PRINTING MACHINE

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INTRODUCTION

Company: Unisan
Location: Bridgend, South Wales

Unisan specialises in **providing recycling solutions for medium to large organisations.** Offering solutions for both front-of-house and back-of-house environments. Our recycling stations help empower workspace recycling.

This is achieved through **engaging graphics** which enables the user to successfully segregate their waste item in the correct waste stream, which ultimately leads to better recycling rate.

Unisan currently **outsource all printing services** from several suppliers across the UK.

With the increasing volume and demand, Unisan are now considering to bring this aspect of the business in-house which will bring the company several benefits.

PROJECT

Invest in a printing machine to be able to produce bespoke graphics **in-house.**

AIMS

- Determine whether to **buy or lease a printer**
- Understand the benefits and any issues that may arise from implementation
- Assess profitability of project

BENEFITS

COMMERCIAL

- Improve lead times
- Increase our USP
- Open up new areas of revenue

ECONOMIC

- Significantly reduce cost
    - a. Material
    - b. Delivery
- Increase profit from sales

ENVIRONMENTAL

- Reduce carbon footprint
- Reduce transportation emissions
- Packaging saving

SOCIAL & ORGANISATIONAL

- Improve in-house capabilities

TECHNOLOGICAL

- Eliminate delays
- Efficient manufacturing
- Stock control
- Prototyping

CHALLENGES

1 **Staffing issues**
- Lack of expertise to operate new machine
- Unable to afford additional staff

2 **Warehouse space**
- Limited warehouse house
- Can only fit small-medium machines

3 **Maintenance**
- Time consuming
- Health and safety
- Consumables

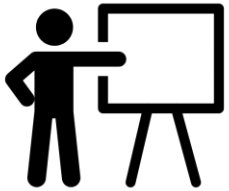
TIMELINE

DELIVERY

Machine can be delivered in 2 weeks

INSTALLATION

Installation of the machine will take 1 week



TRAINING

Training staff will take 1-2 weeks

READY TO USE!

RATIONALE

FINANCIAL FACTORS

- Payback period in less than 2 years
- Positive NPV from a WACC of 10%
- Profitability index of 1 or greater
- IRR of 30% or greater

OTHER FACTORS

- Ease of operation
- Limited space
- Retain quality at a high standard

COST ANALYSIS

Graphic 1 (150x50mm)		Graphic 2 (250x100mm)	
Quantity	38	Quantity	173
Cost to buy per sticker	£0.68	Cost to buy per sticker	£1.83
Cost to buy x38	£25.84	Cost to buy x173	£316.68
Cost to print per sticker	£0.02	Cost to print per sticker	£0.16
Cost to print x38	£0.76	Cost to print x173	£27.68
Profit	£25.08	**Profit**	£289
Profit %	97.1%	**Profit %**	91.3%
Cost of sales	£2.9%	**Cost of sales**	8.7%
		Avg profit %	94.2%
		Avg cost of sales %	5.8%

Spent with supplier		What could've been saved
2020	£19,241	£18,125.02
2021	£19,377.73	£18,253.82
2022	£23,275.96	£21,925.95
Estimated cost		**Potential savings**
2023 - 2027 5 Years	£25,000 per year	£23,550 per year

COST OF PROJECT

Buy – Option A	
Machine cost	£7,750
Delivery	Included
Training	£500
Installation	£250
Total initial investment	£8,500
Recurring Cost (Annual) – Option A	
Consumables	£3,000
Running cost	£1,250
Annual maintenance contract	£500
Labour	£6,250
Total estimated annual cost	£11,000
Total recurring cost over 5 years	£55,000
Lifespan	
5 Years	

Savings per year – Option A	
Potential savings per year	£23,550
Recurring annual cost	£11,000
Savings per year	£12,550

5 Year Lease - Option B	
Lease Term	5 Years
Weekly Payment	£46.10
First Payment	£199.75
23 Monthly Payments	£199.75
Total Cost	£11,985
Tax Relief @ 19%	£2,277.15
Net Cost of Finance	£9,708
Recurring Cost (Annual) – Option B	
Total estimated annual cost	£11,000
Total recurring cost over 5 years	£55,000
Lifespan	
5 Years	

Savings per year – Option B	
Potential savings per year	£23,550
Recurring annual cost	£11,000
Savings per year	£12,550

MODEL

- WACC of 10%

	Buy – Option A	**Lease –** Option B	**Outsource** – Option C
Payback Period	0.68 Years	0.77 Years	?
Net Present Value	£39,074	£37,866	
Internal Rate of Return	146%	127%	
Profitability Index	4.95	4.33	
Benefit-Cost ratio	4.60	3.90	
Accounting Rate of Return	214.3%	188.05%	

FUNDING

INTERNAL	EXTERNAL
Retained profits	Asset finance or leasing
Working capital	Bank loan
Selling assets	Explore Government backed schemes

Buying the printer will use **internal source of finance**

Leasing will use **external source of finance**

CONCLUSION & RECOMMENDATION

With the amount of potential savings that can be made, it is recommended for Unisan to go ahead with this project.

Both project satisfies the business rationale whilst providing a number of benefits to the company.

The machine can be paid back within 1 year which lowers the risk for Unisan and can immediately increase profit margins and improve efficiency.

Ownership has a cheaper overall cost with the added benefits of owning the machine, the increasing volume and demand will only continue to rise as it is a vital aspect of Unisan’s business.

It will allow Unisan to build their portfolio of hard assets and give them total control as to how equipment is used and maintained.

THANK YOU FOR LISTENING!

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