Instructions

This year's format is slightly different from last year. If you participated last year, you will remember that each case had one case partner and was written from their specific perspective. This resulted in solutions that were very useful to the case partner, but not necessarily replicable to other organizations. This year, many case partners were consulted to give a broader perspective on endemic energy efficiency implementation barriers. ***Accordingly, this year's cases describe "typical" versions of problems, and your solutions will be judged on innovation and replicability.***

Each case provides information that reflects the most common elements of the problem and some contextual assumptions. But in real life, every instance of a problem can be different. Therefore, you have two options for developing your solutions:

1) *You can select one or more real-world examples, and use the specifics of their situation to inform your solution OR*
2) *You can propose a general solution based on the assumptions provided in the case text and create additional assumptions as needed.*

Under either option, solutions will be judged for innovation and replicability. Therefore, if you choose to focus on a specific real-world example, you should indicate where aspects of your solution might be adapted or changed to be more broadly replicable.

In addition, any assumptions that you change or add must be clearly stated, and the sources cited in your case solution. If you use an example(s) that has different parameters than the assumptions in the case, of if your proposed solution requires changes to the case parameters, you must explain the impact of these differences on the solution's success or replicability.

Introduction

Finding opportunities for greater energy efficiency in the food service sector is easy. Making the business case for those changes in an industry with razor thin margins can be more difficult. Add the complication a franchise structure and you've got a challenge! The nature of the quickservice franchise restaurant business is to rapidly process food to meet consumer demand. Many restaurants keep energy intensive cooking equipment running in anticipation of customer orders. In addition, many quickservice restaurants are moving to 24-hour operation, where lights, HVAC, and equipment are rarely turned off at all. Complicated ownership, investment, and management structures present obstacles to instituting standardized energy conservation measures (ECMs) across franchise locations. Furthermore, while company-owned restaurants can be wholly integrated into corporate energy efficiency programs, franchised stores must voluntarily opt in.

The Challenge

You are the Director of Energy for a nationwide quickservice restaurant chain called Good Burger. In 2005, the company adopted a goal of 10% energy reduction by 2020 over their 2004 baseline of 686 kBTU (site)/sf/yr, applicable to all company-owned locations. You have been asked to propose an energy efficiency strategy addressing franchised locations. Your strategies should maximize energy savings while adhering to franchise agreements and company policies. Your plan should describe how the strategy will impact the business model and consider the financial aspects of the franchisor/franchisee relationship.

You will present a business case outlining your proposed strategy and decision criteria to the National Director of Franchising and the Senior Leadership Team for approval. In your experience, the Senior Leadership Team responds well to strong business cases with short payback periods. The Team supports efficiency efforts but lacks a complete understanding of its immediate necessity for the business.

Under the current Good Burger franchise model, the corporate office does not receive any financial benefit from increased cash flow to a franchised store location that is realizing savings from energy efficient equipment or reduced energy bills. In order to obtain buy-in from the key decision makers, you should outline an investment strategy describing if/ how much corporate will need to invest in the program and the required payback[1] to ensure program success. You will also need to determine how to evaluate the program's effectiveness including how to track franchise energy savings toward the corporate goal. What is the role of recognition in encouraging participation?[2]

[1] The current standard industry payback period is two years.
[2] Positive publicity from energy efficiency is an important benefit. Franchisees should be the primary benefactors of this recognition.

About Good Burger

The Good Burger portfolio totals 8,000 limited locations in the continental United States and is about 90% franchised and 10% corporate-owned.[3] Good Burger restaurants have low profit margins and average annual unit sales approximately $750,000. Energy consumption accounts for only 3-4% of a restaurant's overall costs. Cooking accounts for approximately 25% of the total delivered energy use to a restaurant[4] and increases the need for building space conditioning.[5] For branding purposes, all new stores, whether franchised or corporate-owned, are built to the same general design standard, although variations may exist to accommodate regional climate differences. The chain's new restaurant prototype has been designed to be highly efficient compared to previous iterations, so your program should focus on existing buildings and operations.

Individual franchisees own an average of six[6] restaurants in different regions across the U.S.[7] Each region has a representative franchisee, or operator, who is nominated to sit on the Good Burger Leadership Council as a representative[8]. The Good Burger Leadership Council is comprised of corporate representatives, including you, the Director of Energy, and the representative franchisees. The Council, which meets quarterly, was developed as a forum for communication, and to share best practices.

Some issues raised during recent Leadership Council meetings concern the challenges of employee behavior modification to reduce energy use due to lack of training, attention, and management oversight. Franchisees sometimes find it difficult to justify the expense of additional employee training around energy efficiency in an industry that experiences high turnover. Some owners dislike complicated building automation systems, or don't perceive a benefit from them at locations moving to 24-hour operating schedules. Although owners monitor energy costs, since they are variable costs over which they can exert some control, they are not placing priority on energy conservation measures. Some regional representatives have had success instituting energy efficiency competitions among franchisees within their regions, though they have no formal enforcing power.

Good Burger has an online resource intranet for franchisees but the site does not see a lot of activity and is not updated often. This site offers internal documents available for download, including limited resources on energy efficiency, and equipment upgrade information.

Franchisees are not currently required to share energy data with the national chain. Franchisees may identify and implement ECMs at their own expense. Franchisees are expected, though not required, to make the franchisor aware of any upgrades.[9]

[3] Refer to Appendix A for the National Restaurant Association's restaurant category definitions and Appendix B for the portfolio building data.
[4] See the U.S. Department of Energy's "Better Buildings Alliance: Food Service," at http://www4.eere.energy.gov/alliance/activities/technology-solutions-teams/food-service.
[5] See http://www.restaurant.org/Industry-Impact/Conservation/Energy-Water-Efficiency.
[6] There are franchisees with a single store and others with several hundred, so scale should be considered. Program should provide meaningful impact to a large number of stores, but perhaps only a few franchisees as well
[7] Source: McDonalds
[8] Regional representatives typically own the most franchises per region.
[9] Appendix E describes the chain's existing energy efficiency goals and policies as well as a list of ECMs in place within franchised locations

Franchise Agreements

The franchisor typically supplies the branding, business knowledge, architectural designs, and equipment to the franchisee and the franchisee benefits from knowledge transfer, business training, and brand recognition. A franchisor with national reach can offer bulk pricing on equipment and supplies, as well as share best practices with franchisees to arm them with strategies for success. Franchise agreements vary significantly from company to company and state to state, depending upon company culture, legal issues, and local regulations but most agreement a share basic structure.

The franchise agreement is updated every ten years plus 2 five-year options for renewal. Unscheduled updates may occur, but are uncommon and must be approved by both the franchisor and franchisee. There are some opportunities for negotiated amendments. It is important to note that franchisees own the business they franchise, even if it is branded with the franchised company's logo, and often seek to operate their franchises in a manner consistent with their goals, understanding of the market territory served, business knowledge, and approach.[10]

A number of stakeholders can play a major role in influencing changes to existing franchise agreements. These stakeholders may include: customers, franchisees, employees, suppliers, regulatory bodies (e.g. national and local regulatory bodies including health and safety groups), community groups, and shareholders[11] (refer to Appendix D for the project approval process). It is important to consider the approval process at all levels of the business, including franchisor, franchisees and stakeholders. What role might communication strategies play in obtaining buy-in at the various levels (corporate, stakeholder, regional, owner and employee)?

Technology

Under the current model, Good Burger requires franchisees to purchase most kitchen equipment and technology directly through the corporate office, which allows franchisees to take advantage of bulk pricing discounts while helping the franchisor to ensure safety and consistency in food preparation. Franchisees have the option to purchase building systems equipment from alternate suppliers as long as they meet requirements specified by the franchisors. In the case of HVAC units, the franchisor may recommend equipment size and supplier, allowing the franchisee to purchase compliant equipment on their own from an approved list of manufacturers. Equipment included on the approved list is often also offered at discounted prices and there may be offerings of a single type of equipment at a range of energy performance levels. To purchase equipment that is neither offered through corporate or on the approved list, the franchisee must navigate a required chain of approval, which may include testing the equipment to confirm performance.

[10] You may find it helpful when considering these challenges to refer to the Franchise Agreement and Cost Structure (Payment Chart) detailed in Appendix C, or the Organizational Chart**.** Cost structure is an important aspect of this industry in terms of who pays upfront/capital costs and who receives the financial benefits of any savings achieved.

[11] See "McDonalds: Creating Effective Stakeholder Relationships" here: http://www.afrbiz.com.au/case-studies/mcdonald-s-serving-new-zealand-since-1976.html?print=1&tmpl=component.

Key cooking equipment includes: broilers, convection ovens, fryers, griddles, holding cabinets, ranges, and steamers. Refrigeration contributes to 6-10% of energy consumed at restaurants and energy efficient models can save up to 30% over less efficient models.[12]

Financial Considerations

Franchisors profit primarily through royalties and fees, which are typically paid as a percentage of gross revenue. Franchisees profit by selling food to their customers. Both the franchisor and franchisee are focused and aligned on driving top-line sales. Additionally, both want to control costs in order to maintain a viable long-term business model. Under the current franchise agreement Good Burger franchisees are responsible for funding initial project costs for technology upgrades. Therefore, franchisees capitalize on the savings from these upgrades.

Franchisees must be convinced of the value of energy efficiency efforts.[13] Consider how the availability of upfront capital may influence ECMs, and how owners of multiple locations view the opportunities for investment in energy efficiency differently. Do lease structures play a role in the capital investment strategy of franchisees? What information should be collected to determine the most effective ECMs for meeting franchisor goals? It is important to establish a program that encourages franchisee participation while also strengthening the franchisees financially – an outcome that will benefit the entire organization.

[12] See "ENERGY STAR Guide for Restaurants" here: http://www.energystar.gov/ia/partners/publications/pubdocs/restaurants_guide.pdf.

[13] For more information, see Franchise Direct's "US Fast Food Industry Franchise Report" at http://www.franchisedirect.com/foodfranchises/fastfoodfranchiseindustrystudy/14/262. Students are encouraged to compile a sample case cash flow using applicable industry examples and conduct private research to locate additional sources.

Appendix A: National Restaurant Association's Restaurant Category Definitions[14]
Full Service: The establishment provides waiter/waitress service, and the order is taken while the patron is seated. Patrons pay after they eat. Subcategories are defined by average per-person dinner check:

- Family Dining: $10 or less
- Casual Dining: $10–25 range
- Fine Dining: $25 and above

Limited Service: The establishment primarily provides food service where patrons generally order or select items and pay before eating. Food and drink may be consumed on premises, taken out, or delivered. This category also includes snack and nonalcoholic beverage bars. Subcategories are defined by average per-person dinner check:

- Quickservice: $3–6 range
- Fast casual: $10–25 range

Contract Foodservice/Other: Other eating establishment that serves food for profit, either to the general public or to a select group of individuals. Examples include:

- Corporate eating places
- Hospitals
- Military kitchens
- School cafeterias
- Social caterers
- Universities

Appendix B: Building Data

Average Restaurant Characteristics:

- Size: 3,000 square feet
- Energy consumption breakdown:
    - Kitchen equipment 40%-50%
    - HVAC 20%-30%
    - Lighting 20%
    - Refrigeration 10%

Appendix C: Franchise agreement and cost structure (payment chart)

Sample Cash Flow for Franchised Good Burger[15]
Royalty fee of 8%
Franchise fee of $15,000
Franchise agreement term of 20 years

Additional cash flow resources:

- Entrepreneur Magazine article "Sandwiches Franchises"
- Franchise Help "How Much Money Can My Franchise Make?"
- MSA Worldwide's "Pricing of Franchises"

[14] National Restaurant Association's "2013 Restaurant Industry Forecast"
[15] See Entrepreneur Magazine article on Subway here: http://www.entrepreneur.com/franchises/subway/282839-0.html.

- Yum! Brands Franchising

Appendix D: Organizational chart and project approval process

Sample Approval Process:

- Develop business case for ECM which factors in lifecycle costs and savings
- Present proposed ECM to Senior Leadership Team for approval
- Obtain additional approvals from the following departments (depending on ECM under consideration):
    - Development
    - Facilities Maintenance
    - Engineering
    - Finance
    - Operations teams

Appendix E: Existing energy efficiency goals/policy of the chain and ECMs in place at franchised locations

Sample Energy Goals

- Reduce energy consumption by 10% by 2020 in company-owned and managed locations
- Corporate store ECMs:
    - Purchase ENERGY STAR certified equipment
    - Develop and implement preventative maintenance procedures to improve efficiency and extend equipment life
    - Upgrade to T8 linear fluorescent lighting*
    - Install programmable thermostats*

*Indicates measures currently in place at most franchised locations. Some franchised locations utilize LED lighting and energy management systems but they are not widespread.

- Retrofit corporate-owned, managed, and franchised properties with T8 linear fluorescent lighting and programmable thermostats. Other ECM's such as LED lighting, EMS, exist sporadically.

Additional sample corporate energy goals

Appendix G: Helpful Links.

- Department of Energy's Better Buildings Alliance
- ENERGY STAR Commercial Buildings Program & Portfolio Manager
- ENERGY STAR Commercial Food Service Incentive Finder & Guide
- ENERGY STAR Commercial Kitchen Equipment Savings Calculator
- ENERGY STAR Commercial Kitchen Package (equipment facts)
- ENERGY STAR Guide for Restaurants
- ENERGY STAR Success Story for Red Robin
- Fresh Direct Fast Food Franchise Industry Study

- Food Service Energy & Water Survey
- National Restaurant Association 2013 Facts at a Glance
- National Restaurant Association's Conserve Sustainability Education Program
- New York Times, "Energy Efficiency Comes to Fast Food" (Sample ECMs)
- Pacific Gas & Electric Food Service Technology Center
- Technical Support Document: 50% Energy Savings for Quick-Service Restaurants
- Commercial Buildings Energy Consumption Survey
- Contract Duration: Evidence From Franchising
- Franchise Direct
- International Franchise Association