

Annual AEA Conference Atlanta, October 2016

Presentation by

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at the 2016 American Evaluation Association Conference

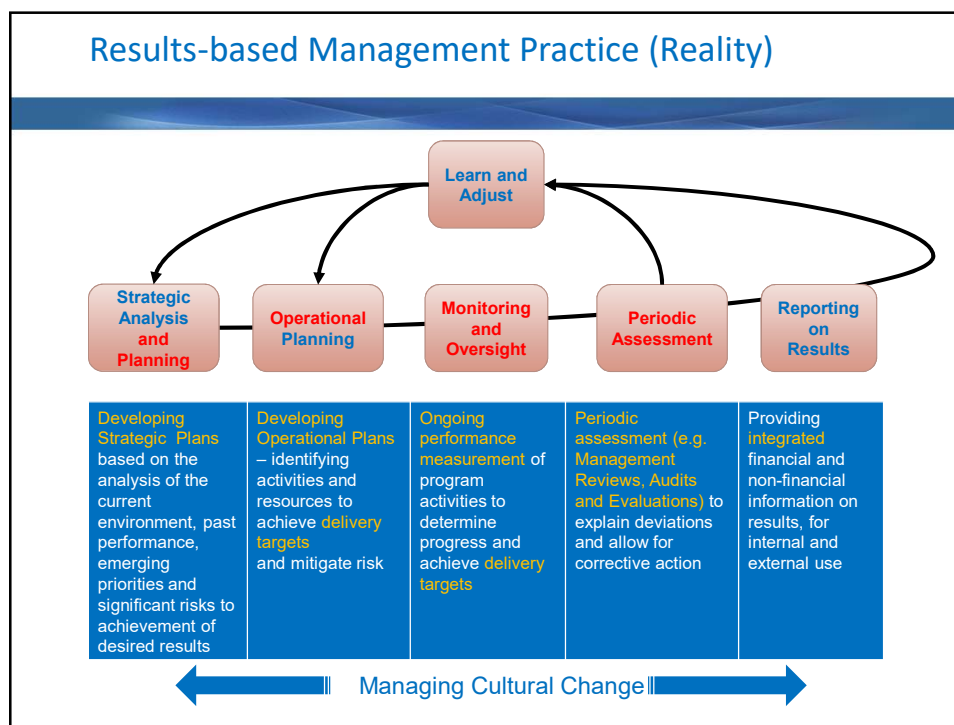
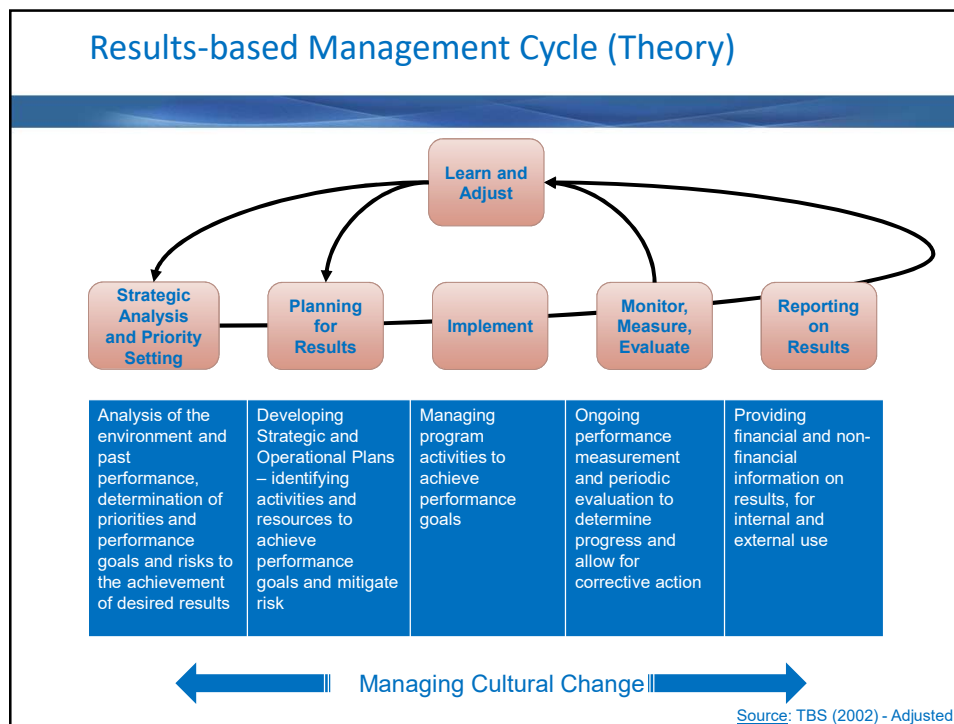
INTEGRATING PERFORMANCE MEASUREMENT AND EVALUATION

20 YEARS OF PLANNING AND REPORTING INITIATIVES IN CANADA

Timeframe	Management Initiative
1996	Planning Reporting and Accountability Structure
1997/1998	Improved Reporting to Parliament Project, First Reports on Plans and Priorities and Departmental Performance Reports
1998	Modernizing Accountability Practices in the Public Sector
1999	Modernizing Comptrollership
2000	Results for Canadians
2001	Results-based Management and Accountability Framework (RMAF)
2001	Integrated Risk Management Framework/Risk-based Audit Framework (RBAF)
2003	Management Accountability Framework
2004/2005	Program Activity Architecture/Management, Resources and Results Structure Policy and Integrated RMAF/RBAF
2007	Policy on Investment Planning
2008	Guide to Costing
2009	A Guide to Developing Performance Measurement Strategies
2012/2013	Common Indicators for Internal Services Programs, Tagging, Efficiency Indicators
2016/2017	Policy on Results and Program Information Profiles

Source: BMB Consulting (2016)

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PLAYERS AND PERSPECTIVES

- Chief Science Officer ➤ Strategic Analysis
- Privy Council Office ➤ Priority Setting
 ➤ Approval of MC
- Operational Manager ➤ Approval of TBS Sub.
 ➤ Monitoring and Oversight
- Corporate Services ➤ Periodic Analysis and Reporting
- Senior Management and Parliamentarians ➤ Resource (re)allocations

LOGIC MODEL/THEORY OF INTERVENTION

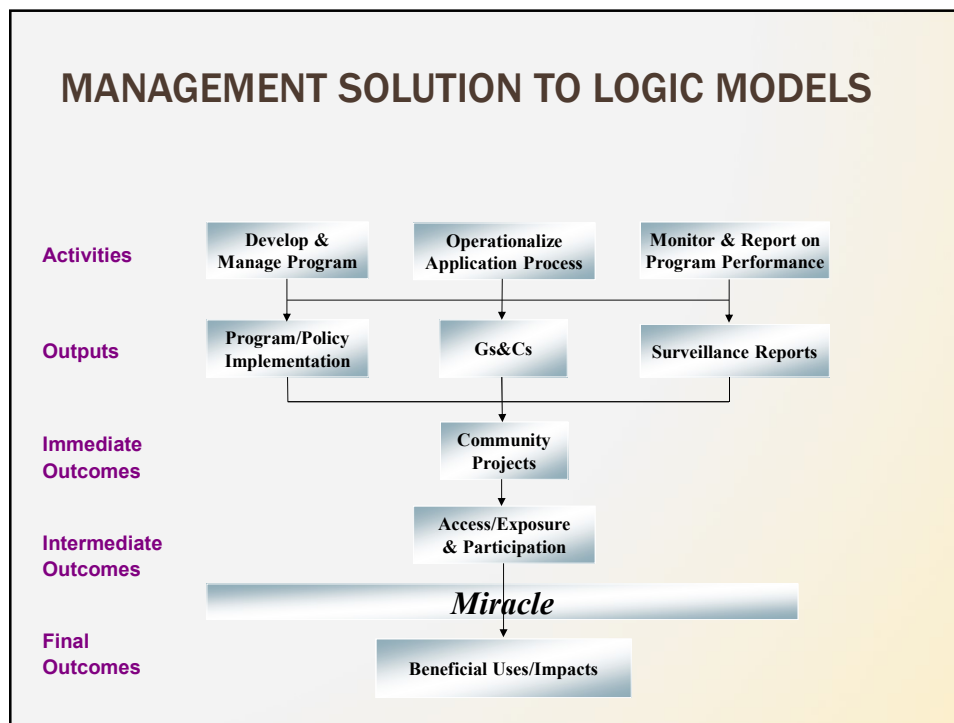
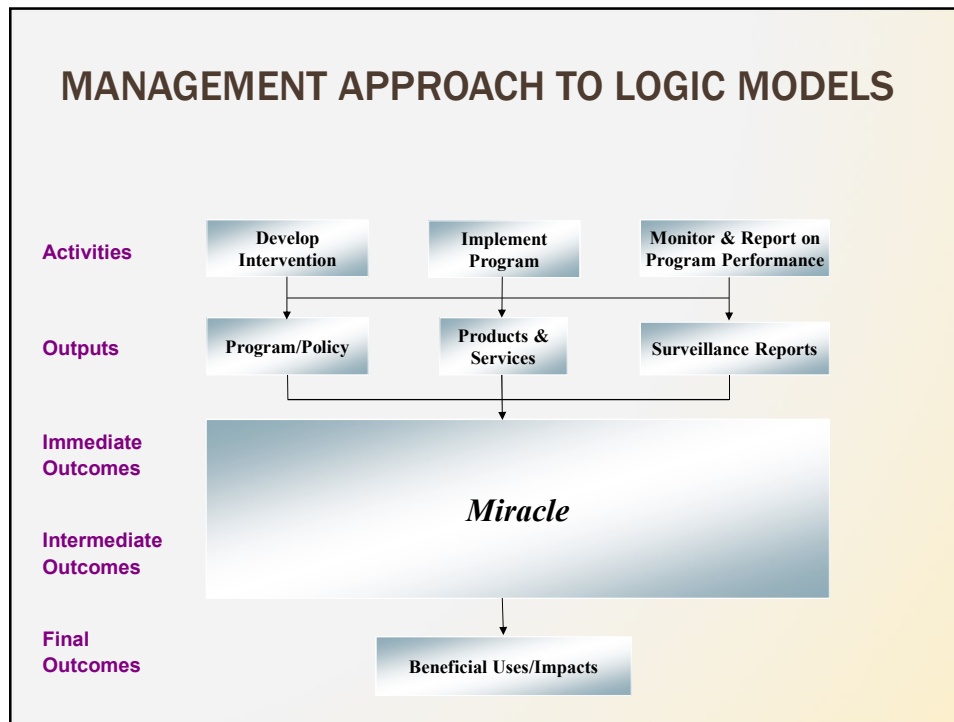
- Need techniques/tools to understand :
 - The strategy developed by the program to achieve intended results
 - The assumptions on which the program intervention was built
 - What results need to be monitored and evaluated in order to demonstrate progress/success

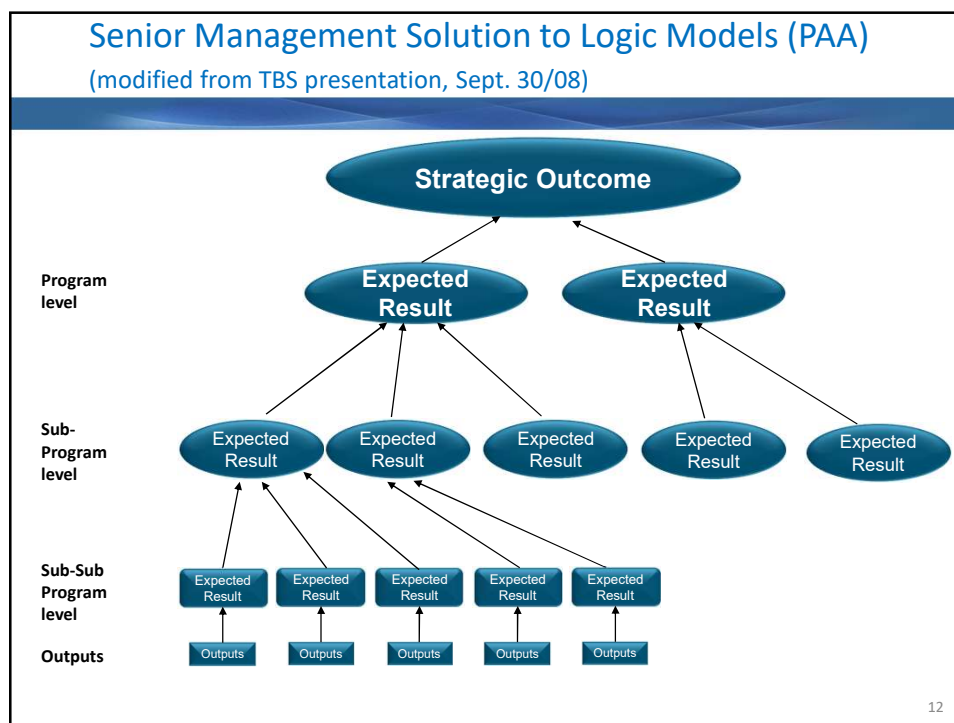
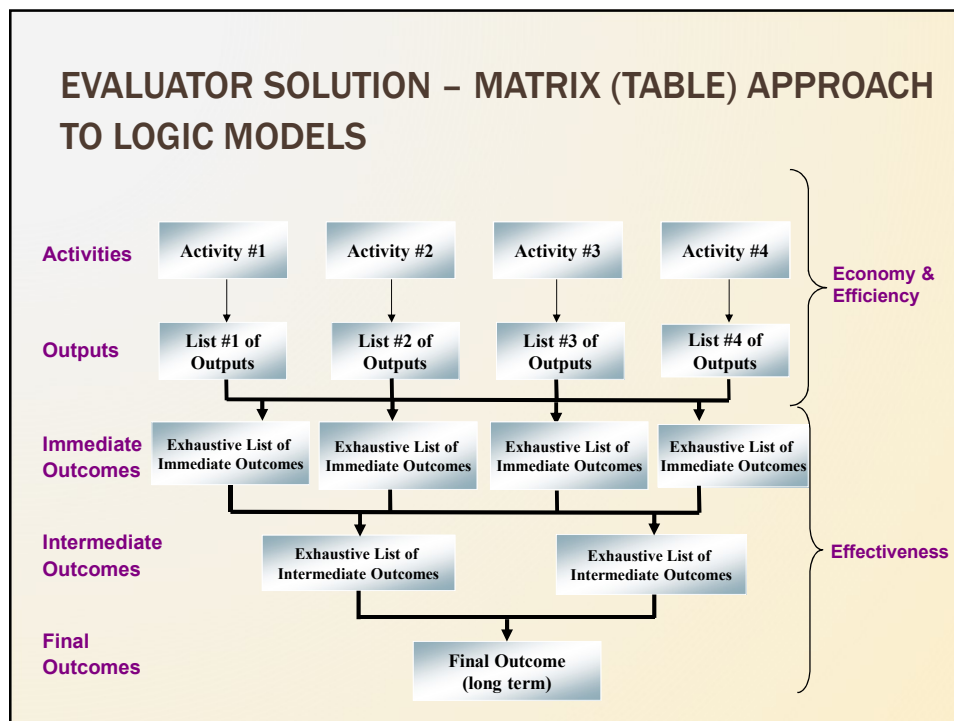
ISSUES WITH LOGIC MODELS

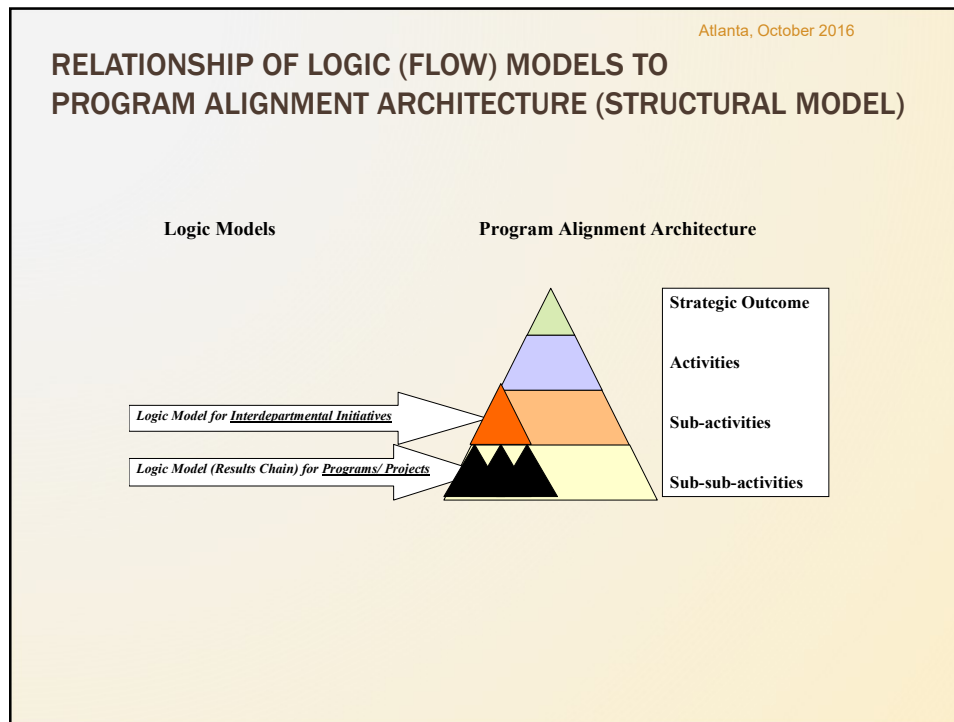
- Difficult linkages to performance measurement
- Much confusion between:
 - Internal and external results
 - Program management and program intervention
 - Flow and structural models
- No proper account of conditionality between activities
- Not comprehensive (absence of external factors/risks that influence results)

ISSUES WITH THEORIES OF CHANGE

- Planning approach for the design of new programs
- Identifies *conditions* for the achievement of outcomes
 - Tend to be very general (not operational)
 - Based mostly on beliefs
- Assumptions are essentially risk statements
- Difficult linkages to performance measurement and evaluation







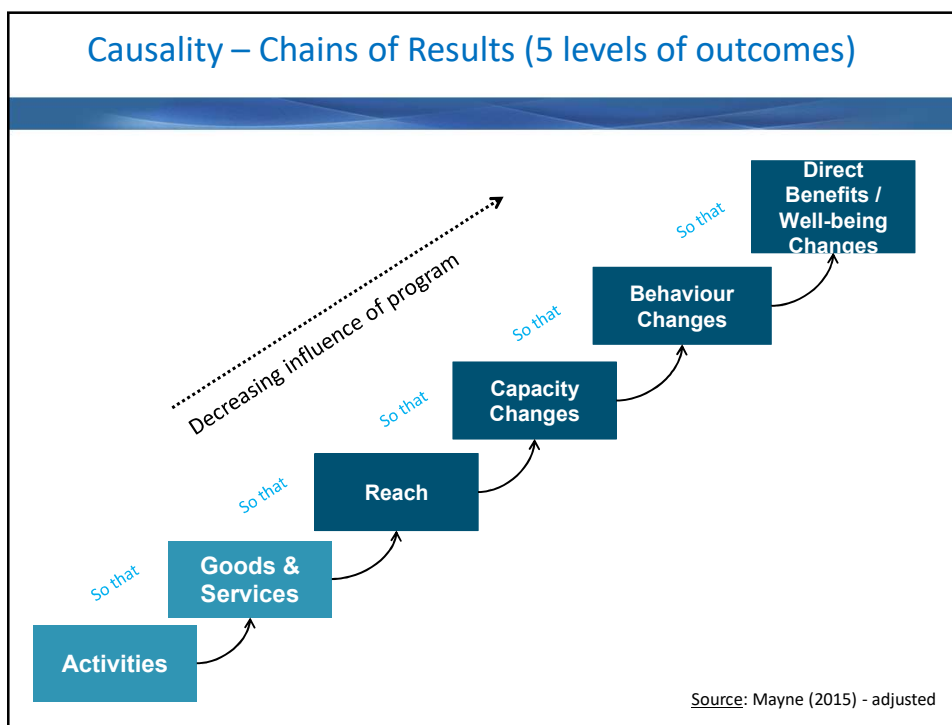
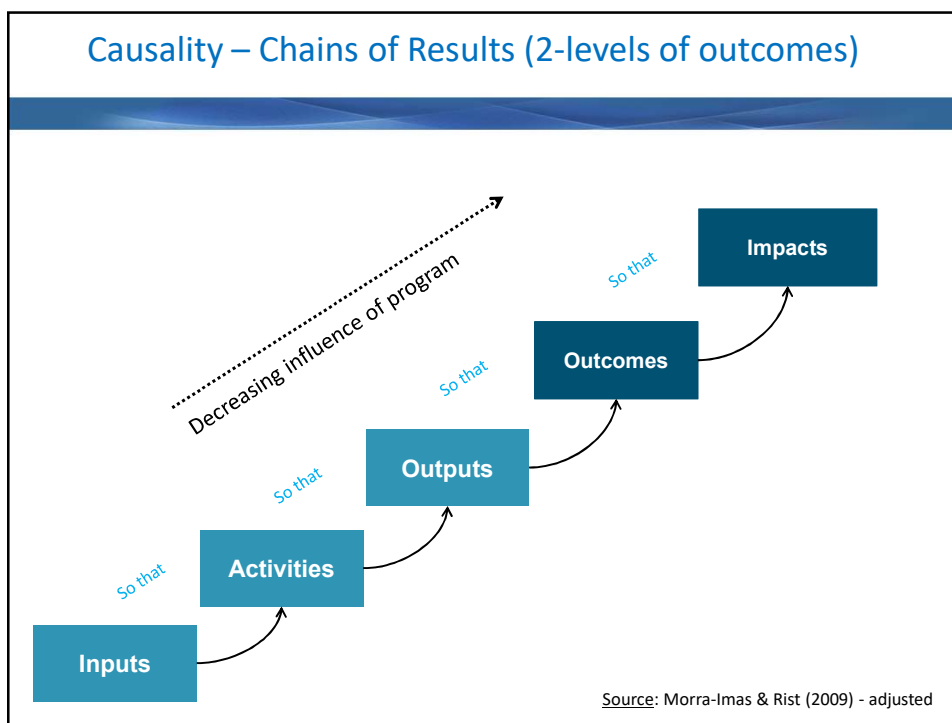
PROPOSED INTEGRATIVE TECHNIQUES

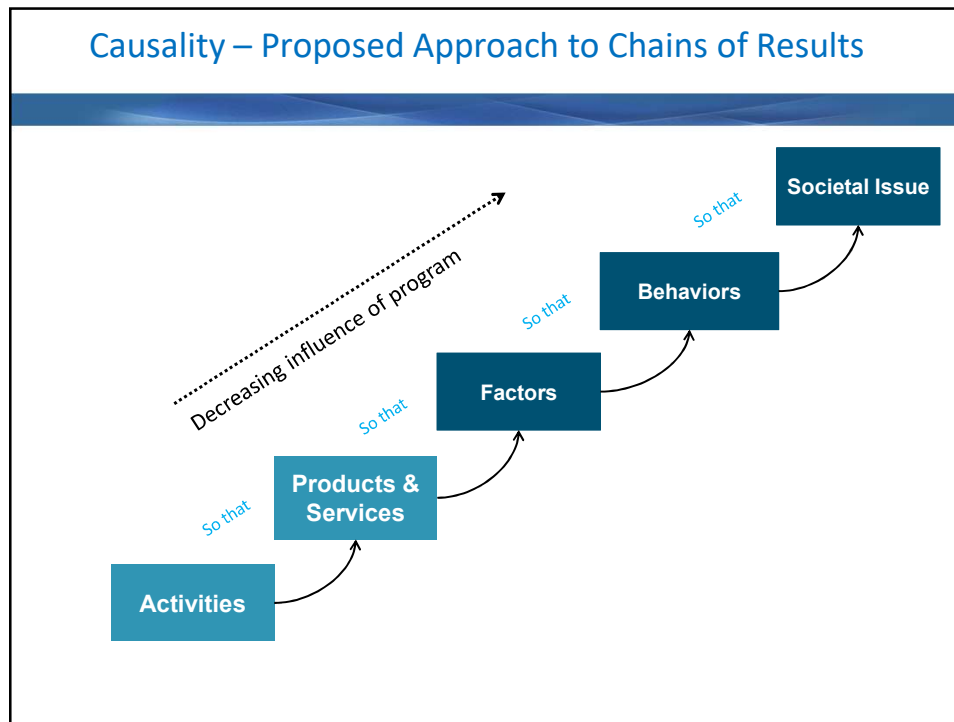
1. *Linking Logic Model & Theory of Change*

- Identifying all factors contributing to the issue at the origin of the program
- Defining the program strategy (i.e. mapping causal linkages between program outputs and final outcomes)
- Including external factors influencing the results of the program

2. *Developing Process Models for Program Delivery*

- Clarifying the critical steps for producing outputs (products and services)
- Creating proper linkages to management controls





Common Activity/Output Groupings

The activities/services of Canada's three orders of government can be structured into five impact groupings by the type of output they produce:

- | | |
|--|--|
| 1. Acquire and/or provide financial resources | 11. Create collaborations, negotiate agreements, settle disputes |
| 2. Provide resources such as goods, equipment, accommodations (apart from funds and human resources) | 12. Regulate, license, permit, certify, identify, authorize |
| 3. Conduct research | 13. Inspect and investigate |
| 4. Provide care and rehabilitation to people and things | 14. Apply rules and dispense justice |
| 5. Provide educational and training experiences / opportunities | 15. Enforce compliance, mete out punishment, penalize |
| 6. Provide recreational and cultural experiences / opportunities | 16. Monitor, warn, guard, store, eliminate threats, reduce risks |
| 7. Move people and things | 17. Intervene, respond to threats and emergencies, give aid, restore order |
| 8. Provide information and advice | 18. Create and change rules |
| 9. Broker, refer, connect, match | 19. Change existing organizations, practices, systems |
| 10. Influence, advocate, persuade, promote awareness | |

Source: BMB Consulting (2016)

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Common Program Impact Groupings

The five impact groupings - that are common to both internally and externally facing programs - are:

1. Supply the capacity to act
2. Enhance the capability to act
3. Facilitate and influence action
4. Regulate action
5. Create rules

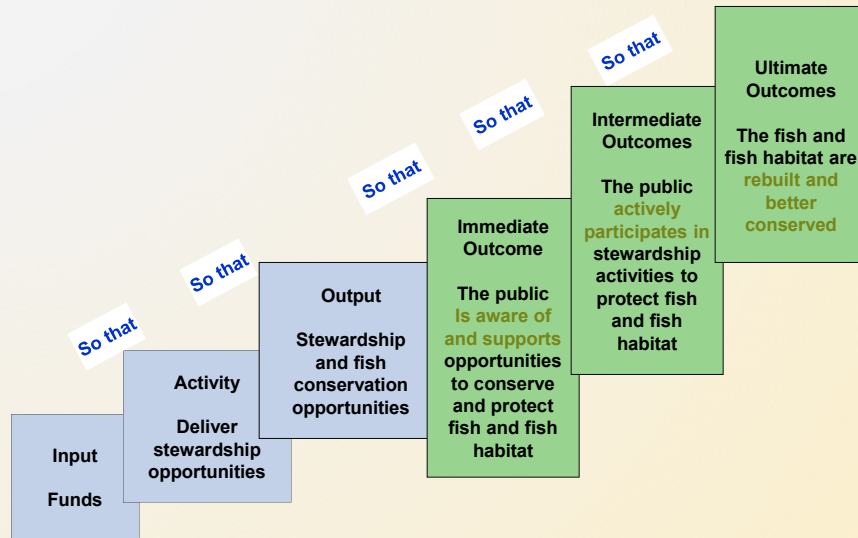
Source: BMB Consulting (2016)

SUPPLY THE CAPACITY TO ACT LOGIC FLOW



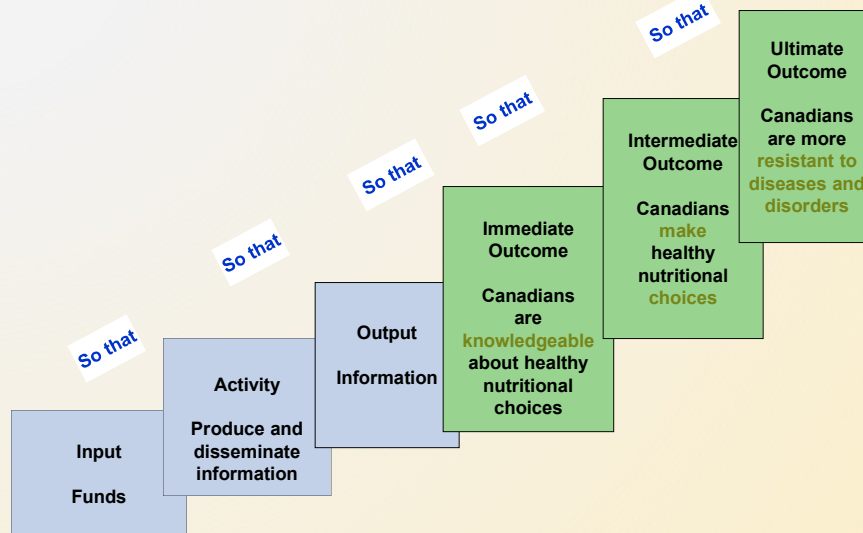
Source: BMB Consulting (2016) - adjusted

ENHANCE THE CAPABILITY TO ACT LOGIC FLOW

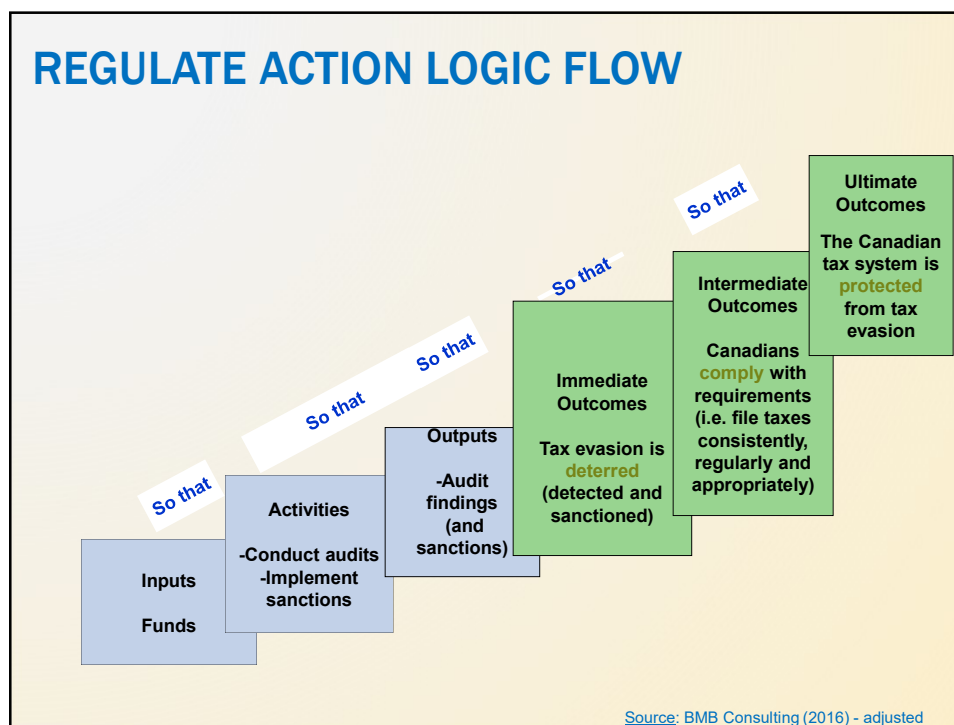
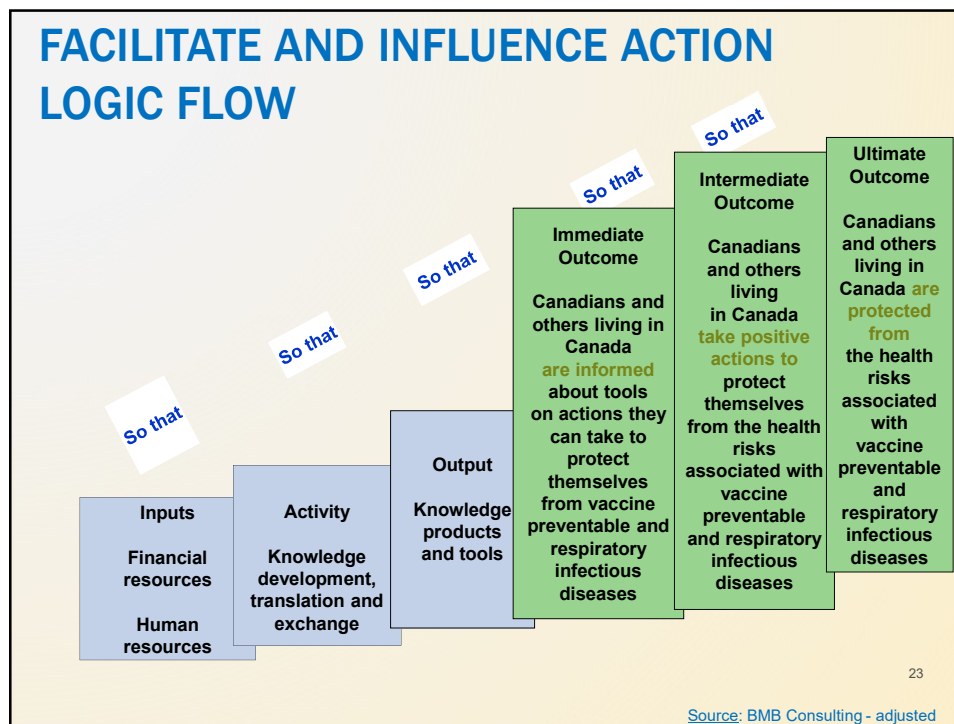


Source: BMB Consulting (2016) - adjusted

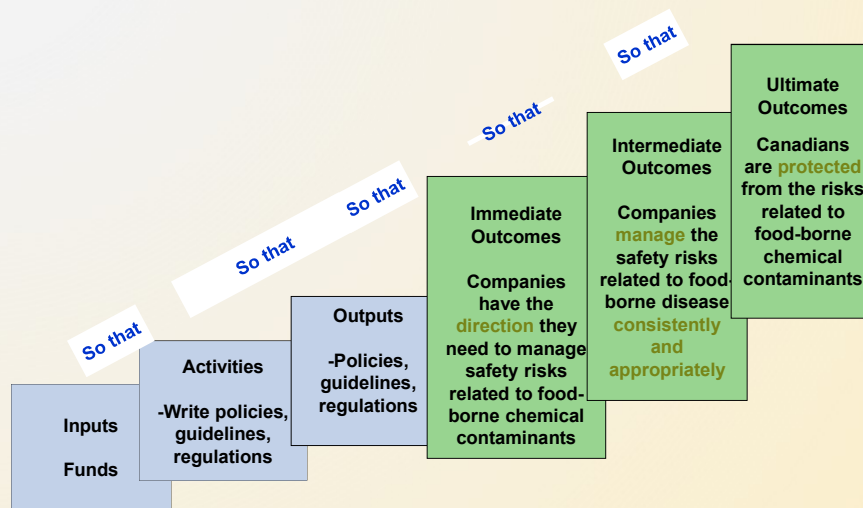
FACILITATE AND INFLUENCE ACTION LOGIC FLOW



Source: BMB Consulting (2016) - adjusted

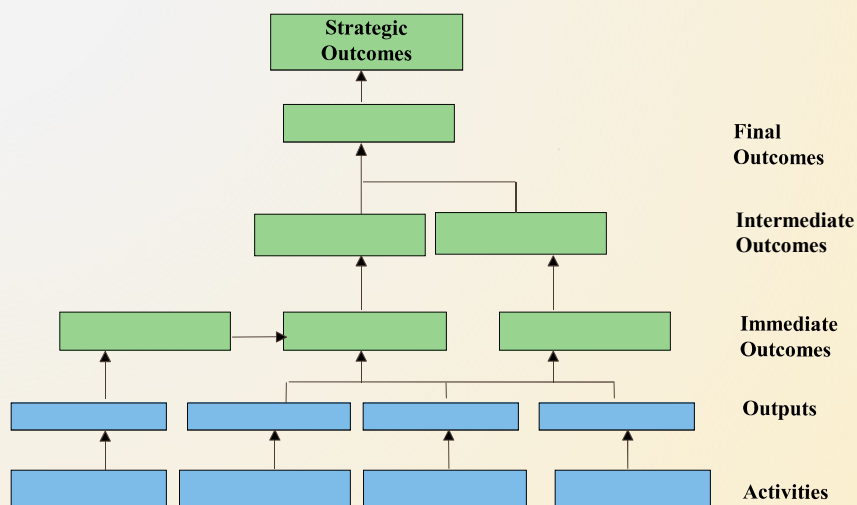


CREATE RULES/IMPLEMENT CHANGES LOGIC FLOW



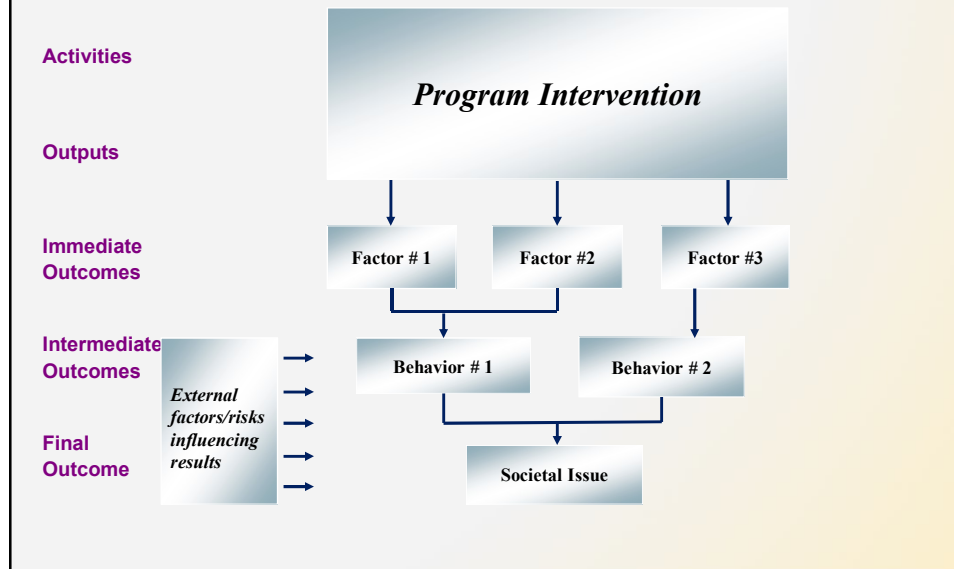
Source: BMB Consulting (2016) - adjusted

Working Logic Model (Program Design Mode)

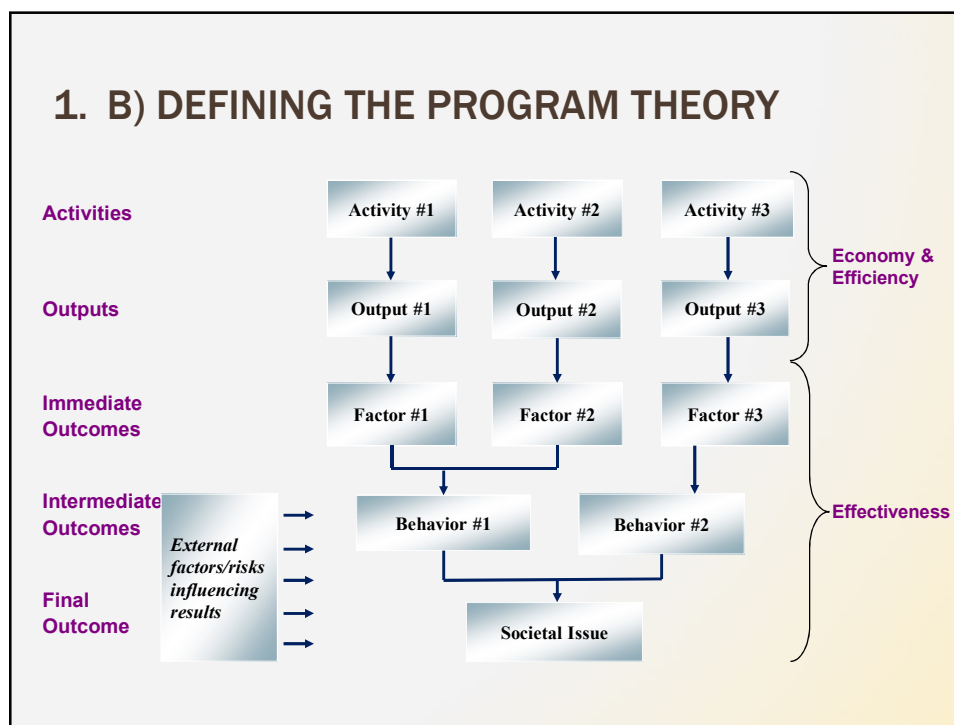


Source: BMB Consulting (2016)

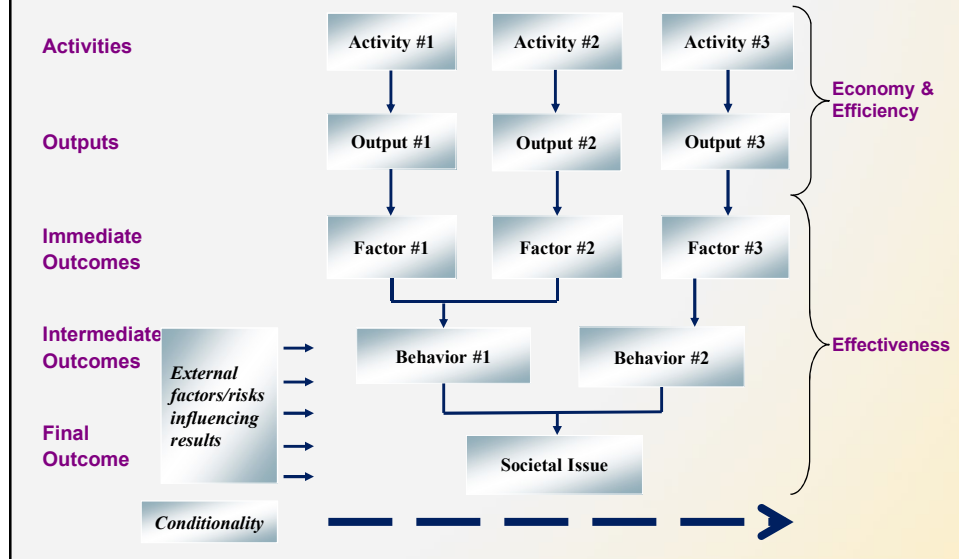
1. A) DEFINING THE THEORY OF CHANGE



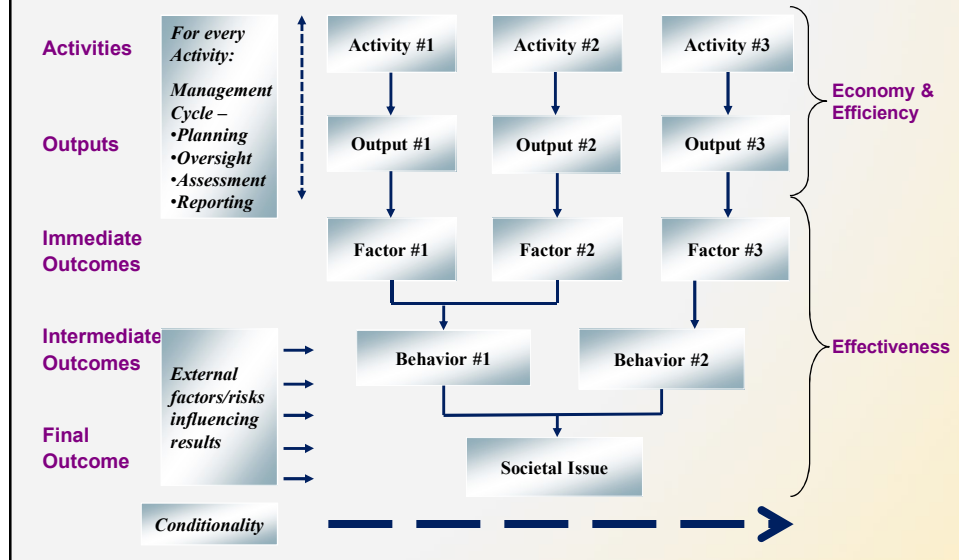
1. B) DEFINING THE PROGRAM THEORY

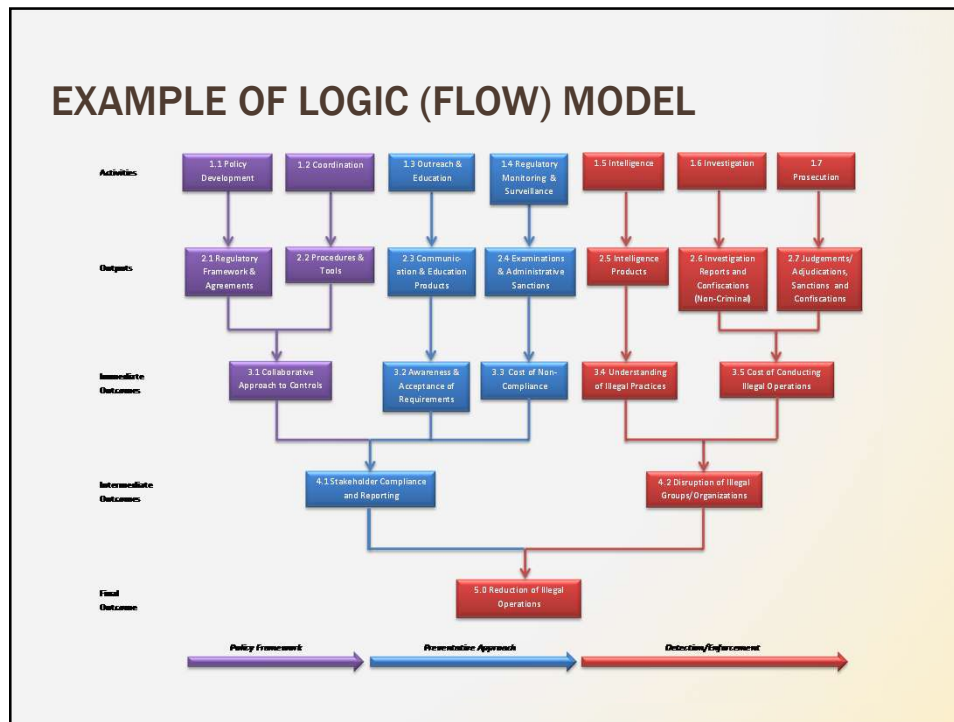


1. C) ADDRESSING CONDITIONALITY



1. D) INCLUDING THE MANAGEMENT CYCLE





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ISSUES RESOLVED WITH COMBINED LM/TOC

- Clear depiction of chains of results and underlying assumptions from a program perspective
- Inclusion of external influences (control variables)
- Program outputs as products* reaching target populations
- Comprehensive set of indicators supporting performance measurement (monitoring) and evaluation
- Subset of best indicators for reporting purposes

* As well as services through push-pull approach

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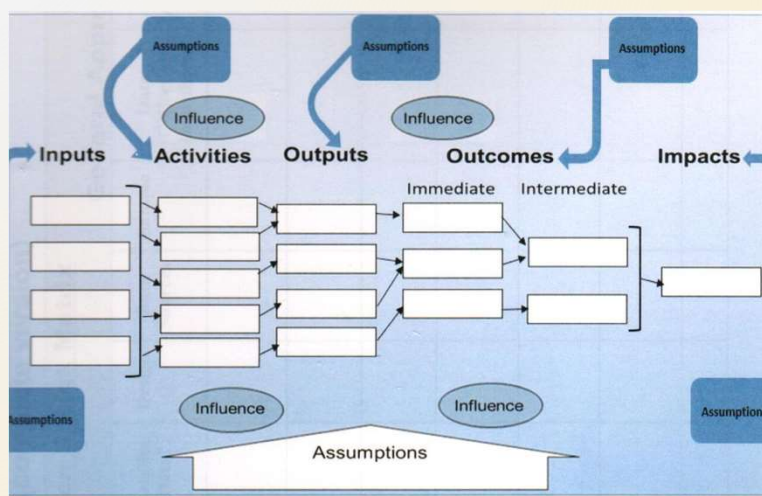
REMAINING ISSUE WITH COMBINED LM/TOC

Need to eliminate confusion with approach to assumptions (e.g. next slide):

- *Logic Model (Program Theory)*: working **assumptions** or hypotheses about (i.e. salient causal links of) the program intervention
- *Influences*: **assumptions** about external (support) factors that are salient and also influencing program outcomes
- *Other assumptions*: Contextual (threshold) conditions/risks for unfolding of Theory of Change – redefine as *influences*?

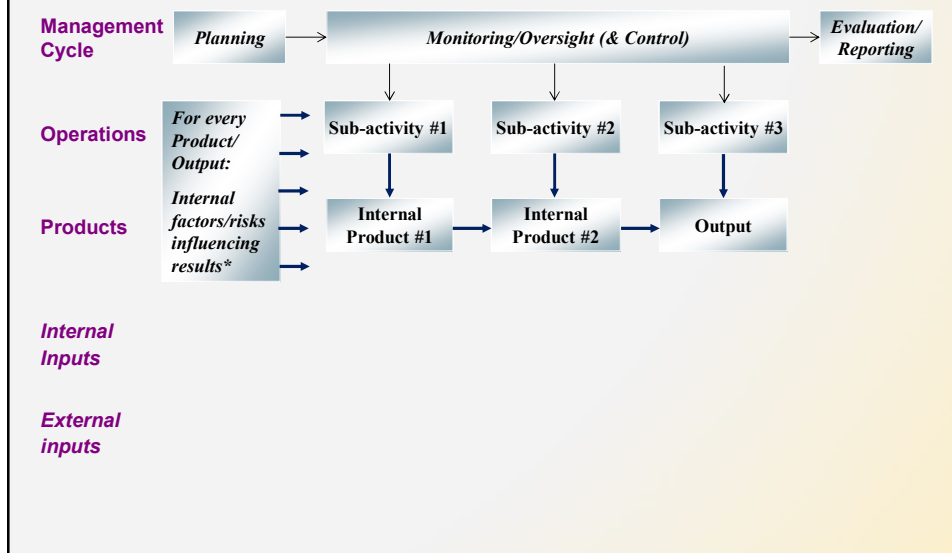
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INFLUENCES AND ASSUMPTIONS IN LM/TOC

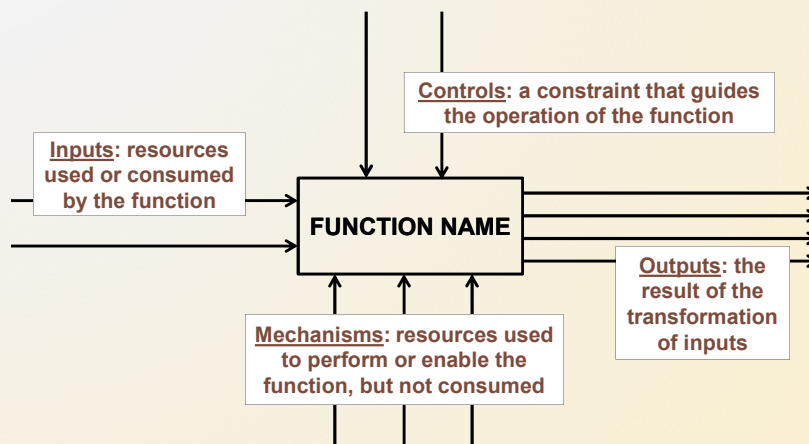


Source: IPDET (2015)

2. A) DEFINING DELIVERY PROCESS MODELS

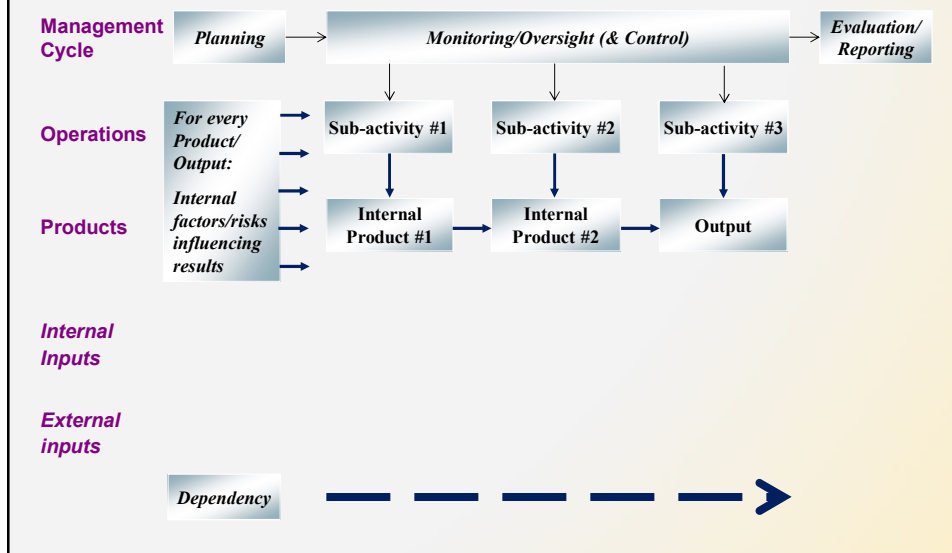


BASED ON 'INTEGRATION DEFINITION FOR FUNCTION MODELING' (IDEF 0)

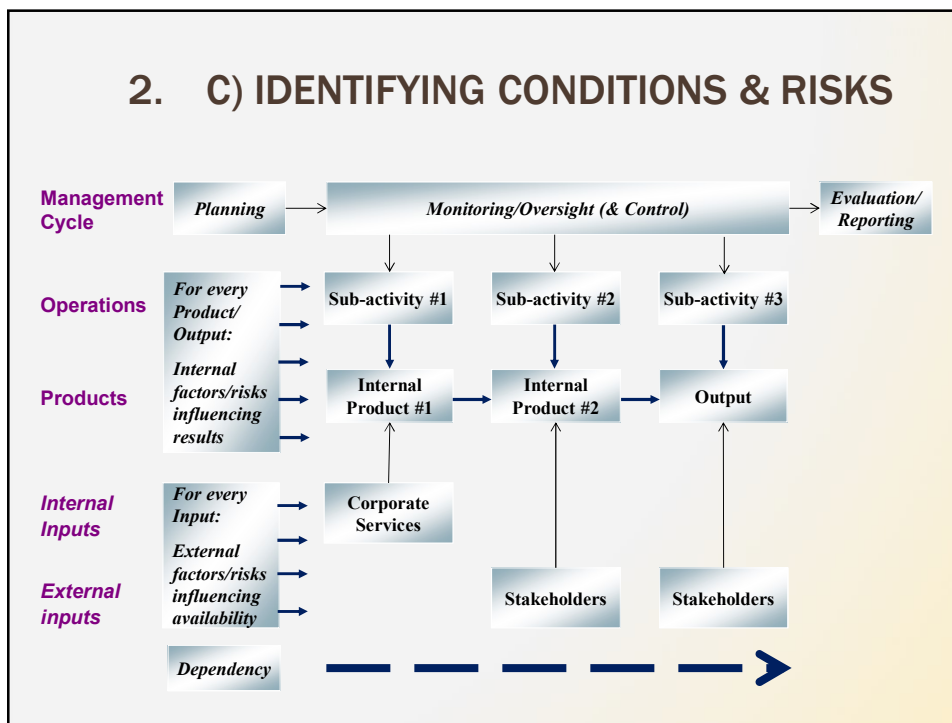


Source: Draft Federal Information Processing Standards Publication 183 (1993) - adjusted

2. B) CLARIFYING DEPENDENCIES



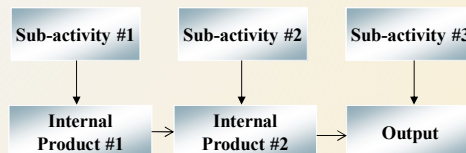
2. C) IDENTIFYING CONDITIONS & RISKS



DELIVERY PROCESS MODEL (IN NARRATIVE OF LOGIC MODEL)

Operations

Products



EXAMPLE: DELIVERY PROCESS MODEL FOR SECURITY

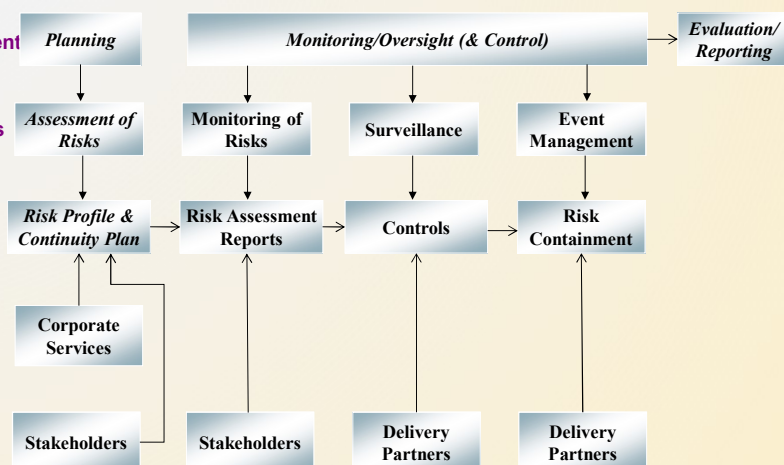
Management

Operations

Products

Internal
Inputs

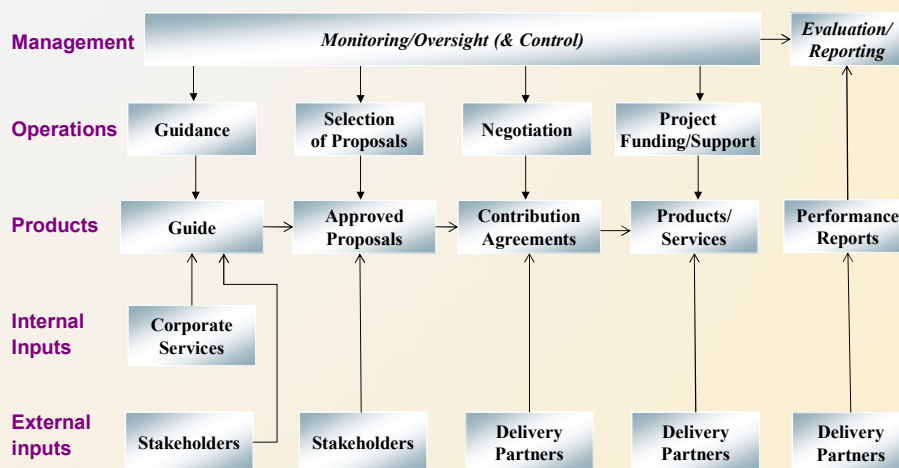
External
inputs



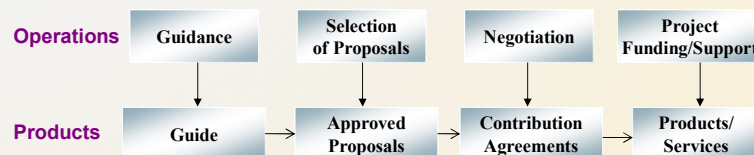
NARRATIVE OF DELIVERY PROCESS MODEL FOR SECURITY



EXAMPLE: DELIVERY PROCESS MODEL FOR G&C



NARRATIVE OF DELIVERY PROCESS MODEL FOR G&C



STEP APPROACH TO PERFORMANCE MEASUREMENT

- Identify all influencing factors (assumptions)
- Determine which factors/risks are being 'managed' under the program intervention
- Link activities/outputs to outcomes
- Define the delivery process models
- Separately identify management issues (if any)
- Determine relevant indicators for all above
- Create a database with micro-data on all relevant indicators (including external factors)

WHY?

- Clarity of assumptions
- Structuring capacity
- Management & stakeholder buy-in
- Explanatory power
- Predictive capacity
- Credibility/reliability of evidence for:
 - **Comprehensive monitoring of delivery**
 - **Robust evaluation of program contribution**
 - **Validation of predictive indicators (e.g. delivery standards)**

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HOW?

Program Delivery

- Multi-level operational targets
- Quality standards
- Comprehensive monitoring
- Process evaluation

Program Contribution

- Clear theory of change
- Microdata on all outputs and outcomes
- Relevant data on all external factors
- Multivariate analysis

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EXAMPLE OF EVALUATION USING MULTIVARIATE ANALYSIS

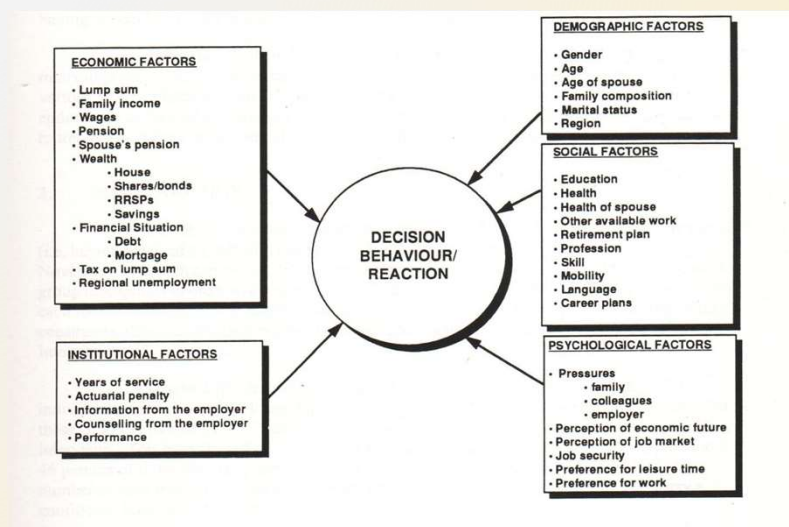
The Civilian Reduction Program at the Department of National Defence: Factors Affecting Early Departure Decisions (1995)

- Economic
- Institutional
- Demographic
- Social
- Psychological

Source: Laurendeau (1995)

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FACTORS INFLUENCING DECISION



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REGRESSION MODEL PREDICTIVE CAPACITY

- Socio-demographic variables only ➤ 74% to 83%
- Adding institutional and binary decision variables ➤ 96%
- Using scaled decision variables following factorial analysis ➤ 97.1%

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STUDY FINDINGS

- Meaningful regrouping of factors
 - Risk aversion
 - Fear of relocation
 - No career opportunity
 - Waiting for retirement
 - Skills not transferable
 - Bad working environment
- Alignment with career stages
 - Exploration
 - Establishment
 - Maintenance
 - Disengagement
- Cost and savings projections to rest of Public Service

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CONCLUSION

- Reporting on narrow targets and satisfaction not sufficient – still need comprehensive *process* evaluations
- Also need more robust *impact* evaluations to support:
 - Program design and policy making
 - Achievement of optimal allocative efficiency, within and between programs
- Requires advance development of fully integrated Performance Measurement (Monitoring) and Evaluation frameworks
- Also requires development and **sharing** of:
 - LM/TOC models of Program Theories
 - Micro-databases on program outcomes and external factors supporting multivariate analysis

QUESTIONS?

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