

FINANCE 702

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# Variable Systems Model ExxonMobil Australia

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## Contents

1	Model Interpretations	2
1.1	Principal Theories: Stewardship vs Agency . . . . .	2
1.2	Amplifiers & Attenuators . . . . .	3
2	Appendix	4
2.1	Variable Systems Model - NYSE: XOM . . . . .	4

## List of Figures

1	ExxonMobil Australia . . . . .	4
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# 1 Model Interpretations

Davis, Schoorman & Donaldson (2018) outline the discrepancies between agency and stewardship theory developed in preceding literature. Principal Agency Theory (PAT) informs the behaviours of a rational agent who seeks to maximise his or her utility and manage an organisation's operations on behalf of executives. However, diverging approaches to maximising the utility for each party create agency conflicts as there is a separation of control and ownership (Jensen and Meckling, 1976). Principal Stewardship Theory (PST) informs the behaviours of stewards who gain more utility from pro-organisational, collectivistic behaviours than individualistic, self-serving behaviours (Donaldson and Davis, 1991). A Variable Systems Model (VSM) articulates the structure required by organisations to maintain viability in complex and dynamic environments (Davis, Schoorman, and Donaldson, 2018). Conflicts between PAT and PST enable different interpretations of the Variable System Model (2.1).

## 1.1 Principal Theories: Stewardship vs Agency

In general terms, the stewards and agents may interpret the interactions between systems and linkages differently at ExxonMobil Australia. Stewards would recognise the various linkages between exploration, extraction, processing and commercialisation of hydrocarbon assets as integral to business performance. Each resource unit employee and manager (System 1: Drilling, Wells etc.) will uphold their integrity and communicate both good and bad outcomes, e.g. Safety incidents, NPV negative projects, failed negotiations with governments or private consortiums when executing gas contracts. The rationale behind this transparency is an increase in pro-organisational, collectivistic outcomes to derive utility. The Lead Country Manager, Resource Unit Managers, Finance Managers, and Legal Managers will be across most business needs and issues, seeking support from the global policy and intelligence systems if required.

Agents may not be so transparent. The individualistic, self-serving actions under PAT may interpret the model differently. They may game the linkages (a subset described in 1.2) only to communicate positive outcomes. For example, only communicate information meeting compliance through command channels, positive information when resource bargaining or change audit information in the audit channel to reflect good financial outcomes. Progression/promotion at ExxonMobil Australia (and other large corporates) aligns with the financial performance and the benefits you generate for the company or resource unit (system one). Additionally, agents in system one may see a disconnect from the global organisation (Global Executive Team, Board of Directors) as indirectly linked to the Intelligence or Policy systems. Agents may interpret the variable systems model as a set of smaller variable models where linkages solely depend on their place within the

hierarchy i.e. many smaller businesses, not one global business.

## 1.2 Amplifiers & Attenuators

Variety engineering (VE) informs how regulatory processes operate (Beckford, 1993). VE matches the variety of the environment and the regulator through the judicious use of attenuation and amplification (Achterbergh and Vriens, 2011). Attenuation in this context refers to organisational efforts to reduce (attenuate) the variety of the environment. Amplification refers to efforts to increase (amplify) the ability to respond to it (O’Grady, Morlidge, and Rouse, 2016). There are several linkages between systems 2, 3, 3\* with system 1: Command (S1 - S3); Resource bargaining & accountability (S1-S3); Anti-oscillation or Coordination (S1-S2-S3); and Audit (S1-S3\*-S3). Command communicates and manages compliance to legal and corporate requirements and cultural norms. Resource bargaining & accountability supports negotiations about action programs and resourcing and conveys accountability information. Anti-oscillation or Coordination communicates common standards and conventions through guidelines and maintains routine information systems. Audit conveys detailed information about specific aspects of operational performance on an ad-hoc basis (O’Grady et al., 2016).

The diverging methods of maximising utility between stewards and agents affect the provision of attenuators and amplifiers. In the command channel, resource unit managers will regularly amplify legal and corporate requirements in face to face discussions with other units to align compliance across teams under a stewardship mindset. However, under an agency mindset, resource unit managers may only intervene on legal/compliance concerns (attenuate) in their business units when operations affect their unit and amplify compliance with their unit, regardless of the impact on other resource units in system one. Resource unit managers may work together to optimally allocate (amplify) resources, e.g. capital or labour, across units as a steward in the resource bargaining channels. Conversely, an agent may look to maximise resource allocation without considering the needs of other units. In the coordination channel, weekly reporting on performance (attenuator) may be available organisation-wide under stewardship theory but only available to the resource unit under an agency theory. The corporate culture (amplification) either fosters or inhibits information sharing/group problem solving using stewardship or agency theory, respectively. In the audit/monitoring channel, the prompt publication of internal audits (amplifier) helps diagnose problems under stewardship or hide results to fix issues before publication delaying diagnosis under an agency theory.

In summary, there are different interpretations of the variable system model and inclusion of different attenuators and amplifiers, depending on principal stewardship or agency theory at ExxonMobil Australia.

## 2 Appendix

### 2.1 Variable Systems Model - NYSE: XOM

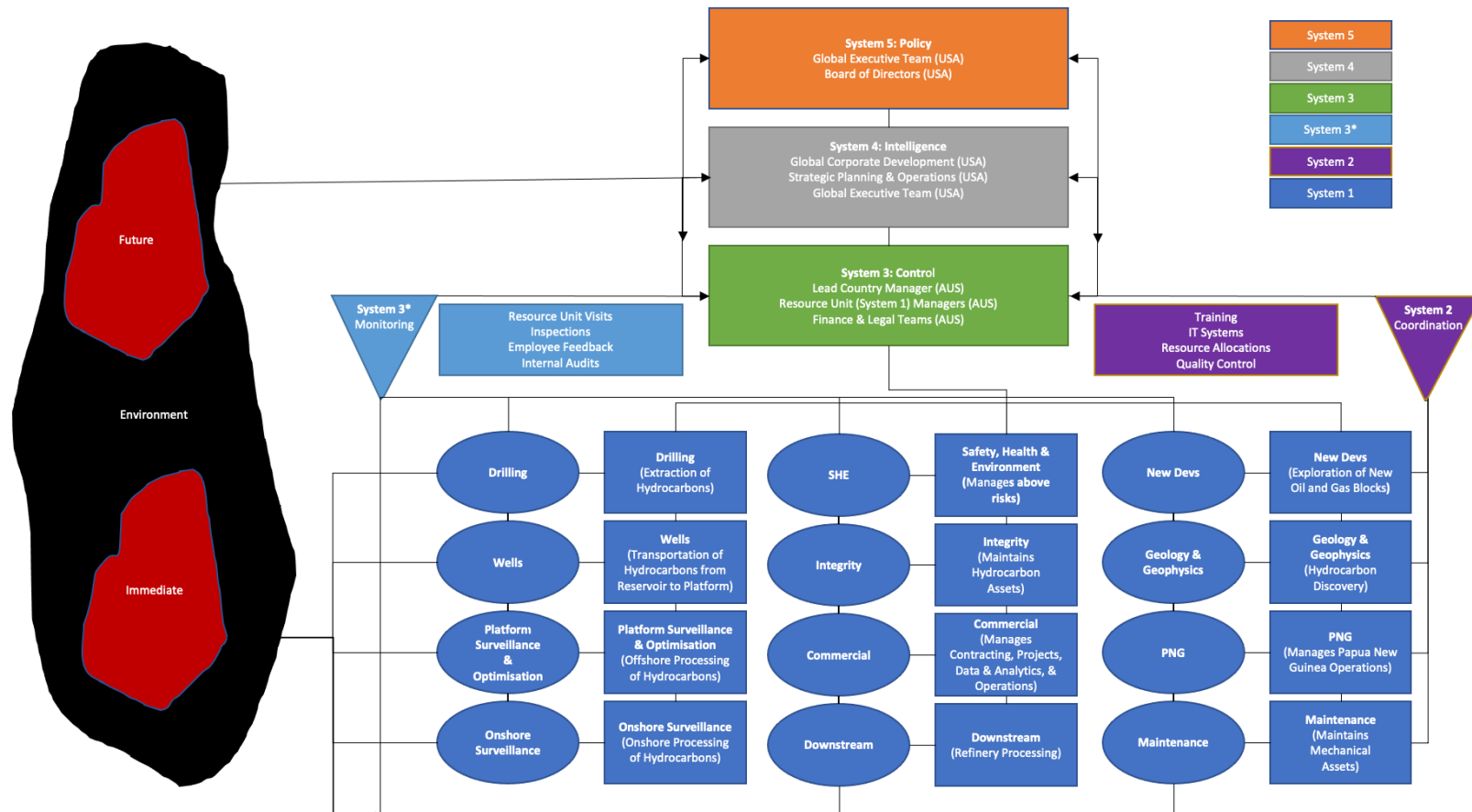


Figure 1: ExxonMobil Australia

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