

Engineering Management Journal >

Volume 13, 2001 - [Issue 3](#)

88 Views | 21 CrossRef citations to date | 3 Altmetric

Original Articles

Using Science and Technology Indicators to Manage R&D as a Business

Patrick Thomas & G. Steven McMillan 

Pages 9-14 | Published online: 16 Apr 2015

 Cite this article  <https://doi.org/10.1080/10429247.2001.11415121>

Sample our
Engineering & Technology
Journals
>> **Sign in here** to start your access
to the latest two volumes for 14 days

 References  Citations  Metrics  Reprints & Permissions

[Read this article](#)

 Share

Abstract

The purpose of this article is to develop a method to predict future stock market performance of a company, using its technological quality as measured by its patent portfolio. This is accomplished by using a series of science and technology indicators developed from a unique patent database. Several studies have examined the relationship between various research and development (R&D) metrics and different measures of economic performance, yet few have explored this relationship using market-based measures of performance. Our findings show that an investment model based solely on this group of R&D metrics does substantially better than the Standard and Poor's (S&P) 500 Index.

 [Previous article](#)

[View issue table of contents](#)

[Next article](#) 

Related Research Data

[Global corporate competition: Who's winning, who's losing, and the R&D factor as one reason why](#)

Source: Strategic Management Journal

[Direct validation of citation counts as indicators of industrially important patents](#)

Source: Research Policy

[How R&D Affects Sales Growth, Productivity and Profitability](#)

Source: Research-Technology Management

[Science and Technology as Predictors of Stock Performance](#)

Source: Unknown Repository

[On Patents, R & D, and the Stock Market Rate of Return](#)

Source: Journal of Political Economy

[Managers at Work: How To Talk To Your CEO](#)

Source: Research-Technology Management

[Patents as indicators of corporate technological strength](#)

Source: Research Policy

[Scientific output of small and medium size firms in high-tech industries](#)

Related research

People also read

Recommended articles

Cited by
21

[R&D Performance in Chinese industry](#) >

Gary H. Jefferson et al.

Economics of Innovation and New Technology

Published online: 25 Jan 2007

Information for

[Authors](#)

[R&D professionals](#)

[Editors](#)

[Librarians](#)

[Societies](#)

Opportunities

[Reprints and e-prints](#)

[Advertising solutions](#)

[Accelerated publication](#)

[Corporate access solutions](#)

Open access

[Overview](#)

[Open journals](#)

[Open Select](#)

[Dove Medical Press](#)

[F1000Research](#)

Help and information

[Help and contact](#)

[Newsroom](#)

[All journals](#)

[Books](#)

Keep up to date

Register to receive personalised research and resources by email



Sign me up



Copyright © 2026 Informa UK Limited [Privacy policy](#)

[Cookies](#) [Terms & conditions](#) [Accessibility](#)

Registered in England & Wales No. 01072954
5 Howick Place | London | SW1P 1WG



Taylor & Francis
by informa