



# Innovation Update

## NPD Strategy Series

## Beyond Stage-Gate<sup>®</sup> - Automating Innovation

The use of Stage-Gate<sup>®</sup> processes to manage innovation is widely accepted as the most effective way to manage innovation risk. Adoption of gate based innovation processes by US Fortune 500 companies is now estimated to be in excess of 75%.

Australasian companies lag the US in their adoption of Stage Gate<sup>®</sup> automated systems although many companies have recently introduced manual processes. In implementing Stage-Gate, it is common to struggle to gain process acceptance and adherence across the organization. While manual systems are a logical starting point for many companies, their limitations become quickly apparent as the number of projects and stage gate users grows. With the maturation of Stage-Gate use comes the development of multiple Stage-Gate processes for “Incremental” projects, “Fast Track” projects (3 Stage) and “Full Development” projects (5 Stage). The barrier to increased process acceptance lies in overcoming the inefficiencies of running a manual stage gate process including:

- Variation in process consistency
- Poor process adherence
- Lack of visibility of project status
- Limited accountability for project deliverables
- Duplication of data entry
- Difficulty in managing multiple versions of documents
- Limitations on managing data access and security of R+D information
- Inability to extract project data for portfolio reports

Automation systems provide significant benefits including:

### **Database Information Storage**

Acting as a central repository for all R+D information, a single database maxi-

**Best practice companies are using systems which manage the workflow of projects and allow information roll-ups of data into integrated product portfolio reports.**

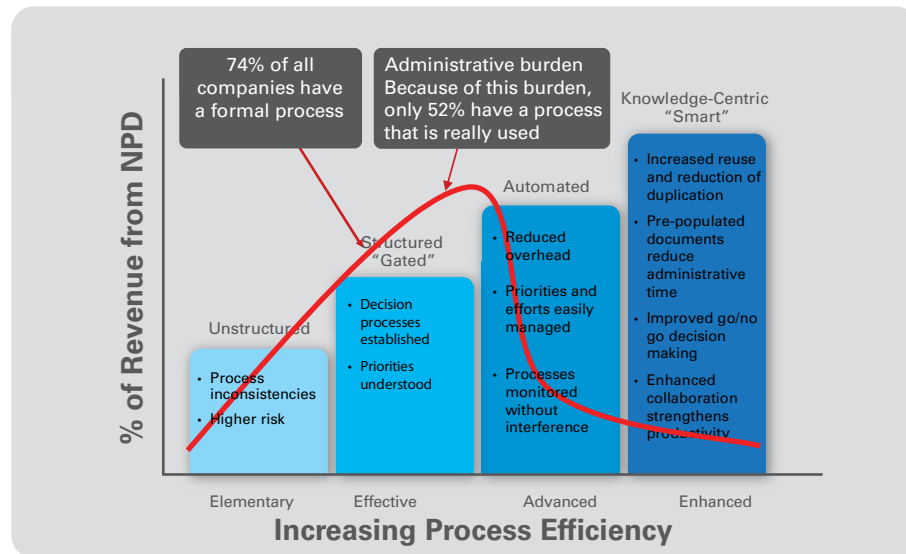
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-mizes the potential for information retention, accessibility and re-use. Coupled with a powerful search engine, this enables effective knowledge management in the information intensive world of product innovation.

### Security

Overlaying a database system with an effective security framework for information access management ensures that the right information is available to the right people at all times. Striking a balance between freedom of access and controlled access should be enabled through a matrix management framework.

### Evolution of the Product Development Process



### Remote Access

The use of a server based information storage system coupled with a web-browser interface affords ease of access from multiple locations and for remote users.

### Down-loadable documents

The creation of standardized document templates also allows for them to be down-loaded for off-line work. Intelligent document marking ensures that documents saved back into the database are saved to the same project location from which they were accessed.

### Publishing Control

Deliverables in draft mode should be accessible to all team members but remain invisible to the reporting process until published.

### Smart Documents

One time data entry can be enhanced by the creation of smart documents which extract key information from project deliverables for inclusion in executive summaries and Gate Documents. Examples of Smart Documents include the auto-preparation of Gate presentations from deliverable input.

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### Version Control

The ability to create and work with multiple versions of a document facilitates scenario planning. Although the selected version is published for review, alternate versions should remain accessible within the system.

### Workflow Mapping

Ease of use is facilitated by the use of graphic representations of the workflow through the process. Process models vary according to the process being used and should include key indicators such as locked stages and gate decisions.

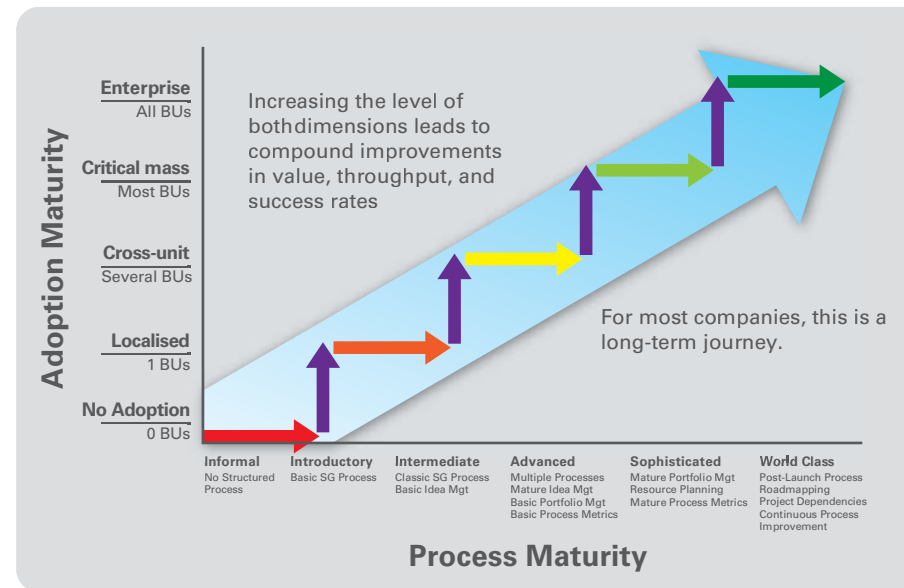
### Role based information display

The user interface of systems should vary based upon the role of the user. Whether the user is a team member, team leader OR gate keeper, information should be made available in a role based view for complete ease of use.

### Multiple process models

As companies mature in their use of the Stage gate process they quickly realize the need to create multiple process models. The creation of a 5-Stage process is valid for new to company projects or for other projects where the risk is high. For the majority of projects (70% of projects are typically reported as incremental changes to existing products.), a simplified Stage Gate process with a reduced number of Gates or decision points is required.

### Maturity Model for Innovation Process Governance



### Locked Deliverables

One of the challenges facing any development team is accountability for forecasts. One of the benefits of a system which supports this requirement is the ability for the team leader to lock deliverables. This negates any ability to overwrite data at subsequent stages ensuring a focus on the quality of our decision making.

While the Excel spreadsheet represents a great way to prepare lists, product development is also about process models and process flow.



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## About the author: Gerard Ryan

Gerard Ryan is the Managing Director of Prodex Systems and a specialist in the field of New Product Development Management. Gerard's work focuses on achieving sustainable organisational change delivered through the implementation of practices, which are tailored to the needs of individual companies. Over the last 15 years Gerard has worked with the management teams of more than 300 leading Australian and multi-national companies in the implementation of idea, Stage Gate and Portfolio Management systems. The results of which have included an increase in productivity in new product development, halving failure rates of new products and reducing time to market by 40%.

## Reporting Wizard

The use of a reporting wizard allows the cross comparison of ANY data from within the database. Standard reports should be generated as product portfolio charts and updated with real-time project information.

## Beyond Spreadsheets

While the Excel spreadsheet represents a great way to prepare lists, product development is also about process models and process flow. For many companies the spreadsheet is THE system for managing information.

Best practice companies are using systems which manage the workflow of projects along alternate process models while ensuring the management of data security and access. This extraction and sharing of information allows the roll-up of data into integrated product portfolio reports. These reports DO use the functionality enabled by Excel to represent the information as it is extracted from the data base.

With the combined benefits of effective knowledge management, database storage, security, access, workflow mapping, data management and reporting, systems such as Sopheon's Accolade offer best practice new product development management in configurable solutions which can be tailored to meet the needs of many smaller businesses.

## Gerard Ryan

Managing Director - Prodex Systems

For more articles in the NPD Strategy, Process, Resource and Technology series, visit our website at [www.prodex.com.au/innovation update](http://www.prodex.com.au/innovation update)

## About Prodex

Prodex Systems is a specialist provider of Consulting, Training and Software Implementation services which facilitate best practice management of new product development. Our consulting approach is based upon global best-practice methodologies and our consulting assignments include the implementation of idea, Stage-Gate® and Product Portfolio Management systems. We work with senior management teams to:

- Develop strategy to accelerate business growth through new products
- Implement processes which effectively manage new product risk
- Train cross-functional development teams in NPD Best practices.

Prodex is the Australian reseller of the Accolade suite of software modules by Sopheon for Integrated management of the product innovation process.

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