

Journal of Academic Research and Innovation (JARI)



General Style Guide for JARI submissions

Length Less than 25 pages Please (wordcount is not always a good guide)

Font Calibri (body)

Font Size 18/16 BOLD for main title and sub-title (Not in capitals)

14 Bold for headings: Authors, Abstract, Key Words - and for main headings

12 for text, 1.5 spacing

11 for Abstract, single-spaced

11 for image titles

11 for References (unless auto-formatting uses a different size and style)

12 Bold for second level headings

12 Bold italics for third level headings

12 plain for fourth level headings

(no underlining anywhere Please)

Text colour Black

Images colour as visually appropriate for easy understanding (samples)

Image titles centred at bottom, bold, in italics

Margins even

Text Justified (unless it is technically unsuitable)

Numbering 1, 2, 3 etc for main headings, i. ii. iii. or a. b. c. for lists

Page numbering bottom centre

Footnotes as discipline/field

Referencing style as discipline/field

Reference list as discipline/field or auto-formatted

Author/s name/s as preferred, with institutional/organisational affiliation

Author profile as preferred

SAMPLE 1

Mind the gap between research findings and policy change

Authors

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Abstract

This discursive article is intended as an advisory to novice scholar-researchers working in the field of policy change. It defines key policy change terms, presents a matrix of fifteen key theories of policy change, and explains the roles of policy advocate/entrepreneur and political entrepreneur in the process.

1. Introduction

Policy change and policy reform literature contains a complicated mix of framework theories and models. Most theories evolved separately and were not designed with comparability or synthesis in mind. Different theories use relatively different worldviews, frames of references, foci and conceptual definitions. Their assumptions and features may either complement or contradict each other, and they may even attach different meanings to the same concepts. So, how does the scholar-researcher select coherent and conceptually sustainable policy change theory to underpin their research paradigm, research design and analytical framework so that there may be a policy change impact as a result? How does the policy researcher transition to policy change agent?

Enhancing the Capabilities of Fluid Bed Granulation through Process Automation and Digitalisation

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Figure 1: SmartX-equipped fluid bed system at the University of Limerick

Abstract

Developers, Data Scientists and Data Engineers (Dukart, et al., 2020). Drug manufacturing processes This paper describes a PAT-enabled, digitalised, and automated fluid bed granulation system. A multichannel Near-Infrared (NIR) spectrophotometer and a direct imaging particle size and shape analyser in constant dialogue with the SmartX no-code/low-code platform provide a ground-breaking process automation toolset now located at the Bernal Institute in the University of Limerick. Two sets of results are presented for this study, from two iterations of the Advance Dynamic Process Control (ADPC) controller application. The results demonstrate the direct measurement and control of the product's critical quality attributes through digitality enabled feedback control of processing setpoints and parameters. The platform controlled the particle size more tightly compared to non-automated control and a more accurate measurement-driven process endpoint for moisture content was achieved. Implementing a digitally enabled control approach can significantly reduce batch to batch variation and greatly improve process performance and product consistency.

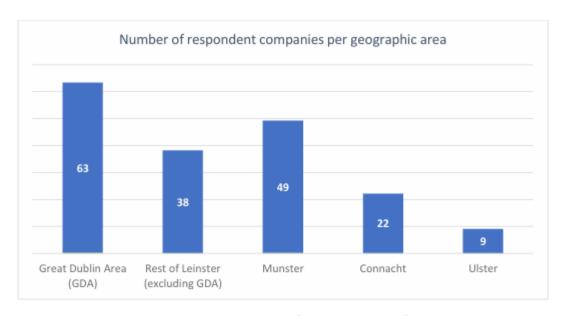


Figure 4: Respondents per geographic area

One of the key objectives of the employer survey was to determine the number of apprentices trained, the number of people directly employed and the number of people employed on a sub-contract basis amongst respondent firms. Figure 5 illustrates the trends in this regard.

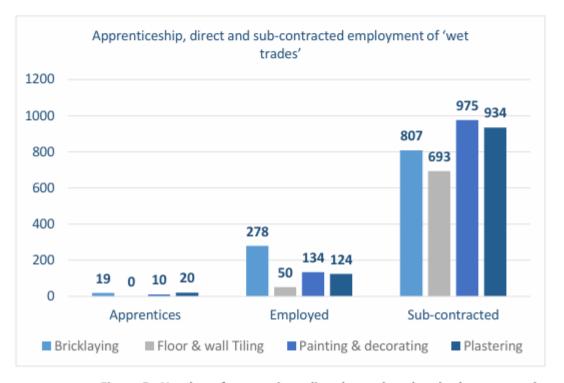


Figure 5: Number of apprentices, directly employed and sub-contracted