

Informing Shelter Decision Making through Financial Scenario Analysis:

The Example Case of Shelter Adoption Strategies

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* Scenarios derived from work co-authored with Dr. Annette Litster and Emily Lord

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Introduction: Farm Business Management Concepts Applied to the Shelter Setting

- · Bulk of my research resides in the areas of:
 - Animal-Related Business Management & Decision Making
 - Companion animals
 - Production animals
 - Production Economics







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Objective

The objective of this session is to cover some of the key components of shelter economics that should be considered when making management decisions.

* A recently developed shelter financial management tool will be used to illustrate, under various scenarios associated with shelter adoption strategies, financial outcomes for the shelter under different management strategies.

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Outline

- I. Introduction to shelter economics
- II. Financial Statements

Balance Sheet
Income Statement
Cash Flow Statement

III. Risk

Major sources of risk

- IV. Framing shelter decision making
- V. Scenario Analysis Example Scenario

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Shelter Management



Strategic Management

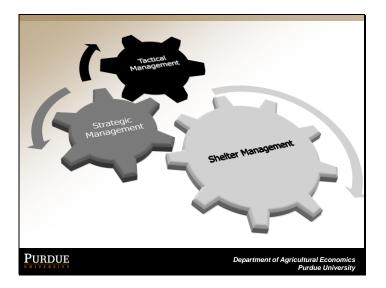
Tactical Management

The process of charting the overall long-term course of the firm

The process of making and implementing short-term decisions that keep the firm moving towards its long-term goals

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STRATEGIC MANAGEMENT

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Strategic Management

- Strategic management is all about anticipating, driving, and capitalizing on change:
 - Anticipating: seeing the future
 - Driving: shaping the future
 - Capitalizing: making the most of the future

Adapted from: Purdue, Agricultural Economics, Strategic Business Planning for Commercial producers

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Strategic Management

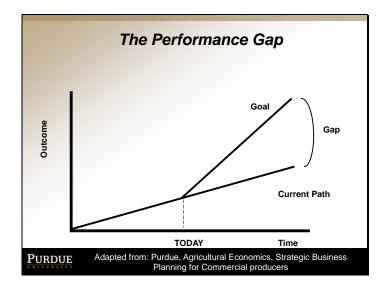
- In any strategic planning process, we must answer three key questions:
 - Where are we now?
 - Where are we going?
 - How will we get there?

Adapted from: Purdue, Agricultural Economics, Strategic Business Planning for Commercial producers

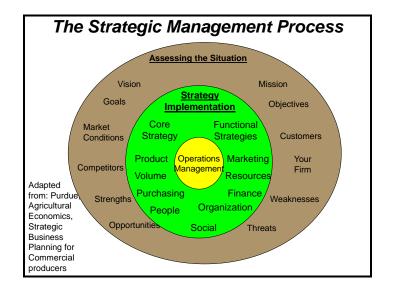
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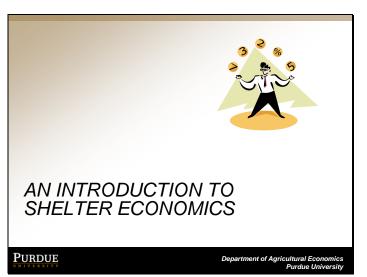
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Closing the performance gap? Define your current position with respect to customer needs & general economic situation Determine our goal where should we be in 5, 10, ..., years? Evaluate our firm and our market ... Strengths, Weaknesses, Opportunities, Threats Start down the path that will lead to our goal short - long-term action steps to move toward our target Adapted from: Purdue, Agricultural Economics, Strategic Business Planning for Commercial producers





Key Points

Fixed Costs/Expenses

Variable Costs/Expenses

Revenue/Income Streams

- Directly related to animals saved
- Not directly related to animals saved



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Always TWO ways to improve

Profit = Revenue - Cost





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Costs/Expenses

Fixed

Ownership (or fixed or indirect) costs = costs that arise from owning buildings or land (or other long-term assets).

*Arise from owning assets and would exist even if they weren't used to produce in this enterprise.

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A Note on Fixed Costs

- ***Difficult to assign on an enterprise budget ***
- Often appropriate and necessary but not tied to any enterprise (legal and accounting fees)
- Often prorated and spread across enterprises
- Sometimes charged to enterprises based on that enterprise's share of either shelter's total variable costs or total gross revenue
- Think overhead!

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Costs/Expenses

Variable

Operating (or variable or direct) costs = arise from the actual operation of the enterprise.

*** Would not exist if you did not operate.

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Revenue/Income

Adoption fees

→ Tied to number of lives saved.

Donations

→ Not directly tied to number of lives saved.

Sales of goods

→ Not directly tied to number of lives saved.

Fundraising events

→ Not directly tied to number of lives saved.

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How do I organize all of this and make it USEFUL?

Enterprise Budget!

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Enterprise Budget

An organization of revenues, expenses, and profit (net income) for a single enterprise

Each "business unit" or type of animal is an enterprise

BASE UNIT for an enterprise budget is <u>generally</u> a single unit of production

Per dog

Per cat

Per kitten

Per puppy

Enterprise Budget

BASE UNIT for an enterprise budget is generally a single unit of production

Per dog Per cat Per kitten Per puppy

Sometimes another unit makes sense, i.e. a room in your shelter; a group of 30 kittens

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Enterprise Budget

You MAY have multiple budgets per enterprise with different assumptions of production (or yield)

i.e.: you may have a budget for "fast track" kittens and a separate budget for other kittens

Using common units (i.e. per kitten) permits comparison across budgets

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Uses of Enterprise Budgets

Helps identify most profitable enterprises to be included in the whole shelter plan

They require a lot of data – but – once completed ... are a good source of data for: other budgeting exercises decision making

In order to show *economic profit* must include opportunity costs to <u>unpaid factors</u>

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Opportunity Cost

- The cost of using a resource that could be used elsewhere.
- The earnings from that resource in that best alternate use.
- To use a resource, it costs you what you could sell it for, not what you paid for it.



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What is opportunity cost?

Technically, we will define it in one of two ways:

 The income that could have been generated by selling or renting the input to someone else,

OR

2. The additional income that would have been received if the input had been used in its most profitable alternative use.

Why is this important?

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Bottom Line: Enterprise Budgets

Receipts

- operating costs (variable)
- ownership costs (fixed)
- = accounting profit (net income)
- $-\ opportunity\ cost\ of\ unpaids\ (labor, mgt, capital)$
- $= economic\ profit$

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What's going on here?

To increase lives saved ... you drive up Total Variable Cost!

Thus, you MUST understand what your variable costs are, relative to your revenue generated.

 Does a puppy, on average, generate more or less in income that it costs to save?

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FINANCIAL MANAGEMENT & FINANCIAL STATEMENTS

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Financial Management

 Sound financial management is necessary in order to enable the operation to continue



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Back to the Basics: Business Management

Borrowing from farm business management ...

3 business financial statements:

- 1. Balance Sheet
- 2. Income Statement
- 3. Cash Flow Statement

Let's focus on the concepts and what we can gain from each ...

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Balance Sheet

 a financial report summarizing the assets, liabilities, and equity (net worth) of an entity at a given point in time

What do you own?

What do you owe?

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Income Statement

- report that summarizes the income and expenses and computes the resulting profit of the business over a period of time
- *** Major purpose is to measure the difference between revenue and expenses

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Cash Flow Statement

- = records timing and size of cash inflows and outflows that occur over a given accounting period
- *** Will you have cash on hand when you need it?
 - When will you need to borrow money? And, how much?
 - When can you afford to increase spending?
 - When should you repay outstanding debts?

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Remember: 2 ways to improve profit

Profit = Revenue - Cost





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A Tool for Financially Evaluating Your Shelter's Programs

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Risk

- Financial
- Regulatory
- Human resource
 - Hired, volunteer, management
- Legal
- Production

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Consider ...

Demand

- General economy
 - Demand for pets
 - Ability to pay for pet care
- Location, location, location
- Adoption fees
- Seasonality
- Awareness
- Segmentation of market

Supply

- General economy
 - Ability to pay for pet care
- Location, location, location
- Costs!
 - Vaccines
 - Food
- Veterinary Care
- Interest rates, capital availability
- Seasonality

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Don't get stuck on decreasing costs alone!

Increase Revenue

- Grants/External Funding Opportunities
- Fundraising/Pursuing Donations
- · Retail sales? Services?

Decrease Costs

- Procurement of food and supplies (offset costs)
- Facilities & maintenance
- Supplies & standard operating procedures

Know where you stand & have decision making processes in place

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Enterprise Budget

- = an organization of revenue, expenses, and profit for a single enterprise
- Purpose = planning tool to test out new ideas and compare enterprises to determine the best one
- Use a consistent base unit
 - Income & expenses per unit (per dog, per cat)
- · Allows comparison across enterprises
- · Easily feeds into breakeven analysis ...

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Partial Budgets

- A process of examining those costs, income and resources that change with a proposed adjustment
- Compares profitability of alternatives under consideration
- Emphasis only on the expected <u>changes</u> in revenues and costs
- Isolates the effects of proposed changes

Decision-Making!

Decision-Making!

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Partial Budget Development

- 1. Identify goals and option to be investigated
- 2. Identify revenues and expenses to consider
- 3. Estimate revenue and expense changes
- 4. Associate changes with a positive or negative impact on the business
- 5. Perform sensitivity analysis for key factors/assumptions
- 6. Review outcome in a "whole" operation perspective

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Evaluating Management Changes

- + Additions due to Management Changes (increased revenues and decreased expenses)
- Subtractions due to Management Changes (decreased revenues and increased expenses)
- Net Change to Enterprise

	Format			
A. Increas	sed Revenue	C. Decreased Revenue		
B. Decrea	sed Expense	D. Increased Expense		
	Net effect = (A+B) – (C+D)		
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Recent Project: Shelter Financial Analysis

Recent Project:

- Adoption strategies used in animal shelters can have a large impact on the total number of adoptions and donations that take place.
- Reducing adoption fees during peak kitten or puppy season is one way to reduce inventories and increase the number of open space to save more lives, but does not necessarily increase the financial well-being of the shelter if the per-animal costs exceed the revenues generated.

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Methods Employed				
Enterprise Budget developed	for:			
Cat	Costs!			
Kitten	Dog	Cost (\$)	Puppy	Cost (\$)
Dog	Cost of spay (female)	15.00	Cost of spay (female)	15.00
Puppy	Cost of neuter (male)	12.00	Cost of neuter (male)	12.00
Рирру	Food cost (for 36-day stay)	26.75	Food cost (for 21-day stay)	7.23
	DA ₂ PP vaccine (two doses)	14.00	DA ₂ PP vaccine (three doses)	20.00
	Bardetella vaccine	6.00	Bardstella vaccine	6.00
Revenue!	Rabies vaccine	1.25	Rabies vaccine	1.25
	Blood testing (≥6 years)	4.00	Blood testing	0.00
Adoption Fees:	Heartworm testing	3.00	Heartworm testing	3.00
\$150 for dogs, \$175 for puppies,	Topical flea control	11.00	Topical flea control	10.00
\$50 for cats, and \$95 for kittens.	Microchip	12.00	Microchip	12.00
, , , , , , , , , , , , , , , , , , , ,	Dewormer	2.00	Dewomer	2.00
	Cost of euthanasia	7.00	Cost of euthanasia	5.00
	Cost of disposal	6.00	Cost of disposal	4.00
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In Summary

- Key tools to be aware of and incorporate:
 - Enterprise Budgeting
 - Partial Budgeting
 - Balance Sheet
 - Income Statement
 - Cash Flow Statement
- Ultimately...
 - Decision making incorporating short-term and long-term goals & financial feasibility
 - Variable versus fixed costs are KEY*

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In Summary

Shutdown Rule*

- a shelter should shutdown when revenue received from goods and services provided cannot cover the variable costs of operating
- *** Know the cost and revenue associated with each enterprise (ENTERPRISE BUDGETING) to inform sound decision making

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Thank you!
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Additional Notes: