



I PRO 497-338

Electrical Contractor Business Development
with Building Information Modeling (BIM) and
Green Technologies

A Guidebook on Writing a Successful Business Development Plan to
Get More Work

Illinois Institute of Technology
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**Electrical Contractor Business Development with Building Information
Modeling (BIM) and Green Technologies
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1. Executive summary

The goal for the IPRO 338 team for this semester was to create a business development guidebook that would provide electrical contractors with a process by which they could get more work. The electrical contracting industry has experienced a significant economic downturn and contractors have been seeking methods to get more work. Our team decided to address the problem by developing a step-by-step business development guidebook that electrical contractors could use to develop their own, custom- business development plan to get more work. Also, this guidebook consists of detailed explanations, examples, strategies, actual templates, and resources to allow a company to develop its own plan.

The business development guidebook was based upon research methods found to be successful. Our team consisted of nine members, and we divided the work among them. Each team member researched different methods, including books, articles, NECA, Aldridge, interviews and phone calls. Also we divided the strategies for each person, and our professor helped us. Our team met every Tuesday and Thursday, and all members presented their respective ideas to the entire IPRO team. Our team completed extensive research and developed creative ideas for electrical contractors to implement their work by using our guidebook.

2. Purpose and Objectives

Purpose

The construction industry has been hit hard by the recent economic recession, causing most electrical contractors to be unemployed. Our IPRO team was concerned about that situation and decided to develop a business plan for electrical contractors. We gained the information through researching online resources, books and articles that are related to business, and attending business lectures from the ECA. The team strived to create a business development guidebook which would help electrical contractors with a process by which they could get more work.

Objectives

The objective of IPRO 338 was to create a business development guidebook for electrical contractors to help them develop their own plans. Going into the semester, our team set the following steps to achieve our goals.

- A. Identify statement of the problem
- B. Confirm goals of our project
- C. Introduce the business development plan and guide to use the business development plan

- D. Present steps in writing the business development plan
- E. Provide business development plan worksheet and electrical contractors writing their own company business development plan
- F. Provide business strategies
 - a. Develop and enhance the electrical contractors' marketing plan
 - b. Develop new advertising techniques
 - c. Develop and enhance the their company's website
 - d. Expand their networking
 - e. Take care of their existing clients
 - f. Enhance branding and image of their company
 - g. Reinvent their company today
 - h. Restructure their company
 - i. Improve existing core services
 - j. Augment their core business with new services
 - k. Expand into smart electrical technologies
 - l. Expand their company in to green services
 - m. Building Information Modeling (BIM)
 - n. Develop and enhance a formal business presentation
 - o. Develop a job selection "Go-No-Go" process
 - p. Pursue government grants and contracts
 - q. Identify new perspective business openings/permits
 - r. Strategic partnering, acquisitions and mergers.
 - s. Expand their company into different markets
 - t. Expand business to other locations.

3. Organization and Approach:

Our approach to help electrical contractors of Chicago was to research and make a guidebook that would help electrical contractors to develop their company's business development plan. We decided to organize our guidebook into two sections. The first section focuses on steps to write an effective business development plan while section two details many strategies of business development that can be used by contractors to get more work.

In the first two weeks of the project, the work was divided among various team members with some working on steps to write a business development plan and the majority working on researching various business development strategies. As the project progressed, the major focus was shifted to business development strategies that electrical contractors can use. This task included researching the literature to find business strategies that have been used by contractors before to improve their businesses. Research was also aimed at finding success stories and

examples of the effectiveness of the business strategies which used by the Electrical contractors of Chicago. By organizing into teams, we were able to spread the work load evenly among team members. This organization strategy also helped us to come up with new strategies and ideas that could be used by the contractors and also help us in formulating a good business development plan for the Electrical Contractors of Chicago.

Since there are a great number of books and articles relating to our project problem, a literature review was the main research method employed in this project. Additional research was done through an interactive meeting session with Aldridge Electric's VP of power division. This meeting provided us with very useful information on what strategies could be used and could prove effective for electrical contractors to get work. Another aspect of our research included communication with electrical contractors and electrical workers, who provided us with the challenges contractors were facing in getting work. As a team, we felt this approach was best suited to the needs of our project.

4. Analysis and Findings

The most significant part of our project was researching business development strategies and analyzing their effectiveness for electrical contractors through examples and success stories. Our various strategies are explained below.

1. Develop/Enhance Your Marketing Plan: Marketing takes time, money, and lots of preparation. One of the best ways to prepare is to develop a solid marketing plan. A marketing plan includes everything from understanding your target customers and your competitive position in the market, to how you intend to reach those customers and differentiate yourself from your competition in order to sell you services. This section talks about Marketing plan basics and how to conduct research to find opportunities to improve your company's marketing. It also gives information about marketing plan components with emphasis on budget distribution on different marketing techniques. The section also includes examples supporting the marketing techniques we describe. It also lists various resources which can be helpful to the contractors in improving their marketing strategies.

2. Develop New Advertising Techniques: Everyone should have a website; an advertisement in the yellow pages, and maybe even in the newspaper, but there are many more things than this that a company can do to expose itself to its clients. This section talks of new avenues of advertising that electrical contractors can undertake. This includes various techniques of advertising that reaches people while they are at their work, home, while travelling, or when at any store, restaurant or entertainment venues.

3. Develop/Enhance Company Website: As a business, the most important tool to advertise yourself to a potential client is a website. It is very important to have a website, and make sure that it has all the things clients want to see. This section talks about the

information that should be included in a website like contact information, Work guidelines, and additional base material showing how well you can do a job along with the statistical evidences. It also gives information on how can a company make a good website at low cost, for example, hiring a talented high school or college student. Many examples of good websites have also been included that can be used as a reference by the contractors for building their website.

4. Expand Your Networking: Building strong networking strategies can lead to many benefits in business development. Some of these benefits include better customer relations which may lead to more business. The more successful relationships that a business has, the more success your business can enjoy. This section gives various ways in which such relations can be built. These include joining various organizations that will help in increasing network and influence of company in the market. Other ways in which companies can expand their networking includes participating in trade shows and business expos, and giving presentations in their area of expertise. Companies can also write articles to their clients telling them what services and prices they are offering.

5. Take Care of Your Existing Clients: Building a strong relationship with your existing clients is very critical for any business. This section gives examples that can be used by the contractors in keeping contact with customers, building upon relationships, and keeping the name of company fresh in minds of people as the new projects arise. This can be done by making frequent visits to the clients, investing in an inexpensive postcard program, developing an e-newsletter and organizing promotional giveaways. It also gives various links that can help companies in designing their postcards, newsletters and giveaways.

6. Enhance Branding and Image of Your Company: Branding gives potential customers a glimpse into a company before a transaction is ever completed, so it's important for businesses to develop branding strategies that create a vivid picture of who they are, how they treat their customers and what they offer. A strong brand is memorable and introduces customers to what's important to the business and how the business differs from its competitors. This section introduces various ways in which contractors can improve the branding and image of their company to have that long lasting impact on customers. This section talks about various branding techniques like logos and promotional giveaways along with various examples. It also gives resources which can be used by contractors to design their own logos.

7. Reinvent Your Company: Should a company never change and be like the rock of Gibraltar, or should a company make it their business to change with the times? This section presents a list of companies that have chosen to reinvent themselves. These “test” cases will hopefully help to transform a business.

8. Restructure Your Company: The biggest reason to restructure a company is to make sure that it is in the best position to achieve its major goals. This section talks about

different types of approaches that electrical contractors can take when it chooses to restructure. These techniques include slash-and-burn type approach which mainly emphasizes on short- term cost savings. Another approach described in this section is more of a strategic restructuring that focuses on improving the value of company's current assets while looking to strengthen the long-term viability of the company. Many other such techniques have been included in this section that may help electrical contractors to restructure their company.

9. Improve Existing Core Services: In order to be strong in the market a company must keep the core business strong. This can be achieved by continually improving the core services thereby making clients more confident in doing repeat business with the company. This section lists and describes various strategies that might trigger some ideas for electrical contractors. It explains about new technologies that can be implemented and standardization process that can help contractors improving their existing services.

10. Augment Your Core Business with New Services: Adding new services to a current business can really help bring in those jobs that are outside the scope of a typical business and boost some extra revenue. These services can be in both residential and commercial. This section describes some examples of potential services like optic wiring, smart technologies, Green technology, networking and many more that can help augment the core business of electrical contractors.

11. Expand into Smart Electrical Technologies: Expanding into smart electrical technologies can produce cost-savings and efficiency by providing consumers with information on energy use and automated systems. Some examples of "smart" technologies are fiber optic wiring, smart grid, intelligent power technologies, energy storage technology, smart appliances, etc. These devices may offer viable business opportunities for electrical contractors. In this section, there are examples provided that a company might use to expand their business.

12. Expand Your Company into Green Services: Even though these are tough economic times, "green" projects and services are showing great promises. In 2010, LEED projects jumped from 9% to 19, solar/photovoltaic increased from 11 to 16%, and wind energy rose from 3 to 5%. Federal incentives, lower material costs, and savings from reduced energy savings are driving homeowners and also corporations to adopt alternative methods to power their homes and office buildings. In this section, areas of work are presented in which electrical contractors are in demand.

13. Building Information Modeling (BIM): Building information modeling offers great possibilities for speeding up construction schedules and cutting construction budgets, as a result. Proponents of this new technology also believe it could aid efforts to limit a building's environmental impact. The US government's landlord, the General Services Administration, now is mandating BIM be incorporated in the design phase of all its

interior space-planning projects. This section describes how BIM can be effective in helping electrical contractors with their work.

14. Develop/Enhance a Formal Business Presentation: Selling is the art of matching your service benefits with the customer's needs or desires. Electrical services are sold by communicating the value of the work to the potential customer. This section describes various ways in which a company can enhance the way in which it presents their services to customers and convince them to believe in them and use them.

15. Develop a Job Selection "go-no-go" Process: Huge amounts of time and money can be wasted by electrical contractors in developing bids for contracts that they won't win. Developing a streamlined process by which to evaluate projects and decide whether to bid on them can be a simple way to save your business lots of money. This section presents ways to develop a "Go-No-Go" process that will help a company save money down the road.

16. Pursue Government Grants and Contracts: There is a great deal of government funding available at both the federal, state, and local levels. Pursuing government contracts can provide a major boost to the amount of work coming into a company. There are projects available for electrical contractors of all sizes. This section presents information for pursuing research grants from the U.S. Department of Energy.

17. Identify New Perspective Business Openings/Permits: Having reliable information on both the internal and external environment is another key to a successful business. It is an important business characteristic to be vigilant in the market. This section presents different ways to find out where other businesses are relocating and who got new permits.

18. Strategic Partnering & Acquisition Mergers: The phrase mergers and acquisitions (M & A) refers to the aspect of corporate strategy, corporate finance and management dealing with the buying, selling and combining of different companies that can aid, finance, or help a growing company in a given industry grow rapidly without having to create another business entity. This section describes ways to improve financial performance.

19. Expand Your Company into Different Markets: A business will have a better chance of succeeding in a new market if it researches possible market opportunities, develops an expansion plan, and initiates action. This section presents ways to choose and expansion mode, expanding areas, and how to expand with new target customers.

20. Expand Business to Other Locations: Expansion to other locations is another strategy to enhance a company. With this marketing strategy viewpoint, a company needs to be careful to distinguish marketing tips and strategy, and corporate development. Nevertheless, expanding a business to proper locations can help the business make money. This section presents ideas on how to track jobs in different regions, cities, states, and other areas.

5. Conclusions and Recommendations

Based on our analysis and findings, we feel that we put together a great product that can be used by any electrical contractor. They can use this guidebook to track down Government Grants, gain insight into marketing and advertisement, expand into green technologies, learn how to expand their networking base, or any of the various business strategies that are suggested in the guidebook. At the close of this project, we believed that the Business Development Guidebook was well put together. A tremendous amount of time and effort went into developing a tool that electrical contractors can use to gain more work. The overall layout of the guidebook was very appealing and it provided for a very smooth reading experience. In terms of the team dynamic, at first there was a lot of confusion and frustration because it was really hard to get things moving in the right direction. Finally, we started to work together as a team as we were successfully able to reach our goal of presenting the guidebook to our sponsor. The next step for our sponsor would be to potentially distribute this product to their members so that it can give them an extra advantage to go out there and find more work. For the next IPRO team, the continued work should focus on developing cost-effective electrical smart grid technologies for residential and commercial applications. This would include the following technologies and applications:

- Advanced metering devices
- Efficient building systems
- Plug-in hybrid vehicles
- Dynamic systems control
- Data management and smart products
- Smart appliances
- Storage and regenerative energy systems
- Wind and solar applications

6. Appendix

Since major part of our project involved research, most of the material available through online books and articles and Galvin library were used as the sources. Thus, we did not have any budget for writing the business development plan. Around \$500 was used for printing and binding of the Guidebook for the electrical contractors.

Team

Team Member	Major	Year
Bansal, Neha	Bio-medical Engineering	Senior
Day, Joshua	Electrical Engineering	Senior
Hamilton, James	Architectural Engineering	Senior
Harbour, Zachary	TBD	TBD
Lee, Dong Kyu	Architectural Engineering	Junior
Marchi, Nicola	Architecture	Senior
Medellin, Oscar	Information Technology & Management	Junior
Mukashambo, Marine	Architecture	Senior
Yousef, Shadi	Electrical Engineering	Senior