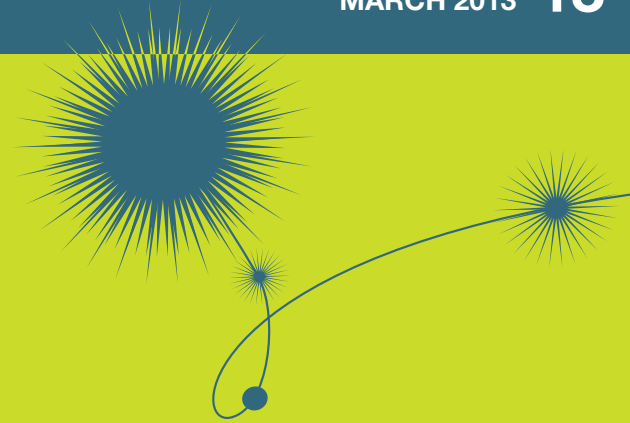


# Stage-gate or straitjacket; how too much structure can be bad for innovation!



## Authors:



Dr Peter Robbins  
(faculty member at  
NUI Maynooth)



Prof Colm O'Gorman  
(Associate Dean  
for Research, DCU)

Further information on this research  
is available from Peter Robbins  
at [peter.robbs@nuim.ie](mailto:peter.robbs@nuim.ie) or  
Colm O'Gorman at [colm.ogorman@dcu.ie](mailto:colm.ogorman@dcu.ie)

## Summary

The new product or service development (NPD/NSD) process is arguably the most important dynamic capability within a firm, with success at innovation being vital not only for firm success but also for survival. Despite this, little is known about innovation in Ireland; specifically, about how organisations manage for innovation. Auditing 347 firms across numerous sectors in Ireland our research finds that the majority of firms do not have a formal innovation process with service sector firms being the least likely to have a formalised process. Yet, clear evidence of the benefits of having an innovation process exist, with these being most evident in the launch and diffusion of innovations. At the same time, firms without a process are more successful in the ideation, or idea generation phase with these firms also having a better record in creating 'new to the market' ideas than firms who conform to an a-priori process.

### Background:

Despite researchers and policymakers identifying innovation as important, up to now there has been no simple way for businesses to assess their individual capability at this key management function. It is argued that to improve innovation, executives need to view the process of transforming ideas into commercial outputs as an integrated flow or value chain for transforming raw materials (or ideas) into finished goods (innovations). But without having an audit, how can companies know if they are good at innovation, or more specifically, where on the innovation journey or value chain they have a strength or weakness.

The stages of the innovation process are commonly referred to as the Innovation Value Chain (IVC) and are broken down into the following stages:

(i) Idea generation: linked to organisational creativity, this stage includes the initiation, identification or discovery of something novel whether

that is an idea, a technology or a process that is new to the organisational setting.

(ii) Idea conversion: here ideas arising from the first stage are developed further. This includes selecting, sifting, ranking and prioritising ideas for funding (or resourcing) with the aim of developing these into products, services or processes.

(iii) Idea diffusion: at this stage the priority is on diffusing, exploiting or implementing the products, services or processes either internal or externally through the launch of new products or services.

The purpose of this research was to examine the extent to which firms in Ireland perceived innovation as a process, what mechanisms they had in place to manage this process, and what effect the presence of absence of these mechanisms had on innovation at the different stages of the innovation process.

## Research Method

A survey of firms in Ireland was conducted to examine the nature of the innovation process. The majority of firms responding to the survey (66%) had less than 50 employees with 17% having between 50 and 250 and 21% with greater than 250 employees. Responses were received from across the economic sectors with 80% of firms being indigenous and 20% foreign owned. As the sampling method required people to self-select for the survey, it is perhaps not surprising that all respondents reported that they had introduced a significant innovation within the previous three years. The same is therefore biased towards innovators and provides an insight into the use of an innovation process in innovating firms.

## Key Findings

- **Managing Idea Generation** - Firms in Ireland depend heavily on the imagination and ideas of their own people for innovation. 60% agreed that people within their own company/unit regularly come up with lots of good ideas. Although almost all of the firms surveyed (94%) reported that they collaborate with external partners, only half of the firms identified these external sources as providing useful information for innovation.

In larger organisations in particular, it appears that culture is more of a barrier to innovation than in other firms. Overall, original ideas are being presented within firms by their staff but there may be an over-reliance on internally generated ideas at the expense of a more open approach.

- **Having an Innovation Process** – Despite evidence pointing to an innovation process being positively related to innovation success, the

majority of firms surveyed did not have an innovation process. Only 29% of indigenous Irish firms had an innovation process compared to 37% of foreign subsidiaries. For firms providing an intangible service, the likelihood of having an innovation process is even lower, supporting the idea that service innovation both in terms of research and practice is not as well evolved as product development.

Our survey shows that (approximately) two thirds of organisations self-reporting as successful innovators do not have an ‘innovation architecture’ in place. In other words, they don’t have an innovation strategy, they don’t have a dedicated innovation process, they don’t have innovation metrics, they don’t have an R&D budget nor do they have a dedicated team leader for their innovation projects. Given that these factors have all been shown to have a positive correlation on innovation performance one can only assume that the performance of Irish firms has the potential to be considerably enhanced should these practices gain traction.

- **Implications of having an innovation process** - Our findings point to a worrying trend in NPD/NSD in Ireland: the vast majority of innovation projects do not complete on time. 63% reported that their projects don’t finish on time with this proportion being even higher (71%) for firms without a formal innovation process. This suggests that Irish firms are having difficulty managing innovation projects and even where an innovation process exists, this does not guarantee effectiveness.

Firms without an innovation process also acknowledged that they were ‘slow to roll out new products’ and

furthermore, at the point of product or service launch, they did not penetrate all the possible channels of distribution so the market launch or introduction was sub optimal. This is an issue for 68% of firms without a formal innovation process. This highlights the advantages of having a process for the third stage of the IVC – idea diffusion. Against these findings of a negative relationship between innovation process and innovation performance, some evidence was found that those companies who didn’t have a process in place were 15% more likely to introduce new, to the market innovations than the average respondent. This outcome is consistent with prior research indicating that creativity flourishes in a more open, less structured environment.

In summary, it seems that the absence of a process may encourage more novel ideas. However, this needs to be weighed against the increased likelihood of an over-run in the project (time and/or cost) as well as an increased likelihood of a disappointing outcome at launch.

## Implications:

Most firms who describe themselves as successful at innovation do not have the structures and processes in place which might help further enhance their declared success. These elements of strategy, process, R&D resources, dedicated leadership and metrics for innovation are more likely to be found in foreign owned organisations. However, the lack of such processes does not seem to be a barrier in generating highly original ideas that are new to the market. Hence, the value of having the structures and processes seems to be greater after the ‘fuzzy-front-end’ when the focus turns from invention to implementation.

## About us

The InterTradeIreland All-Island Innovation Programme - Community of Researchers is an initiative to bring together academics, postgraduate students, policy makers and business people who are interested in innovation in Ireland. We aim to ‘create a virtual community to strengthen innovation studies research in Ireland and its contribution to strategy, practice and policy.’ This research briefing series is one way of achieving this aim along with meetings, workshops and postgraduate research awards.

For more information about the InterTradeIreland All-Island Innovation Programme and the Community of Researchers visit [www.intertradeireland.com/all-island-innovation-programme/](http://www.intertradeireland.com/all-island-innovation-programme/) or you can contact Bernadette McGahon on 028 3083 4168 (048 from Ireland).



The Trade and Business Development Body  
The Old Gasworks Business Park  
Kilmorey Street, Newry, Co. Down BT34 2DE

Tel: 028 3083 4100 (048 from Ireland)  
Fax: 028 3083 4155 (048 from Ireland)  
Textphone: 028 3083 4169 (048 from Ireland)  
Email: [info@intertradeireland.com](mailto:info@intertradeireland.com)  
Web: [intertradeireland.com](http://intertradeireland.com)