Presented by UBM Electronics Group

2015 Embedded Markets Study

Changes in Today's Design, Development & Processing Environments

April 2015

EBN EDN NETWORK EETimes embedded TECHONLINE DataSheets.com UBM

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Purpose and Methodology

- **Purpose:** To profile the findings of the 2015 results of UBM Tech's annual comprehensive survey of the **embedded systems markets worldwide**. Findings include types of technology used, all aspects of the embedded development process, IoT emergence, tools used, work environment, applications, methods/ processes, operating systems used, reasons for using chips and technology, and brands and chips being considered by embedded developers. Many questions in this survey are trended over three to five years.
- **Methodology**: A web-based online survey instrument based on the previous year's survey was developed and implemented by independent research company Wilson Research Group from January 14, 2015 to March 31, 2015 by email invitation.
- **Sample:** E-mail invitations were sent to subscribers to UBM Tech Embedded Brands with reminder invitations sent later. Each invitation included a link to the survey.
- **Returns: 1,807** valid respondents for an overall confidence of 95% +/-2.29%. Confidence levels vary by question. As a guide, confidence for questions with:
  - 1807 respondents = 95% +/- **2.29%** vs. 95% +/- **2.05%** in 2014
  - 1050 respondents = 95% +/- 3.0%
  - 600 respondents = 95% +/- 4.0%
  - 400 respondents = 95% +/- 5.0%

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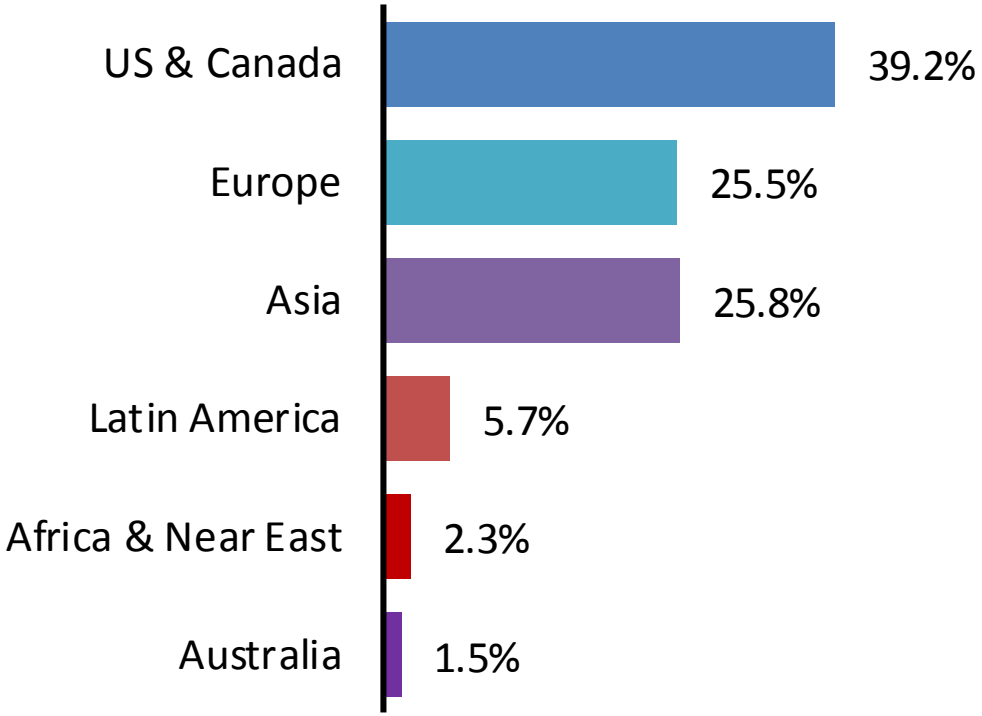
In which region of the world do you reside?



Up 12% from 2014
Significant affect on all data

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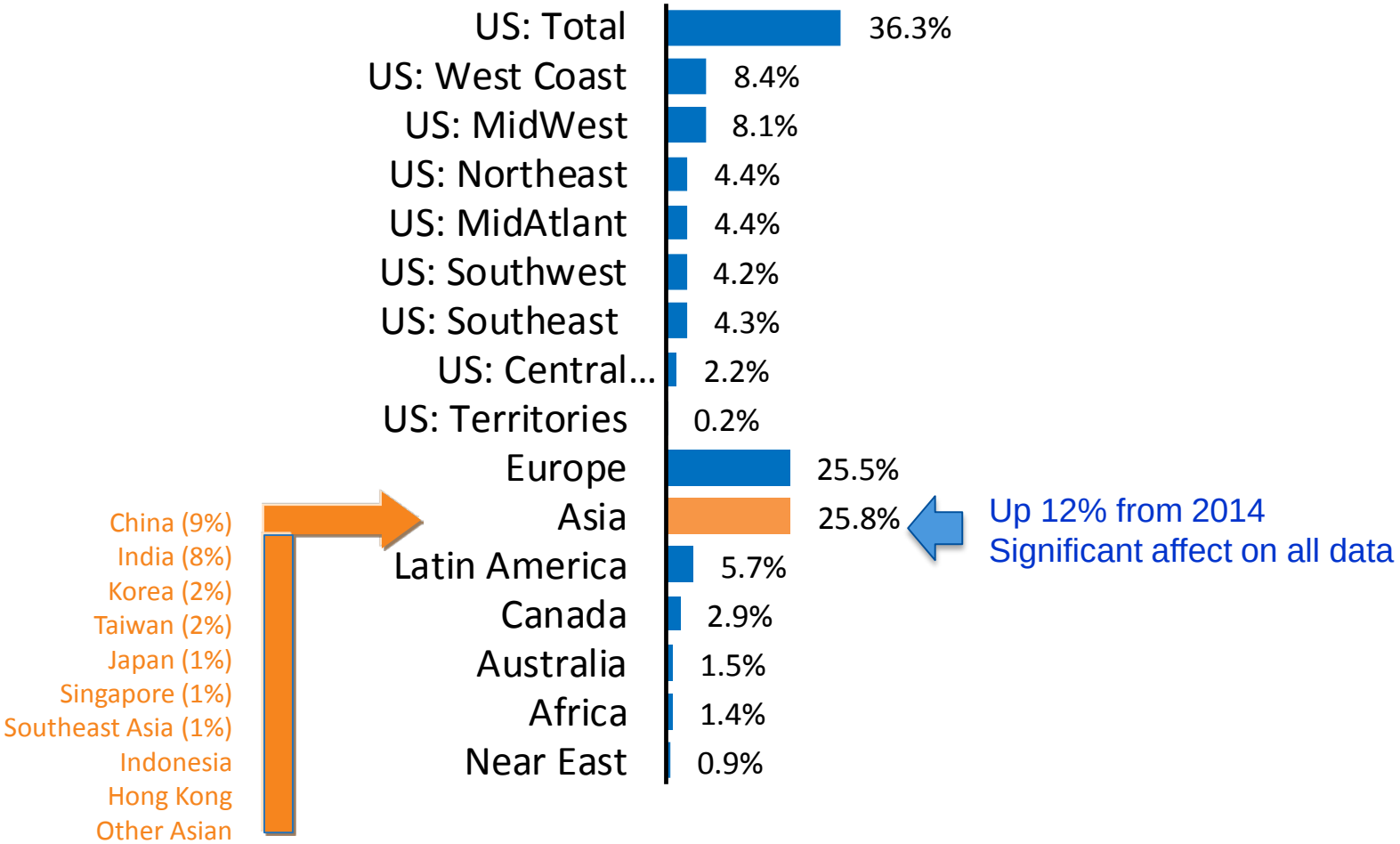
In which region of the world do you reside?



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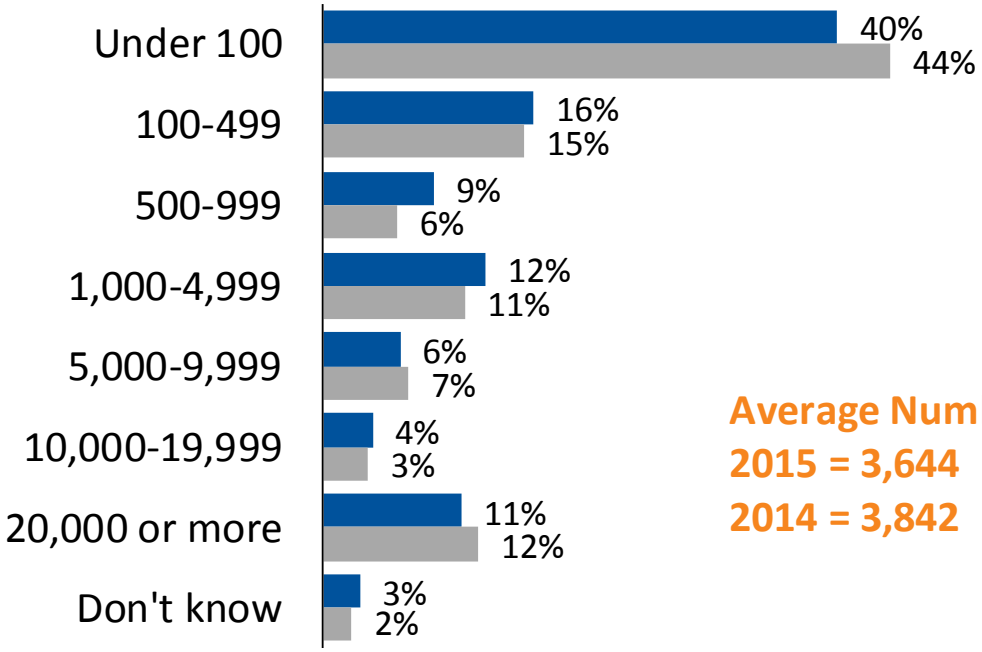
How many employees does your company have at all locations?



Average Number of Employees:
2015 = 3,644
2014 = 3,842

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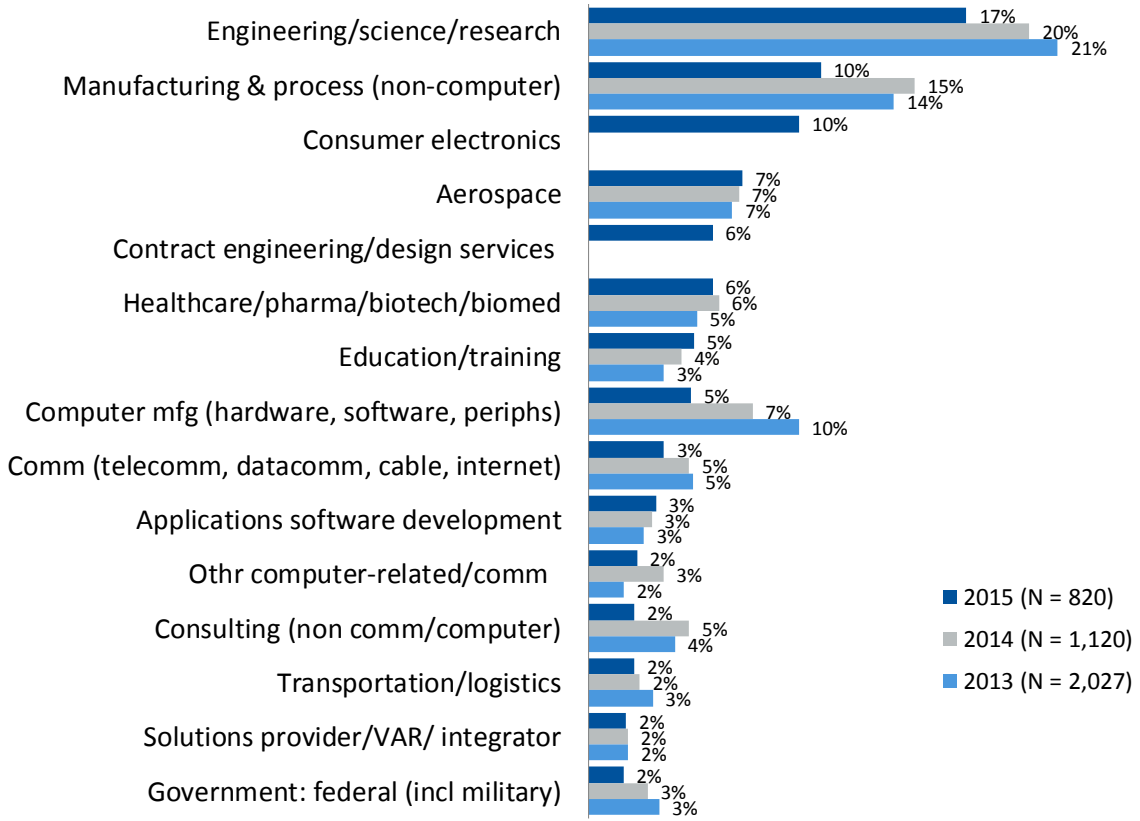
What is your organization's primary business activity?



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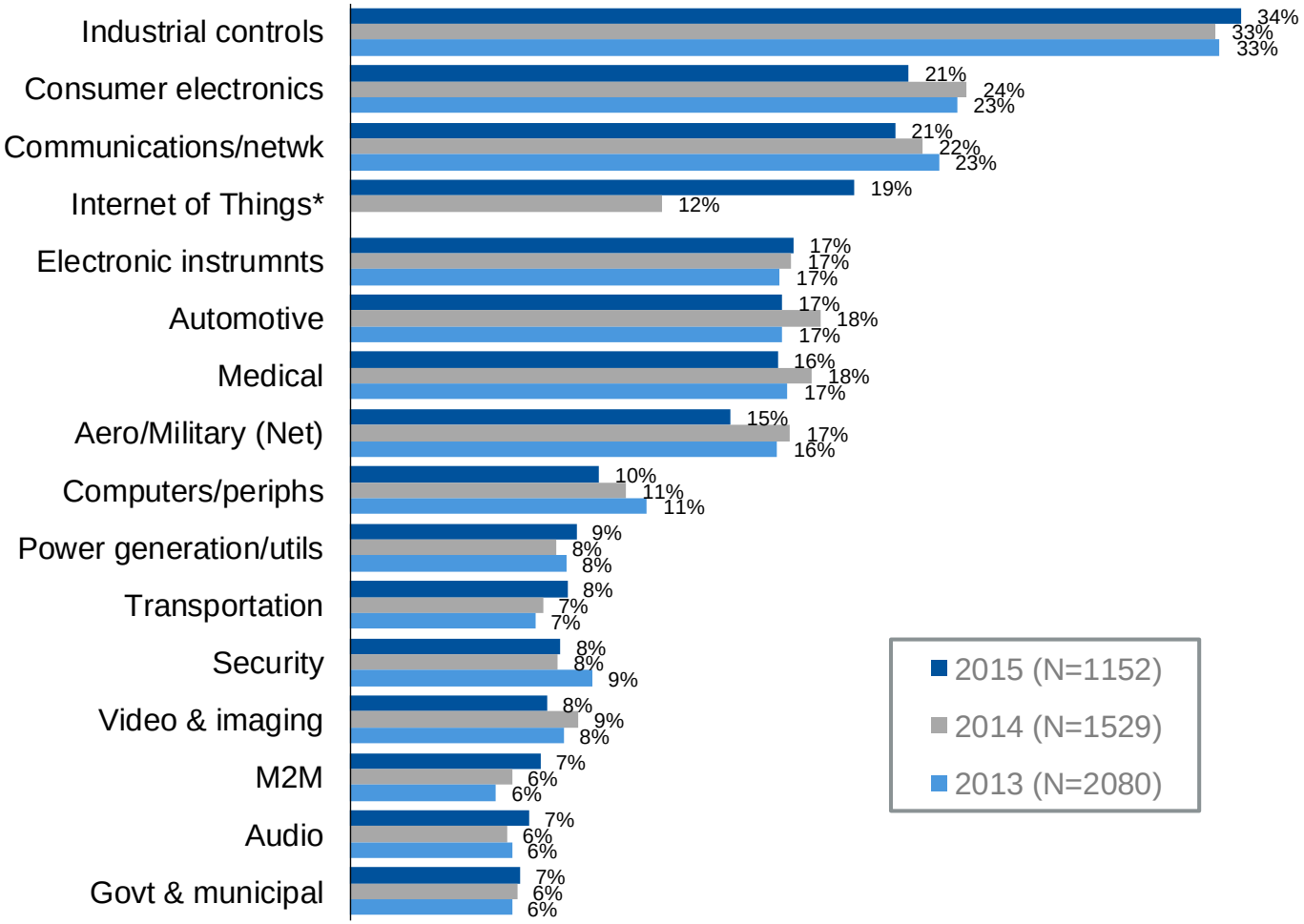
For what types of applications are your embedded projects developed?



* Added in 2015

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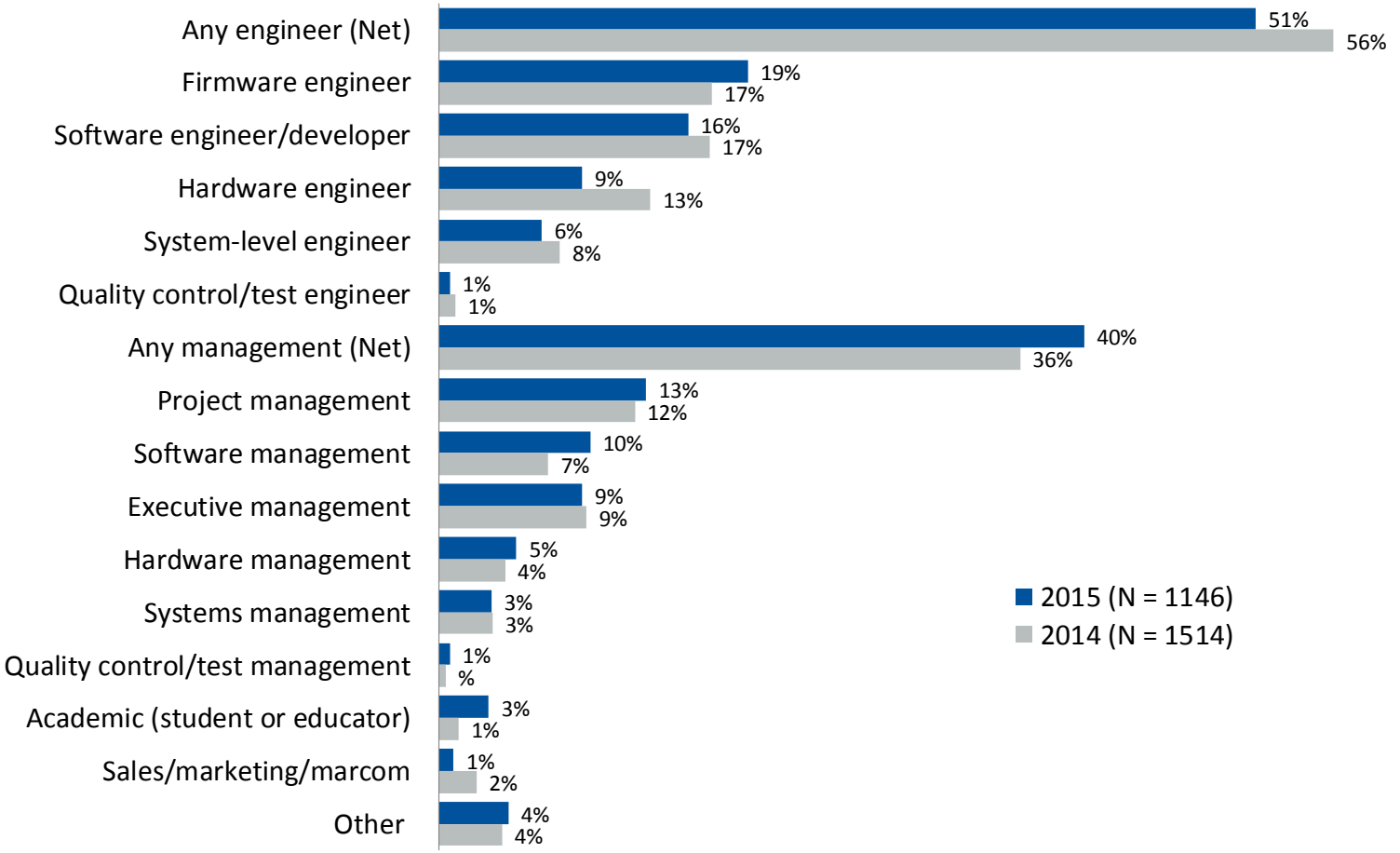
What role do you primarily play in your organization's embedded systems projects



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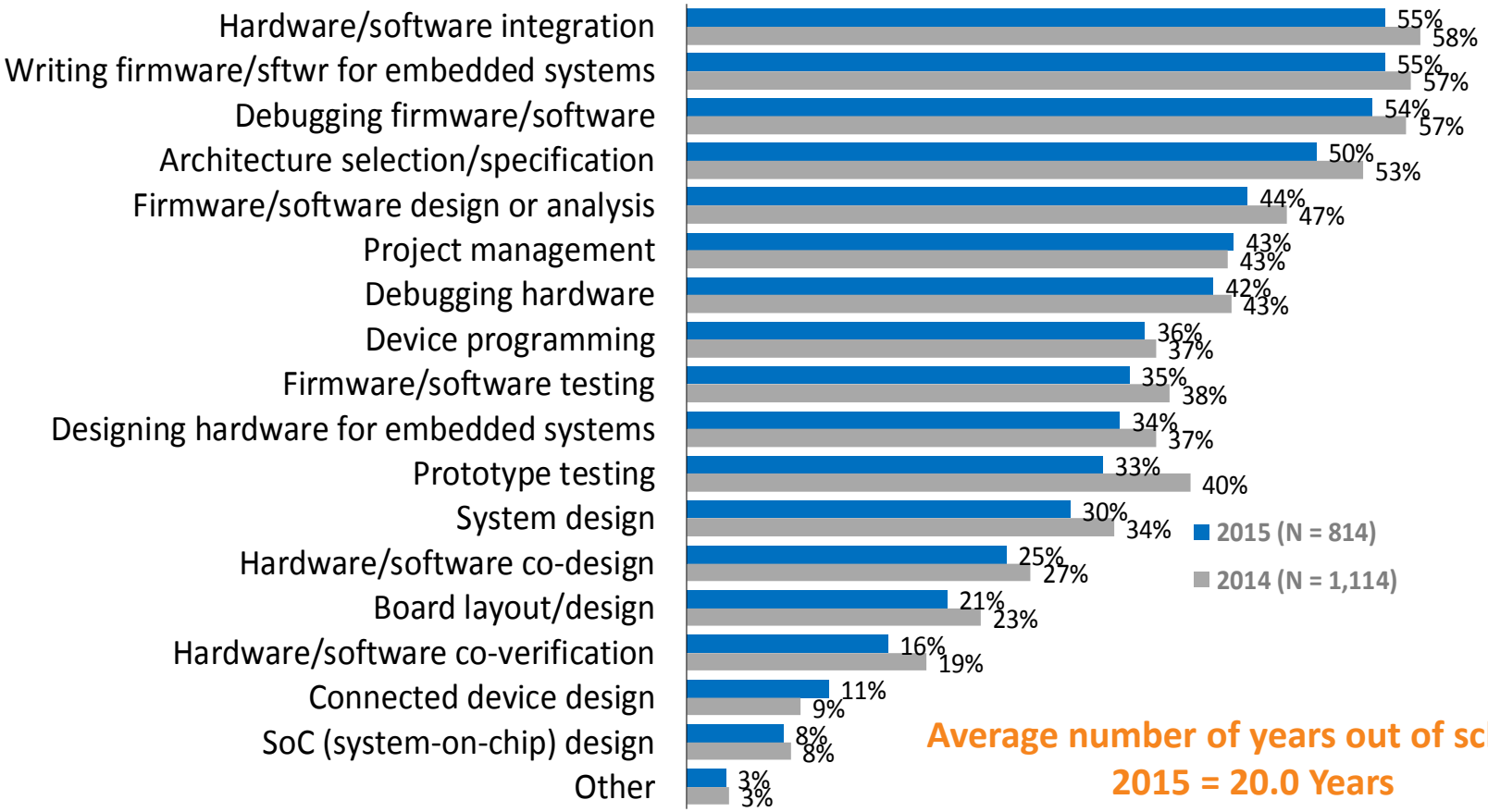
Job Functions



Average number of years out of school :

2015 = 20.0 Years

2014 = 21.8 years

2013 = 19.7 years

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Current Embedded Design Environment

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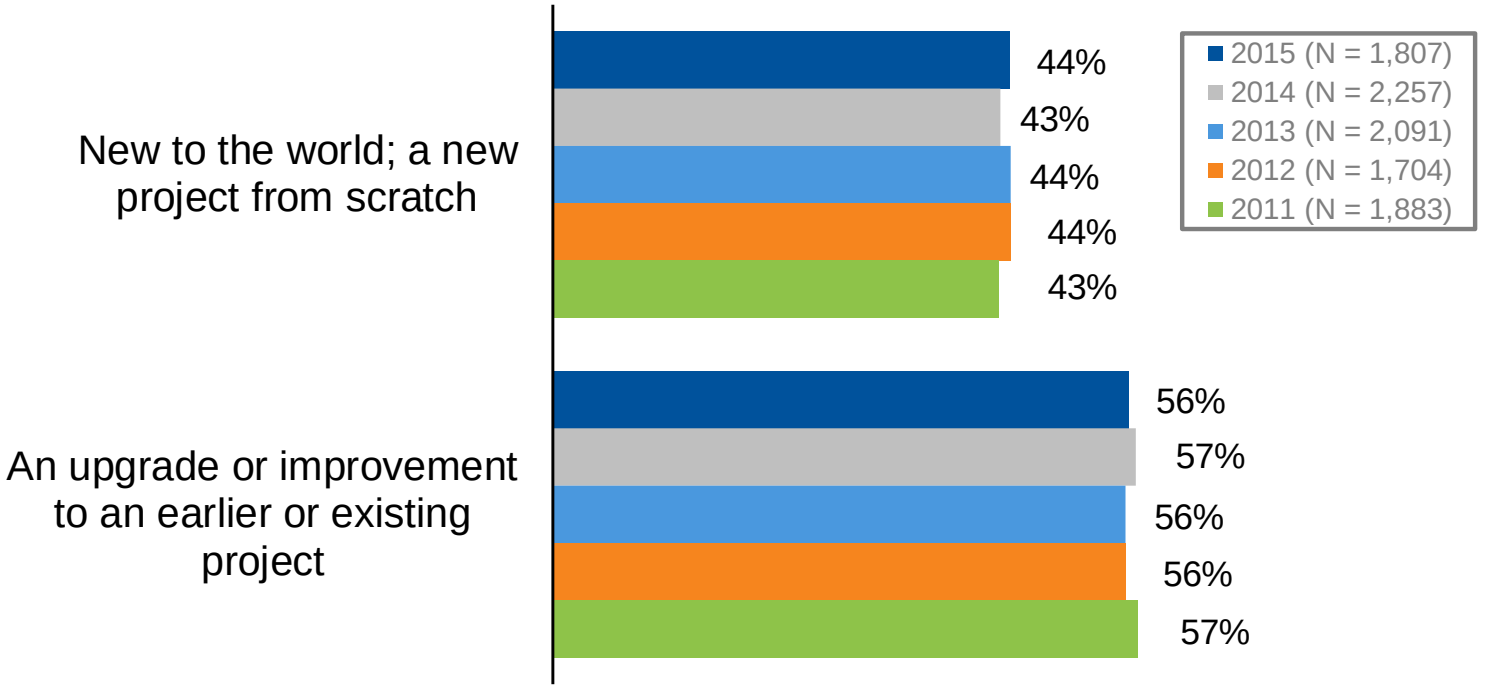
Current Embedded Project



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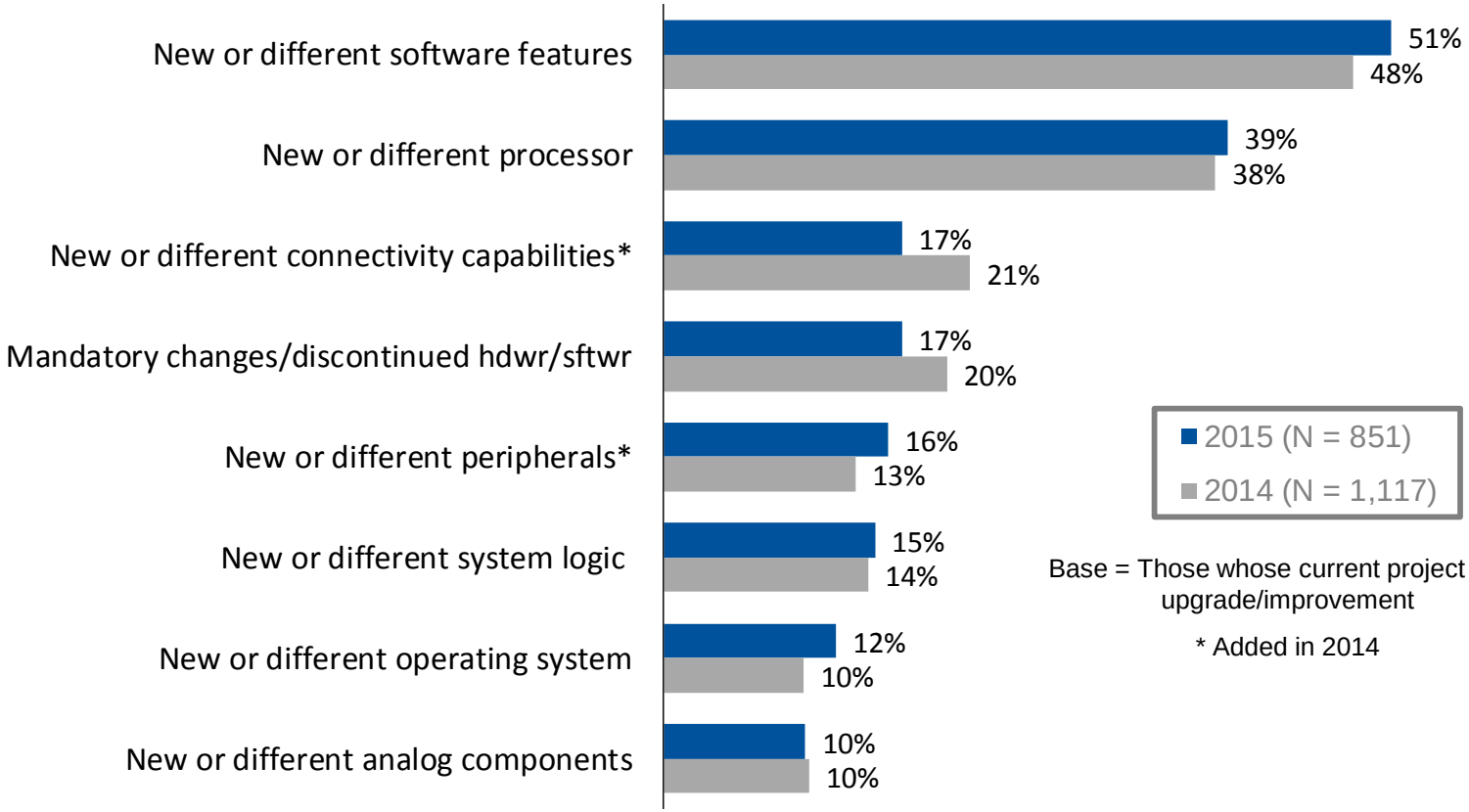
What does the upgrade or improvement include?



Base = Those whose current project is an upgrade/improvement

* Added in 2014

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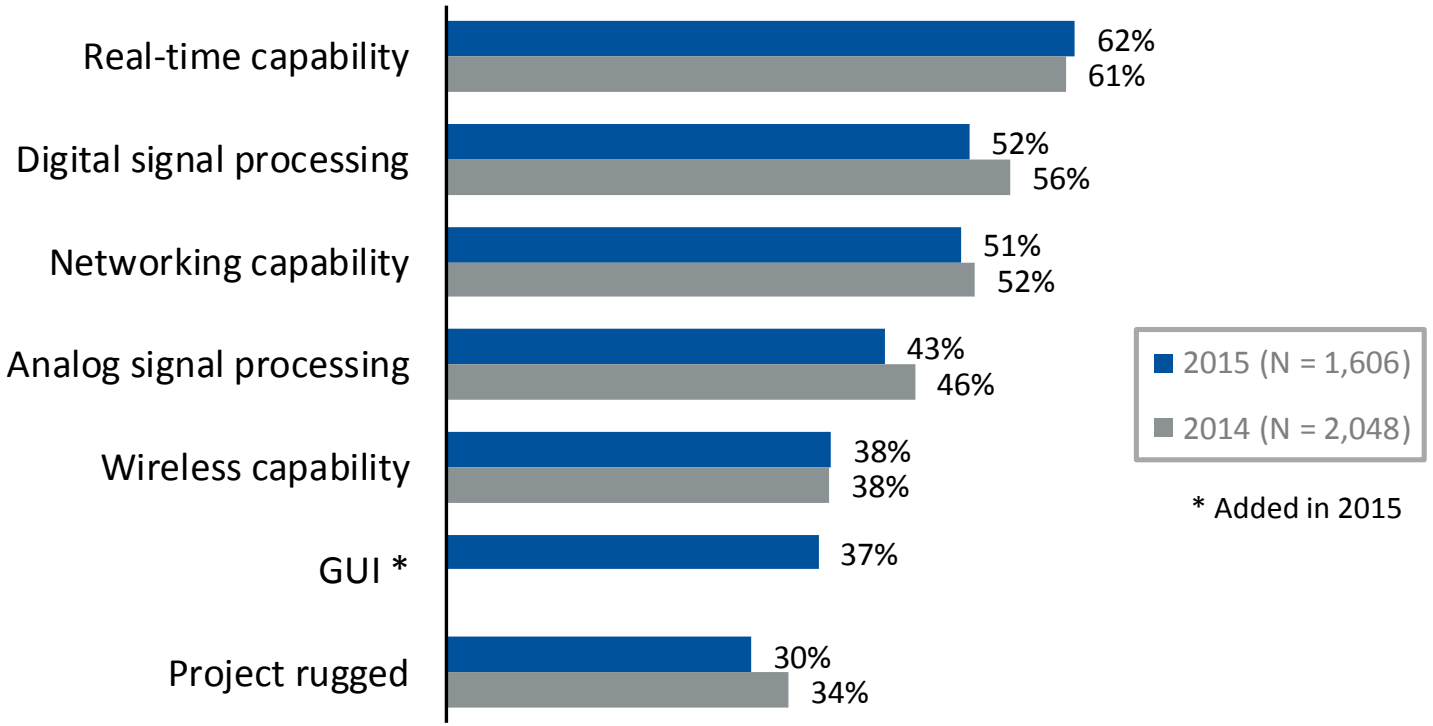
Which of the following capabilities are included in your current embedded project?



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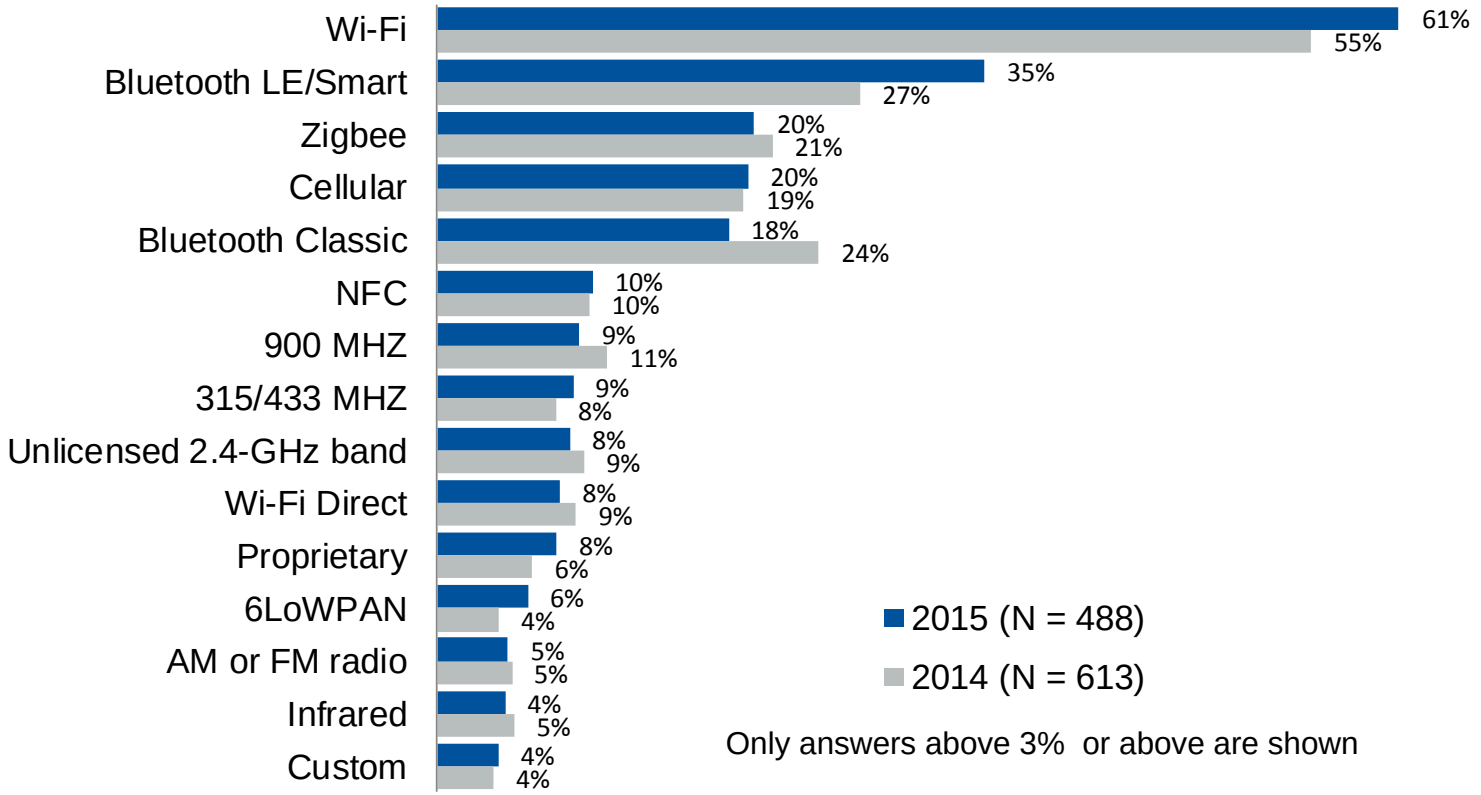
If wireless, what wireless interfaces does your current embedded project include?



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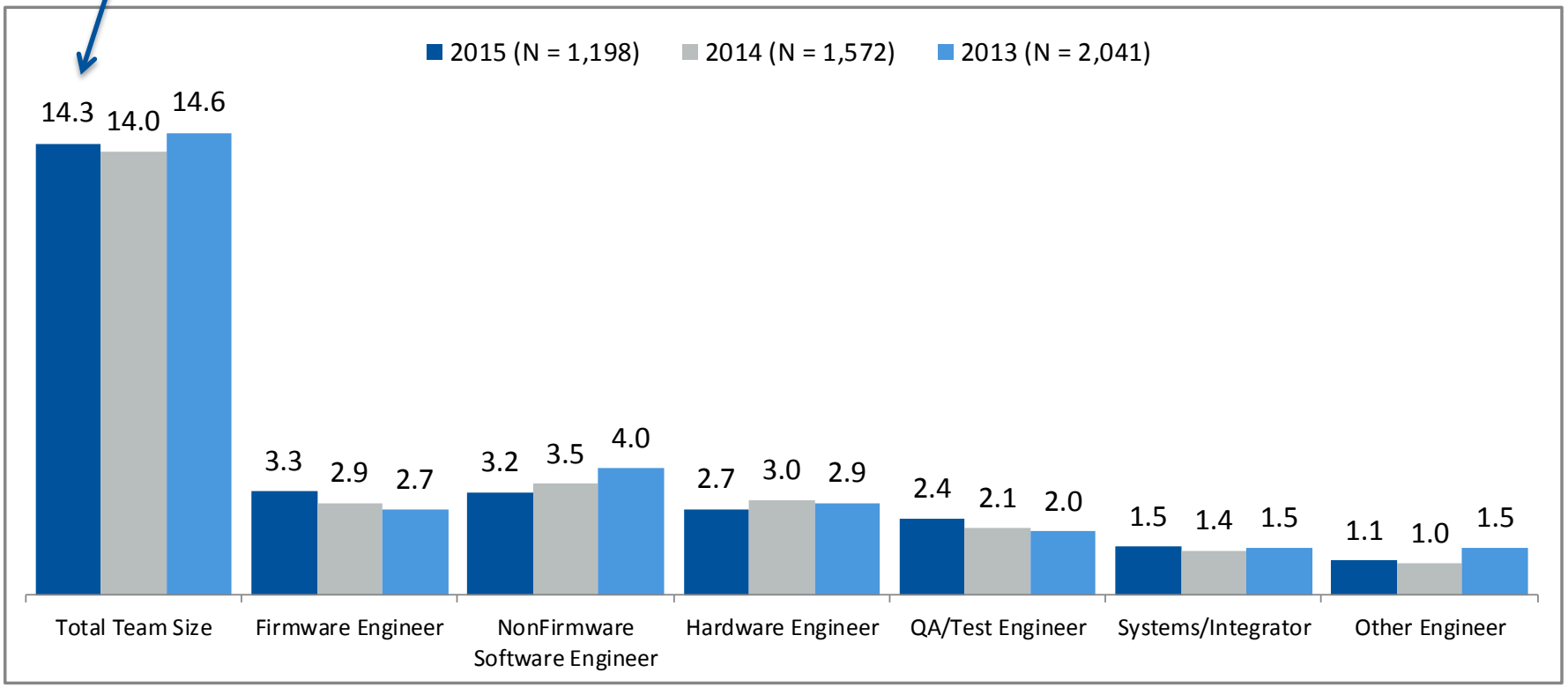
How many people are on your embedded project team?

Roughly, **14 engineers per team** has remained stable for the **last three years**



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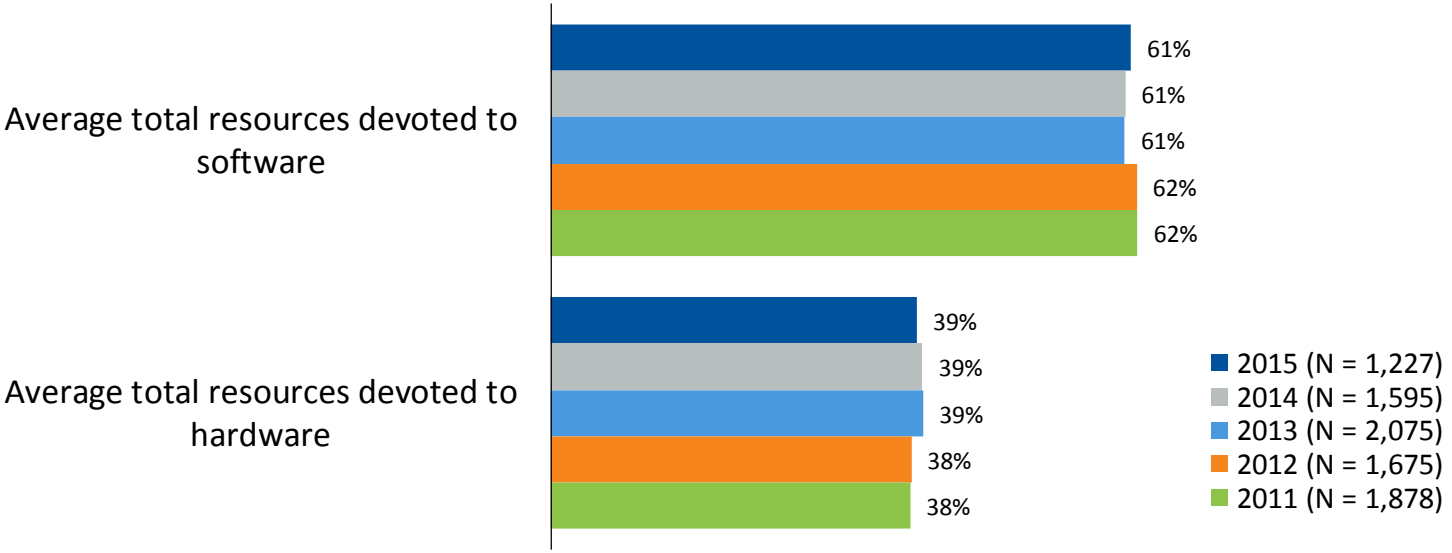
What is your development team's ratio of total resources (including time/dollars/manpower) spent on software vs. hardware for your embedded projects?



Note:
In 2015, respondents averaged working on 2.1 projects at the same time.
In 2014, respondents averaged working on 2.0 projects at the same time.

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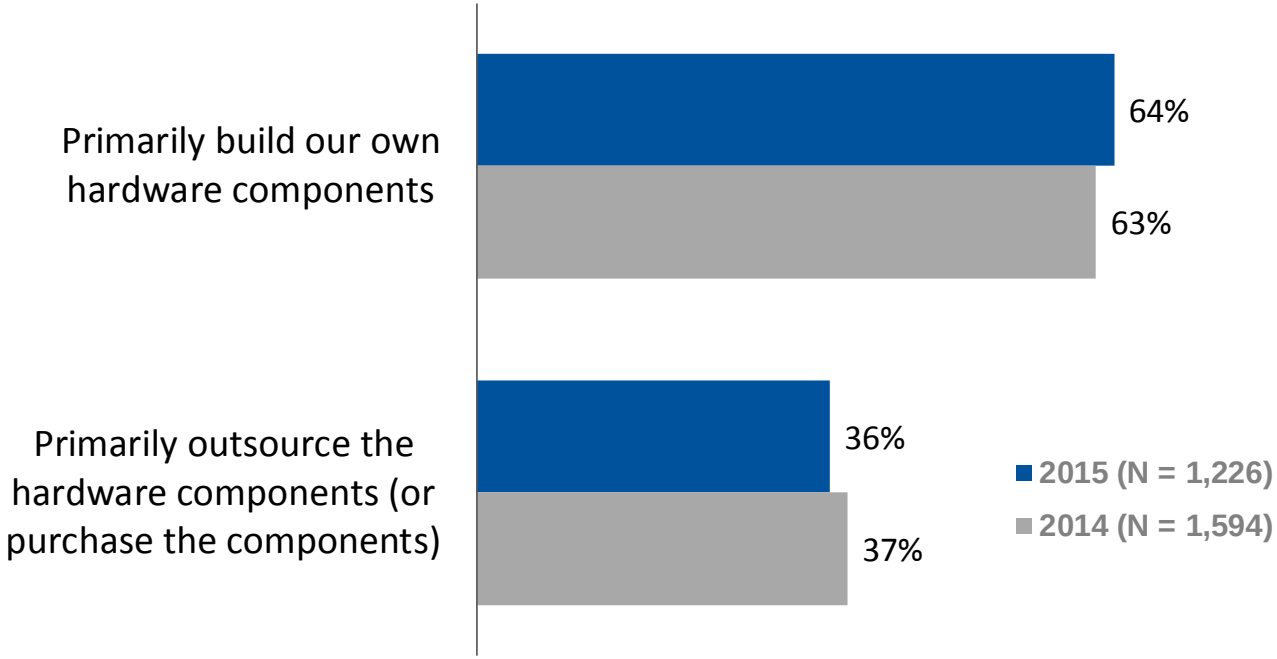
Do you primarily build your own hardware or do you primarily outsource your hardware requirements?



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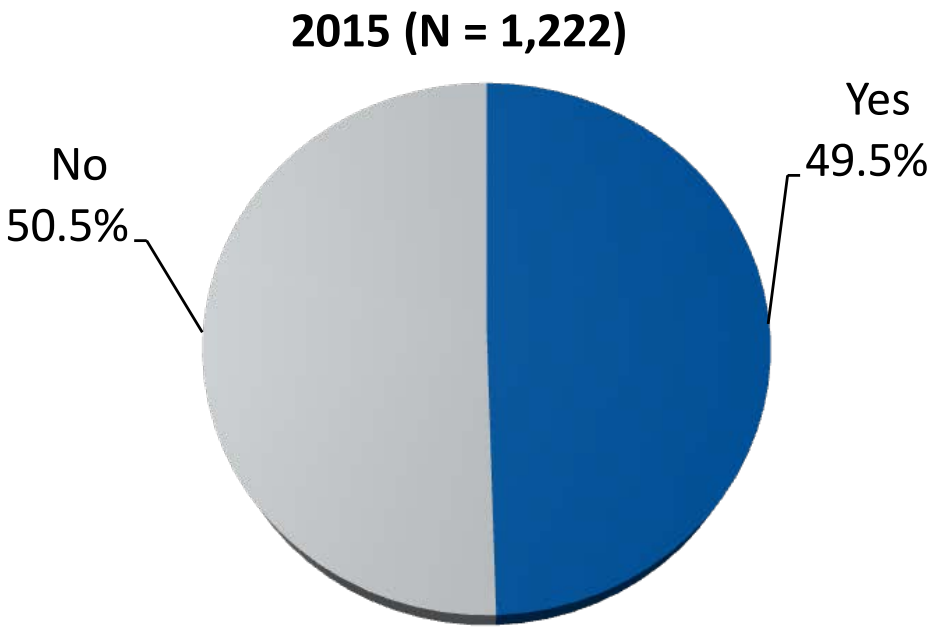
New in 2015

Did you start your current embedded design with a development board?



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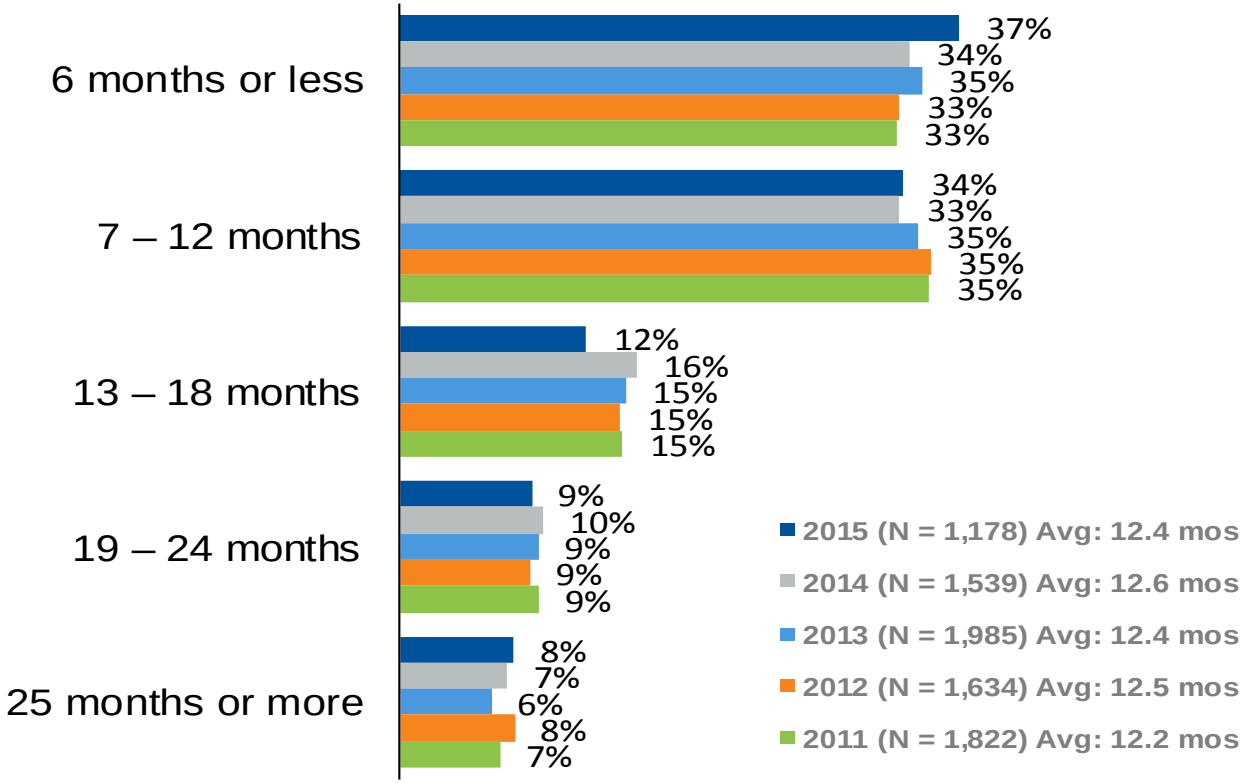
Thinking now about the last embedded project you completed (no longer in development), how many months did that project take to finish?



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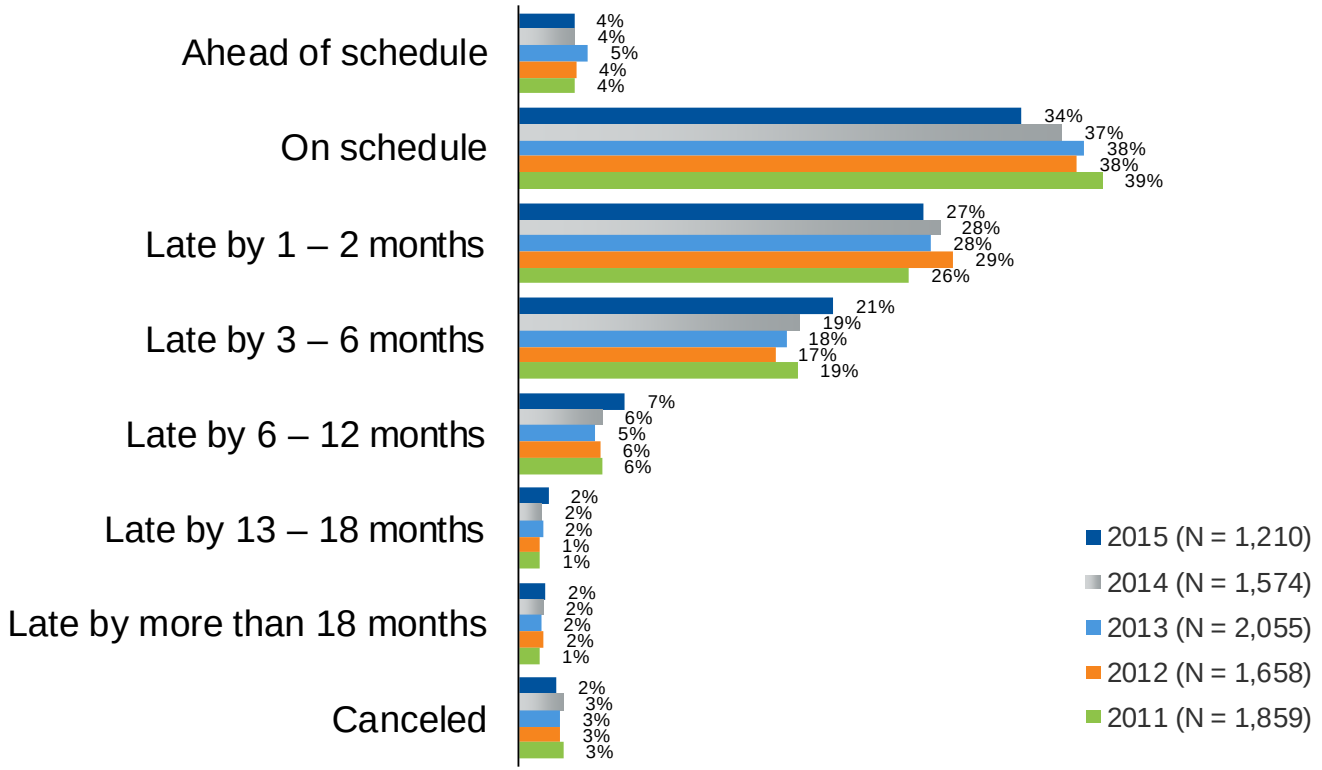
Was that project completed . . .



In 2015, 38% of all projects finished "ahead of" or "on" schedule, and 62% finished "late or cancelled".
In 2014, 41% of all projects finished "ahead of" or "on" schedule, and 59% finished "late or cancelled".
This downward trend in performance is worse than the previous 4 years that averaged 42%-44% "on/ahead of" schedule.

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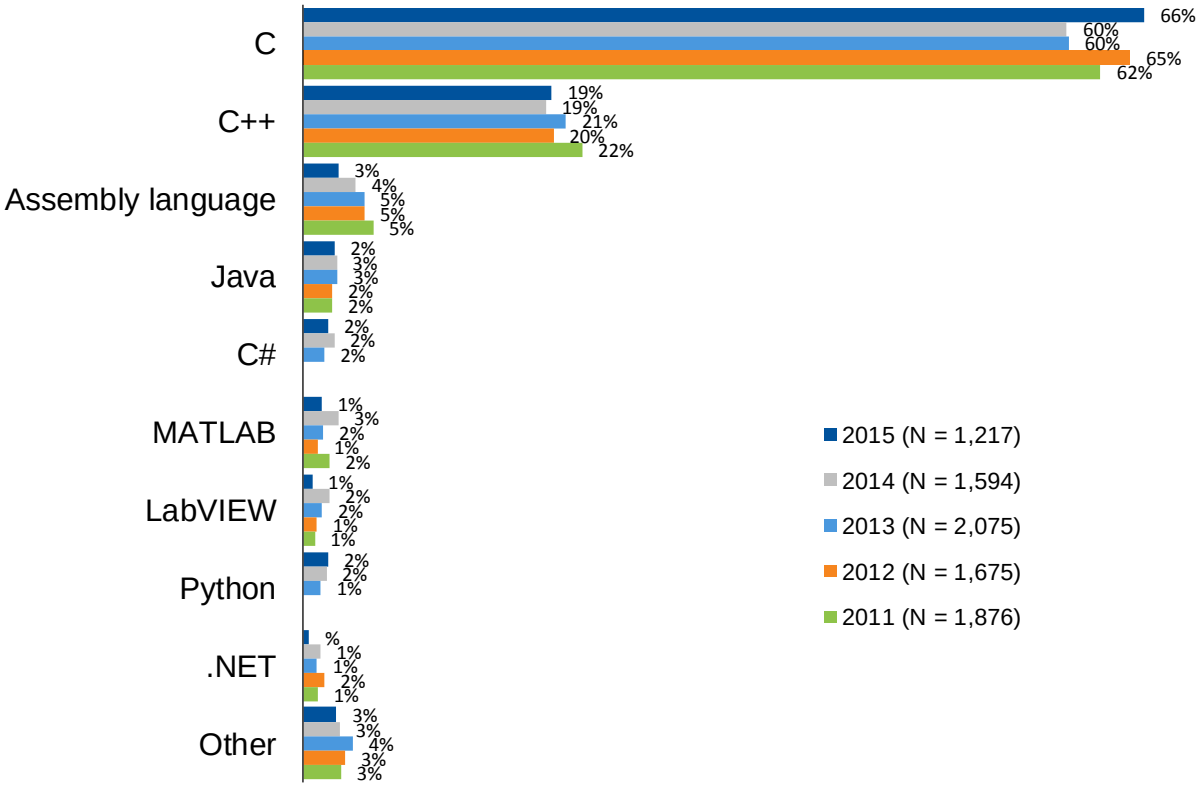
My current embedded project is programmed mostly in:



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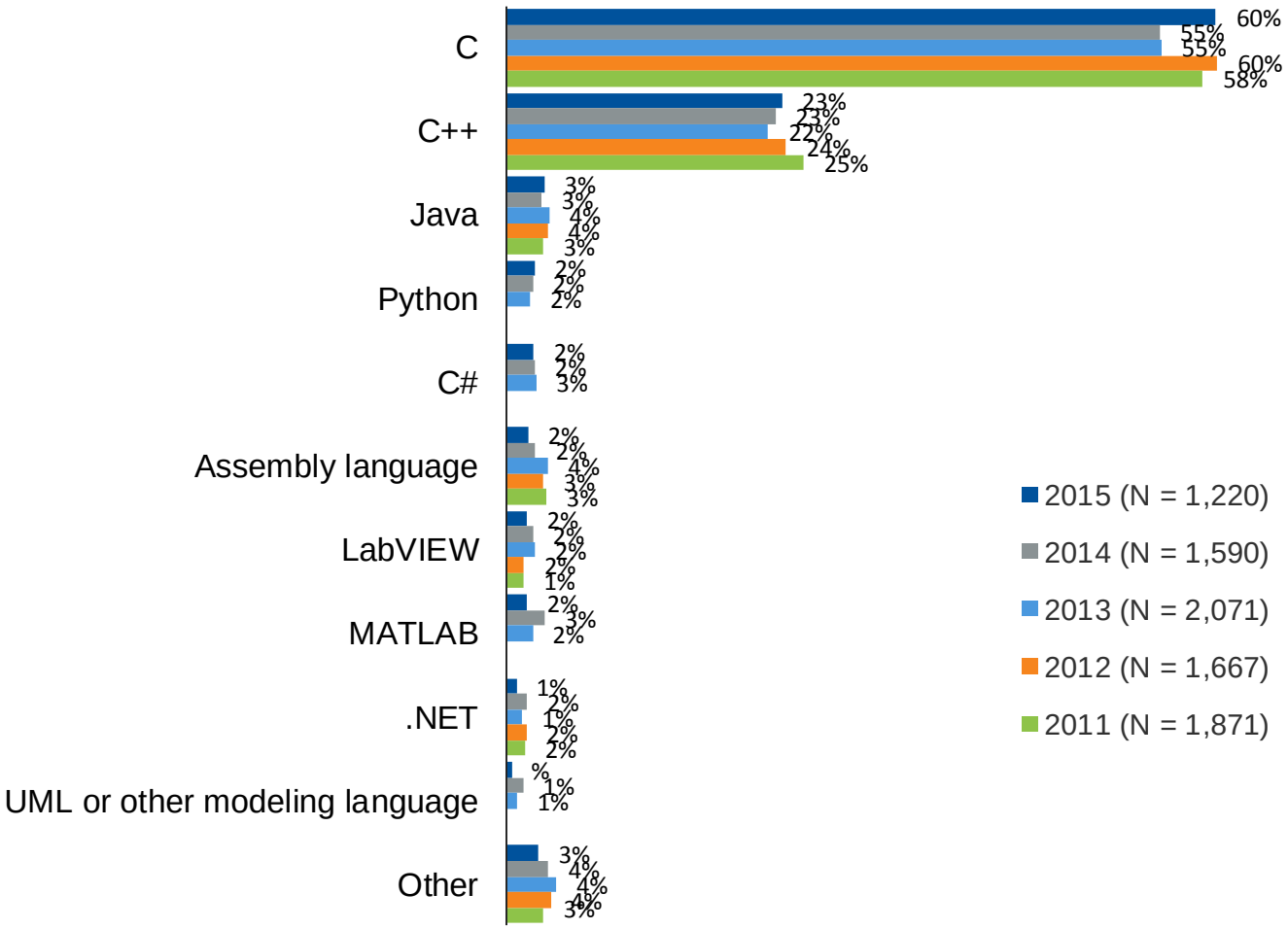
My next embedded project will likely be programmed mostly in:



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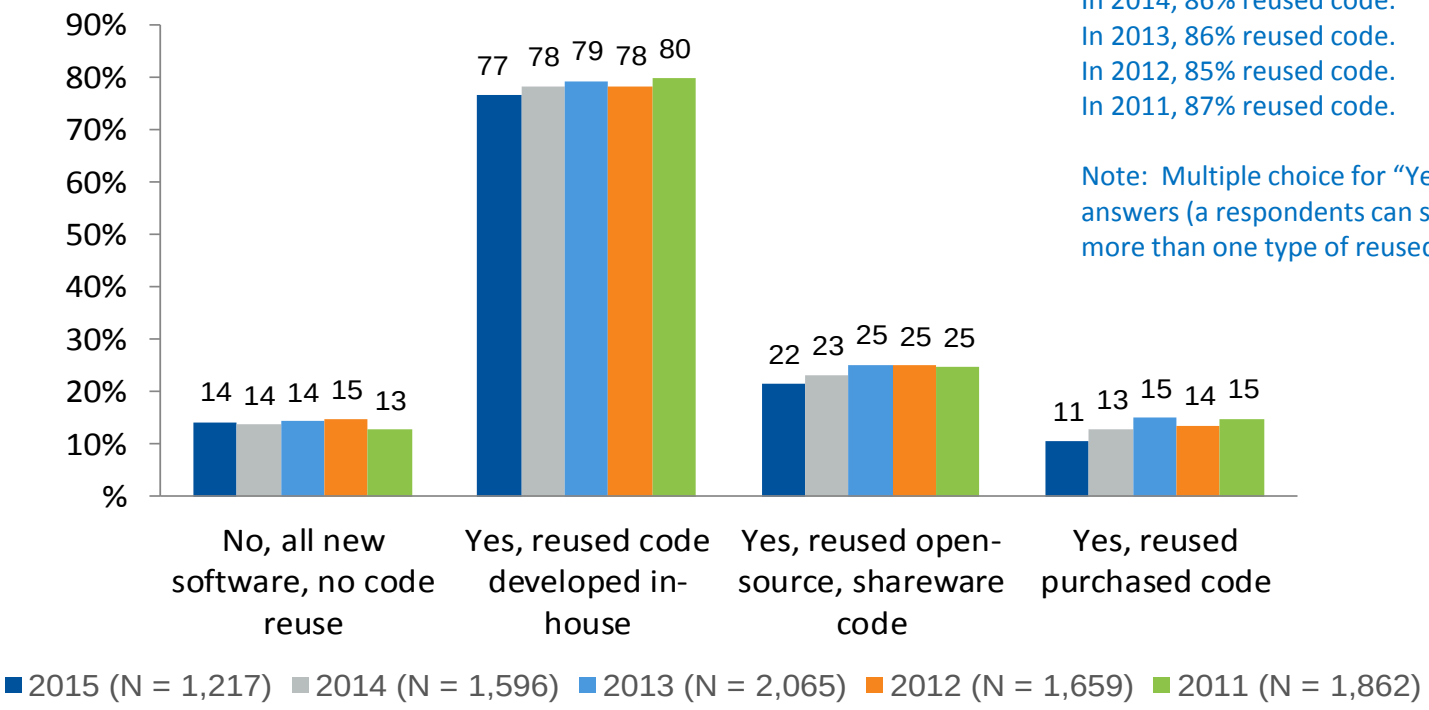
Does your current project reuse code from a previous embedded project?



In 2015, 86% reused code.
In 2014, 86% reused code.
In 2013, 86% reused code.
In 2012, 85% reused code.
In 2011, 87% reused code.

Note: Multiple choice for "Yes" answers (a respondents can select more than one type of reused code).

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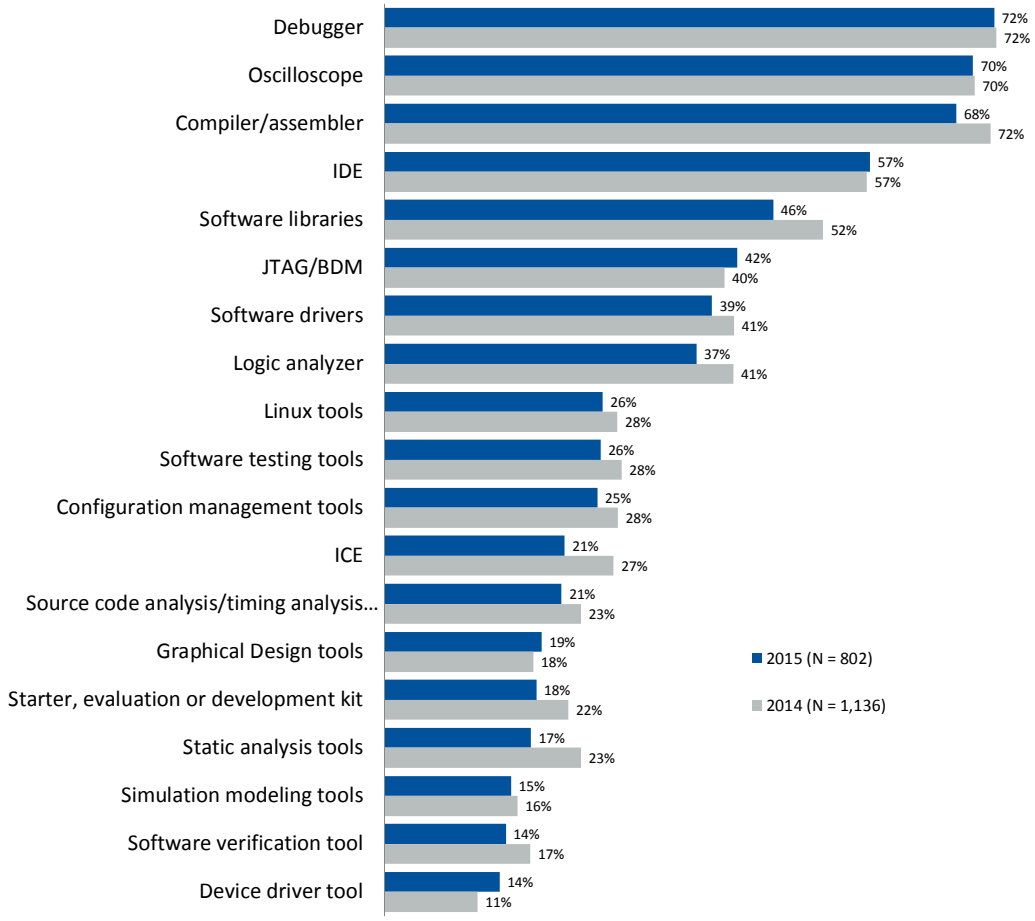
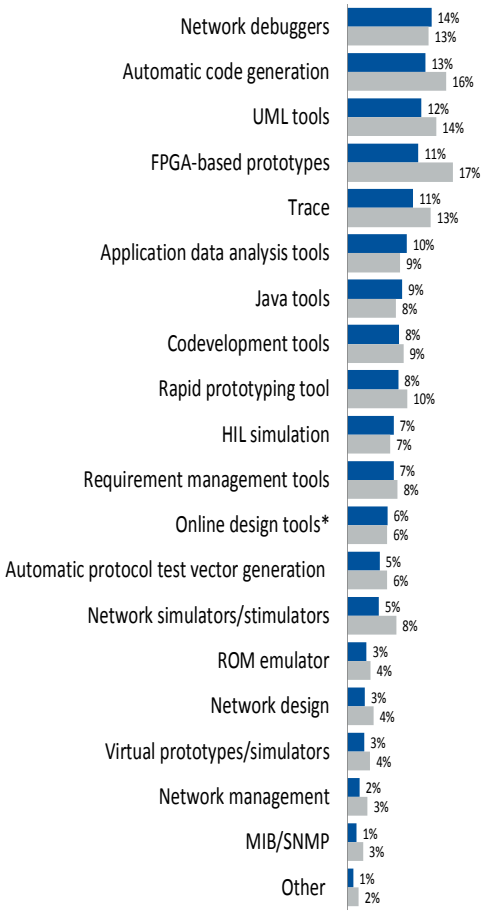
Which of the following software/hardware tools do you currently use?





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