

Xml Schema Adoption & Usage

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Logistics

- ⦿ Goals of the survey
 - Breadth-first analysis
 - Starting point
- ⦿ Project team
 - Microsoft
 - UM
- ⦿ Participants
 - Microsoft US customers
 - Dev/DBA/IT

Details

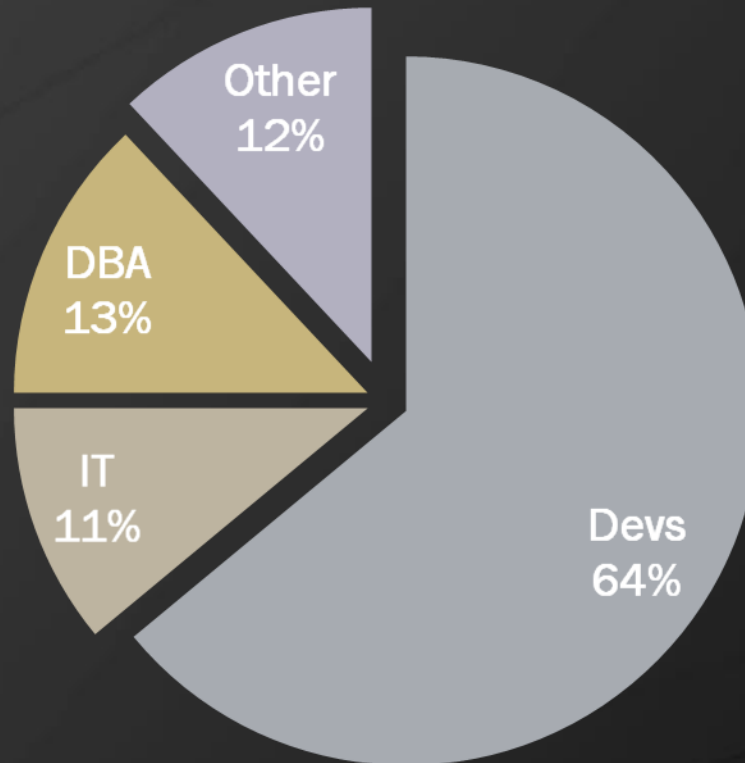
- ◎ 2000 invitations
 - Evenly between Dev/IT/DBA
 - Evenly distributed across US
 - Even representation of small/medium/large companies
 - Even representation of industries
- ◎ 127 participants
 - 45-75 answers per question

Reliability of results

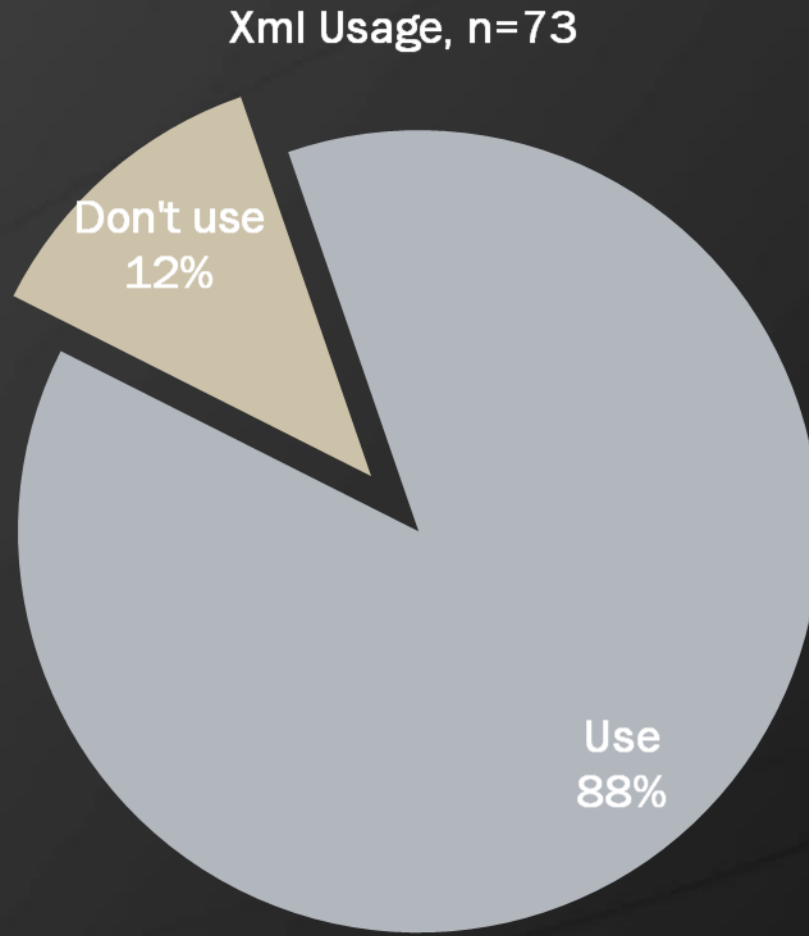
- ⦿ Potential self-selection
- ⦿ A large number of respondents are developers/architects
- ⦿ Number of responses per question

Demographics

Survey Participants, n=75

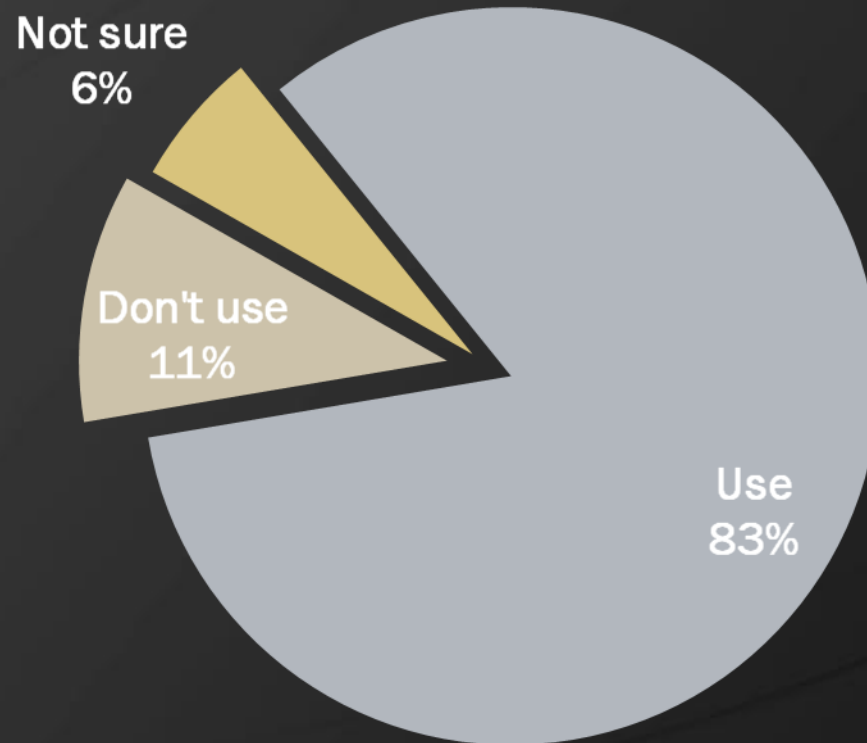


Xml Usage



Xsd Adoption

Xsd Adoption, n=64

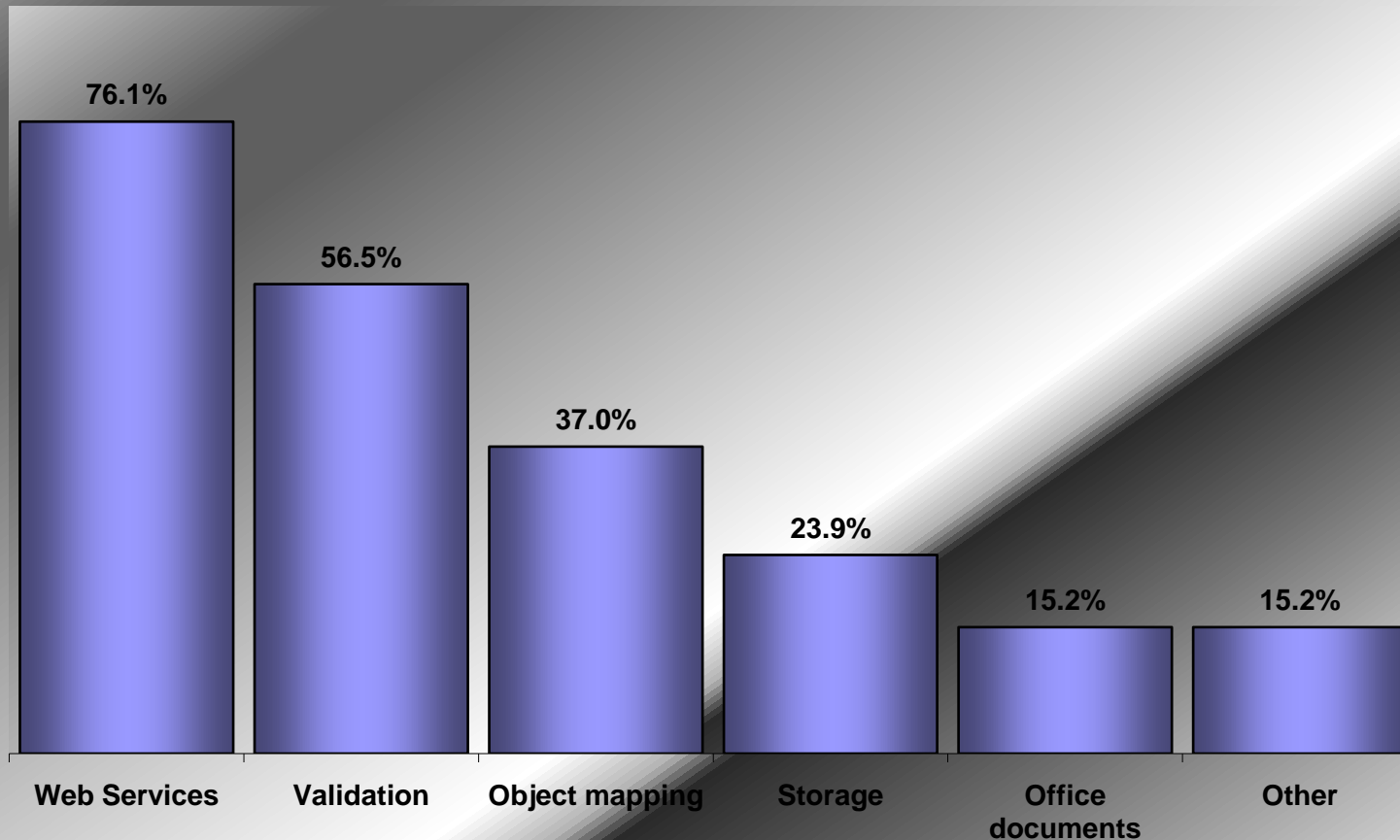


Reasons for not using Xsd

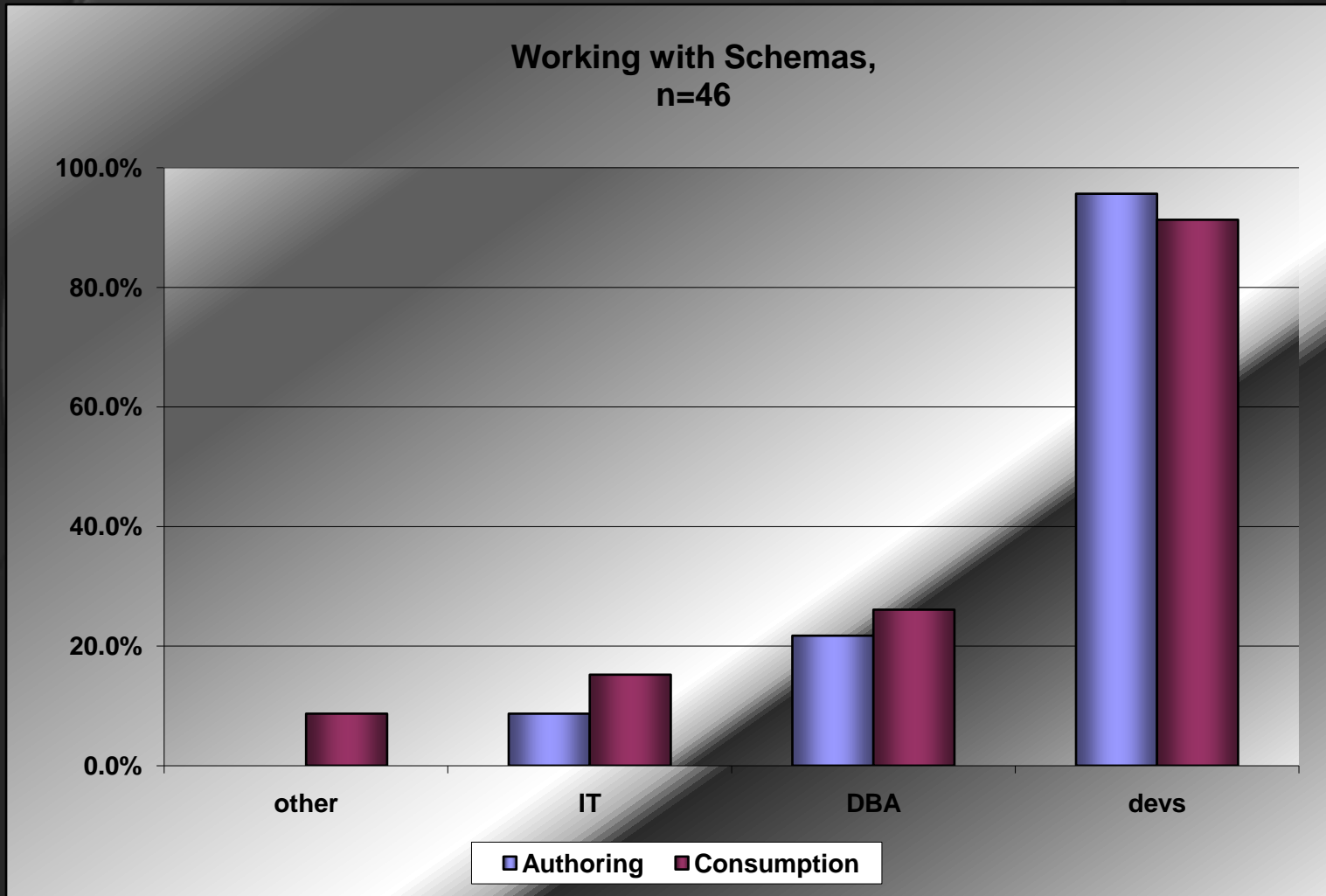
- ⦿ No single dominant reason
 - ⦿ Lack of expertise
 - ⦿ Complexity
 - ⦿ Doesn't address needs
 - ⦿ Don't use Xml
 - ⦿ Not necessary

What are schemas used for

Schema Usage,
n=46



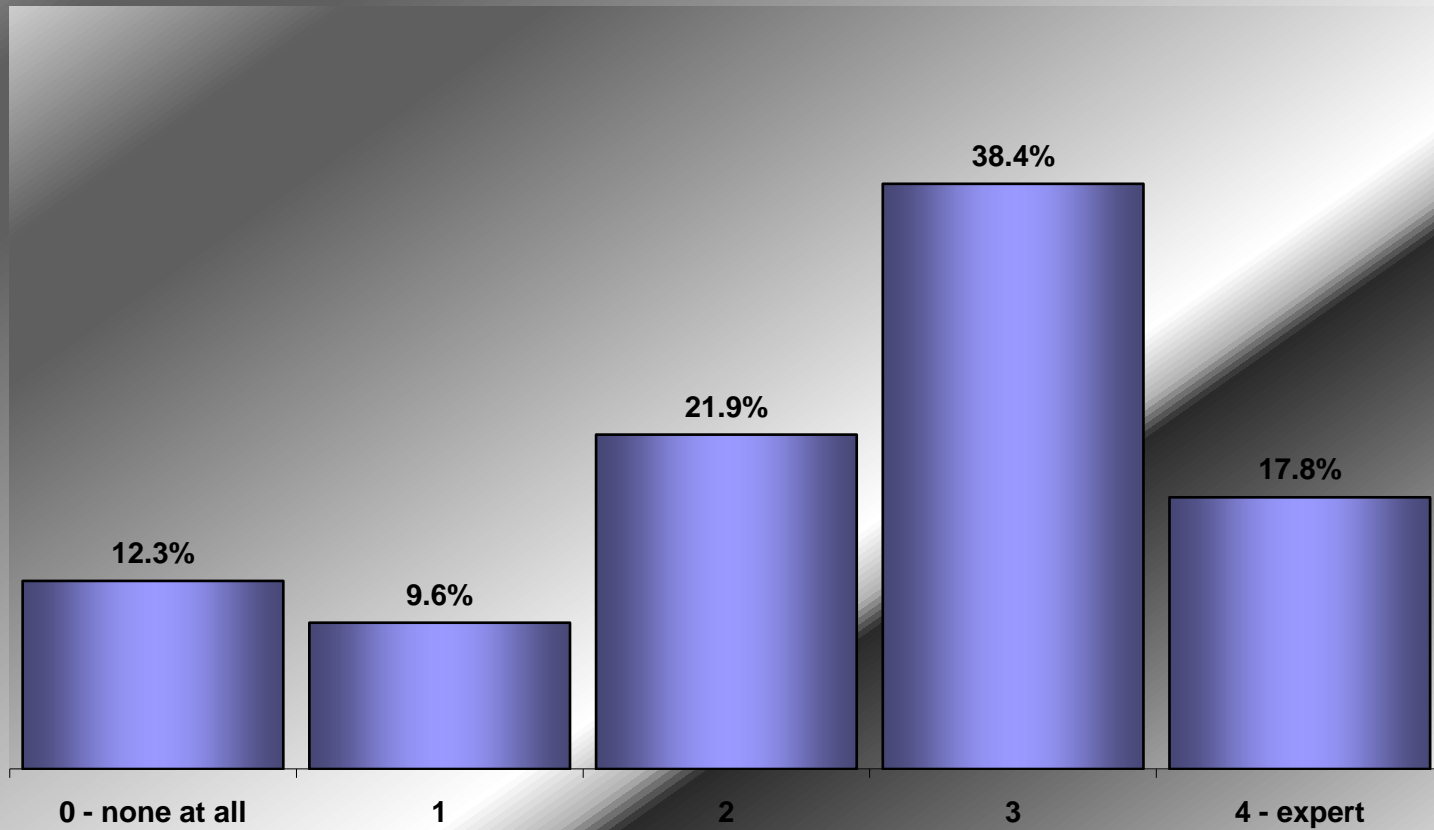
Who is using Xml Schema



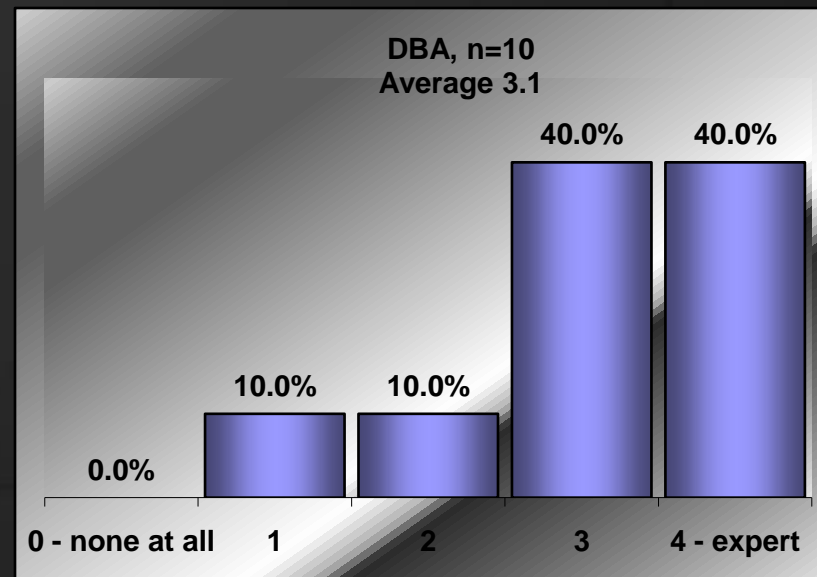
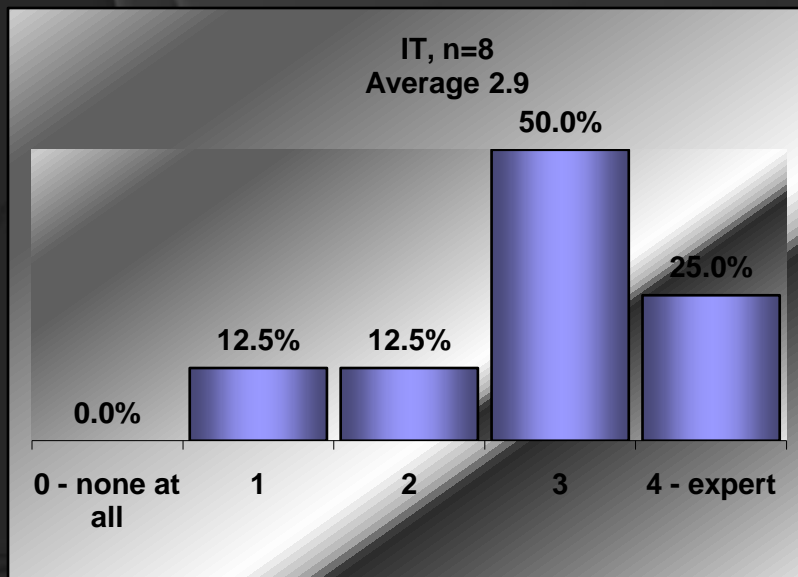
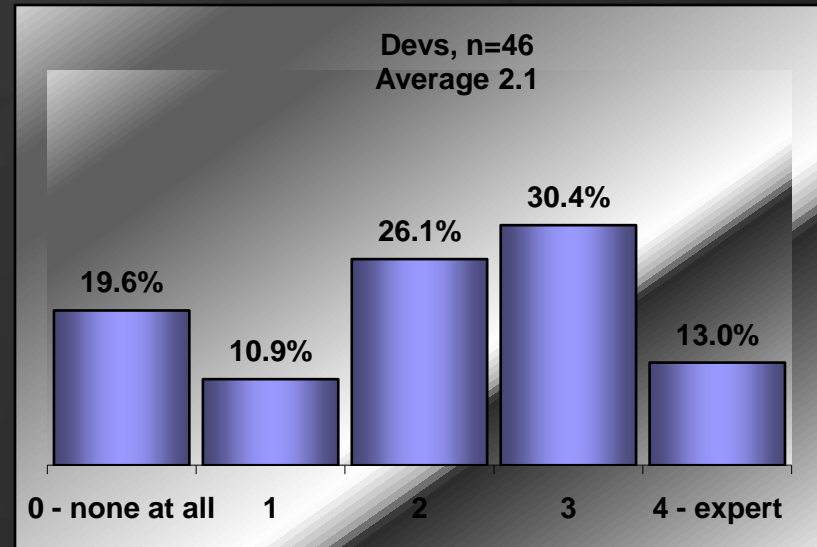
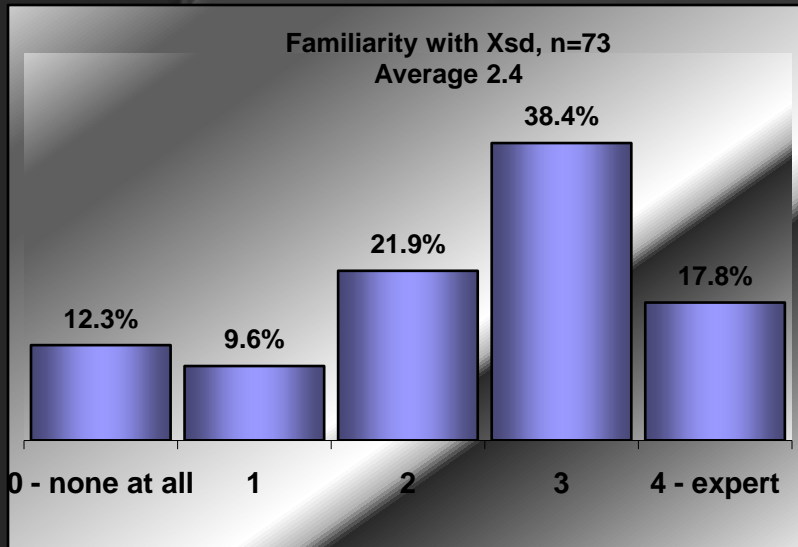
Others: clients, end users, project managers, field engineers, QA analysts

Familiarity with Xsd (Overall)

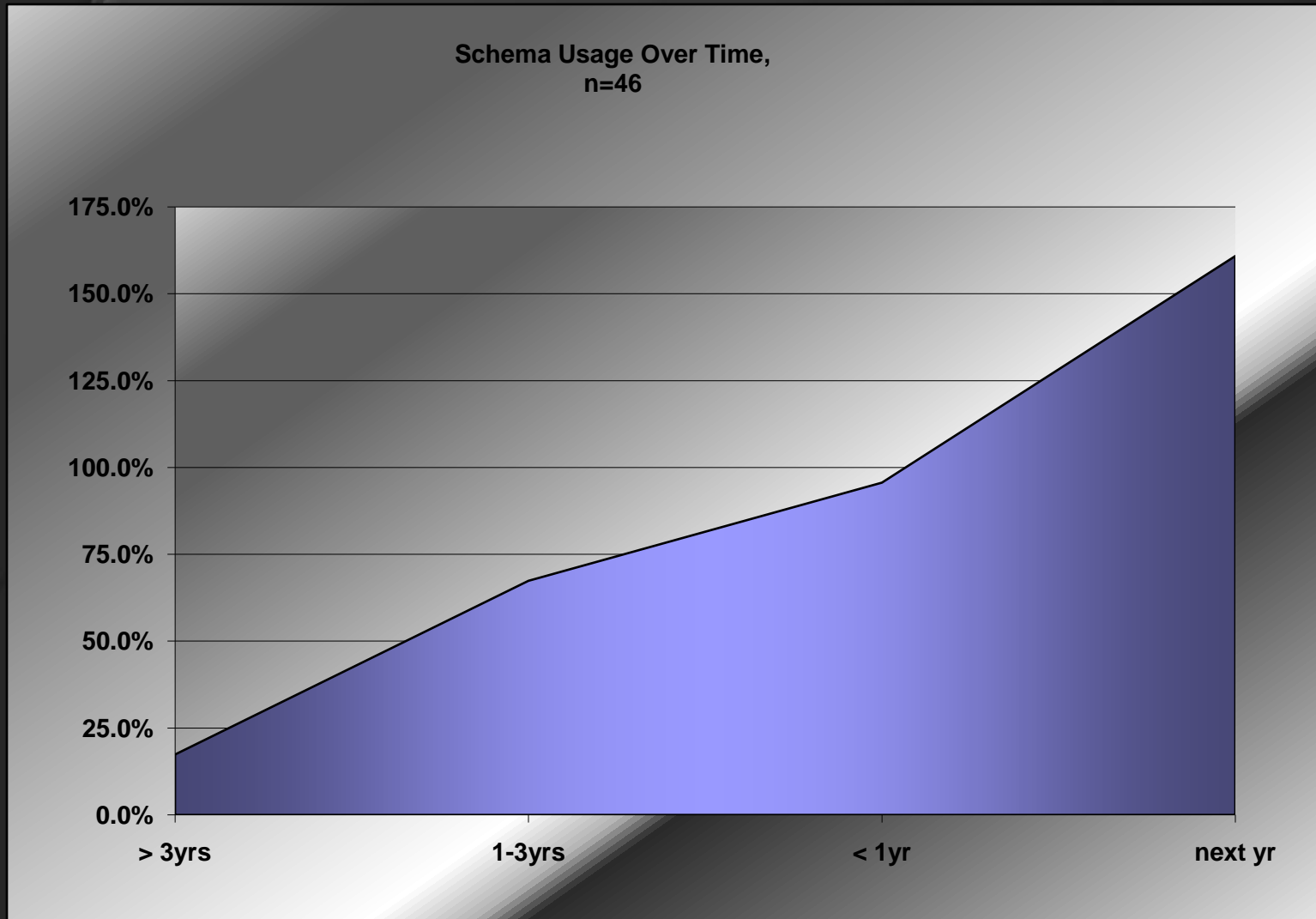
Familiarity with Xsd, n=73
Average 2.4



Familiarity with Xsd (by group)



Level of adoption over time



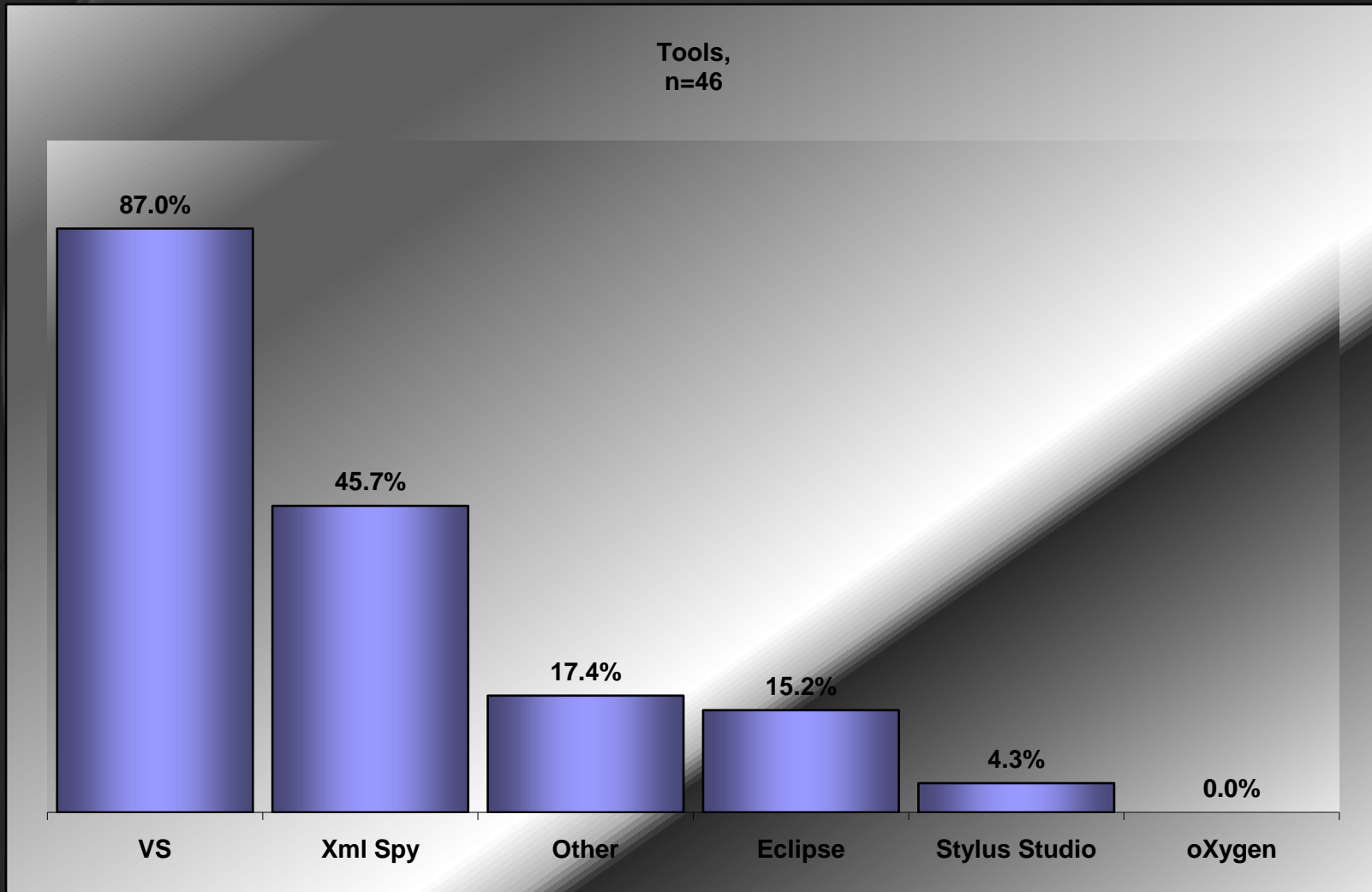
Future use by industry

- ⦿ ISV: 71% (5/7) stated usage will increase within 12 months
- ⦿ Government: 43% (3/7)
- ⦿ Finance: 29% (2/7)

Reasons for future change in usage

- ◉ More products use and accept xml formats
- ◉ We are moving from a Windows-based application programmed in Visual C++ to one using XML and XSL as a web-based application.
- ◉ Future projects will require it
- ◉ I expect to be working on developing more web services and will use schemas more frequently to validate input documents that the web service will accept.
- ◉ DTD is being replaced by XML schema. XML schema is being chosen for new projects.
- ◉ New software being written that uses xml storage
- ◉ Technology is going to be integrated into all products and services, thus demanding a universal language.
- ◉ Not enough time for planning and change from existing architecture

Tools used to work with schemas



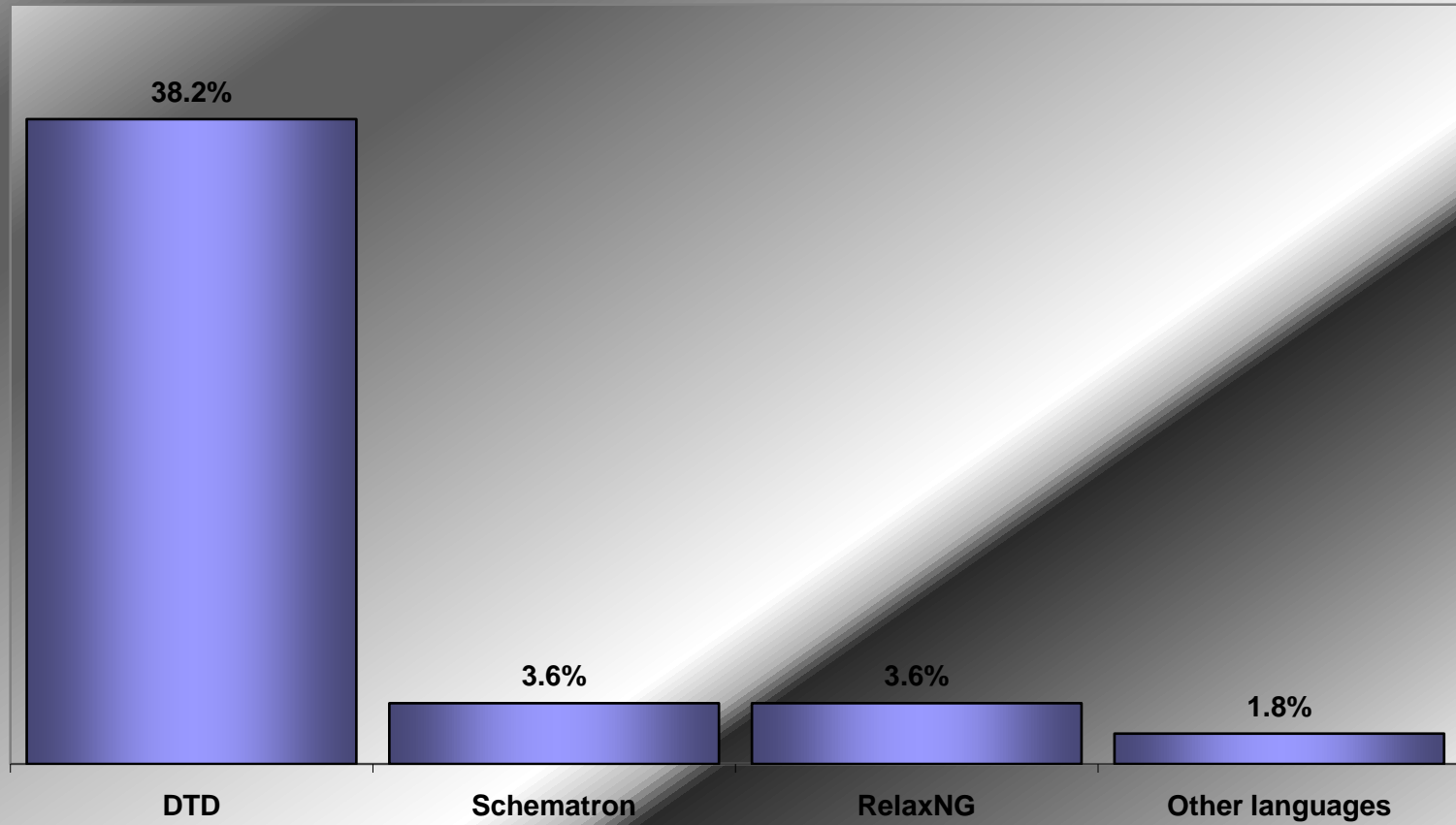
Other: notepad, xmlnotepad, cooktop, net-beans, visual slick edit, custom tools

Comments about tooling support

- ⦿ A steep learning curve is preventing a faster adoption. Better tools would also speed adoption.
- ⦿ A little cumbersome, but that's more a limitation of the toolsets.
- ⦿ Schemas will play an important role in SOA and WS-* based technologies. However unless the tools catch up with the ideas behind schemas many opportunities will be missed.

Other languages

Other Schema Languages,
n=55



Comments about Xsd

- ⦿ Effective and simple
- ⦿ More readable than DTD
- ⦿ Strong future
- ⦿ Serves an important role
- ⦿ Though I find them a little complex and tedious at times, I think they serve a valuable purpose and I should become more comfortable working with them
- ⦿ Seems to be here to stay
- ⦿ Rapidly, taking off in our business
- ⦿ I don't see how anyone can do soap without it. should last forever
- ⦿ Hard to incorporate into existing systems
- ⦿ It is very hyped. Not everything is solved with it. It is valuable for many things but it is currently (in my opinion) heavily misused