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University of Applied Sciences
Wiesbaden Rüsselsheim

Entrepreneurship RheinMain

Winter Term 2022/23,
Prof. Dr. Thomas Heimer

Agenda des Kurses

- Structure of a Business Plan
- Various plans as composites of the Business Plan
- The financial plan

Outline of a Business Plan (1 of 2)

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I. Introductory Page

A. Name and address of business

B. Name(s) and address(es) of principal(s)

C. Nature of business

D. Statement of financing needed

E. Statement of confidentiality of report

II. Executive Summary—Three to four pages summarizing the complete business plan

III. Industry Analysis

A. Future outlook and trends

B. Analysis of competitors

C. Market segmentation

D. Industry and market forecasts

IV. Description of Venture

A. Product(s)

B. Service(s)

C. Size of business

D. Office equipment and personnel

E. Background of entrepreneur(s)

V. Production Plan

A. Manufacturing process (amount subcontracted)

B. Physical plant

C. Machinery and equipment

D. Names of suppliers of raw materials

VI. Operational Plan

A. Description of company's operation

B. Flow of orders for goods and/or services

C. Technology utilization

Outline of a Business Plan (2 of 2)

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VII. Marketing Plan
A. Pricing
B. Distribution
C. Promotion
D. Product forecasts
E. Controls

VIII. Organizational Plan
A. Form of ownership
B. Identification of partners or principal shareholders
C. Authority of principals
D. Management-team background
E. Roles and responsibilities of members of organization

IX. Assessment of Risk
A. Evaluate weakness(es) of business
B. New technologies
C. Contingency plans

X. Financial Plan
A. Assumptions
B. Pro forma income statement
C. Cash flow projections
D. Pro forma balance sheet
E. Break-even analysis
F. Sources and applications of funds

XI. Appendix (contains backup material)
A. Letters
B. Market research data
C. Leases or contracts
D. Price lists from suppliers

Components of a Business Plan

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- A business plan:
  - Should be comprehensive.
  - Should help the entrepreneur clarify his or her thinking about the business.

Using and Implementing the Business Plan

- Implementation of the strategy contain control points to:
  - Ascertain progress.
  - Initiate contingency plans if necessary.

- Without good planning:
  - Entrepreneur is likely to pay an enormous price.
  - Employees will not understand the company's goals.

- Businesses fail due to entrepreneur's inability to plan effectively.

Measuring Plan Progress

- Business plan projections are made on a 12-month schedule.
- However the entrepreneur should frequently check on:
  - Profit and loss statement.
  - Cash flow projections.
  - Inventory control.
  - Production control.
  - Quality control.
  - Sales control.
  - Disbursements.
  - Web site control.

Updating the Plan

- Entrepreneurs must:
  - Be sensitive to changes in the company, industry, and market.
  - Determine what revisions are needed If changes are likely to affect the business plan.

- Helps entrepreneurs:
  - Maintain reasonable targets and goals
  - Keep the new venture on a course to high probability of success.

Why Business Plans Fail

- Factors can be one of many of the following:
  - Goals set by the entrepreneur are unreasonable.
  - Goals are not measurable.
  - Entrepreneur has not made a total commitment to the business or to the family.
  - Entrepreneur has no experience in the planned business.
  - Entrepreneur has no sense of potential threats or weaknesses to the business.
  - No customer need was established for the proposed product or service.

VARIOUS PLANS AS A COMPOSITE OF A BUSINESS PLAN

Environmental and Industry Analysis

- Environmental analysis: assessment of external uncontrollable variables that may impact the business plan.
  - Examples: Economy, culture, technology, legal concerns,

- Industry analysis: reviews industry trends and competitive strategies.
  - Examples: Industry demand, competition

Critical Issues for Environmental and Industry Analysis

1. What are the major economic, technological, legal, and political trends on a national and an international level?
2. What are total industry sales over the past five years?
3. What is anticipated growth in this industry?
4. How many new firms have entered this industry in the past three years?
5. What new products have been recently introduced in this industry?
6. Who are the nearest competitors?
7. How will your business operation be better than this?
8. Are the sales of each of your major competitors growing, declining, or steady?
9. What are the strengths and weaknesses of each of your competitors?
10. What trends are occurring in your specific market area?
11. What is the profile of your customers?
12. How does your customer profile differ from that of your competition?

Description of Venture

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- Provides complete overview of the product(s), service(s), and operations of new venture. Components of the description are:
  - Mission statement.
  - Important factors that provide a clear description and understanding of the business venture.
    - Product(s) or service(s).
    - Location and size of the business.
    - Personnel and office equipment needed.
    - Background of the entrepreneur(s).
    - History of the venture.

Describing the Venture

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1. What is the mission of the new venture?
2. What are your reasons for going into business?
3. Why will you be successful in this venture?
4. What development work has been completed to date?
5. What is your product(s) and/or service(s)?Describe the product(s) and/or service(s), including patent, copyright, or trademark status.
6. Where will the business be located?
7. Is your building new? old? in need of renovations? (If renovation is needed, state costs.)
8. Is the building leased or owned? (State the terms.)
9. Why is this building and location right for your business?
10. What office equipment will be needed?
11. Will equipment be purchased or leased?
12. What experience do you have and/or will you need to successfully implement the business plan?

Production Plan

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- Details how the product(s) will be manufactured.

1. Will you be responsible for all or part of the manufacturing operation?
2. If some manufacturing is subcontracted, who will be the subcontractors? (Give names and addresses.)
3. Why were these subcontractors selected?
4. What are the costs of the subcontracted manufacturing? (Include copies of any written contracts.)
5. What will be the layout of the production process? (Illustrate steps if possible.)
6. What equipment will be needed immediately for manufacturing?
7. What raw materials will be needed for manufacturing?
8. Who are the suppliers of new materials and what are the appropriate costs?
9. What are the costs of manufacturing the product?
10. What are the future capital equipment needs of the venture?

Operation Plan

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- All businesses (manufacturing or nonmanufacturing) should include an operations plan as part of the business plan.
  - Goes beyond the manufacturing process.
  - Major distinction between services and manufactured goods is services involve intangible performances.

If a Retail Operation or Service:

1. From whom will merchandise be purchased?
2. How will the inventory control system operate?
3. What are the storage needs of the venture and how will they be promoted?
4. How will the goods flow to the customer?
5. Chronologically, what are the steps involved in a business transaction?
6. What are the technology utilization requirements to service customers effectively?

Marketing Plan

- Describes market conditions and strategy related to how the product(s) and service(s) will be distributed, priced, and promoted.
- Describes:
  - Marketing research evidence.
  - Specific forecasts for a product(s) or service(s).
  - Budget and appropriate controls needed for marketing strategy decisions.

- Potential investors regard the marketing plan as critical to the success of the new venture.

Organizational Plan

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- Describes form of ownership and lines of authority and responsibility of members of new venture.

- In case of a:
  - Partnership:
    - Terms of the partnership should be included.
  - Corporation:
    - Shares of stock authorized and share options.
    - Names, addresses, and resumes of the directors and officers of the corporation.
    - Organization chart.

Assessment of Risk

- Identifies potential hazards and alternative strategies to meet business plan goals and objectives.
- Assessment of risk should be based on:
  - Potential risks to the new venture.
  - Discussion of what might happen if risks become reality.
  - Strategy employed to prevent, minimize, or respond.
- Major risks for a new venture could result from:
  - Competitor's reaction.
  - Weaknesses in marketing/ production/ management team.
  - New advances in technology.

Financial Plan

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- Projections of key financial data that determine economic feasibility and necessary financial investment commitment.

- Three financial areas:
  - Summarize the forecasted sales and the appropriate expenses for at least the first three years.
  - Cash flow figures for three years.
  - Projected balance sheet.

Appendix

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- Contains any backup material that is not necessary in the text of the document.

- May include:
  - Letters from customers, distributors, or subcontractors.
  - Secondary data or primary research data used to support plan decisions.
  - Leases, contracts, or other types of agreements.
  - Price lists from suppliers and competitors.

Using and Implementing the Business Plan

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The
Financial
Plan

see also template

Operating and Capital Budgets (1 of 2)

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- Developed before the pro forma income statement.
- Sales budget: estimate of the expected volume of sales by month.
  - Cost of sales can be determined from the sales forecasts.
  - In manufacturing ventures: costs of internal production or subcontracting are compared.
  - Includes estimated ending inventory required as a buffer.

Example of a Manufacturing Budget

	Jan.	Feb.	Mar.
Projected sales (units)	5,000	8,000	12,000
Desired ending inventory	100	200	300
Available for sale	5,100	8,200	12,300
Less: beginning inventory	0	100	200
Total production required	5,100	8,100	12,100

Operating and Capital Budgets (2 of 2)

- Operating costs:
  - List of fixed expenses incurred regardless of sales volume.
  - Variable expenses must be linked to strategy in the business plan.

- Capital budgets provide a basis for evaluating expenditures that will impact the business for more than one year.

Example of an Operating Budget

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Expense	January	February	March
Salaries	$23.2	$23.2	$26.2
Rent	2	2	2
Utilities	0.9	0.9	0.9
Advertising	13.5	13.5	17
Selling expenses	1	1	1
Insurance	2	2	2
Payroll taxes	2.1	2.1	2.5
Depreciation	1.2	1.2	1.2
Office expenses	1.5	1.5	1.5
Total expenses	$47.4	$47.4	$53.9

Pro Forma Income Statements (1 of 2)

- Pro forma income: projected net profit calculated from projected revenue minus projected costs and expenses.
- Sales by month is calculated first.
  - Basis of the figures: marketing research, industry sales, and some trial experience.
  - Forecasting techniques may be used.
- New ventures take time to build up sales.
- Projections of all operating expenses for each of the months during the first year should be made.

Pro Forma Income Statements (2 of 2)

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- Increasing selling expenses as sales increase should be taken into account.
- Changes in expenses during the first year can necessitate month-by-month illustration.
- Increase in individual expenses need to be reflected in the first year's pro forma income statement.
- Projections should be made for years 2 and 3 as well.

Example of a Pro Forma Income Statement (see excel spreadsheet prepared for the lecture)

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	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
Sales	20.0	32.0	48.0	70.0	90.0	100.0	100.0	100.0	80.0	80.0	120.0	130.0	970.0
Less: Cost of goods sold	10.0	16.0	24.0	35.0	45.0	50.0	50.0	50.0	40.0	40.0	60.0	65.0	485.0
Gross profit	10.0	16.0	24.0	35.0	45.0	50.0	50.0	50.0	40.0	40.0	60.0	65.0	485.0
Operating expenses													
Salaries*	23.2	23.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	308.4
Rent	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	24.0
Utilities	0.9	0.9	0.9	0.8	0.8	0.8	0.9	0.9	0.9	0.8	0.8	0.9	10.3
Advertising	13.5	13.5	17.0	17.0	17.0	17.0	14.0	14.0	14.0	21.0†	17.0	17.0	192.0
Sales expenses	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	12.0
Insurance	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	24.0
Payroll taxes	2.1	2.1	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	29.2
Depreciation‡	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	14.4
Office expenses	1.5	1.5	1.5	1.7	1.8	2.0	2.0	2.0	1.8	1.8	2.2	2.2	22.0
Total operating expenses	47.4	47.4	54.3	54.4	54.5	54.7	51.8	51.8	51.6	58.5	54.9	55.0	636.3
Gross profit	(37.4)	(31.4)	(30.3)	(19.4)	(9.5)	(4.7)	(1.8)	(1.8)	(11.6)	(18.5)	5.1	10.0	(151.3)

* Added shipper in month three
†Trade show
‡Plant and equipment of $72,000 depreciated straight line for five years.

Pro Forma Cash Flow (1 of 2)

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- Projected cash available calculated from projected cash accumulations minus projected cash disbursements.
  - Not the same as profit.
  - Sales may not be regarded as cash.
  - Cash flow is a major problem faced by new ventures.
  - Use of profit as a measure of success for a new venture may be deceiving.

- Two standard methods used to project cash flow:
  - Indirect method.
  - Direct method.

Statement of Cash Flows: The Indirect Method

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Cash Flow from Operating Activities: (+ or − Reflects Addition or Subtraction from Net Income)	
Net income	XXX
Adjustments to net income:	
Noncash nonoperating items:	
+ depreciation and amortization	XXX
Cash provided by changes in current assets or liabilities:	
Increase(+) or decrease(−) in accounts receivable	XXX
Increase(+) or decrease(−) in inventory	XXX
Increase(+) or decrease(−) in prepaid expenses	XXX
Increase(+) or decrease(−) in accounts payable	XXX
Net cash provided by operating activities	XX,XXX
Cash Flow from Other Activities	
Capital expenditures (−)	(XXX)
Payments of debt (−)	(XXX)
Dividends paid (−)	(XXX)
Sale of stock (+)	XXX
Net cash provided by other activities	(XXX)
Increase (Decrease) in Cash	**XXX**

Pro Forma Cash Flow (2 of 2)

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- Entrepreneurs must make monthly projections of cash.
- Difficulty with projecting cash flows is determining the exact monthly receipts and disbursements.
- Cash flow statement is based on best estimates.

Example of a Pro Forma Cash Flow

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	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Receipts												
Sales	12.0	27.2	41.6	61.2	82.0	96.0	100.0	100.0	88.0	80.0	104.0	126.0
Disbursements												
Equipment purchase	72.0	—	—	—	—	—	—	—	—	—	—	—
Cost of goods	8.0	14.8	22.4	37.6	43.0	49.0	50.0	50.0	42.0	40.0	56.0	60.0
Salaries	23.2	23.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2
Rent	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Utilities	0.9	0.9	0.9	0.8	0.8	0.8	0.9	0.9	0.9	0.8	0.8	0.9
Advertising	13.5	13.5	17.0	17.0	17.0	17.0	14.0	14.0	14.0	21.0	17.0	17.0
Sales expense	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Insurance	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Payroll & misc. taxes	2.1	2.1	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Office expenses	1.5	1.5	1.5	1.7	1.8	2.0	2.0	2.0	1.8	1.8	2.2	2.2
Inventory*	0.2	0.4	0.6	0.6	0.8	0.8	1.0	1.0	1.0	1.0	1.2	1.2
Total disbursements	126.4	61.4	76.1	91.4	97.1	103.3	101.6	101.6	93.4	98.3	110.9	115.0
Cash flow	(114.4)	(34.2)	(34.5)	(30.2)	(15.1)	(7.3)	(1.6)	(1.6)	(5.4)	(18.3)	(6.9)	11.0
Beginning balance†	300.0	185.6	151.4	116.9	86.7	71.6	64.3	62.7	61.1	55.7	37.4	30.5
Ending balance	185.6	151.4	116.9	86.7	71.6	64.3	62.7	61.1	55.7	37.4	30.5	41.5

*Inventory is valued at cost or average of $2.00/unit.

†Three founders put up $100,000 each for working capital through the first three years. After the third year the venture will need debt or equity financing for expansion.

Pro Forma Balance Sheet

- Pro forma balance sheet: summarizes the projected assets, liabilities, and net worth of the new venture.
  - A picture of the business at a certain moment in time.
  - Does not cover a period of time.

- Consists of:
  - Assets: items that are owned or available to be used in the venture operations.
  - Liabilities: money that is owed to creditors.
  - Owner's equity: amount owners have invested and/or retained from the venture operations.

Example of a Balance Sheet

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Assets		
Current assets		
Cash	$41.5	
Accounts receivable	52.0	
Inventory	1.2	
Total current assets		$ 94.7
Fixed assets		
Equipment	72.0	
Less depreciation	14.4	
Total fixed assets		57.6
Total assets		$152.3
Liabilities and Owners' Equity		
Current liabilities		
Accounts payable	$13.6	
Total liabilities		$ 13.6
Owners' equity		
K. Peters	100.0	
C. Peters	100.0	
J. Welch	100.0	
Retained earnings	(151.3)	
Total owners' equity		148.7
Total liabilities and owners' equity		$152.3

Break-Even Analysis

- Break-even: volume of sales where the venture neither makes a profit nor incurs a loss.
- Break-even sales point indicates the volume of sales needed to cover total variable and fixed expenses.

- The break-even formula:

$$B/E(Q) = \frac{\text{Total Fix Cost}}{\text{Selling Price} - \text{Variable Cost /Unit (Marginal Contribution)}}$$

$$= \text{Total Fix Cost / (Turnover per piece - variable Cost per piece)}$$

- Major weakness in calculating the breakeven lies in determining if a cost is a fixed or variable.

Graphic Illustration of Breakeven

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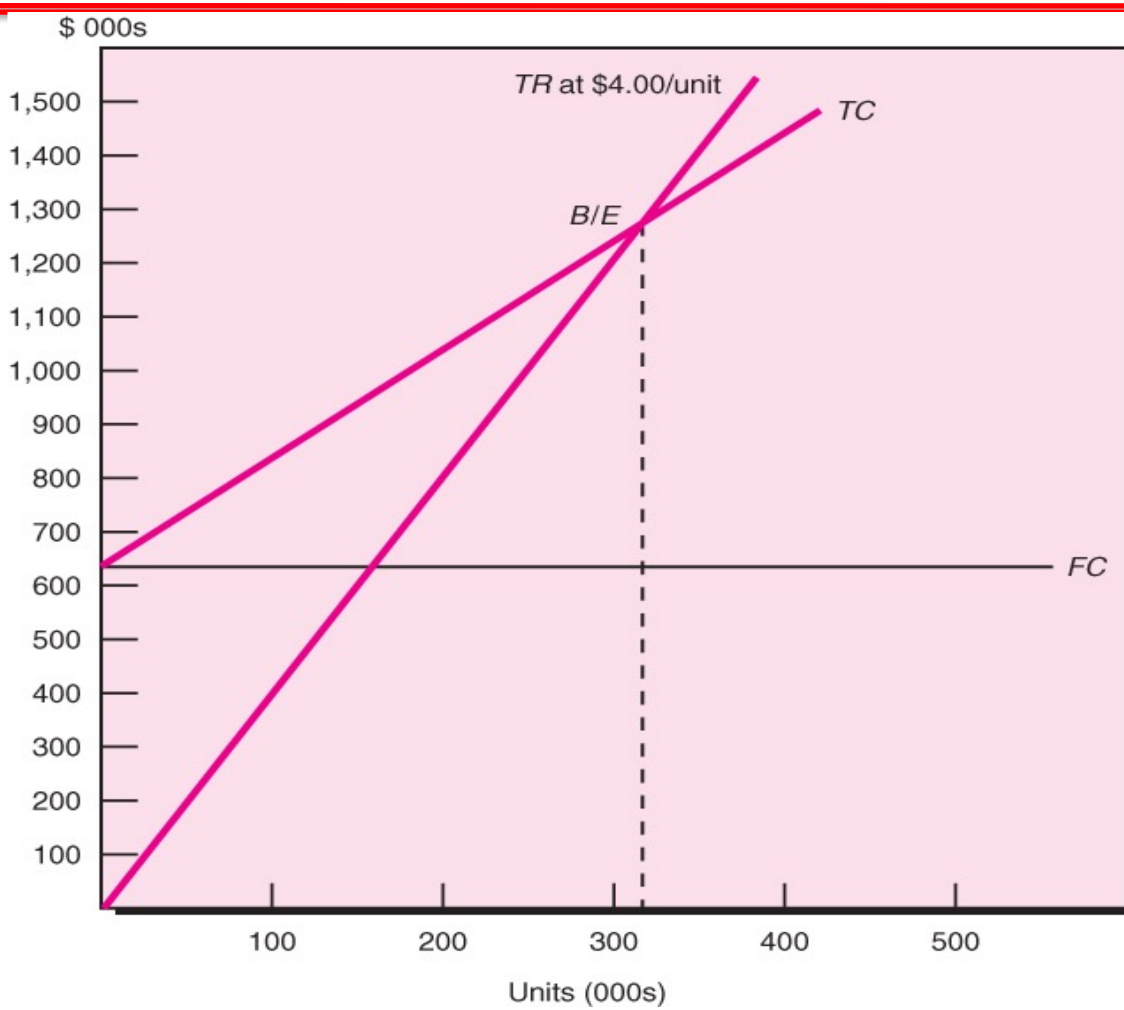

Calculation of share value

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A1	**Berechnungsmethode**	
A2	Liquiditätsbedarf	2.000.000,00 €
A3	Umsatzwert in Exitjahr	30.000.000,00 €
A4	Exitjahr	5
A5	EBIT in Exitjahr	7.500.000,00 €
A6	Übliche Branchenmarge Gewinn (=n*Gewinn)	12
A7	Erwartete Rendite in %	0,50
A8		
A9	Erwarteter Unternehnemenswert in t5 (Gewinn*A6)	90.000.000,00 €
A10	Erwarteter Wert des Investments in t5 (A2*(1+A7)hochA4)	15.187.500,00 €
A11	Anteil der Beteiligung am Wert des Unternehmens in t5 (A10/A9 in Prozent)	16,88%
A12	Post Money Wert für Investor (A2/A11)-A2	9.851.851,85 €
	Quellen:	
	https://www.einstein1.net/venture-capital-methode/	
	https://gafron.law/startup-beteiligungsrechner/?cookie-state-change=1611312230951	

HOW TO USE THE FINANCIAL PLAN TOOL

Financial Plan – Excel Tool

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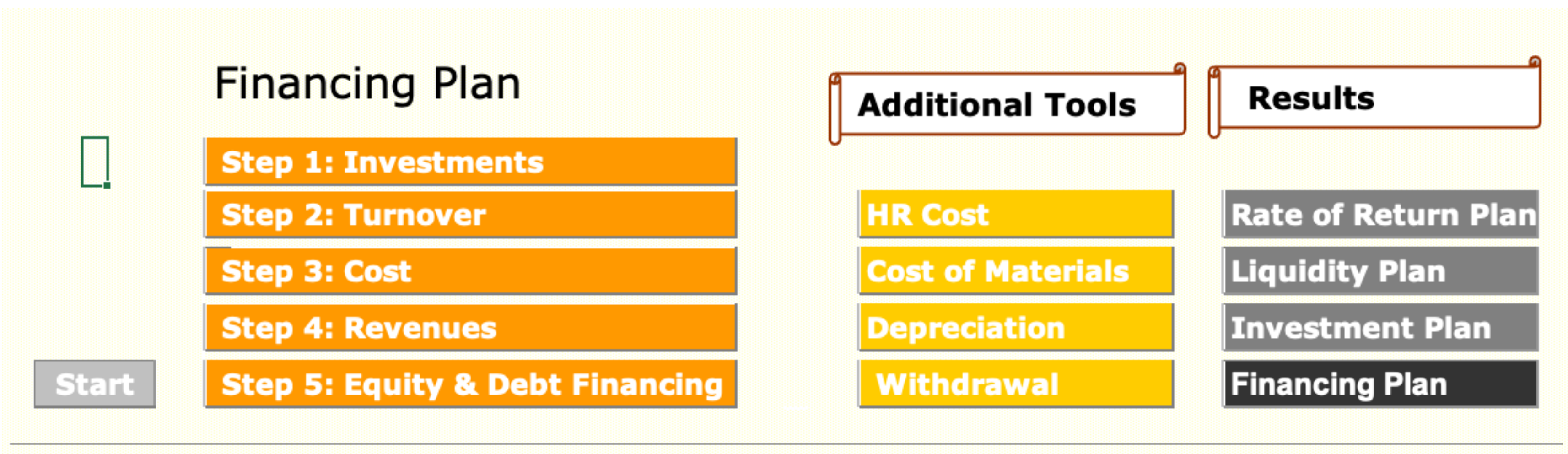

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