



Assessment A - Financial Management and Planning ACPA7002

Capital Project Appraisal

Clair Petheram - 2117170

26th September 2022

Agenda

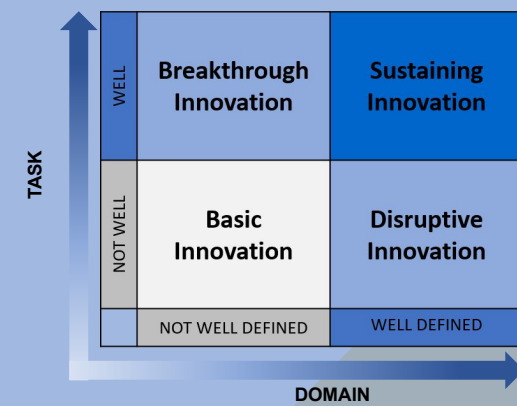
- Introduction - DiSC Project
- Project Objectives
- Project Timeline
- Implementation Considerations
- SWOT Analysis
- Funding
- Cost Detail
- Financial Analysis - with and without IUK Grant
- Conclusions

Introduction - DiSC Project

- SimplyDo is a SaaS company - platform to bring people together to solve transformational challenges
- Diverse Supply Chains project - 6 month feasibility study with 3 years follow on
- Research Partner - Cardiff University
- Engagement with external parties - legal partner, SME users and existing SimplyDo client
- Additional functionality to existing SimplyDo platform for Open Innovation



Project Objectives



Innovation matrix (Satell, 2017)

- To address:
 - The identified problems of sifting, vetting and engaging innovative start-up and SMEs in supply chains; and
 - The related time, cost and risk for suppliers of sharing intellectual property when engaging with larger organisations
- Radical innovation - “a line of business that was new not only for the firm but also for the marketplace” [O’Connor 1998]
- Key planned output (feasibility study) - functional demonstrator

Project Timeline



Applicants Notified

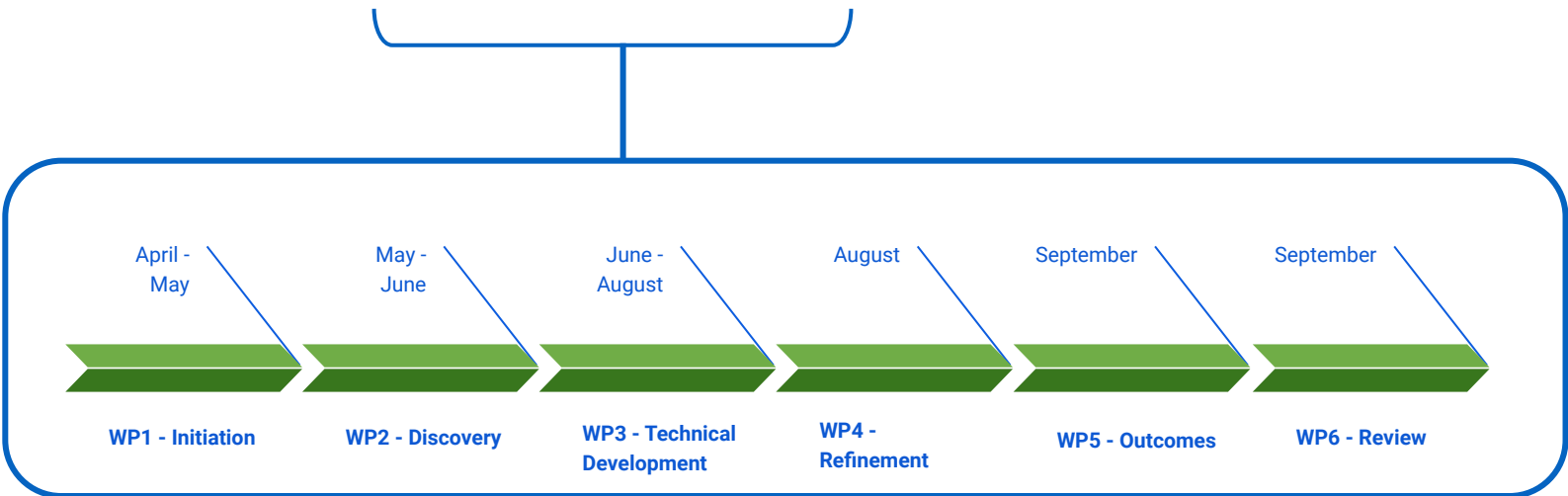
Feasibility Study Planning

Feasibility Study

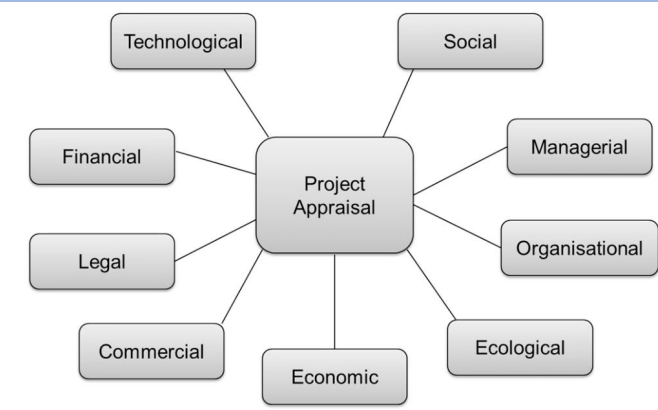
Commercialisation

Collaborative Improvement

Funding Competition:
Manufacturing made
smarter: digital supply chain,
feasibility studies

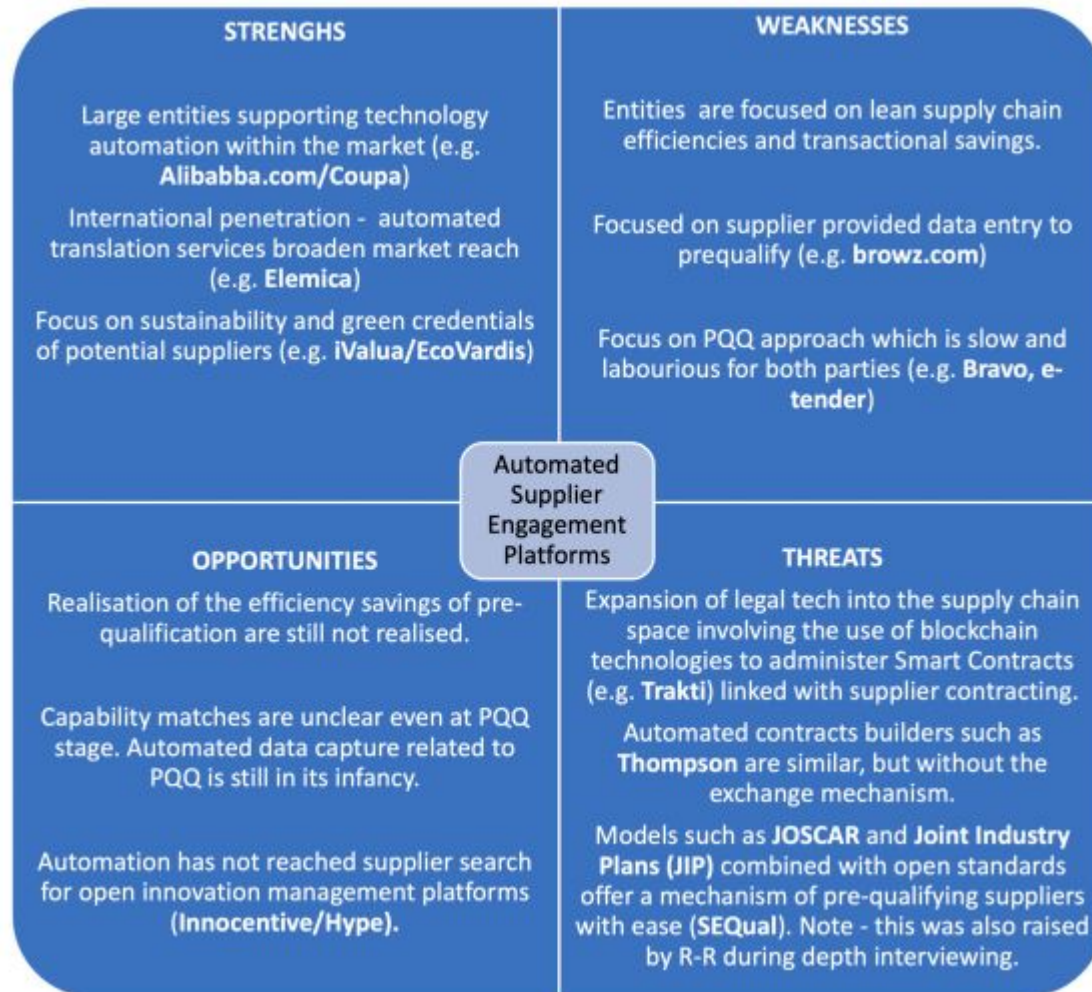


Implementation Considerations



- The project posed significant risks and barriers:
 - Lack of in-house knowledge in the area of legal compliance, project management and blockchain;
 - High financial cost of new technologies and software;
 - Legal restrictions related to data protection;
 - Resource capacity and impact on current business operations; and
 - Competition

SWOT analysis



- SWOT analysis conducted in early stages of the project
- Reviewed and discussed monthly by SimplyDo Management Team
- Ensured continued alignment with business strategy and the identification/confirmation of the market opportunity

Funding

- Innovate UK Grant
 - 70% of eligible costs for feasibility study
 - Reportable monthly
 - Payable in two installments in month 5 and 9
- R&D Tax Credits
 - Claim back up to 33% of costs associated with R&D
 - PAYE/NI/Pension
 - Software and low value consumables (solely for R&D purposes)
 - SME scheme
 - Research and Development Expenditure Credit (RDEC) scheme - applies for IUK project associated costs

Cost Detail

6-month Project costs (April - end September 2021)

Description	Cost
Labour	£134,637
Overheads	£26,927
Materials	£90,575
Sub-contracts	£30,000
Travel & Subsistence	£192
Other Costs 1	£917
Total	£283,249

(20% labour)

Marketing Costs	Yr 1 (2021)	Yr2 (2022)	Yr3 (2023)	Yr4 (2024)
Cost	£0	£3,000	£4,500	£4,500
* Social media, LinkedIn Ads and Lead Magnet, £750/month, Yr2= 8 months and Yr3/4 = 12 months with 50% DiSC project				

Software Licence Cost	Yr 1 (2021)	Yr 2 (2022)	Yr 3 (2023)	Yr 4 (2024)
Creditsafe	In 6-month project costs	£12,190	£12,190	£15,000
Crunchbase		£29,000	£29,000	£29,000
Hunter.io		£1,044	£1,044	£2,100
		£42,234	£42,234	£46,100

* Creditsafe and Hunter.io change to next level package in year 4 due to increase in licence sales

Labour costs		Yr 2 (2022)		Yr 3 (2023)		Yr 4 (2024)	
Role	Average salary	% time	Cost	% time	Cost	% time	Cost
Sales	£51,500	15	£7,725	25	£12,875	30	£15,450
Operations	£51,500	10	£5,150	5	£2,575	0	£0
Prod Dev	£37,000	30	£11,100	15	£5,550	10	£3,700
Prod Dev	£37,000	30	£11,100	15	£5,550	10	£3,700
			£23,975		£21,000		£19,150
Plus 11% NI and pension			£26,612		£23,310		£21,257

* Yr 1 has additional £11k labour cost based on £50k salary, 12 days - plus 11% NI/pension

Income (excluding IUK Grant)

DiSC Licence Sales	Yr 1 (2021)	Yr2 (2022)	Yr3 (2023)	Yr4 (2024)
Licence sales estimated	0	2	5	10
Sales cost	£0	£58,750	£146,875	£293,750
* Avg licence cost £29375. Licence sales are in relation to DiSC functionality only. Yr2 sales low due to commercialisation work.				

R&D Tax Credits	Yr 1 (2021)	Yr2 (2022)	Yr3 (2023)	Yr4 (2024)
Tax Recovery	£0	£18,965	£32,000	£16,000
* Yr 2 RDEC scheme only, Yr 3 assumed 40% of £80k and Yr 4 assumed 20% of £80k				

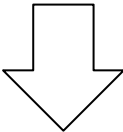
Financial Analysis - with IUK Grant

6-month Project costs

Description	Cost
Labour	£134,637
Overheads	£26,927 (20% labour)
Materials	£90,575
Sub-contracts	£30,000
Travel & Subsistence	£192
Other Costs 1	£917
Total	£283,249

	Yr 1 (2021)	Yr2 (2022)	Yr3 (2023)	Yr4 (2024)
Sales value	£0	£58,750	£146,875	£293,750
IUK grant	£198,269	£0	£0	£0
Tax recovery	£0.00	£18,965	£32,000	£16,000
Business costs	£11,100	£71,846	£70,044	£71,857

	Investment	Yr1 (2021)	Yr2 (2022)	Yr3 (2023)	Yr4 (2024)
Present value	-283,249	187,169	5,869	108,831	237,894
Discount rate	8%	ASSUMED WACC			
Denominator	1	0.926	0.857	0.794	0.735
Future value	-283,249	173,319	5,030	86,412	174,852



Payback	2.83	Payback period of less than 3 years
NPV	156,363	Positive NPV => project will add value
PI	1.55	PI greater than 1 => project will give a positive return
IRR	29.40%	High annual rate of return to get to break even point
BCR	0.55	Positive BCR => project is expected to deliver a positive net present value
ARR	47.64%	High ARR (earn £0.47 for every £1 invested each year)

Financial Analysis - without IUK Grant

6-month Project costs

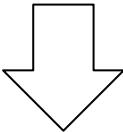
Description	Cost
Labour	£134,637
Overheads	£26,927 (20% labour)
Materials	£90,575
Sub-contracts	£30,000
Travel & Subsistence	£192
Other Costs 1	£917
Total	£283,249

* Assume no additional costs from Cardiff University

	Yr 1 (2021)	Yr2 (2022)	Yr3 (2023)	Yr4 (2024)
Sales value	£0	£58,750	£146,875	£293,750
IUK grant	£0	£0	£0	£0
Tax recovery	£0.00	£30,795	£32,000	£16,000
Business costs	£11,100	£71,846	£70,044	£71,857

* Zero IUK grant, Tax recovery amended as wholly SME scheme claim for Yr 1 (income Yr 2).

	Investment	Yr1 (2021)	Yr2 (2022)	Yr3 (2023)	Yr4 (2024)
Present value	-283,249	-11,100	17,698	108,831	237,894
Discount rate	8%	ASSUMED WAAC			
Denominator	1	0.926	0.857	0.794	0.735
Future value	-283,249	-10,279	15,167	86,412	174,852



Payback	3.71	Almost 1 year longer than with the IUK grant
NPV	-17,097	Negative NPV => project will not create value
PI	0.94	PI of less than 1 => project will give a negative return
IRR	6.19%	Lower IRR than with the IUK Grant
BCR	-0.06	Negative BCR
ARR	31.18%	ARR lower that with IUK grant

Conclusions

- Initial screening using Payback period and ARR confirms the decision to proceed with the IUK Grant project option
- Decision further supported by detailed analysis using NPV, PI, IRR and BCR
- Additional project considerations included labour, cashflow, legal implications and competitors
- Full project appraisal supports decision to proceed with IUK Grant funded project option