Stakeholders at Systems Level

ENGGEN 403 – Lecture 5

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This Week

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2	22 Jul	Challenges & Systems Thinking	Stakeholders at Systems Level	Systems Level Innovation	Personal Goal Settings (Review)

Assignment: Friday 10 pm

4 Peer Reviews on Feedback Fruits (including self assessment)

Learning Outcomes

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- Discuss the challenge of stakeholder analysis on complex systems
- Describe and apply the different stakeholder analysis tools to complex systems
- Identify Key Success Factors from stakeholders' requirements

Agenda

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- The steps of stakeholder analysis
- Challenges in a Complex System
- Stakeholder Analysis Tools
- Identifying Key Stakeholders and Their Requirements
- From Requirements to Key Success Factors
- Application of Stakeholder Analysis
- Recap and What's Next

Stakeholders Refresh

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Some who has a **stake** in your project

Can be affected by the project
- Real or perceived
- Positively or negatively

Can impact the project
- Positively or negatively

Can influence the project
- Positively or negatively

Stakeholder Analysis

Stakeholder have different

ROLES

INTEREST

INFLUENCES

IMPACTS

NEEDS

1) Identify All Stakeholders
2) Investigate Motivation Factors
3) Assess their Power/Influence & Interest in Project
4) Determine Requirements
5) Develop Key (Critical) Success Factors

Challenges in Complex System

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Complex System is a system of systems

Systems Thinking allows us to identify specific “solvable problems” in a larger complex system.

What if stakeholders are complex with dynamic attributes?

How do they adapt to the system changing

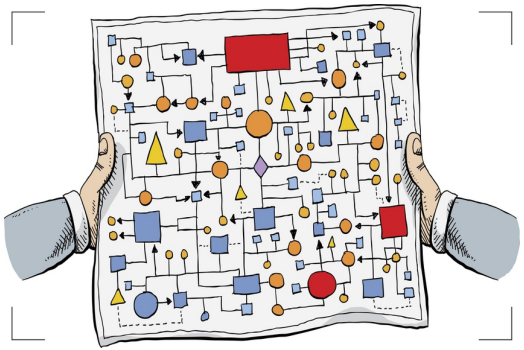

Image credit: https://www.campaignasia.com/article/systems-thinking-a-new-lens-on-complexity/454187

System Thinking & Modeling

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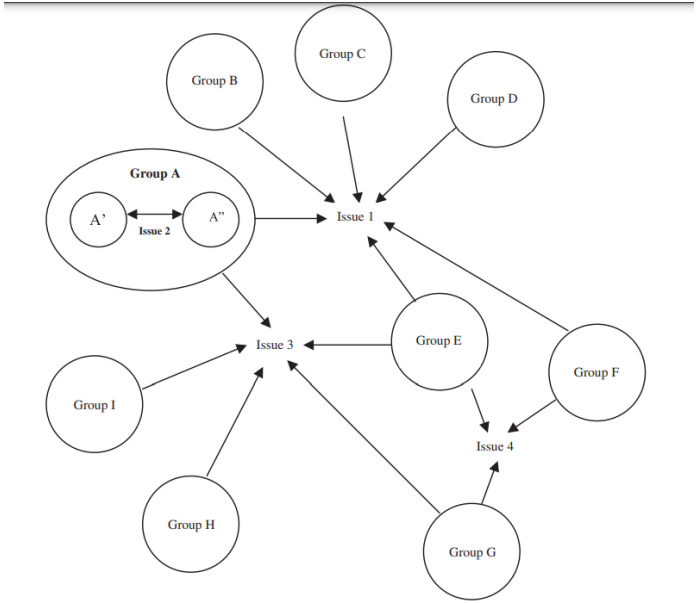
1) Use ST to develop problem structure
2) Generate – maps, causal loops, dynamic impacts
3) Identify multiple stakeholders and their perspectives
   - Power/Influence
   - Interest
   - Position/Attitude
   - Urgency
   - Responsibility
   - Accountability
   - Consulted
   - Informed



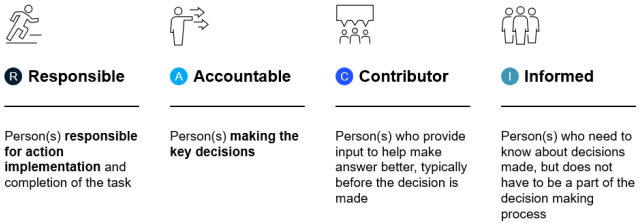
John M Bryson (2004) What to do when Stakeholders matter

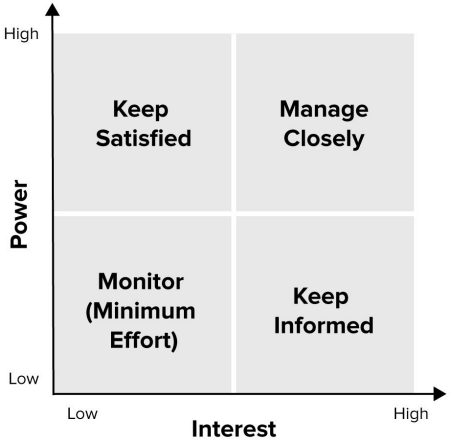
Tools

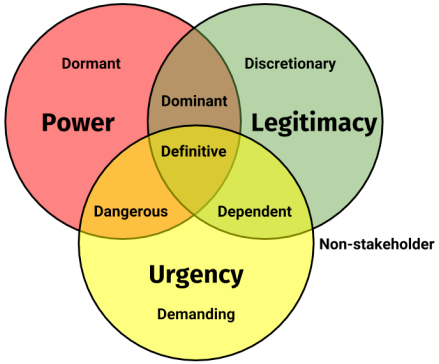
Generate Traditional Stakeholder list

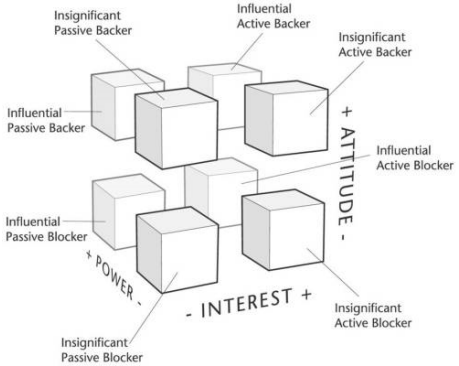
Examine Model
Upwards/Downwards/
Outwards/Sidewards
Direct/Indirect &
Positive/Negative

Models
- Grid based
- Cube based
- Salience
- RACI







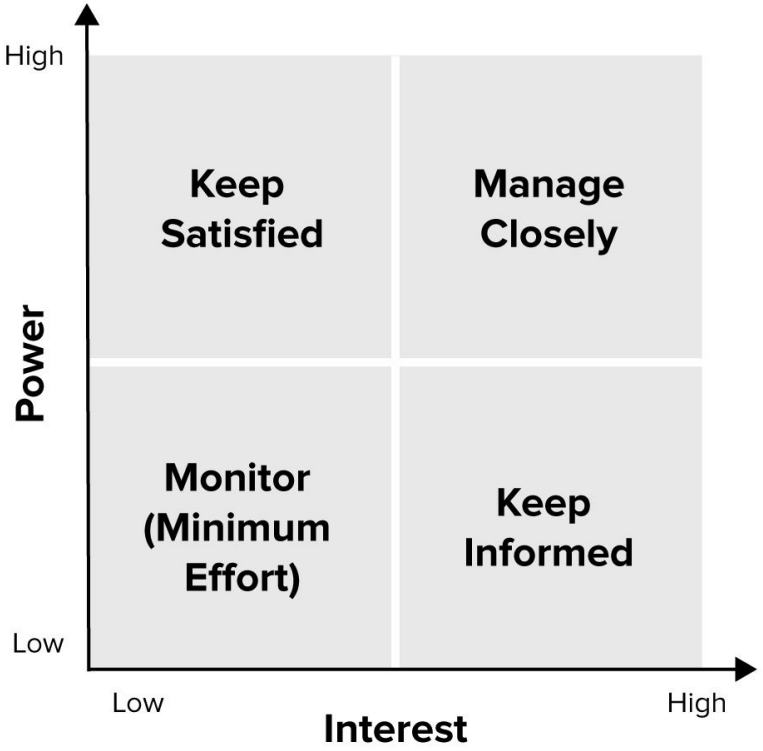


Power Interest Matrix

Power/Influence: the ability to CHANGE or STOP a project

Interest: the size of the overlap between the stakeholder's goals and the project's goals

Government
Public Sectors Groups
Landowners
Businesses



https://www.mindtools.com/pages/article/newPPM_07.htm

Project Frames

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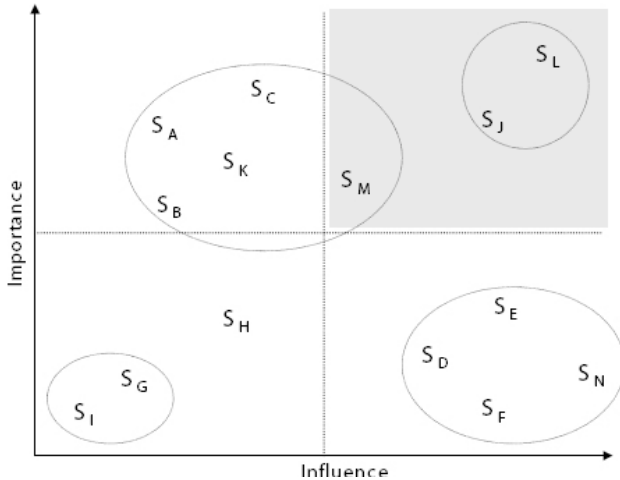
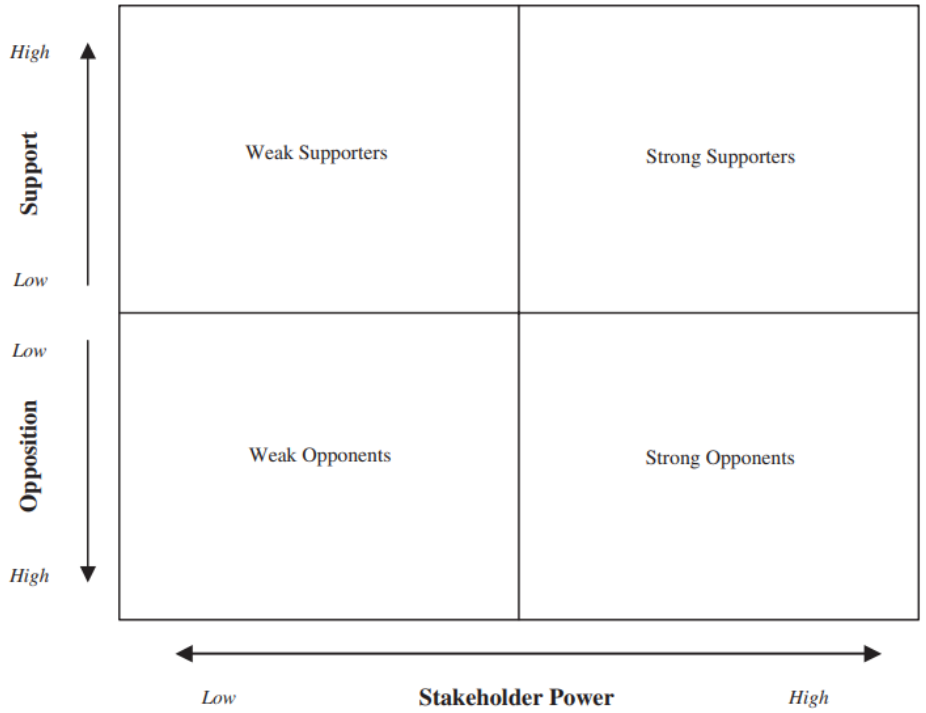
Power/Influence: the ability to CHANGE or STOP a project

Support & Opposition: agree or do not agree with project or problem





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Stakeholder Cube

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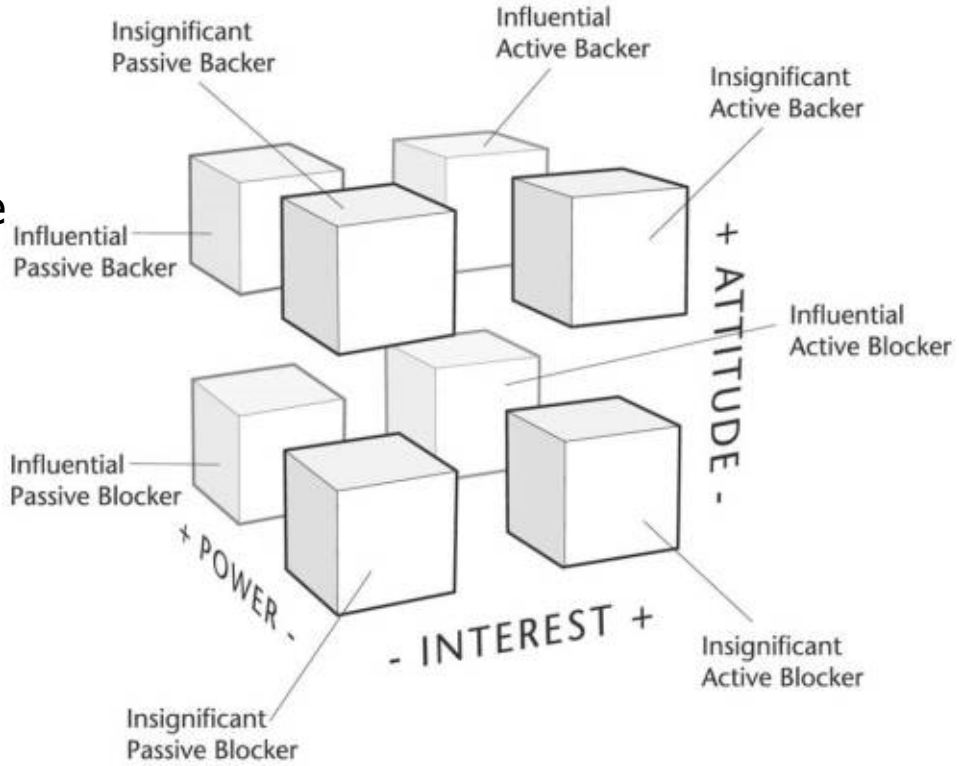
Power – authority to change the project

Interest – the size of the overlap between the stakeholder's goals and the project's goals

Attitude – back or block the project

Difficult to see relationships



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https://mosaicprojects.wordpress.com/2015/04/04/for-stakeholders-2x2-is-not-enough/
https://www.deepfriedbrainproject.com/2017/09/salience-model-for-stakeholder-classification.html

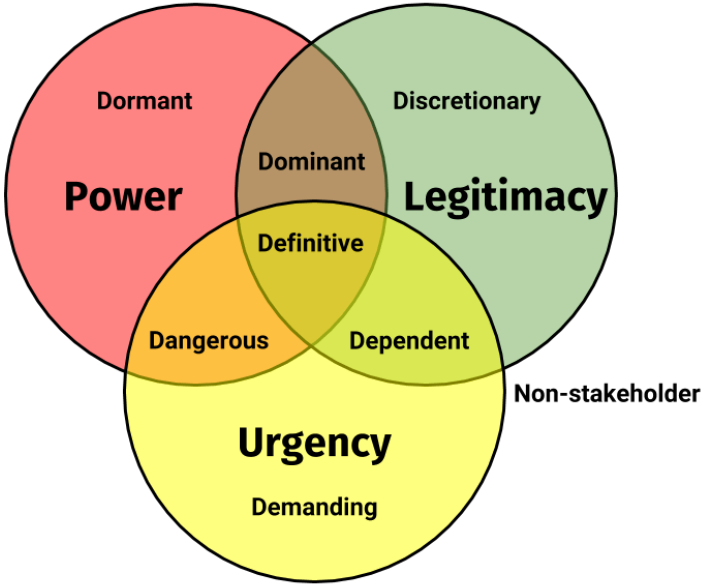
Salience Model

Power – authority to change the project

Legitimacy – Involvement is appropriate

Urgency – Needs immediate attention
- Time-sensitive
- Criticality

Dynamic model



Manage Closely	Definitive
Keep Satisfied	Dominant, Dangerous
Keep Informed	Dependent
Monitor	Dormant, Discretionary, Demanding

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RACI Framework

Responsible – Stakeholders responsible for action and implementation

Accountable – Stakeholders responsible for making key decisions

Contributor – Stakeholder provide input to make answer better

Informed – Stakeholders who need to know about decisions

Stakeholder \ Activity	Site assessment and feasibility study
Prime Minister / Minister of Energy	C Contributor
MBIE	C Contributor
Iwi and land owners	A Accountable
Energy companies	R Responsible
Engineering firms	C Contributor
Energy users / customers	I Informed

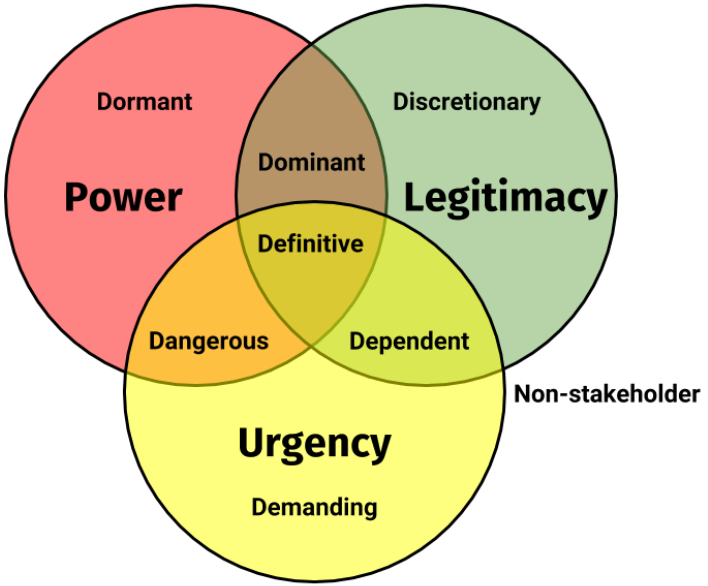
Mickinsey
https://citoolkit.com/articles/raci-matrix/
https://www.pmi.org/learning/library/stakeholder-analysis-pivotal-practice-projects-8905

Identifying Key Stakeholders and Their Requirements

Multiple Models over multiple scenarios

1) What's their role?
2) What is important to them?
3) What is their attitude?
4) What shifts do we need?
5) How can they use their power?
6) How do they relate?

Identify stakeholders repetitively have large impacts on project



Identifying Key Stakeholders and Their Requirements

Requirements may change per problem space

1) Necessary
2) Nice to have
3) Aspirational

Brainstorm
Interview

Actor-linkage matrices
Social Network Analysis
- Communication,
- Trust
- Influence

Knowledge Mapping

Conflicting Requirements

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Table 2: Sources of Intractable Conflicts

	More Tractable	More Intractable
Parties	*Bounded* Well-organised Clearly Defined Members Roles and Mission	*Diffuse* Unorganised Loose Collective Members Roles and Mission Lacking Structure
Issues	*Consensual* Agreement on Values Disagreement on Allocation	*Dissensual* Fundamental Value Differences
Social System	*Prescribed* Well-defined Structures Clear Procedures and Rules Legitimate Authority	*Ambiguous* Ill-defined Structures Uncertainty in Procedures Absence of Clear Authority
Conflict Process	*De-escalated* Contained and Focused Commitment to Resolving Issues Conflict Cycles Broken Up	*Escalated* Growth in Parties, Issues and Costs Polarisation and Segregation Conflict Spirals

Brainstorm with representatives

Can you reach a compromise?

Can you meet the requirements another way?

Requirement list

- Need to have
- Address conflicts
- Buy-in from the Key Stakeholders

2008 Head "Wicked Problems in Public Policy"

From Requirements to Key Success Factors

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Key Success Factor: Requirements that potential solutions are assessed against

Look at overlaps of necessary requirements

The more complex problem, or the more problem spaces; the more KSF you may have

Don’t loose sight of the overall problem

All KSF are necessary requirements, but not all necessary requirements are KSF.

Application of Stakeholder Analysis

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What new innovations can be made at the systems level to improve the prevailing access and waiting time issues faced by New Zealanders in our health system over the next 10-15 years?

Unattractive working conditions for healthcare professionals creates a major strain on our healthcare system through lack of staff and introduces unnecessary wait times for patients

Due to the increased life expectancy and unhealthy New Zealand population, more elective surgeries are required. This increase will push the fragile healthcare system to its limits.

Rural communities in New Zealand struggle with limited healthcare access due to long distances, few facilities, and workforce shortages. The existing healthcare system does not adequately address the health disparities for these communities.

Lower-socioeconomic and deprived communities struggle to overcome the financial hurdles prevalent in visiting health service providers, resulting in less access to needed health care, further reducing the health of this historically health-poor demographic.

Application of Stakeholder Analysis

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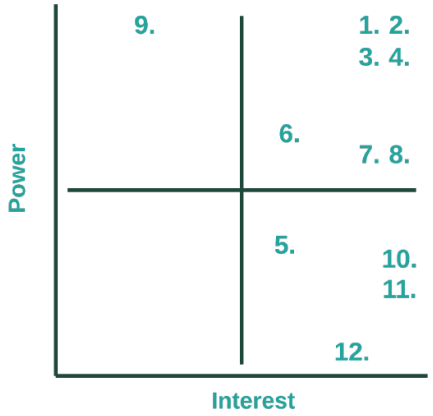
Power-Interest matrix

1. Ministry of Health
2. Public Health Agency
3. Te Whata Ora – Health NZ
4. Te Aka Whai Ora – Māori Health Authority
5. Non-urgent care patients
6. Healthcare practitioners
7. Urgent care patients
8. Vulnerable Populations
9. Pharmaceutical and Medical Suppliers
10. Rural Communities
11. Low-Socio Economic Communities
12. Health Insurance (ACC)



Stakeholder	Necessary
Ministry of Health	Accountability mechanisms for performance monitoring. New solutions abide by laws and regulations. Justified use of government resources and financial sustainability (Ministry of Health, 2021)
Te Whatu Ora – Health New Zealand	Effective resource allocation and management of health services. Efficient healthcare operations.
Te Aka Whai Ora - The Māori Health Authority	Improved Māori health outcomes, with less health disparities. Cultural competence and responsiveness (Te Aka Whai Ora, 2022).
The Public Health Agency	Effective population health strategies and response plans. Equity-focused approaches (Manatu Hauora, 2023).
Health Professionals	Safe and enjoyable working conditions (Small, 2023). Motivated to stay within New Zealand's healthcare system (Te Whatu Ora, 2023b). Have sufficient staffing levels (Brettkelly, 2023).
Urgent Care Patients	Immediate medical care (OECD, 2020; Quinn 2022, 2023). Competent staff available (Te Tāhū Hauroa, 2022).
Vulnerable Populations	Improved access to healthcare (physical access financial access, etc.). Access to specialised care options. (Bhatt & Bathija, 2018)
Pharmaceutical and Medical Suppliers	Transparent procurement process that aligns with industry standards and regulations. Timely payments and a streamlined invoicing system.
Non-urgent Care Patients	Quality healthcare services with timely access to care. Inclusivity and cultural competence.
Rural Communities	Means to reach and use healthcare facilities and services (Rural Health Information Hub, 2022; McCaull, 2022).
Low socio-economic communities	Inclusive community involvement. Education on healthcare reform.
Health Insurance Providers (ACC)	Immediately informed on any healthcare policy and regulation changes.

1. **Expand Opportunities for Patients to Access Healthcare Services.**
2. Improve Working Conditions for Healthcare Workers.
3. Increased Efficiency in Healthcare Operations.
4. Cost Efficiency and Financial Viability.
5. Accommodate Vulnerable People and Promote Equity.
6. Aligns with the New Zealand Public Health Strategies.

Key requirements not selected as critical success factors:

Application of Stakeholder Analysis

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What new innovations can be made at the systems level to improve the prevailing access and waiting time issues faced by New Zealanders in our health system over the next 10-15 years?

PROBLEM STATEMENT 1 (20%)

New Zealand has several vulnerable groups such as Māori, Pasifika People, elderly, and disabled people, who face more barriers to accessing healthcare than other New Zealanders, despite New Zealand having a publicly funded healthcare system that aims to provide universal healthcare for all New Zealanders.

PROBLEM STATEMENT 2 (30%)

New Zealand's primary and secondary healthcare systems are poorly integrated, making it difficult for medical professionals and patients to navigate. This results in inefficiencies and patients failing to access the care they need.

PROBLEM STATEMENT 3 (25%)

Many visits to hospitals and emergency rooms are unnecessary or preventable. This puts excess pressure on the New Zealand healthcare system resulting in long wait times for these services.

PROBLEM STATEMENT 4 (25%)

Wait times for elective surgery and specialist appointments are excessive, with average wait times of up to a year for some specialists. These wait times will only continue to worsen as New Zealand's population continues to grow and the demand for healthcare increases.

Application of Stakeholder Analysis

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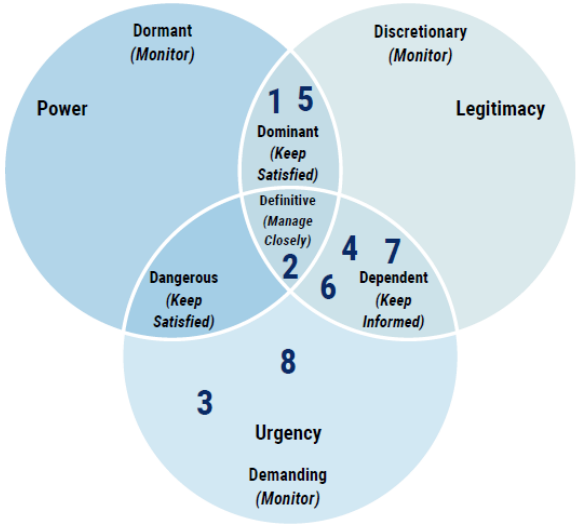
Stakeholders

1. Health care professionals
2. Government entities
3. Taxpayers
4. Health sector organisations
5. Iwi and Mana Whenua
6. Māori and Pasifika patients
7. Patients in other vulnerable groups
8. Patients and their families



Health outcomes are improved and become more equitable for vulnerable patient groups.

1

KPI: Life expectancy by patient groups such as ethnicity.

Patients receive healthcare in a timely manner and average wait times are reduced.

5

KPI: Average wait times for consultation and surgery.

Reduce number of patients that are unable to afford healthcare.

2

KPI: Average cost of general practitioner (GP) consultations.

Healthcare professionals' working hours and caseloads are maintained or reduced.

6

KPI: Average caseload and working hours.

Quality of healthcare is maintained or improved.

3

KPI: Health performance indicators such as life expectancy.

Simplifies healthcare processes for primary and secondary care.

7

KPI: Individuals progression through the system

Solution is sustainable for long-term continuity.

4

KPI: Social & economic impact and performance monitoring.

Total hospital and emergency room visit numbers are reduced.

8

KPI: Total number of national hospital admissions.

Application of Stakeholder Analysis

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What new innovations can be made at the systems level to improve the prevailing access and waiting time issues faced by New Zealanders in our health system over the next 10-15 years?

Problem Statement 1
The increasing demand on the healthcare system continues to outpace the number of healthcare professionals available. It is necessary to find ways to ensure the supply of healthcare professionals available to treat patients grows at a pace meeting increasing demand.

Problem Statement 2
The resources available to healthcare facilities are inadequate to meet demand. This leads to delays in patient care as they wait for them to become available.

Problem Statement 3
Barriers within the healthcare system lead to inequitable access to medical care for vulnerable and disadvantaged groups within New Zealand.

Problem Statement 4
Inefficiencies within New Zealand healthcare systems lead to discrepancies in healthcare cover, making it difficult for people to access the medical care that they require.

Application of Stakeholder Analysis

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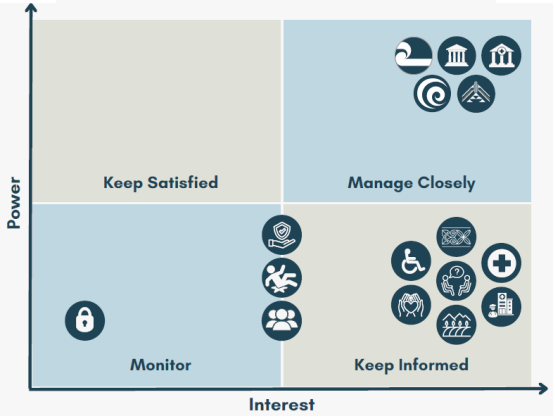
- Central Government
- Accident Compensation Corporation (ACC)
- Te Whatu Ora
- Rural Residents
- Te Aka Whai Ora
- Trainee Healthcare Professionals
- Te Tāhū Ora
- Persons with Mental Illness
- Māori and Pasifika Peoples
- Vulnerable Patient Groups
- Iwi
- Insurance Companies
- Healthcare Workers
- Private Healthcare Providers
- Persons with Disabilities
- General Public



Key Stakeholders	Necessary
Central Government	• Quality of healthcare is not reduced.
Iwi	• Te Tiriti requirements are upheld.
Te Aka Whai Ora	• Māori communities are better served. • The requirements of Te Tiriti are met.
Te Whatu Ora	• Equity of health outcomes for patients is improved. • Existing processes are streamlined.
Te Tāhū Hauora	• Health outcomes and patient satisfaction are improved. • Healthcare service standards are improved.
Healthcare Workforce	• Working conditions and work life balance are improved. • Associated occupational hazards are not increased.
Māori and Pasifika Peoples	• Healthcare services culturally sensitive. • Language is not a barrier to receive healthcare. • Cost does not inhibit medical care.
Persons with Disabilities	• Necessary care is readily and easily accessible.
Persons with Mental Illness	• The availability of mental health support services is increased.
Pregnant Women and Elderly	• Necessary medical care is inexpensive and accessible.
Rural Residents	• Travel time to receive care is reduced. • Transportation is easily accessible and inexpensive.
Trainee Healthcare Professionals	• People are able to access healthcare when it is needed.

1. Access to medical services for all populations is equitable, incorporating cultural values of different communities
2. Wait times are decreased, therefore increasing accessibility to healthcare services
3. Communication is streamlined between primary, secondary and tertiary medical providers
4. Being a healthcare professional in New Zealand is desirable
5. Quality of healthcare services is not compromised

Application of Stakeholder Analysis

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Stakeholders

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8. Patients and their families

Recap & What's Next

- Traditional Steps of Stakeholder Analysis did not change
- "More tools and models" for analysing stakeholders
  - Multiple solvable problems
  - Multiple assessments
  - Multiple requirements
- Key stakeholders – Power, Dangerous, Manage closely, but also include interest groups
- Necessary to KSF
  - KSF must be met for screening
  - Buy-in required

Systems Thinking allows us to identify specific "solvable problems" in a larger complex system.

Stakeholder analysis allows us to tease out what the needs are to be address/solved/improved in a solution

Iterative

Next, how can we use the problems and KSF to

Thank you and see you Thursday!