

A report from The Economist Intelligence Unit

Ascending cloud: The adoption of cloud computing in five industries

Executive summary



Sponsored by

vmware®

Contents

Introduction	2
Cloud computing—findings for all industries	3
Manufacturing—a special case of cloud adoption	8

Introduction

A new report published today March 1, 2016 by The Economist Intelligence Unit (EIU), sponsored by VMware, predicts that cloud computing will grow at a rapid pace to become a factor in the digitisation of major industries.

- Cloud computing has strong growth potential, with only 7% of all IT and business executives surveyed believing it currently has a pervasive presence across all industries.
- However, a diverse range of global executives predict the rapid growth of cloud in five key industries: banking, retail, manufacturing, education and healthcare. Approximately 70% of panelists expect cloud will be a major factor across their own industry in five years.
- Across all industries, the greatest challenges were seen to be ensuring data security (47% of all executives) and finding qualified personnel to build out and operate cloud systems (35%).

Ascending cloud: The adoption of cloud computing in five industries, sponsored by VMware, is based on a global survey of 360 senior executives who are familiar with cloud computing in their industry and country. The sample was comprised of senior executives, with over half of them from the C-Suite of their companies or non-profit organisations. The panel was divided equally into sub-panels representing the banking, retailing, manufacturing, education and healthcare industries. Developed and developing countries were equally represented in the survey.

For the full report, which contains an analysis of manufacturing, [click here](#). Please [click here](#) for the reports on healthcare and continuing education.

The following is a summary of the key findings of the report. For further information, please contact:

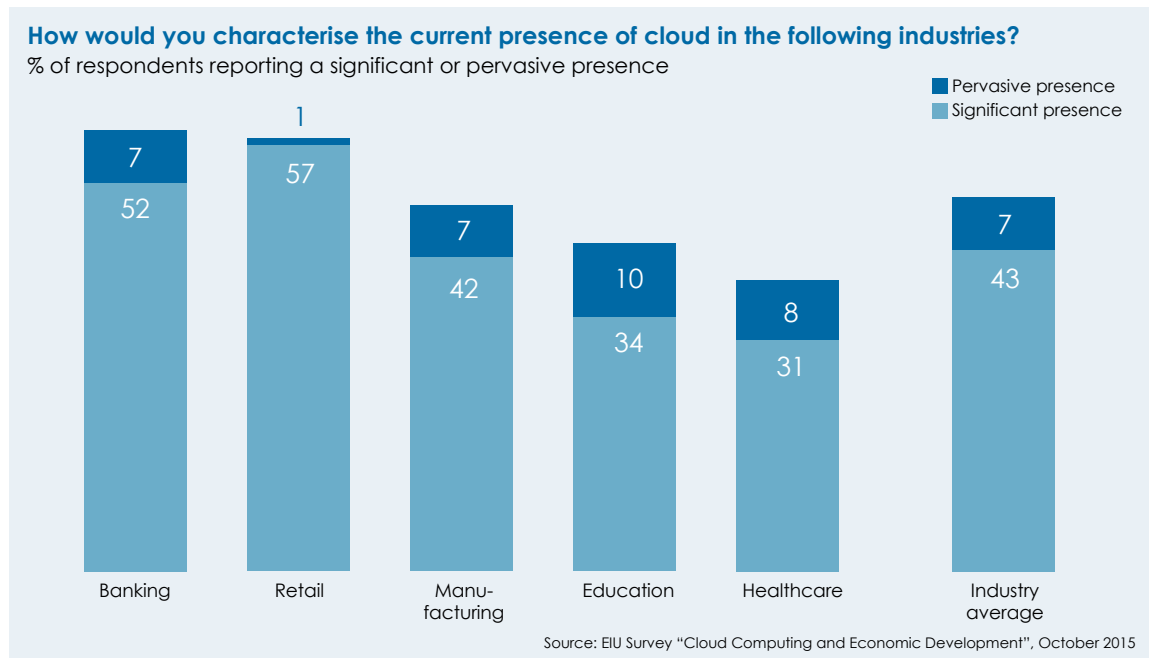
West Coghlan
Senior Editor, Technology
Economist Intelligence Unit
westcoghlan@economist.com

Cloud computing—findings for all industries

1. Current presence of cloud computing

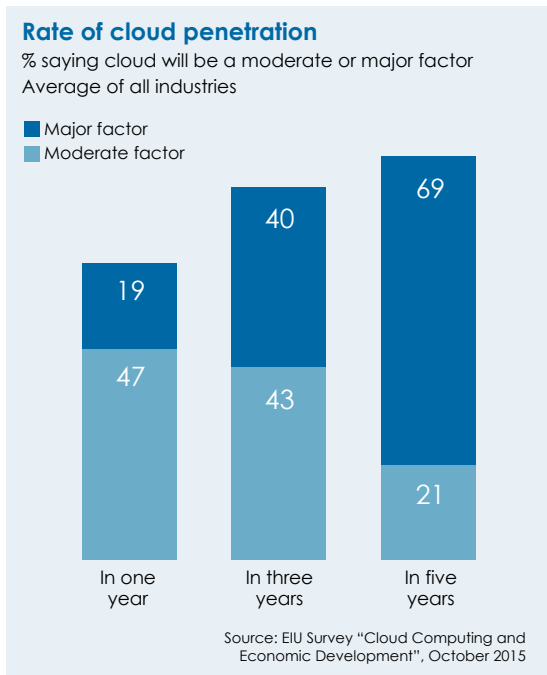
On a global basis, cloud is seen as having a significant current presence (43%), but with significant potential to grow (only 7% of respondents said cloud was pervasive at the current time).

Current rates of cloud penetration differ by industry. Information-based industries such as banking lead in penetration, while “physical” industries such as manufacturing and regulated ones like healthcare and education appear to be adopting cloud more slowly.



2. The growth of cloud across all industries

Cloud is expected to grow rapidly from this relatively low base. Almost 70% of panelists believe that cloud computing will be a major factor across all surveyed industries in five years.



3. The challenges of cloud

The deployment of cloud is seen to have significant challenges. As is the case in many parts of the technology industry, data security is held to be the greatest challenge to the deployment of cloud. Poor infrastructure was seen as a particular challenge in developing countries. The availability of qualified personnel is seen as a challenge across industries on a global basis.

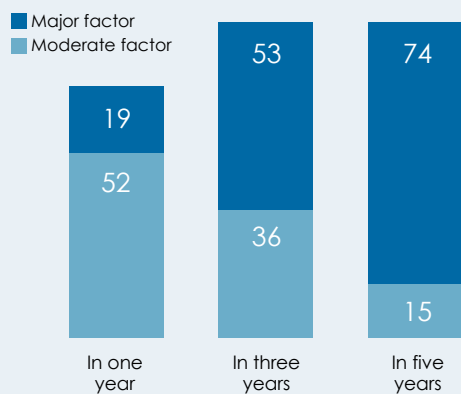


4. Cloud computing and banking

There is an expectation of rapid adoption of cloud in banking—almost three out of four predict cloud will be a major factor in banking in five years. Cloud is expected to be deployed to support a range of banking products, and to enable the extension of banking services to poor and remote populations.

Future cloud penetration of the banking industry

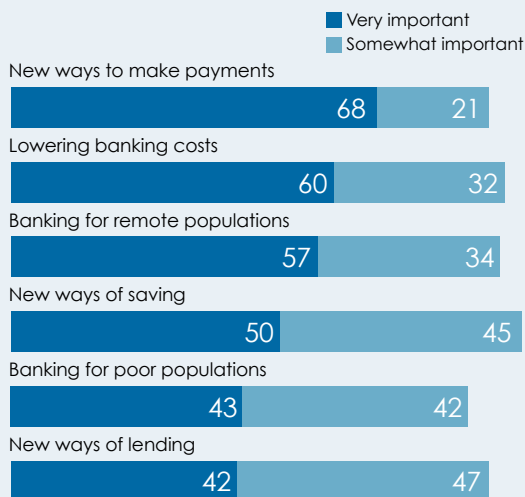
% saying cloud will be a moderate or major factor



Source: EIU Survey "Cloud Computing and Economic Development", October 2015

How important is cloud in supporting sectors of the banking industry?

% saying cloud will be somewhat or very important



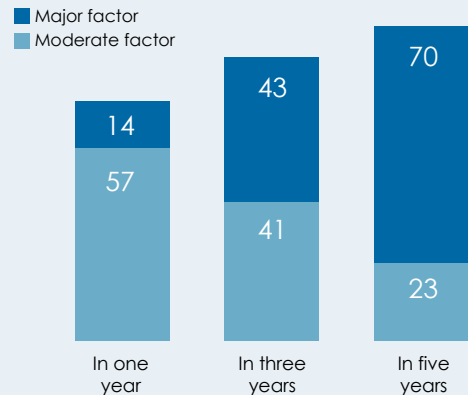
Source: EIU Survey "Cloud Computing and Economic Development", October 2015

5. The impact of cloud on the retail industry

Our retail experts expect a similar pattern of rapid cloud penetration in the retail industry, with 70% of panelists expecting cloud to be a major factor in the industry in five years. From a relatively modest base, the expectation is that cloud will grow five-fold as a major factor in retailing. One of the impacts of cloud appears to be making retailing more consumer-friendly, as a technology being used to increase access, lower prices and reducing costs for the customer.

Future cloud penetration of the retail industry

% saying cloud will be a moderate or major factor



Source: EIU Survey "Cloud Computing and Economic Development", October 2015

How important is cloud in supporting sectors of the retail industry?

% saying cloud will be somewhat or very important



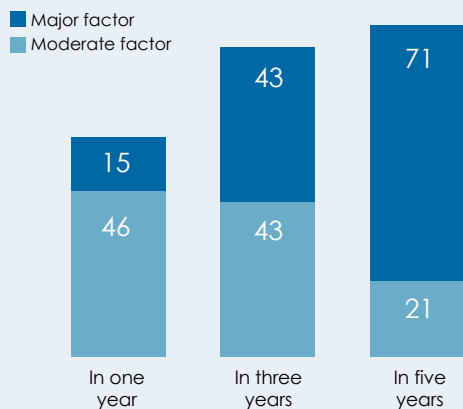
Source: EIU Survey "Cloud Computing and Economic Development", October 2015

6. The impact of cloud on manufacturing

Manufacturing is expected to experience a high rate of cloud penetration, with 71% of panelists projecting it will be a major factor in the industry in five years. Cloud is expected to impact each stage of the manufacturing value chain, from suppliers to distribution to customers.

Future cloud penetration of the manufacturing industry

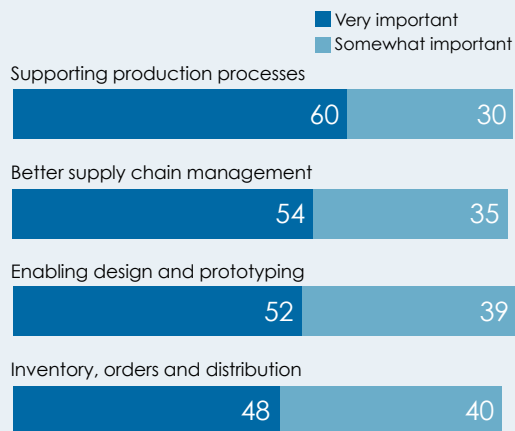
% saying cloud will be a moderate or major factor



Source: EIU Survey "Cloud Computing and Economic Development", October 2015

How important is cloud in supporting sectors of the manufacturing industry?

% saying cloud will be somewhat or very important



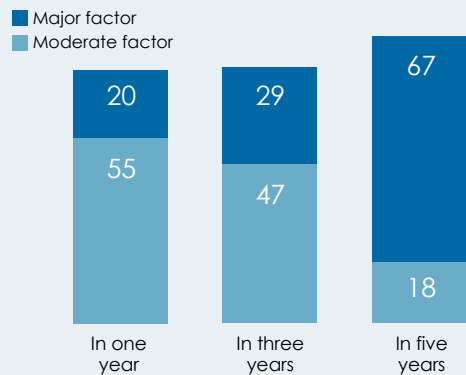
Source: EIU Survey "Cloud Computing and Economic Development", October 2015

7. Cloud computing and education

Education shows a somewhat slower initial adoption rate than other industries, but with acceleration in the 3-5 year timeframe. Possible reasons include a less competitive environment and traditionally slower rates of technology adoption by government.¹ Cloud is expected to impact all sectors of education, but with the greatest impact on higher education.

Future cloud penetration of the education industry

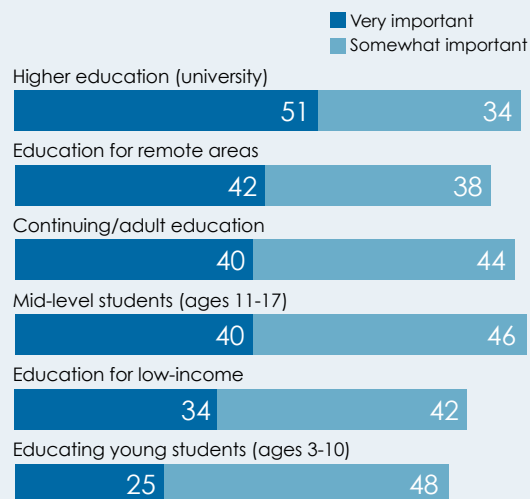
% saying cloud will be a moderate or major factor



Source: EIU Survey "Cloud Computing and Economic Development", October 2015

How important is cloud in supporting sectors of the education industry?

% saying cloud will be somewhat or very important

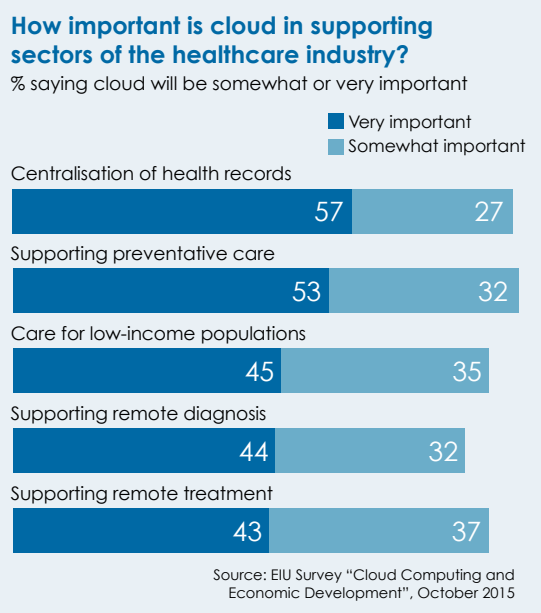
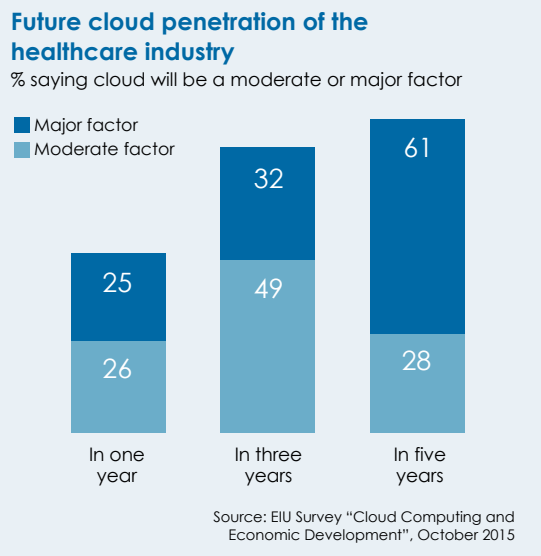


Source: EIU Survey "Cloud Computing and Economic Development", October 2015

1. Information Week, *Public Sector Slow to Adopt Cloud Computing*, June 2012

8. Cloud computing and healthcare

Cloud is expected to become a major factor in healthcare by 61% of healthcare experts. Cloud is geared to support remote diagnostics and treatment, helping to empower the patient with knowledge of their own condition. It may also support the extensive data requirements of preventative care, supporting a long-term industry goal of holistic medicine.



Manufacturing—a special case of cloud adoption

Our panelists were asked for their views on which industry will have most impact on economic growth. By a sizeable margin, manufacturing was expected to make the greatest contribution to economic prosperity. With this in mind, a deeper analysis was made of the impact of cloud on manufacturing. The manufacturing sub-panel was asked to assess cloud's impact on four key stages in the manufacturing value chain—supply chain, design and prototyping, production and distribution to customers.

Which sectors will drive economic growth?

Which of the following do you feel will have the **greatest impact on your country's overall economic prosperity** in the next three years?

(% respondents)



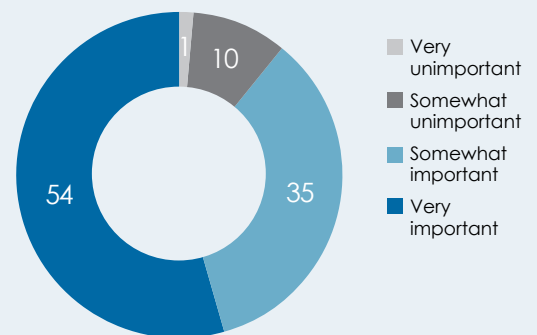
Source: EIU Survey "Cloud Computing and Economic Development", October 2015

1. Cloud and the manufacturing supply chain

Cloud will have a strong impact on supply chain management, with 89% of manufacturing experts saying cloud will be somewhat or very important. Interviews with experts identified cost reduction, expanding the base of suppliers and the ability to track shipments as areas where cloud may make a contribution.

What will be the importance of cloud in manufacturing **supply chain** in one year's time?

(% respondents)

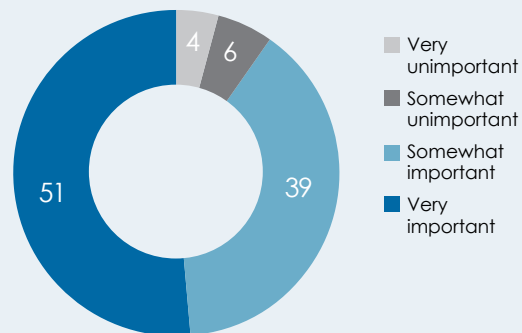


Source: EIU Survey "Cloud Computing and Economic Development", October 2015

2. Cloud and design and prototyping

90% of manufacturing experts predict cloud will be somewhat or very important in the design and prototyping stage of manufacturing. They identified cost reduction, acceleration of time to market and product customisation as activities that could become cloud-enabled.

What will be the importance of cloud in manufacturing **design and prototyping** in one year's time?
(% respondents)

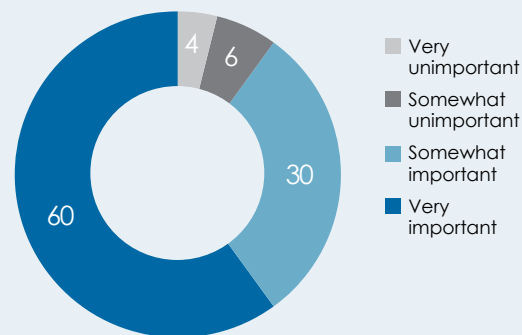


Source: EIU Survey "Cloud Computing and Economic Development", October 2015

3. Cloud computing and manufacturing production

Cloud will also have a significant impact on the production phase, with 90% of manufacturing experts saying cloud will be somewhat or very important. Manufacturing experts identified increased operating efficiencies and boosting manufacturing flexibility as processes that cloud could support.

What will be the importance of cloud in manufacturing **production** in one year's time?
(% respondents)

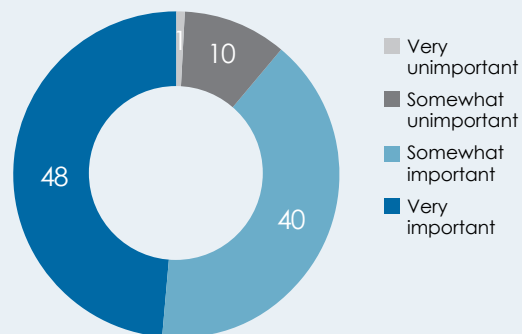


Source: EIU Survey "Cloud Computing and Economic Development", October 2015

4. Cloud and the manufacturing customer

88% of manufacturing experts believe that cloud will be somewhat or very important in the distribution and customer relationships stage of manufacturing. Manufacturing experts identified increased visibility into shipments and increased partnerships between suppliers and customers as two areas that might be supported by cloud computing.

What will be the importance of cloud in manufacturing **distribution and customer relationships** in one year's time?
(% respondents)



Source: EIU Survey "Cloud Computing and Economic Development", October 2015

Whilst every effort has been taken to verify the accuracy of this information, neither The Economist Intelligence Unit Ltd. nor the sponsor of this report can accept any responsibility or liability for reliance by any person on this report or any of the information, opinions or conclusions set out in the report.

London

20 Cabot Square
London
E14 4QW
United Kingdom
Tel: (44.20) 7576 8000
Fax: (44.20) 7576 8476
E-mail: london@eiu.com

New York

750 Third Avenue
5th Floor
New York, NY 10017
United States
Tel: (1.212) 554 0600
Fax: (1.212) 586 0248
E-mail: newyork@eiu.com

Hong Kong

1301 Cityplaza Four
12 Taikoo Wan Road
Taikoo Shing
Hong Kong
Tel: (852) 2585 3888
Fax: (852) 2802 7638
E-mail: hongkong@eiu.com

Geneva

Boulevard des
Tranchées 16
1206 Geneva
Switzerland
Tel: (41) 22 566 2470
Fax: (41) 22 346 93 47
E-mail: geneva@eiu.com