bell has a very adequate conference area as well as filing and storage spaces. Hallmark conversely, is relatively cramped for space for filing and storage, and shares a modest conference room with all the other departments within the division. The Building Management Division also has a secretarial pool for all departments, and the various department heads share a common executive secretary.