



From snow ploughs to child obesity

Overcoming challenges in the deployment of OR projects in the public sector

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Overcoming challenges in the deployment of OR Projects in the public sector

- Learning points from my early career in government OR and British Coal
- Community OR – learning about user involvement and soft OR
- Addressing deployment issues with the Public Sector Scorecard
- What makes a good OR project?

Project 1: UK Department of Transport

- 18 month cost-benefit analysis of snow clearance and ice prevention on motorways
- Involved a simulation model of snow clearance for different snowfall scenarios, traffic flows, and snow clearance policies
- Produced 15 working papers discussed at monthly meetings with a steering group
- Result: staff agreed our assumptions as we went along, so felt committed to our recommendations



Learning point: Ensure regular contact not just with client but a range of relevant stakeholders / experts

Project 2: Department of Health

- Comparison of treatments for acute myeloid leukaemia (AML)
- Close client and staff involvement throughout
- Research papers jointly written with clinicians
- Result: *'delighted collaborating clinicians since it made trials much easier to do and it wasn't too long before a major breakthrough was made in the treatment of AML'*

Prof Steve Gallivan at the 25 anniversary of the Clinical OR Unit

Learning point: Involve front-line staff

Project 3: British Coal

- Presenting the financial case for industry to convert from oil to coal
- Encouraged more junior staff to use our software and to champion our work in their area
- Result: Software used in every marketing region
- Publicity for OR group on BBC TV.



Learning point: Close involvement with staff at all levels

Community OR Unit

- Soon after I moved to Sheffield Business School, we were successful in our joint bid with Northern College to host the new national Community OR Unit
- Gave me the opportunity to learn from several experts in problem structuring and in community OR

Learning points:

1. Involving, empowering and listening to service users was important in itself but also led to more successful deployment
2. Problem Structuring methods and soft OR were crucial in this process

Developing the Public Sector Scorecard

How can OR
improve
deployment in
the public and
third sectors

- Workshop-based approach involving staff, service users and other key stakeholders
- Get involved in strategy, service improvement *and* performance measurement
- Look at outcomes, processes and capability
- Work across organisational boundaries
- Culture of improvement, innovation and learning

The Public Sector Scorecard

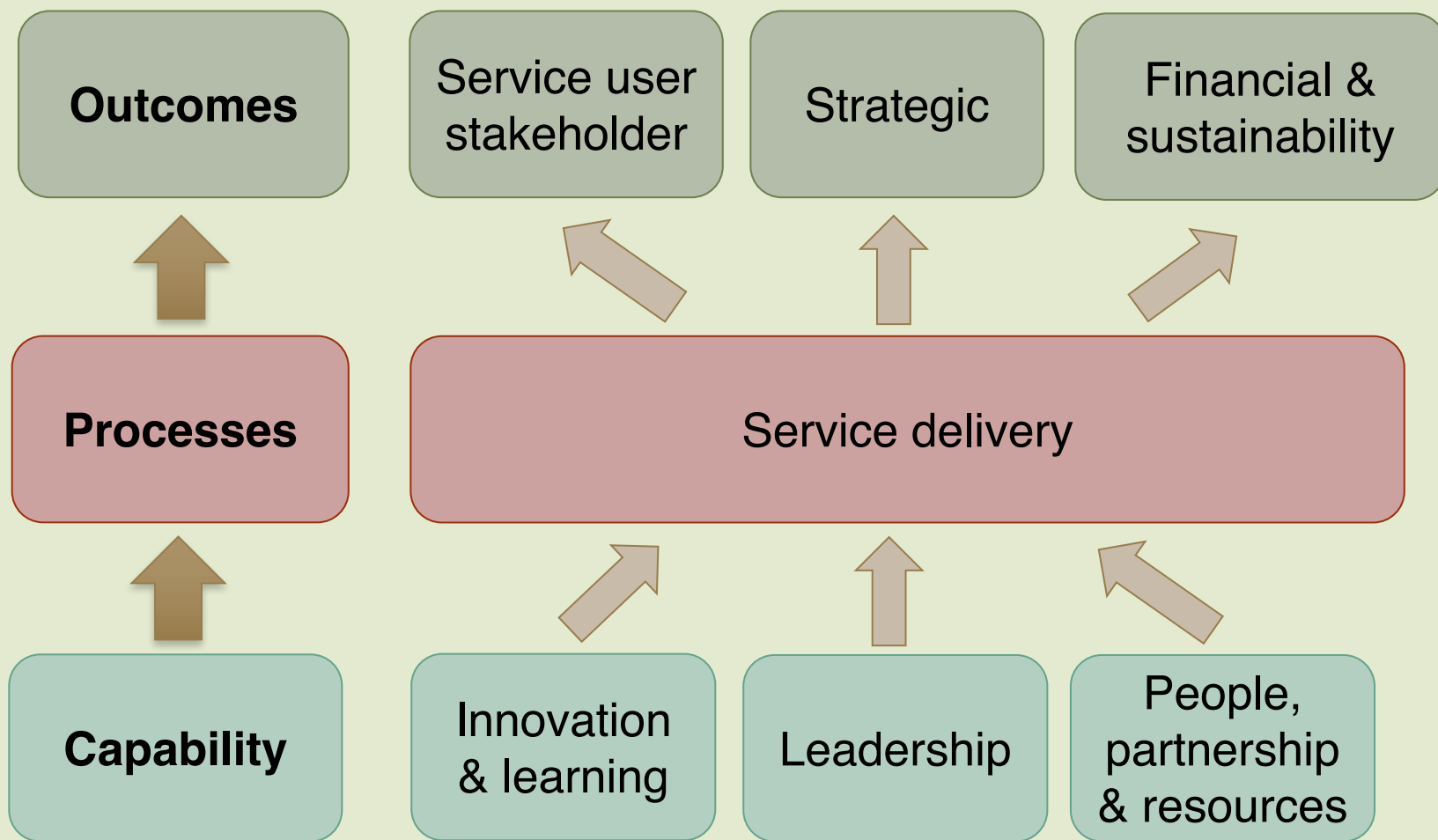
THREE PHASES

1. Strategy mapping
2. Service improvement
3. Performance measurement

The PSS is a workshop-based framework for the public and third sectors

“The PSS has moved performance management from a top-down, blinkered, blame-game approach to a system founded on inclusiveness, cooperation and understanding”

Neil Robinson,
Impact, OR Society



The Public Sector Scorecard

Using the Public Sector Scorecard for Sheffield NHS Stop Smoking Service

- Aim to improve the service and to develop performance measures which relate closely both to strategy and user views
- Started with three service user workshops – over 100 attended
- Then six workshops with a reference group including senior managers, staff, 8 service users, doctors, midwives, and other stakeholders

Stop Smoking Service Strategy Map - excerpt

OUTCOMES

Equity of access

More people stopping smoking

User satisfaction

PROCESSES

More sessions and in better locations

Better phone support

Availability of prescriptions

Working with other agencies

CAPABILITY

Benchmarking

Use of other helplines

Direct access to pharmacy

Better communication with NHS staff

Results and Feedback

Numbers of people stopping smoking doubled during project and has stayed at that level ever since.

“The strategy map captures a useful strategic overview of the key interrelationships

Enabled a broad and balanced portfolio of measures that impact directly on the effectiveness and experience of service delivery”

Charles Price, Director of Public Health
(now Directorate General for Health
and Consumers, European Commission)

Learning point: involving service users and stakeholders really works!

Using the PSS for



- Three year £10 million programme aimed at reducing obesity in children and families
- Systems approach tackling obesity in several ways at once
- Strategy maps developed for each strand and the programme as a whole.
- Based on workshops with the programme board, strand leads, voluntary sector, parents, and Sheffield Youth Council
- Used a combination of the Public Sector Scorecard and the Theory of Planned behaviour

8 strands of work

Breastfeeding Friendly City



Parents as Positive Role Models



Community Health Champions



Living Neighbourhoods



Healthy Open Spaces



Cross Sector Innovation



Schools



Social Marketing



Reducing obesity in children & families

OUTCOMES

Satisfied stakeholders

Better diet & nutrition

Increased physical activity

Value for money & sustainability

Greater desire to adopt healthy lifestyle

Favourable attitudes of others

Confidence in ability to change

Overcoming barriers to change

Breastfeeding-friendly city

Community health champions

Schools at the heart of healthy communities

Healthy, safe, accessible, open spaces

Innovative new partnerships across all sectors

Effective social marketing

Parents as positive role models

Living neighbourhoods

Joint working SCC, NHS, third & private sectors

Community engagement

Shared vision

Effective project management

Leadership from programme board

PROCESSES

CAPABILITY

Feedback

“The SLC4L Strategy Map visually told the story of SLC4L, what we were trying to achieve and how.

It helped all those involved understand the outcome and process measures the programme was trying to achieve, and therefore being evaluated against.”

Carole Weir, SLC4L programme director

Learning point: address behavioural aspects

What makes a good OR project?

Is it ...

- ▶ identifying the best solution to a problem
- ▶ developing really good recommendations
- ▶ writing a good report
- ▶ an impressive presentation

or

- ▶ assisting the client in implementing successful change

Enabling OR to contribute to some of the major problems facing society

Increasing the deployment of OR projects

Systems Approach

Involve staff, service users & other key stakeholders

Work across organisational boundaries

Combination of soft and hard OR methods

Address strategy, service improvement & performance measurement

Focus on outcomes, processes & capability

Address behavioural factors

Integrate risk management

Culture of improvement, innovation & learning

Use the Public Sector Scorecard

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ONLINE WORKSHOP ON THE PSS

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Organised by the
Operational Research Society

Further information at
www.publicsectorscorecard.co.uk

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Main References

1. Moullin, M. (2017) Improving and evaluating performance with the public sector scorecard", *International Journal of Productivity and Performance Management*, Vol. 66 Issue: 4, pp.442-458
2. Robinson, N. (2015) Developing strategy in the Public Sector, *Impact*, Issue 2, Autumn 2015, The Operational Research Society
3. Moullin, M and Copeland, R (2013) Implementing and evaluating behaviour change programmes with the Public Sector Scorecard. *National Health Executive*, Jul-Aug 2013, pp.16-18
4. Moullin, M, Soady, J, Skinner, J, Price, C, Cullen, J, Gilligan, C (2007) Using the Public Sector Scorecard in Public Health *International Journal of Health Care Quality Assurance*. 20:4
5. Moullin, M. (2002) *Delivering Excellence in Health and Social Care*. Open University Press. ISBN 0-335-20888-6

Earlier References

1. Moullin, M. (2015) My First Project. *OR Inside*, OR Society (Snow clearance project)
2. Jackson, RRP, Moullin, M et al. (1981) *Comparison of Clinical Trials in Acute Myelogenous Leukaemia by use of a Mathematical Model*. Springer, Berlin.
3. Moullin, M. and Campbell, T. (1983) Decision support Systems for Colliery Planning. Paper presented at EURO Conference, Vienna.
4. Moullin, M (1985) Talk to OR Society Conference, Durham,
5. Moullin, M. (1991) Getting Planners to Take Notice. *OR Insight*, Vol.4, Issue, 1. OR Society