

New Product Development: Delivering Evidence of What Works

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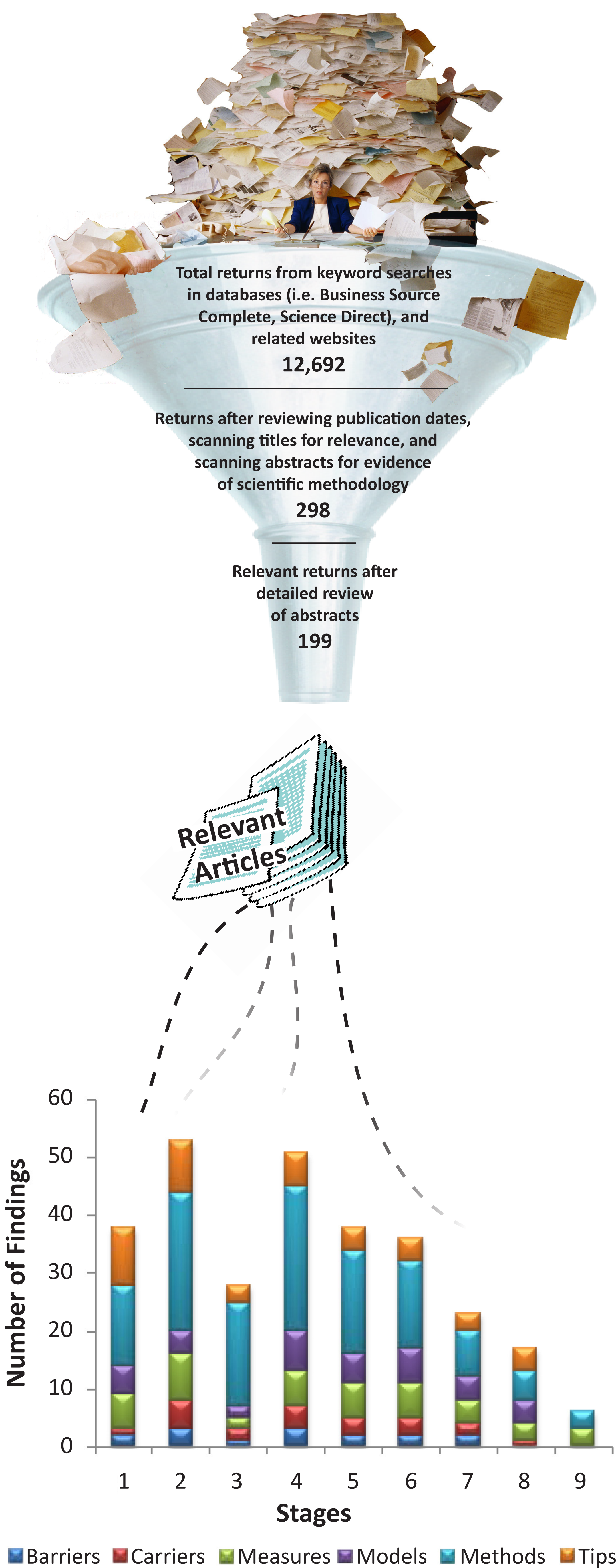
MOTIVATION:

- Many high-quality technological discoveries from applied research do not make it to the marketplace.
- Researchers may not know how to move their discoveries out of the lab.
- Researchers may not understand how their role fits into the larger context of the new product development (NPD) process.
- Lack of communication between stakeholders results in the generation of unwanted, unneeded, or impractical discoveries.
- Manufacturers are interested in new NPD practices; however do not have the time to sift through thousands of resources.

RESEARCH OBJECTIVES:

- To create a user friendly and action oriented model (***Need to Knowledge Model***) detailing the steps involved in the New Product Development Process by:
 - Creating a stage/gate-style model linking the activities involved in generating research discoveries, prototype inventions, and product innovations.
 - Defining an opportunity to integrate a formal research process into new product development activities.
 - Integrating Knowledge to Action (KTA) concepts at key stages within the NPD process to facilitate communication between stakeholder groups.
- Identify, read, and classify current literature, which highlights issues relating to the steps within the ***Need to Knowledge Model***.
- Extract important and actionable information (findings) from literature that substantiates the ***Need to Knowledge Model***.
- Create a searchable database to house findings extracted from literature.
- Produce summaries of information and listings of tools that expedite the acquisition of new knowledge for busy professionals.
- Review and identify steps that are lacking substantiated findings.

Scoping Review Process



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PREDICTIONS:

- Practice Implications:
 - Researchers will be able to better understand where and how their work fits into the NPD process.
 - Communication and utilization of research will improve as practitioners implement KTA concepts in their work.
 - Manufacturers will gain a better appreciation of the value researchers can bring to the product development process.
 - Product development professionals will save time and money when making improvements to their NPD processes.
- Policy Implications:
 - Agencies granting funding for applied research activities can use the ***Need to Knowledge Model*** as benchmarking tool to ensure that they are funding viable development projects.

RESULTS:

- Number of Relevant Articles: 199
- Total number of findings: 788

	Primary Findings 547 Total	Secondary Findings 241 Total
Barriers	31	15
Carriers	37	25
Measures	47	8
Models	88	52
Methods	203	63
Tips	141	78

FUTURE WORK:

- Complete secondary analysis of findings for each stage and step
- Identify gaps
- Report findings
- Improve usability of knowledge base
- Initiate a second scoping review to gather information pertaining to gaps
- To add new research