

SUMMARY

- The frequency of use of UML components varies considerably: Class, Sequence, and Use Case Diagrams are used most often, while Collaboration Diagrams are used least.
- Apparently, at least half of UML projects are not Use Case driven: Class Diagram use substantially exceeds Use Case Diagram and Narrative use.
- Contrary to claims in the popular literature, developers appear to believe that UML diagrams can be understood by clients: Clients are most involved with Use Case Narratives and Activity Diagrams, but are more involved with the remaining components than we expected.
- While systems analysts and programmers rely most on Class and Sequence Diagrams they also use the Use Case Narratives, suggesting that the potential communication disconnect may not be a concern in practice.
- Use Case Narratives appear not to capture all requirements: Class, Sequence, and Statechart Diagrams provide the most additional information beyond Use Case Narratives.
- The complexity of UML is a concern, suggesting more programs are needed to help IS professionals and their clients learn the language and how to use it more effectively. ■

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UML should not be considered exclusively as a language for software professionals; a greater understanding of UML diagrams and their roles in building systems is needed throughout organizations. Standardization of UML has made a major contribution toward this goal; standardization of usage guidelines is needed as well.