

Project introduction

Financial Management & Planning ACPA7002
Capital Project Appraisal

Flexible cardboard packaging machine

Panotec Compact EVO



Image courtesy of <https://ribble-pack.co.uk/right-size/panotec>

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BISLEY

Project objectives

- **Reduce spend** on die-cut cardboard
 - Annualised spend ~ £1.225 million
 - Remove overhead recovery and profit margin of current suppliers

- **Reduce inventory** of die-cut cardboard
 - Currently source 160 variants
 - Inventory cost ~ £40 thousand

- **Increased flexibility**
 - Facilitates growth with uncertain demand profiles
 - True supply to demand – no MOQ
 - More environmentally friendly

- **Increased capability**
 - In-house development of new solutions
 - Easier, less costly & self sufficient
 - Future proofing of supply chain
 - Social benefits of upskilling workers

Project timeline



Price increases



Savings

Q3 – 2021:

Project introduction
Data collection
Data analysis
Expertise Ribble



Q4 – 2021/22:

Supplier / machine visits
Initial proposal
Negotiations



Q1 – 2022:

Fanfold specification
Optimization
Purchase machine



Q2 – 2022:

Machine installation
Programming
Implementation

Project cost

Connect Loan Offer:

- Double wall material = £734/ksm
- Single wall material = £537/ksm
- Energy surcharge 10% of material cost
 - Sole supplier 3 years
- Target annual spend £222,000 with penalty clause 25%
- Purchase machine after 3 years for £63,750

Connect Purchase Offer:

- Double wall material = £705/ksm
- Single wall material = £516/ksm
 - No energy surcharge
 - Sole supplier 2 years
- Target annual spend £210,000 with penalty clause 25%
- Purchase machine subject to lead time for £127,500

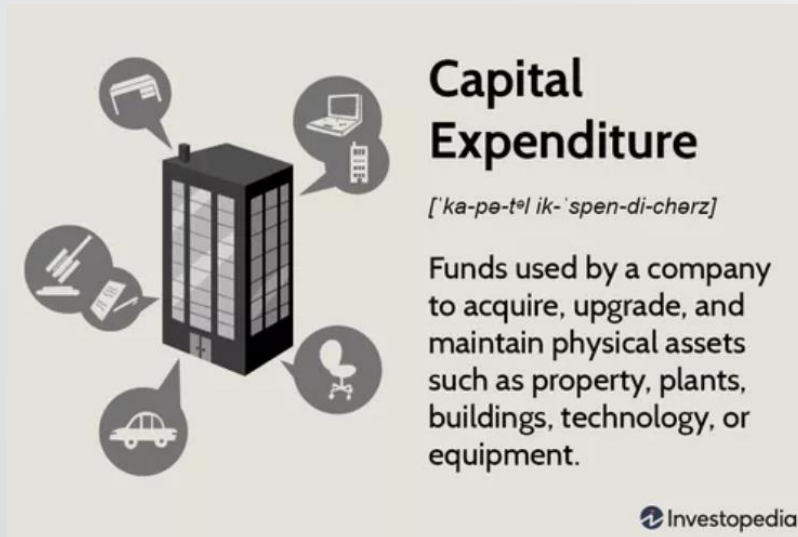
Fixed: machine cost (includes delivery and installation, training) warehouse space

Temporary fixed: material cost, material MOQ

Set up: handling and lifting equipment, additional items incl. gluing station

Variable: energy usage, labour rate, waste, maintenance

Project lifespan

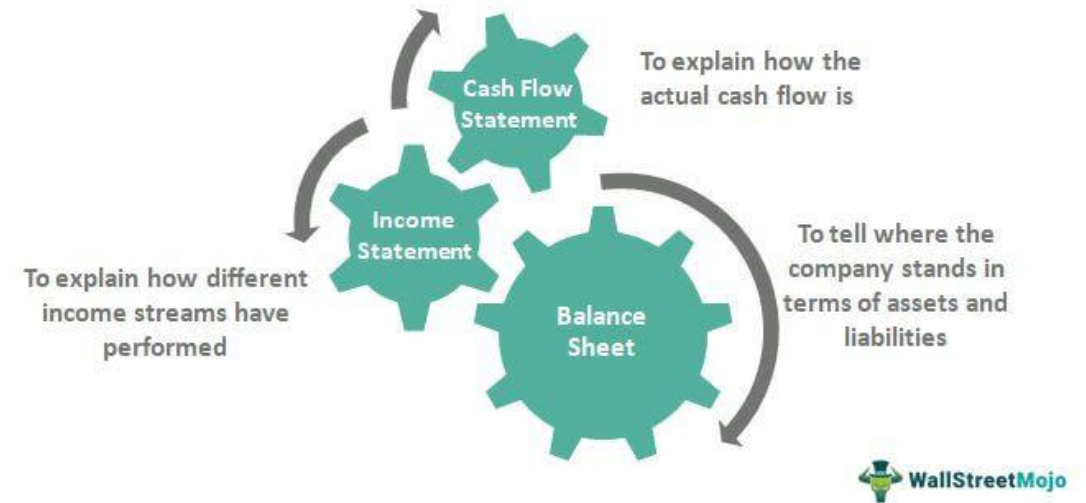


- For a capital expenditure of this size, the company would depreciate this asset across a 10-year period.



- Capital expenditures are payments made for goods or services that are recorded or capitalized on a company's balance sheet instead of expensed on the income statement.

Types of Financial Statements



- This ensure the statements more accurately reflect the financial condition of the company, to account for the loss in value over time and can provide funding to replace the item at the end of its useful life.

Project implementation

- There is an element of risk to any project regardless of the planning that has occurred before implementation. However, with better planning the risk can be mitigated or significantly reduced.

Disruption: Machine Installation	Disruption: Machine Operating	Commercial risk: Supply chain effect
Running of electrical supply	Availability of personnel for training	Effect on the current suppliers
Floor marking	Raw material availability for training	Mitigation of price increases; sustaining volume business
Space requirement	Specification of parts	Full mixed loads only for delivered product
Transportation of machine through the building	Understanding production volume and demand	MOQ 2000m ² per product lines. Lead time – 1-10 days

Project rationale

- Rationale is required to determine which projects should be progressed and which shouldn't.
- Bisley currently uses payback period as the primary financial appraisal tool. A project is deemed to be viable if the payback period is less than two years.

Advantages

1. Simple to use and easy to understand
2. Quick to calculate
3. Preference for liquidity
4. Useful in case of uncertainty

Disadvantages

1. Ignores the time value of money
2. Not all cash flows are covered
3. Can be unrealistic
4. Ignores profitability

- It can be beneficial to use a combination of project appraisal tools.
- Project should be appraised from various perspectives not just financial but from commercial, legal, ecologic and technological as well.

Project model

	Purchase option	Loan option	Assuming 20% reduction in volume	Assuming 25% increase in energy surcharge
No. SKU's for top 81% of volume, 28% of variety	31	31	31	31
Volume for these SKU's	600,000	600,000	600,000	600,000
Current annualised spend	£478,000	£478,000	£382,400	£478,000
Proposed cardboard spend inc. waste	£340,000	£374,000	£299,200 (+ £18,700 surcharge for shortfall)	£425,000
Additional labour & utilities	£40,000	£40,000	£40,000	£40,000
Annualised savings	£98,000	£64,000	£24,500	£13,000
Investment cost	£132,500	£91,250	£91,250	£91,250
Payback period	1.35 years	1.43 years	3.72 years	7.02 years

Project funding

Short-term internal

Tighter credit control for receivables
Reducing inventory levels
Delaying trade payables

Long-term internal

Retained profits
Sale of assets
Owner investment

Short-term external

Bank overdraft
Debt factoring
Invoicing discounting

Long-term external

Ordinary shares
Preference shares
Borrowings
Finance leases / hire purchase
Grants

Implications and considerations: balance sheet, financial performance, cash flow, amount, availability, duration, cost, risk, ratio, control of business, interest

Project findings

- Future project financial appraisal should include an appraisal tool which takes account of the time value of money. Payback period is a good screening tool although may miss opportunities for future profit.
- Financial appraisal tools should be utilised to ensure investment can continue (even through financially difficult times) with reduced risk, for future growth and development of the company.
- Tools can be used to analyse performance after investment too, to compare the expected versus actual results – these many identify assumptions which were incorrect or inaccurate in previous / similar projects.
- A project is a means to achieve a goal by applying a certain amount of resources, therefore everyone within the company needs to be clear and unified in work towards that same goal.

Any questions please?