

Level 5 – Continuous Improvement with Industry 4.0

Define 7 - Project Selection

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Introduction

As discussed in our lectures, potential projects can come from many sources. Consider your prime beneficiaries of defect reduction projects are your customers, both internal and external, what can they tell you about your products? What are they already telling you, either through formal or informal channels? What are your non-customers telling you? Often, our non-customers can tell us more about why they don't source from us, than our current customers.

Your suppliers, both internal (your colleagues) and external play an ever-increasing role in the performance of your product, what can you learn from them?

What are your organisation's strategic plans? Are there opportunities to align to the strategic intent of your organization? Are there projects that are currently running that you could engage with, where other aspects have been highlighted for future work?

How do your competitors operate in your sector? Are there activities that they are delivering or considering that could inform and cause a change for your organization?

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Benefits of this work?

Once we have identified an area or piece of work, what is the deficiency you want to remove, or the improvement you want to make?

If you succeed, what would be the value or potential savings you will achieve? Can you identify the 'return on investment' for this activity, and what is the payback period likely to be? Does this fit with the organizational requirements?

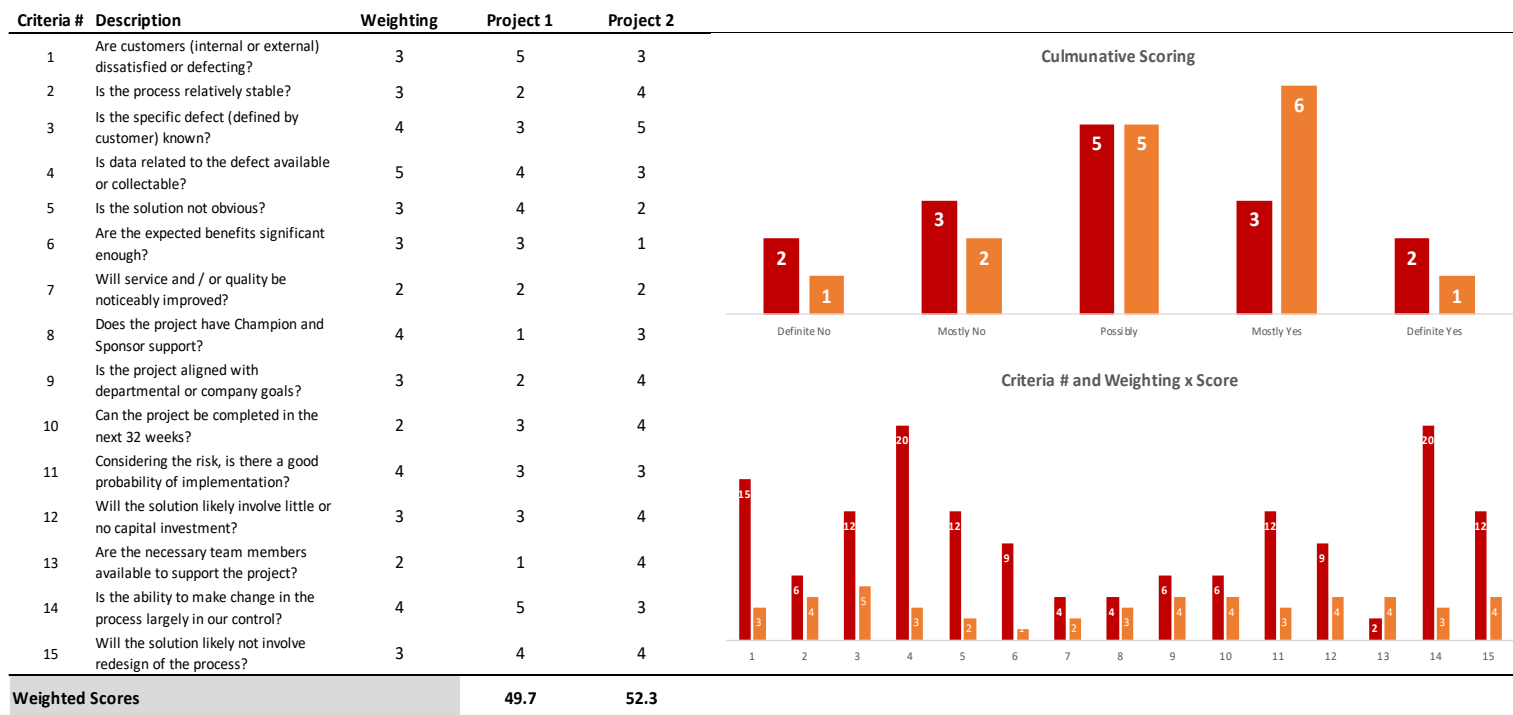
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Project Viability Matrix

Moodle File; MADE DMAIC Project Viability Matrix.xlsx

At this point, it might be worth starting to consider the Project Viability Matrix. The 15 items to consider could be weighted according to your own organizational and sector requirements.

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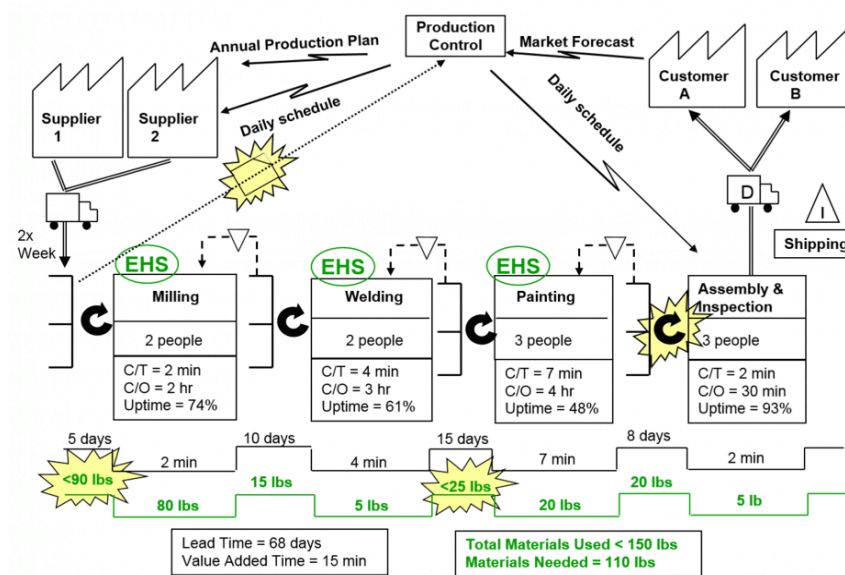
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Value Stream Mapping

[Moodle File; Analyse 1 - VSM - Notes.pdf](#)

If we were to Value Stream Map the '*Current State*' and '*Ideal State*' or '*Future States*', this could identify key areas of opportunity for Kaizen 'bursts' to improve the '*Current State*'

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Project Charter

Moodle File; MADE DMAIC Project Charter Template.xlsx

Once you have selected your project, the next step will be to start scoping your Project Charter. Once there is a draft of this available, we can review this.

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Problem Statement and area of Opportunity

Voice of the Customer: "Again, XYZ Manufacturing's product costs are higher than your competitors. This is the reason you weren't competitive with this latest quotation."

Y (Product costs too high) = f (Material Costs too high + Process costs too high + Profit margins too high)

Y (Process Costs too high) = f (Incorrect product routing + Incorrect assumptions in product routing + Incorrect processes considered + Non-optimised Processes)

Y (Incorrect assumptions in product routing)

Business Need and Justification

Risks and Issues

Assumptions and Dependencies

Project Ownership / Approval

Project Manager Dominic Hodgson

Project Champion Joe Bagnall

Approval Date

Project Number

Process Owner

Financial Benefits / Timing

Financial Benefits			Estimated Expenses / Investment			Schedule		
	Goal	Actual		Goal	Actual		Goal	Actual
Incremental Sales			Expenses Incremental to			Measure		
Profitability (% OI)			Operating Budget			Analyse		
Payback Period (yrs)			Capital			Improve		
Annual Savings			Other; 1.0FTE required. (4 people)			Control		

Project Team

Supplier Representatives			Internal Team			Customer Representatives		
Name	Supplier	Title	Name	Function	Role	Name	Cust.	Title

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Problem Statement

What?

i.e. What happened or is happening - be specific, try to get numbers of defects, poor performance etc (your KPI's)

Where?

i.e. Which machine, which area, which process (Is/Is Not)

When?

What is the timeframe for the issue?

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Problem Statement and Area of Opportunity

We have a problem making enough of parts to satisfy our customer due to too much scrap and re-work

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Problem Statement and Area of Opportunity

Perhaps the following template can help articulate and define a particular problem area?

During	Q3 to Q4	the	
			(time frame)
Scrap rate for Product B			(A key business process)
was	17%.		(Primary business measure)
The company target is 5%			(business objective)
This gap of 12%			(Business objective target vs. baseline)
REPRESENTS £7,000 of cost impact.			(Cost impact of gap)

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STAKEHOLDERS ANALYSIS

NAME OF STAKEHOLDERS /ROLE	EXPECTATIONS FROM PROJECT	HOW THEY BENEFIT	KEY MAJOR ISSUES
My boss	Reduce defects by 10% by beginning Q4	Improved efficiency Use less materials and energy Generate more machine capacity	Your current workload Time to develop your problem solving skills
		• • • • • • • • • •	• • • • • • • • • •

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Charter is important:-

Keep us focussed on the task

Ensure we improve the issue

Stop mission creep

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Final thoughts

If you can choose your project wisely, and align it to organisational stakeholders' requirements, you'll reap rewarding results and the organisation will benefit. We've seen many examples of this through previous part-time student studies, and these students have gone on and used these tools and techniques in further projects.

Bibliography

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