



# Strategy based on award-winning research-led solutions in New Zealand

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*People, Data, Processes*

Dr. Fahimeh McGregor (Zaeri)

# A Little About Me

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*“So What About Data?”*

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## The Risk Of Unreliable Data

- lack of data literacy
- poor knowledge about system and processes
- unknowns which are not raised
- operate by guessing
- data strategy and gaps in data

A photograph of a city skyline with various skyscrapers and buildings, reflected in a body of water. The text "Data has a better idea" is overlaid in a light blue, sans-serif font across the middle of the image.

Data has a better idea

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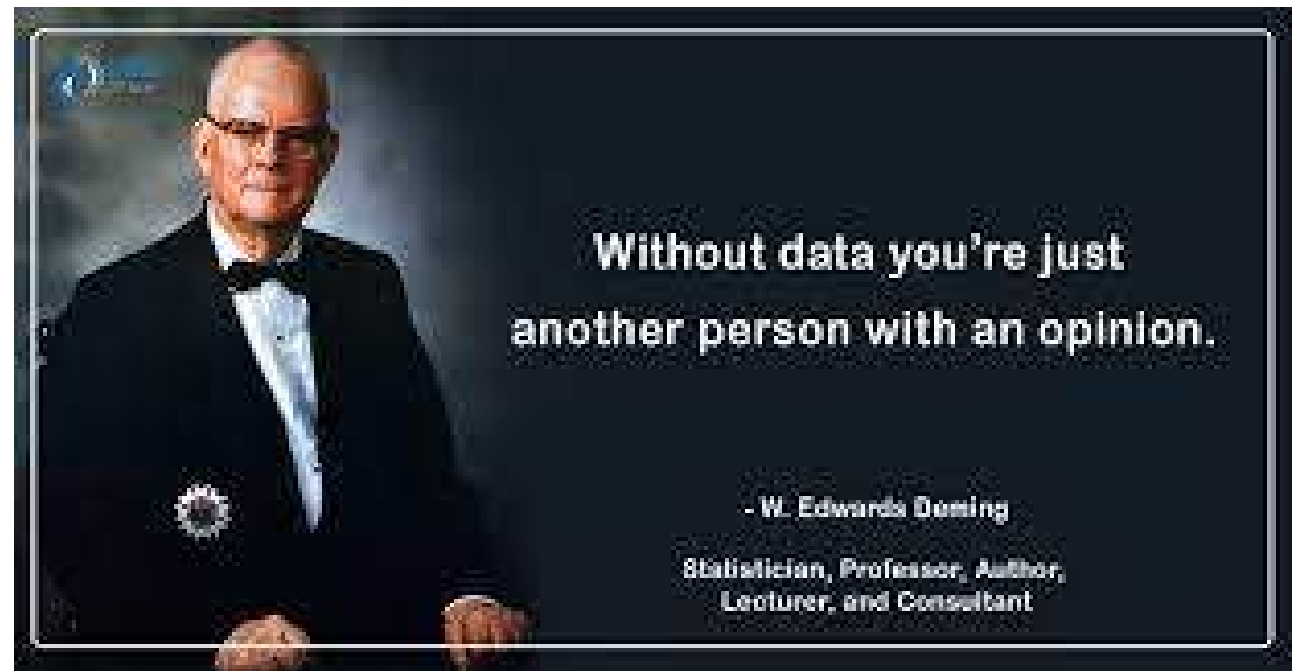
Insights from **McKinsey Global Institute** reveal that a data-driven organization is 23 times more likely to turn prospects into customers, six times more likely to retain them, and 19 times more likely to generate a profit as a result.

Data is everyone's business.



- Identify all people
- Look at the whole person
- Trust as a goal

Roadblocks in becoming a data-centric workforce.



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The value and end in mind of being data-centric is crucial to gain leadership buy-in, which in turn is crucial to drive a top-down cultural change, laying the pathway for a bottom-up engagement.



# The Risk of Confusing Opinion With Data





# Interpretating Data Is About Solving Communications Problems

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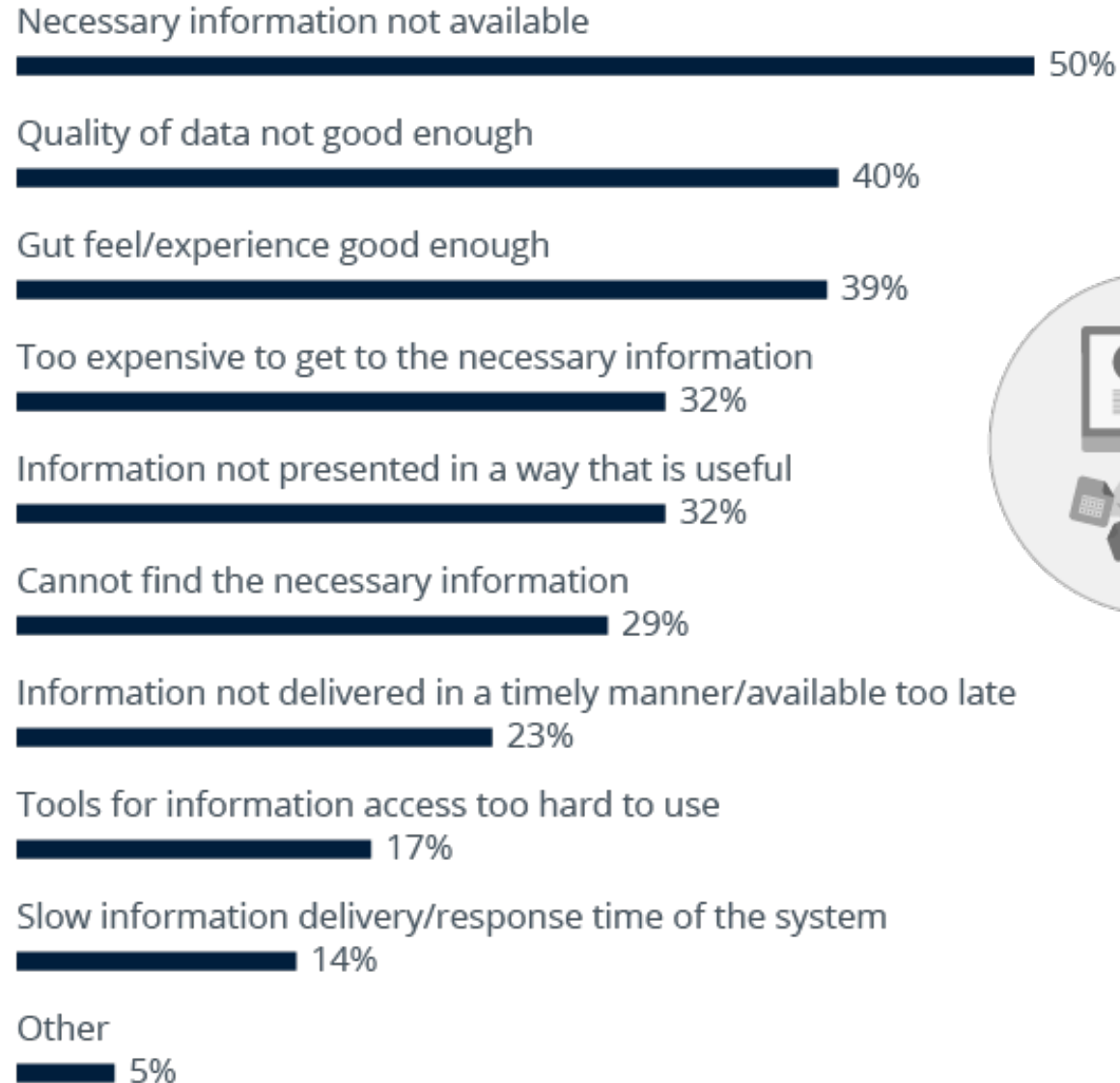


# Good Communication is Like Driving a Car

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OBJECTS IN MIRROR ARE  
CLOSER THAN THEY APPEAR

# What prevents organizations from making data-driven decisions?







## The Dangers of not Using Data Correctly

## Why using Microsoft's tool Incorrectly caused Covid- 19 results to be lost.

- Each Excel template could handle 65,000 rows of data rather than the one million-plus rows that it needed.
- And since each test result created several rows of data, in practice it meant that each template was limited to about 1,400 cases.
- When that total was reached, further cases were simply left off

### Under-reported figures

From 25 Sept to 2 Oct

**50,786**

Cases initially reported by PHE

**15,841**

Unreported cases, missed due to IT error

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**8 days** of incomplete data

**1,980** cases per day, on average, were missed in that time

**48 hours** Ideal time limit for tracing contacts after positive test





# Some Solutions

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**GOOD  
NEWS  
IS COMING**

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Start With A LEAN Culture

five key lean principles:

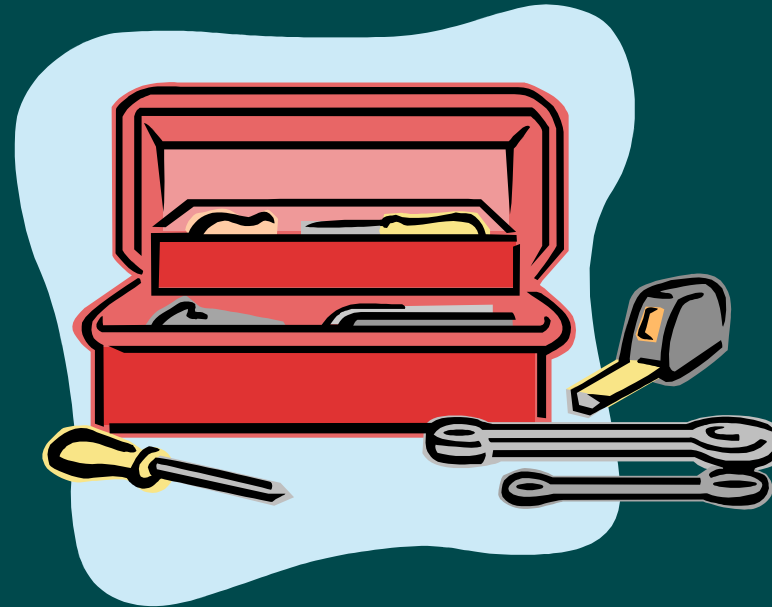
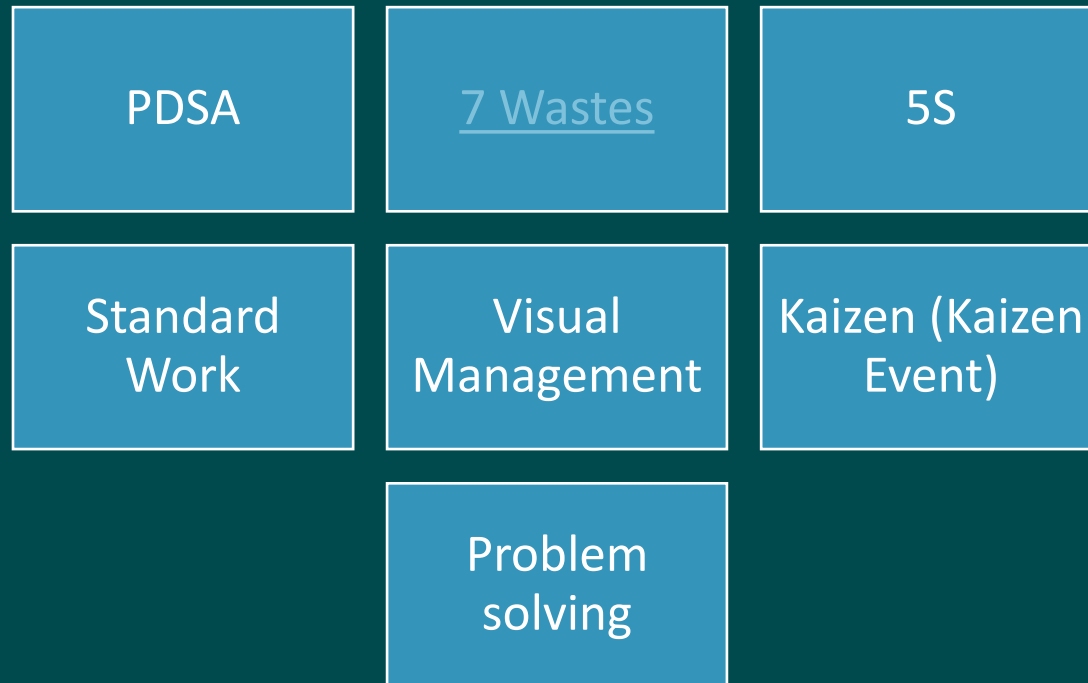
- Value
- Value stream
- Flow
- Pull
- Perfection.



# BUILD MEASURE EARN

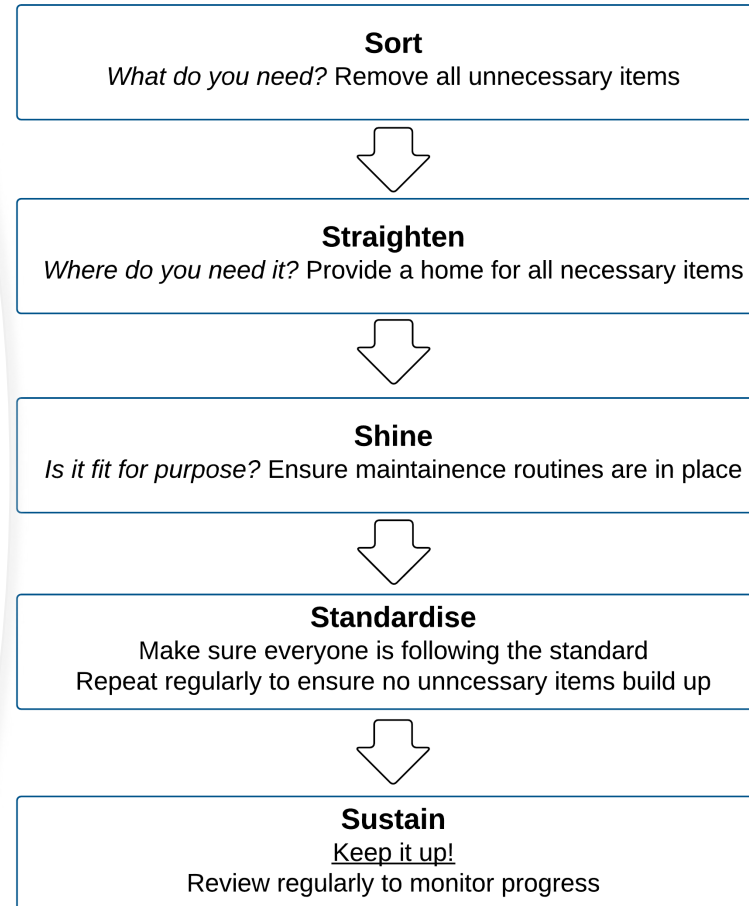


# Lean Concepts and Tools



# A closer Look at One Tool: 5S

The 5S system is a lean manufacturing tool that improves workplace efficiency and eliminates waste.

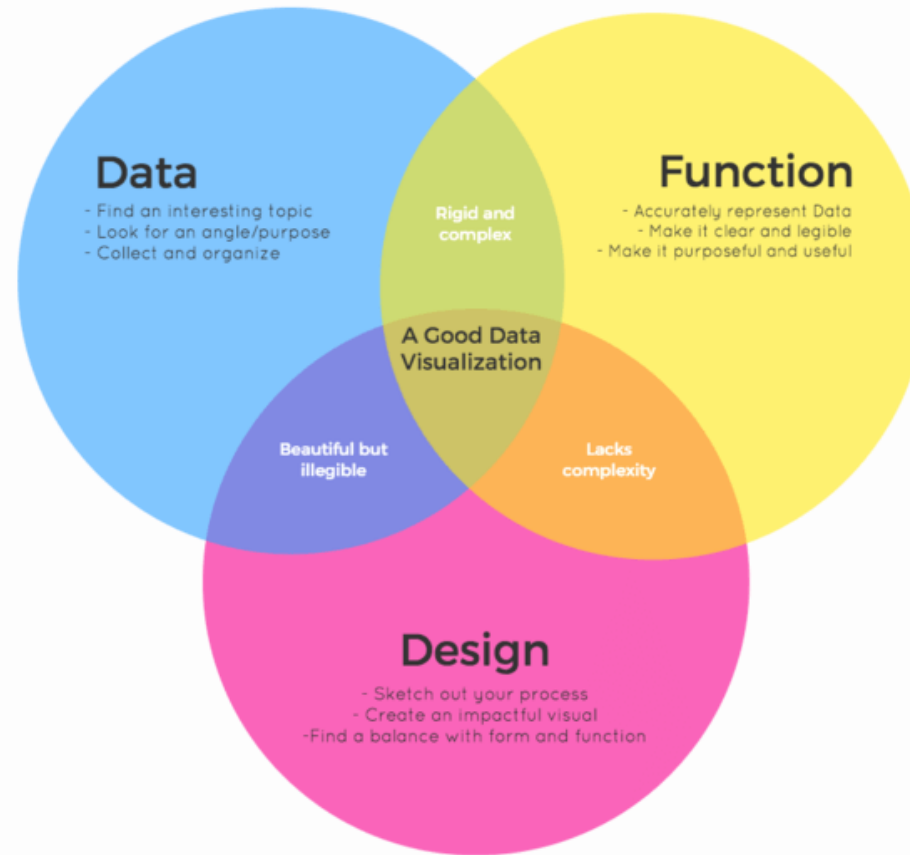




# The Value of Conceptualisation To Leadership



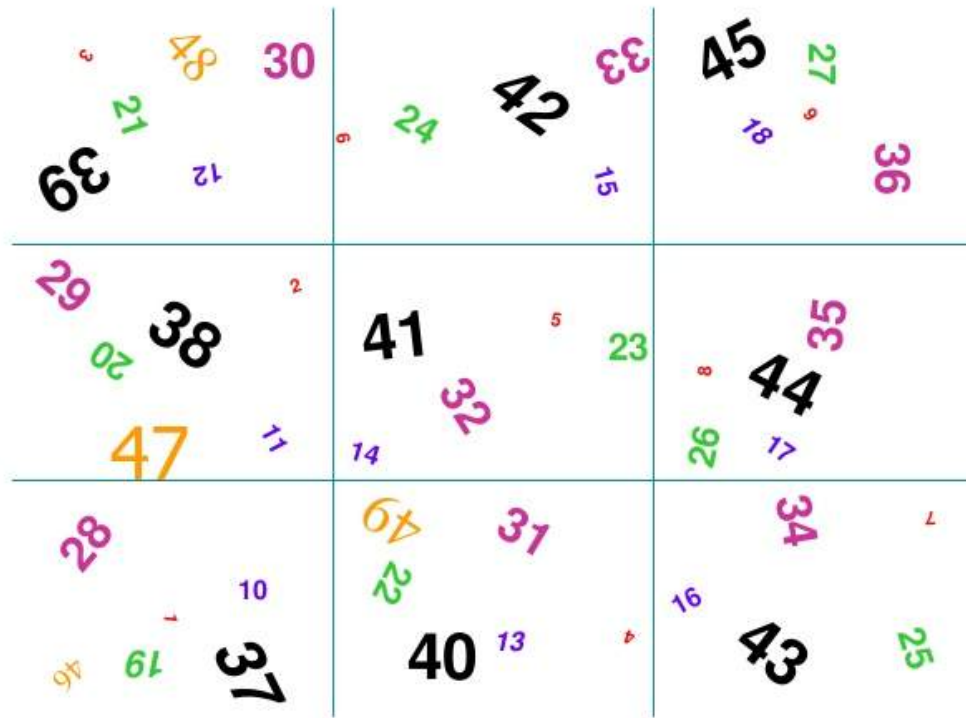
# What Makes A Good DATA VISUALIZATION



STAY	DATA	RES	TYPE	CLASS	MARKET	CHANCE	RATE	A	BOOK	COMP	GROUP	ANAL	DATE	DATE	ANAL	DATE	MONTH	WEEK	WEEK	PERIOD	STAY	DATA	RES	TYPE	CLASS	MARKET	CHANCE	RATE	A	BOOK					
Y1000	45-00	25-00	Product	1	70	TRANSFER	WEB	240	40004	240	250	178	30	1	6	END	1-00	40173	45-00	25-00	OCEAN	70	GROUP	WEB	240	250	178	30	1	6	END	1-00	40004		
Y1000	45-00	25-00	Product	1	806	TRANSFER	WEB	370	40005	370	375	87	100	1	6	END	1-00	40173	45-00	25-00	GARDEN	806	MAN	WEB	370	375	87	100	1	6	END	1-00	40005		
Y1000	45-00	25-00	Product	1	418	TRANSFER	WEB	300	40006	300	400	162	150	1	6	END	1-00	40173	45-00	25-00	OCEAN	418	MAN	WEB	300	400	162	150	1	6	END	1-00	40006		
Y1000	45-00	25-00	Product	1	718	TRANSFER	PHONE	350	40002	350	350	0	0	0	1	6	END	1-00	40173	45-00	25-00	GARDEN	718	MAN	PHONE	350	350	0	0	0	1	6	END	1-00	40002
Y1000	45-00	25-00	Product	1	618	TRANSFER	CTA	300	40000	BOOKIN	300	300	122	100	1	6	END	1-00	40173	45-00	25-00	GARDEN	618	MAN	CTA	300	300	122	100	1	6	END	1-00	40000	
Y1000	45-00	25-00	Product	1	412	TRANSFER	WEB	430	40003	430	430	176	150	1	6	END	1-00	40173	45-00	25-00	OCEAN	412	MAN	WEB	430	430	176	150	1	6	END	1-00	40003		
Y1000	45-00	25-00	Product	1	702	TRANSFER	WEB	270	40004	270	270	176	150	1	6	END	1-00	40173	45-00	25-00	GARDEN	702	MAN	WEB	270	270	176	150	1	6	END	1-00	40004		
Y1000	45-00	25-00	Product	1	412	TRANSFER	CTA	340	40006	340	350	176	150	1	6	END	1-00	40173	45-00	25-00	GARDEN	412	MAN	CTA	340	350	176	150	1	6	END	1-00	40006		
Y1000	45-00	25-00	Product	1	400	TRANSFER	CTA	350	40007	BOOKIN	350	350	100	100	1	6	END	1-00	40173	45-00	25-00	GARDEN	400	MAN	CTA	350	350	100	100	1	6	END	1-00	40007	
Y1000	45-00	25-00	Product	1	407	TRANSFER	WEB	340	40008	340	350	81	30	1	6	END	1-00	40173	45-00	25-00	GARDEN	407	MAN	WEB	340	350	81	30	1	6	END	1-00	40008		
Y1000	45-00	25-00	Product	1	806	TRANSFER	WEB	340	40070	340	350	100	100	1	6	END	1-00	40173	45-00	25-00	OCEAN	806	MAN	WEB	340	350	100	100	1	6	END	1-00	40070		
Y1000	45-00	25-00	Product	1	507	TRANSFER	WEB	380	40070	380	400	100	100	1	6	END	1-00	40173	45-00	25-00	GARDEN	507	MAN	WEB	380	400	100	100	1	6	END	1-00	40070		
Y1000	45-00	25-00	Product	1	503	TRANSFER	PHONE	420	40000	420	425	30	30	1	6	END	1-00	40173	45-00	25-00	GARDEN	503	MAN	PHONE	420	425	30	30	1	6	END	1-00	40000		
Y1000	45-00	25-00	Product	1	517	TRANSFER	PHONE	420	40006	420	425	30	30	1	6	END	1-00	40173	45-00	25-00	GARDEN	517	MAN	PHONE	420	425	30	30	1	6	END	1-00	40006		
Y1000	45-00	25-00	Product	1	604	TRANSFER	WEB	510	40005	510	525	84	30	1	6	END	1-00	40173	45-00	25-00	OCEAN	604	MAN	WEB	510	525	84	30	1	6	END	1-00	40005		
Y1000	45-00	25-00	Product	1	520	TRANSFER	CTA	430	40008	BOOKIN	430	430	83	30	1	6	END	1-00	40173	45-00	25-00	GARDEN	520	MAN	CTA	430	430	83	30	1	6	END	1-00	40008	
Y1000	45-00	25-00	Product	1	417	TRANSFER	WEB	340	40009	340	350	81	30	1	6	END	1-00	40173	45-00	25-00	GARDEN	417	MAN	WEB	340	350	81	30	1	6	END	1-00	40009		
Y1000	45-00	25-00	Product	1	508	TRANSFER	WEB	480	40008	480	480	500	80	1	6	END	1-00	40173	45-00	25-00	OCEAN	508	MAN	WEB	480	480	500	80	1	6	END	1-00	40008		
Y1000	45-00	25-00	Product	1	518	TRANSFER	CTA	430	40103	BOOKIN	430	430	77	30	1	6	END	1-00	40173	45-00	25-00	GARDEN	518	MAN	CTA	430	430	77	30	1	6	END	1-00	40103	
Y1000	45-00	25-00	Product	1	318	TRANSFER	WEB	340	40108	340	350	72	30	1	6	END	1-00	40173	45-00	25-00	GARDEN	318	MAN	WEB	340	350	72	30	1	6	END	1-00	40108		
Y1000	45-00	25-00	Product	1	418	TRANSFER	CTA	540	40105	BOOKIN	540	550	65	30	1	6	END	1-00	40173	45-00	25-00	OCEAN	418	MAN	CTA	540	550	65	30	1	6	END	1-00	40105	
Y1000	45-00	25-00	Product	1	617	TRANSFER	PHONE	330	40122	330	380	58	60	1	6	END	1-00	40173	45-00	25-00	GARDEN	617	MAN	PHONE	330	380	58	60	1	6	END	1-00	40122		
Y1000	45-00	25-00	Product	1	310	TRANSFER	WEB	340	40123	340	350	51	60	1	6	END	1-00	40173	45-00	25-00	GARDEN	310	MAN	WEB	340	350	51	60	1	6	END	1-00	40123		
Y1000	45-00	25-00	Product	1	417	TRANSFER	WEB	480	40100	480	480	50	60	1	6	END	1-00	40173	45-00	25-00	GARDEN	417	MAN	WEB	480	480	50	60	1	6	END	1-00	40100		
Y1000	45-00	25-00	Product	1	425	TRANSFER	WEB	320	40100	320	325	50	60	1	6	END	1-00	40173	45-00	25-00	GARDEN	425	MAN	WEB	320	325	50	60	1	6	END	1-00	40100		
Y1000	45-00	25-00	Product	1	718	TRANSFER	CTA	370	40100	370	375	40	60	1	6	END	1-00	40173	45-00	25-00	OCEAN	718	MAN	CTA	370	375	40	60	1	6	END	1-00	40100		
Y1000	45-00	25-00	Product	1	508	TRANSFER	CTA	540	40103	BOOKIN	540	550	47	60	1	6	END	1-00	40173	45-00	25-00	GARDEN	508	MAN	CTA	540	550	47	60	1	6	END	1-00	40103	
Y1000	45-00	25-00	Product	1	318	TRANSFER	CTA	450	40103	450	450	46	60	1	6	END	1-00	40173	45-00	25-00	GARDEN	318	MAN	CTA	450	450	46	60	1	6	END	1-00	40103		
Y1000	45-00	25-00	Product	1	409	TRANSFER	CTA	450	40107	BOOKIN	450	450	43	60	1	6	END	1-00	40173	45-00	25-00	GARDEN	409	MAN	CTA	450	450	43	60	1	6	END	1-00	40107	
Y1000	45-00	25-00	Product	1	408	TRANSFER	WEB	380	40108	380	400	40	60	1	6	END	1-00	40173	45-00	25-00	OCEAN	408	MAN	WEB	380	400	40	60	1	6	END	1-00	40108		
Y1000	45-00	25-00	Product	1	617	TRANSFER	WEB	450	40140	450	450	39	60	1	6	END	1-00	40173	45-00	25-00	GARDEN	617	MAN	WEB	450	450	39	60	1	6	END	1-00	40140		
Y1000	45-00	25-00	Product	1	714	TRANSFER	WEB	430	40141	430	430	38	60	1	6	END	1-00	40173	45-00	25-00	GARDEN	714	MAN	WEB	430	430	38	60	1	6	END	1-00	40141		
Y1000	45-00	25-00	Product	1	618	TRANSFER	WEB	530	40142	530	550	36	60	1	6	END	1-00	40173	45-00	25-00	GARDEN	618	MAN	WEB	530	550	36	60	1	6	END	1-00	40142		
Y1000	45-00	25-00	Product	1	618	TRANSFER	WALK	280	40147	280	300	32	60	1	6	END	1-00	40173	45-00	25-00	OCEAN	618	MAN	WALK	280	300	32	60	1	6	END	1-00	40147		
Y1000	45-00	25-00	Product	1	521	TRANSFER	WEB	280	40148	280	280	32	60	1	6	END	1-00	40173	45-00	25-00	GARDEN	521	MAN	WEB	280	280	32	60	1	6	END	1-00	40148		
Y1000	45-00	25-00	Product	1	518	TRANSFER	WEB	530	40149	530	550	21	60	1	6	END	1-00	40173	45-00	25-00	OCEAN	518	MAN	WEB	530	550	21	60	1	6	END	1-00	40149		
Y1000	45-00	25-00	Product	1	514	TRANSFER	WEB	530	40145	530	530	20	1	6	END	1-00	40173	45-00	25-00	GARDEN	514	MAN	WEB	530	530	20	1	6	END	1-00	40145				
Y1000	45-00	25-00	Product	1	440	TRANSFER	WEB	440	40141	440	440	29	30	1	6	END	1-00	40173	45-00	25-00	GARDEN	440	MAN	WEB	440	440	29	30	1	6	END	1-00	40141		
Y1000	45-00	25-00	Product	1	530	TRANSFER	WEB	530	40154	530	530	25	30	1	6	END	1-00	40173	45-00	25-00	OCEAN	530	MAN	WEB	530	530	25	30	1	6	END	1-00	40154		
Y1000	45-00	25-00	Product	1	519	TRANSFER	WEB	390	40155	390	395	25	30	1	6	END	1-00	40173	45-00	25-00	GARDEN	519	MAN	WEB	390	395	25	30	1	6	END	1-00	40155		
Y1000	45-00	25-00	Product	1	715	TRANSFER	CTA	580	40155	580	575	24	30	1	6	END	1-00	40173	45-00	25-00	OCEAN	715	MAN	CTA	580	575	24	30	1	6	END	1-00	40155		
Y1000	45-00	25-00	Product	1	418	TRANSFER	CTA	450	40158	BOOKIN	450	450	24	30	1	6	END	1-00	40173	45-00	25-00	GARDEN	418	MAN	CTA	450	450	24	30	1	6	END	1-00	40158	
Y1000	45-00	25-00	Product	1	314	TRANSFER	CTA	380	40159	BOOKIN	380	400	22	30	1	6	END	1-00	40173	45-00	25-00	GARDEN	314	MAN	CTA	380	400	22	30	1	6	END	1-00	40159	







# The 5S game

Where to from  
Here?







# Lean Adds-On

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- Customer Focus: Know your customer and continuously strive to enhance customer value by producing exactly what the customer wants, when they want it, and in the smallest possible quantities. It is not about producing what you think the customer wants. Remember, everything that you do that your customer does not perceive as value is waste; strive to eliminate all waste.
- Data driven decisions: Give the most weight to information that can be verified with data; make decisions based on analysis rather than anecdote or intuition.
- Respect: Employees are central to value creation, so 1) grow leaders who understand the work, live the philosophy and teach it to others; 2) develop exceptional people and teams who follow Lean principles; and 3) collaborate with partners and suppliers to improve customer value. Employees know where waste is and how best to improve the process, so involve them in improving the process.
- Results: Set ambitious SMART goals and monitor progress using performance measures.
- Accountability: Hold yourself and others responsible for following through on commitments and share results.
- Excellence: Challenge tradition (status quo), seek out best practices, use data and creativity to address problems (innovate and evolve - take risks), improve quality, enhance timeliness, and reduce costs, learn from experience (failures and successes), monitor and sustain improvements – checking to see whether performance goals/targets have been achieved. Action: Preference on action not perfection - don't let the best be the enemy of the better! Plan-Do-Study-Act. Innovate and evolve (experiment and take calculated risks).

# A Dive Into Principle 2: Data Driven Decisions

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VERIFY ANECDOTES AND  
FEELINGS WITH DATA!



COMPLAINTS THAT A  
PROCESS DOESN'T  
WORK OR IS TOO SLOW?



GATHER DATA TO  
CONFIRM!



DIFFICULTY DECIDING  
WHICH SOLUTION WILL  
WORK BEST?



TEST, MAKE DECISION  
BASED ON DATA!



Two aspects to DDDM (Data Driven Decisions Making) for Lean:

1. The “Prove It” rule: although saying “prove it” may be counterproductive, to make effective improvements we should try to confirm all assumptions, feelings, and anecdotes with data if possible. You don’t want to base your project or solutions on exceptions or on something that’s not the real issue/problem (see also Root Cause Analysis).
  2. When examining process changes and solutions, use data to determine which will be the most effective; people sometimes lean towards a flashy change that won’t have much impact, make sure to emphasize that your intent is to find the most effective solutions, and that you need data to do so.
- Note that “data” in this context may not always mean only numbers, sometimes it’s informal survey or interview results, or information gathered from in-depth discussions about the process.
  - Be aware of belief bias – humans seek to validate their perceptions. Our perceptions limit or filter the information we will consider. **Use of data can help counter belief bias.**