

## Resuming geographic mobility will boost knowledge transfer

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Among the casualties of the COVID-related decline in geographic mobility is effective knowledge transfer, that could have saved billions of dollars to companies across the world. According to research by



Gianmario Verona, Professor of Management and Rector of Bocconi University, knowledge moves across organizational units with people who possess it. Such knowledge transfer, moreover, is particularly important when a unit is introducing new process technologies and can exploit the expertise of people that experienced them in previous assignments

Professor Verona and co-authors Christian Stadler (Warwick Business School) and Constance Helfat (Tuck School of Business) analyzed the performance effects of the transfer of engineers who have expertise in innovative process technologies through the geographic units of one of the largest oil companies in the world. The company is a leader within the industry in the internal development and application of innovative technologies and moves engineers frequently between countries.

The authors singled out 11 innovative technologies used across the <u>company</u>, with country units using on average 1.50 technologies during any engineer assignment, and individual engineers having experience in 3.52 of them.

The scholars collected data on 7,000 well-drilling projects and 30,000 job assignments of individual engineers and showed that an engineer's experience with one additional innovative technology is associated with a 4.2% decrease in costs, or \$12.2 million dollars on average per engineer during an assignment.

"Given that in our sample an engineer has an average of five assignments over nine years, the total costs savings per <u>engineer</u> for additional innovative technology experience are substantial," Prof. Verona says.

The study indicates that country units are less keen on innovation than expected. They are often skeptical that more costly <u>innovative</u> <u>technologies</u> will improve performance and may be reluctant to



introduce an additional element of risk into operations already characterized by uncertainty. Since the decision on which technologies to use is reached by consensus among the engineers working in an oil field, the tacit <a href="knowledge">knowledge</a> and personal initiative of individual engineers who have had prior experience with the technology are key.

"Moving experienced people around may seem expensive," Prof. Verona concludes, "but our research suggests that individuals who bring novel expertise to their organizational units through intrafirm mobility may be important vehicles for organizational learning, helping to diffuse best practices better than remote working collaboration or other arrangements can do."

**More information:** Christian Stadler et al, Transferring Knowledge by Transferring Individuals: Innovative Technology Use and Organizational Performance in Multiunit Firms, *Organization Science* (2021). DOI: 10.1287/orsc.2021.1446

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