The Complexity of Owning and Operating an Architecture Firm

01 About Zweig Group
02 Industry Data
03 Strategic Planning
04 Financial Overview
05 Cash Flow Management
06 Ownership Transition
07 Planning for Tomorrow, Today
About Zweig Group

PURPOSE

WE EXIST
to

elevate

THE INDUSTRY.
Industry data
What do you wish you knew more about, prior to becoming a principal?

01 BUSINESS EDUCATION AND EXPERIENCE WITH FINANCE / ACCOUNTING
02 THE AMOUNT OF STRESS AND TIME IT TAKES
03 EMOTIONAL INTELLIGENCE, CONFLICT RESOLUTION AND COMMUNICATION
04 HOW TO PREPARE FOR OWNERSHIP TRANSITION
### 2018 AIA Report

#### NUMBER OF EMPLOYEES

<table>
<thead>
<tr>
<th>Number of Employees</th>
<th>Percent of Firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>26%</td>
</tr>
<tr>
<td>2-4</td>
<td>24%</td>
</tr>
<tr>
<td>5-9</td>
<td>22%</td>
</tr>
<tr>
<td>10-19</td>
<td>14%</td>
</tr>
<tr>
<td>20-49</td>
<td>10%</td>
</tr>
<tr>
<td>50-99</td>
<td>3%</td>
</tr>
<tr>
<td>100+</td>
<td>1%</td>
</tr>
</tbody>
</table>

*Note: data from the 2018 AIA Annual Report*
Strategic and business planning
Tiers of management

- Top: Strategic Leadership, Committees, Company Structure, Roles, Ownership Transition
- Middle: Teams, Market Sectors, Studios, Incentive Compensation, Coordination
- Low Level: Quality, Quantity, Communication, Profitability, Execution
Why have a plan?

• **Builds a common sense of direction** aligning your entire team with your firm’s vision, mission, values, goals, and culture.

• **Guides your future** helping make the firm more sustainable, able to withstand market fluctuations and other “threats.”

• **Reduces the stress of owning and operating a business** enabling the firm to maximize resources and avoid wasting time, effort, and money on activities that are not profitable, or are holding the firm back.

  • Builds confidence with lenders, creditors, investors and employees.

  • Trains employees in how your business operates and makes money.
Strategic plan components

- **Vision** – Why do we exist?
- **Mission** – Our core purpose. What are we doing to achieve our vision?
- **Values** - How do we do things? Unwavering principals that through action define our culture.
- **Strategies** – What are the basic philosophies that guide us in critical business areas?
- **Goals** – What are we going to do?
- **Actions** – Who, when, and how?
Business plan components

• Definition of markets being pursued.
• Client research.
• Competitive research.
• Employee research.
• Strengths, Weaknesses, Opportunities, and Threats (SWOT) Analysis.
• Financial modeling (pro formas, balance sheets, cash flow, stock value).
• Org charts.
• Realistic budgets for everything from recruiting to training.
• Other back up materials and exhibits.
Executing your business plan effectively

• Be open to change – Unless firm leaders are sufficiently open and willing to consider all options, nothing will get done.

• Think and act holistically – Always have the big picture in sharp focus and have it lead your daily actions.

• Be nimble – Be willing to adjust along the way when new market conditions or data suggest to do so.

• Use the plan often – Everyone needs to know it, understand it.
Financial overview
Financial statement overview

- Income statement - shows firm financial performance over a period of time. Details income and expenses and ends with profit or loss.

- Most firms focus on net service revenue (NSR), not gross revenue. NSR is gross revenue less pass-throughs including subconsultants and reimbursable expenses.

- Revenue - expenses = profit (loss).

- Expenses are ordered from most to least “direct”.

- Isolate discretionary expenses (such as bonuses) if possible.

- Profit doesn’t equal cash!
Financial statement overview

• Balance sheet - shows a “snapshot” view of financial condition at a point in time.

• “What you own vs. what you owe.”

• Assets - liabilities = owners’ equity (also referred to as “book value”).

• Assets and liabilities are ordered by liquidity
Financial management vs. accounting

- **Strategic financial management** is the link between daily activity and overall firm direction.

- **Accounting** focuses on historic review. Financial management is forward-looking.

- **Financial management** focuses on predictive measures and goals.
### Financial performance metrics

<table>
<thead>
<tr>
<th></th>
<th>OVERALL MEDIAN</th>
<th>HIGH PROFIT</th>
<th>ARCHITECTURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Service Revenue/FTE</td>
<td>$150,157</td>
<td>$166,648</td>
<td>$165,389</td>
</tr>
<tr>
<td>Net Multiplier</td>
<td>3.09</td>
<td>3.2</td>
<td>3.35</td>
</tr>
<tr>
<td>Revenue Factor</td>
<td>1.9</td>
<td>2.04</td>
<td>2.12</td>
</tr>
<tr>
<td>Utilization</td>
<td>62%</td>
<td>63%</td>
<td>63%</td>
</tr>
<tr>
<td>Overhead</td>
<td>1.59</td>
<td>1.49</td>
<td>1.68</td>
</tr>
<tr>
<td>Pre-tax, Pre-bonus Profit/NSR</td>
<td>15%</td>
<td>19.5%</td>
<td>25.7%</td>
</tr>
<tr>
<td>Average collection period</td>
<td>70 days</td>
<td>73 days</td>
<td>90 days</td>
</tr>
<tr>
<td>Return on Equity</td>
<td>54%</td>
<td>78%</td>
<td>92%</td>
</tr>
</tbody>
</table>

*Note: Simplified median data from the Zweig Group 2020 Financial Performance Survey of AEC Firms*
Metrics over time
Predictive metrics

• Pipeline
• Backlog
• Revenue forecasting
• CRM database entries
• Web hits
• Inquiries
• Project opportunities
• Proposals
• Sales
Cash flow management
Managing cash flow

- Working capital is a metric that represents operating liquidity. It includes current assets such as cash, AR, WIP, minus other current liabilities.

- Getting billings out the door faster and collection of accounts receivable are the most important elements of managing cash flow for the typical firm.

- Reducing your firm’s average collection period begins at home (meaning stuff you can control!), including managing scope, time sheets, bringing more NSR in house vs subbing it out, and improving WIP.
Work in process (WIP)

- Total value of work performed that has not yet been billed to clients. Usually expressed in days of unbilled revenue. - 2020 Median: 15 days

\[
WIP = \frac{\text{Unbilled Revenue (wip)}}{\text{Annual Gross Revenue}} \times 365 \quad \text{(expressed in days)}
\]
Average collection period (ACP)

- Measures how quickly revenue turns into cash.
  - 2020 Median: 70 days

ACP = \frac{\text{Accounts Receivable}}{\text{Annual Gross Revenue}} \times 365 \text{ (expressed in days)}
## Top challenges as an owner

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Architects</th>
<th>Engineers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recruitment/Retention</td>
<td>3.5</td>
<td>4</td>
</tr>
<tr>
<td>Business Planning</td>
<td>3.7</td>
<td>3.1</td>
</tr>
<tr>
<td>Owner Transition</td>
<td>3.6</td>
<td>2.9</td>
</tr>
<tr>
<td>Time Management</td>
<td>3.5</td>
<td>2.8</td>
</tr>
<tr>
<td>Growth/Profits</td>
<td>3.3</td>
<td>3.4</td>
</tr>
<tr>
<td>Financial Issues</td>
<td>3.2</td>
<td>3.2</td>
</tr>
<tr>
<td>Communication</td>
<td>2.9</td>
<td>2.9</td>
</tr>
</tbody>
</table>
Real vs. ideal time management for architects (owners)
Does your firm carry a life insurance policy for you?

- 0.1% - 9%: 54%
- 10% - 24%: 83%
- 25% - 49%: 73%
- 50% - 99%: 59%
- 100%: 42%
Owners in AEC firms without life insurance policy securing equity value

<table>
<thead>
<tr>
<th>OWNERSHIP PERCENTAGE</th>
<th>NET SERVICE REVENUE</th>
<th>EQUITY VALUE @ 50% NSR</th>
<th>UNINSURED VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.1% - 9.9%</td>
<td>$122,332,272</td>
<td>$61,166,136</td>
<td>$3,058,307</td>
</tr>
<tr>
<td>10.0% - 24.9%</td>
<td>$42,613,000</td>
<td>$21,306,500</td>
<td>$3,195,975</td>
</tr>
<tr>
<td>25.0% - 49.9%</td>
<td>$2,790,788</td>
<td>$1,395,394</td>
<td>$488,388</td>
</tr>
<tr>
<td>50.0% - 99.9%</td>
<td>$14,427,190</td>
<td>$7,213,595</td>
<td>$5,410,196</td>
</tr>
<tr>
<td>100%</td>
<td>$2,603,844</td>
<td>$1,301,922</td>
<td>$1,301,922</td>
</tr>
</tbody>
</table>
Aging ownership population

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>30-39</td>
<td>4%</td>
</tr>
<tr>
<td>40-49</td>
<td>16%</td>
</tr>
<tr>
<td>50-59</td>
<td>46%</td>
</tr>
<tr>
<td>60+</td>
<td>34%</td>
</tr>
</tbody>
</table>
Why should I care about ownership transition planning?

01. It's the only way to keep an architecture firm as a going concern, options are transition or shut down.

02. Impacts every aspect of an AEC firm.

03. The vehicle to harvest value.

04. It takes time!
Transition options
Understanding the basic options

- Selling ownership interest internally.
- Selling the ownership interest or some portion of it to an Employee Stock Ownership Plan (ESOP).
- Selling the firm externally.
- Using debt to retire equity shareholders.
- Using a deferred compensation strategy.
- Merging the firm with another firm and then pursuing one of the above.
- Going public (available to very few).
Key elements of internal transition

- Financial Arrangements
- Management Succession
- Corporate Governance / Leadership Roles
- Cultural Continuity
Growing a business is different from exiting a business

WHAT ARE OUR GOALS?

WHAT IS THE CRITERIA FOR OWNERSHIP?

WHAT ARE THE ROLES OF OWNERS?

WHEN IS THE RIGHT TIME TO BRING IN NEW OWNERS?

FOUNDER TRANSITIONS ARE PARTICULARLY DIFFICULT
Leadership vs. ownership

In a mature firm, leadership and ownership may not be the same.

In a young firm, leadership and ownership may be synonymous.
Drivers of value

1. Growth Rate
2. Profitability
3. Consistency of Performance
4. Quality of Financials
5. Brand Name
6. Specialization
7. CEO Successor/Second Tier Management
8. Staff Quality
9. Client/Potential Client Database
10. Client Concentration
11. Bench Depth of Key Sellers
Valuation methods

**MARKET APPROACH**
Z-Values, industry comparable’s, etc.

**INCOME APPROACH**
Capitalization of earnings or discounted cash flow analysis.

**ASSET APPROACH**
Book value, AE industry is not an asset heavy class, so not used very often.
Valuation ratios: z-formulas

- **Value per Employee**: $75,747
- **Value to Net Service Revenue**: 0.54
- **Value to Backlog**: 0.63
- **Value to EBITDA**: 3.87
- **Equity Value to Profit**: 3.55
- **Equity Value to Book Value**: 1.95

*Note: Simplified median data from the Zweig Group 2020 Valuation Survey of AEC Firms*
Percentage ownership

CONTROLLING INTEREST

• Represents 50.1% of ownership
• Market value or premium over internal value

MINORITY INTEREST

• Typically has discount applied to market value
• Discount for lack of marketability
• Discount for lack of control

© ZWEIG GROUP 2020 • 40
Valuation considerations: internal ownership transitions

1. Is your firm’s stock pricing method fair and reasonable?

2. Is the price so conservative that it does not provide a meaningful return to the shareholders (i.e., book value)?

3. Is the price so aggressive that the next generation will never be able to afford to purchase the firm in a reasonable time frame?

4. How can you create a method for stock pricing that motivates the type of behavior that enhances value?
Start planning now
Preparation

• Develop an internal stock market
  - Share financial information and state of the company regularly.
  - Invest in leadership training

• What should a prospective owner know?
  - Income statement
  - Balance sheet
  - Cash flows
  - Return on equity *(assumptions)*

• Get your team organized
  - Legal council, CPA, tax planning professional, business advisor, etc.
Developing a strategic plan – and sharing it widely – creates focus and direction, helping staff work towards common goals.

- WHERE DOES YOUR FIRM WANT TO BE IN FIVE YEARS? MISSION & VISION.
- WHAT MARKETS, SERVICES, DISCIPLINES? DO WE WANT TO GROW?
- WHAT TYPES OF CLIENTS?
- WHO ARE THE NEXT LEADERS? WHAT ARE OUR CORE VALUES?
What you should do today

01. Balance near long term planning with long term planning
02. Update your strategic plan annually
03. Have an ownership transition plan and financial model. Test scenarios
04. Choose your team carefully
05. Monitor financial performance
06. Keep assumptions and expectations for value and time lines reasonable
Thank you!!

WSWEARINGEN@ZWEIGGROUP.COM