



# A Brief Look at DITA in Current Technical Communication Practices

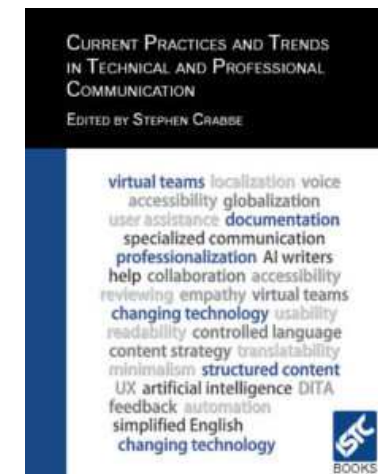
Keith Schengili-Roberts, Market Researcher IXIASOFT



# Who's This Guy?

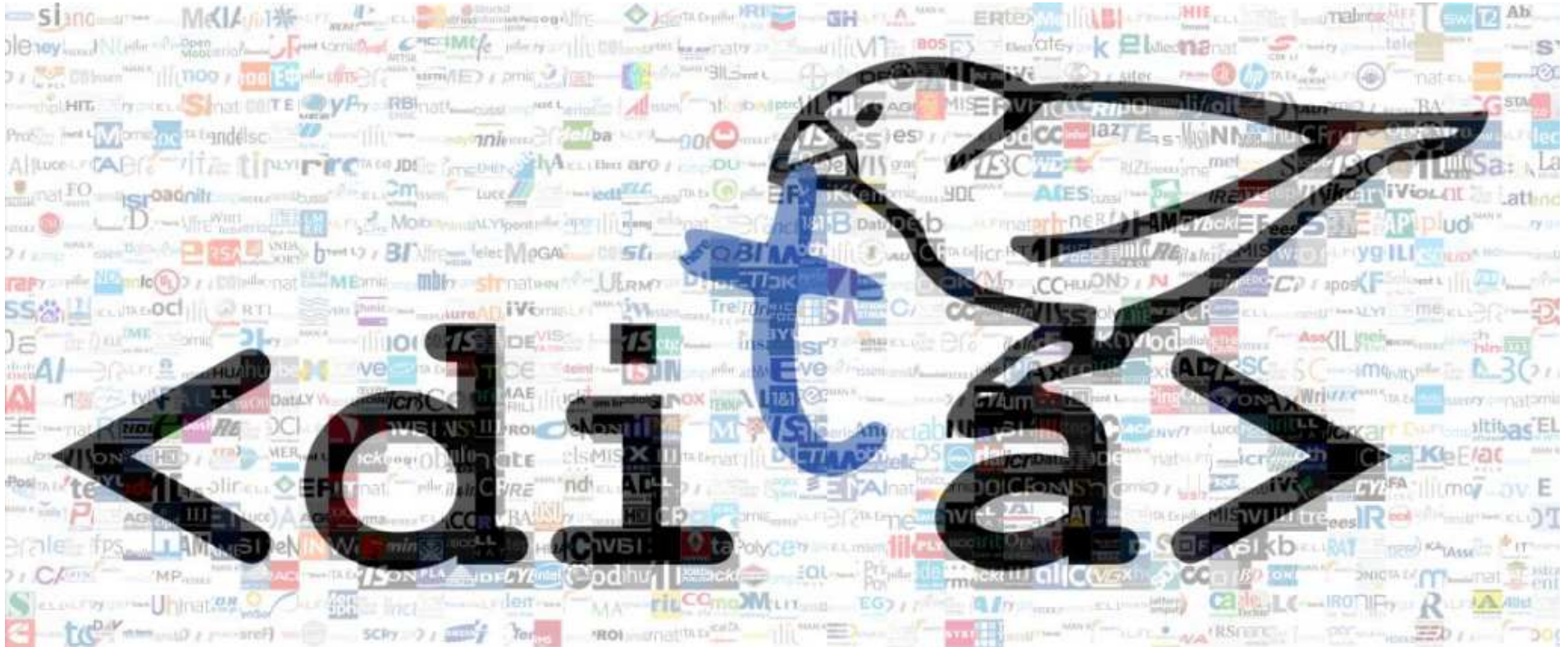
## Keith Schengili-Roberts

- Working in Tech Comm since early 1990s
- Working with DITA since 2004
- Write an industry blog: [DITAWriter.com](http://DITAWriter.com)
- Market Researcher and DITA Evangelist for IXIASOFT
- Chair of OASIS DITA Adoption Committee, member of LwDITA SC and DITA TC
- Author of four technical titles, contributor to recently-released *Current Practices and Trends in Technical Communication*





# Who is Using DITA?



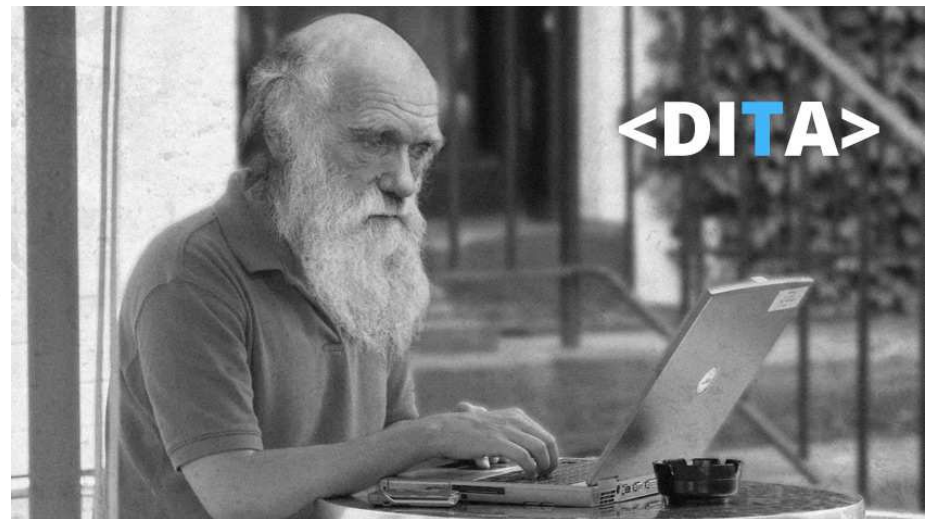
- Most recent count: 696 firms worldwide



# What Makes DITA “DITA”?

DITA is an acronym:

- “D” is for “Darwin”, alluding to his concept of evolutionary adaptation, as DITA is based on specialization and inheritance
  - All topic types inherit features of top-level generic “topic” type
- “IT” is for “Information Typing”, defining the semantic structure of individual topics
  - Topic types are: Concept, Task, Reference, Glossentry and Troubleshooting
- “A” is for “Architecture”, as this is a structured standard that is also extensible
  - An example: Lightweight DITA uses DITA’s structure but can be written using HTML5 or Markdown





# DITA and Content Reuse

- DITA was built around the idea of content reuse
  - Individual topics and parts of topics can be used in different maps
  - Ensures content consistency
  - Reduces localization costs
- Content reuse is a key advantage of the DITA specification over other standards



## DITA XML: A Reuse by Reference Architecture for Technical Documentation

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### ABSTRACT

The Darwin Information Typing Architecture is an XML architecture for producing and reusing technical information. DITA promises the following:

- Scalable reuse, so you can reuse content in any number of delivery contexts simultaneously without complicating the source
- Descriptive markup, so you can use markup that describes your information in terms your customers need
- Interchangeability, so you can treat specialized markup as if it were general, getting reuse of tools and processes defined at more general levels of descriptiveness
- Process inheritance, so you can reuse existing process logic in your specialized processes.

It accomplishes these goals by applying the principle of reuse by reference to the dimensions of content, design, and process within a technical communications workflow.

### 1. BACKGROUND

For the past two years, a workgroup inside IBM's User Technology community has been working on creating XML architecture for the next generation of technical documentation. It was released for public review and testing in March of 2001, and is continuing to evolve with the input of a growing community of writers and developers.

The Darwin Information Typing Architecture (DITA) is an XML-based architecture for authoring, producing, and delivering technical information. DITA is an end-to-end architecture. It consists of a set of design principles for creating information-typed topic modules and for using that content in various ways, such as online help and product-support portals on the Web. At its heart, DITA is an XML document type definition (DTD) that expresses many of these design principles. The architecture, however, is the defining part of this proposal for technical information; the DTD, or any schema based on it, is just an instantiation of the design principles of the architecture.

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SIGDOC'01, October 21-24, 2001, Santa Fe, New Mexico, USA.  
Copyright 2001 ACM 1-58113-295-6/01/0010...\$5.00.

### 2. DITA PRINCIPLES

DITA simplifies the creation of audience-specific content, DTDs, and processes. It is based on principles of modularity and reuse that allow not only the fast deployment of customer solutions but also the painless evolution of those solutions as customer needs, and our understanding of them, evolves.

#### 2.1 Four principles

DITA's basic principles are as follows:

##### 2.1.1 Topic orientation

DITA focuses on the topic as the smallest independently maintainable unit of reuse. This allows authors to focus on writing topics that efficiently and completely cover a particular subject, or answer a particular question, without dwelling on the various places the topic might end up being read.

##### 2.1.2 Information typing

DITA focuses on information types as a way to describe content independent of how that content is delivered. Instead of creating chapters and appendixes, authors can focus on writing concepts, tasks, and reference topics using structures and semantics that remain valid regardless of how the information reaches the reader.

##### 2.1.3 Specialization

DITA allows authors to create more specialized information types, so that the structures and semantics of the information are as specific as they need to be for a particular audience

##### 2.1.4 Inheritable processes

DITA-aware processes, such as publishing and translation, work automatically on more specialized types, and can also be specialized themselves.

### 2.2 Embodied in architectures

Those principles are embodied in two architectures:

#### 2.2.1 Information architecture:

The information architecture describes what a topic is and what the three core information types are. This provides a basic level of consistency across all DITA content, which allows for reuse of infrastructure and interchange of content across the entire range of possible information types.

#### 2.2.2 Specialization architecture:

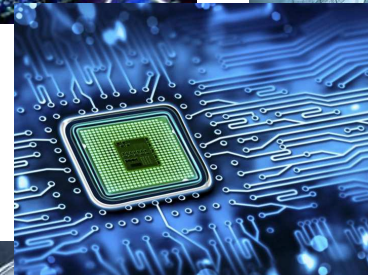
The specialization architecture describes how a specialized type of topic is derived from a more general type of topic, and it describes how specialization-aware processes can access topics at whatever level of specialization they require. For example, a



# Sectors with Significant DITA Adoption

- While DITA first came to prominence 12 years ago in software/IT sectors, DITA adoption has firmly taken hold in a number of other sectors, including significant numbers of firms in:

- Telecommunications
- Semiconductors
- Medical Devices
- Electronics Manufacturing
- Financial Services
- Automotive





# Pain Points that DITA Can Help Solve

These are the pain points I have most often seen in doc teams motivating their move to DITA:

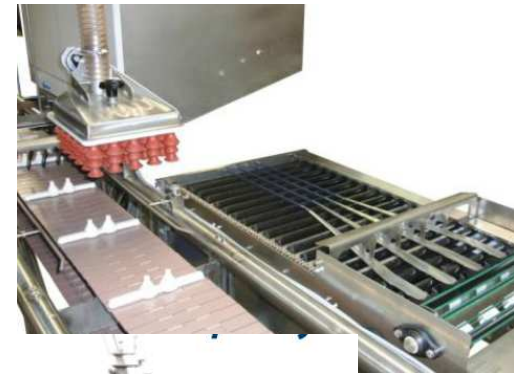
1. The need to reduce operational costs
2. A requirement to decrease localization costs
3. A need to improve content quality
4. The company has moved to Agile (and doc team needs too as well)





# DITA Adoption Crosses All Sectors

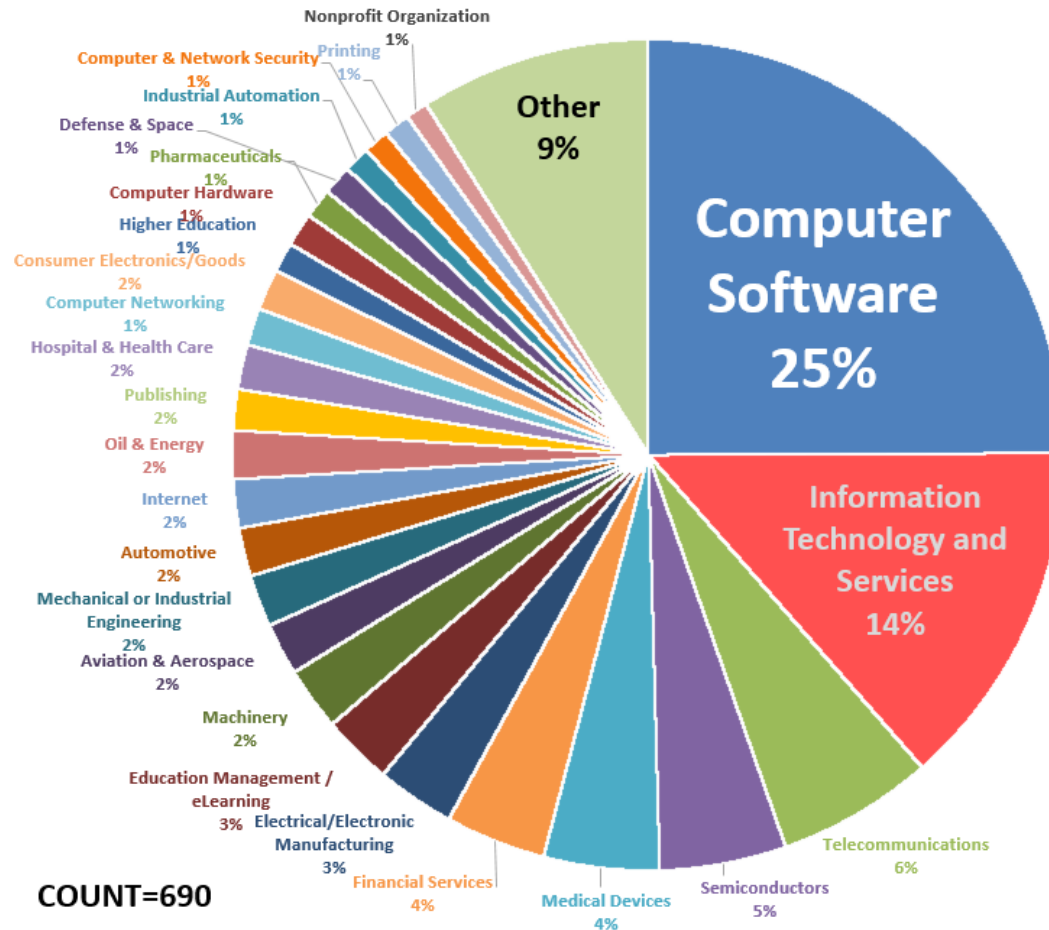
- 60+ industry sectors using DITA
- Wide range of firms
- DITA is being used to document:
  - Industrial egg-beating machines
  - Underwater exploration equipment
  - Radiology scalpels and much more!
- DITA is clearly no longer just for software/info tech!





# What Sectors are Using DITA?

DITA USAGE BY INDUSTRY SECTOR, Q2 2017

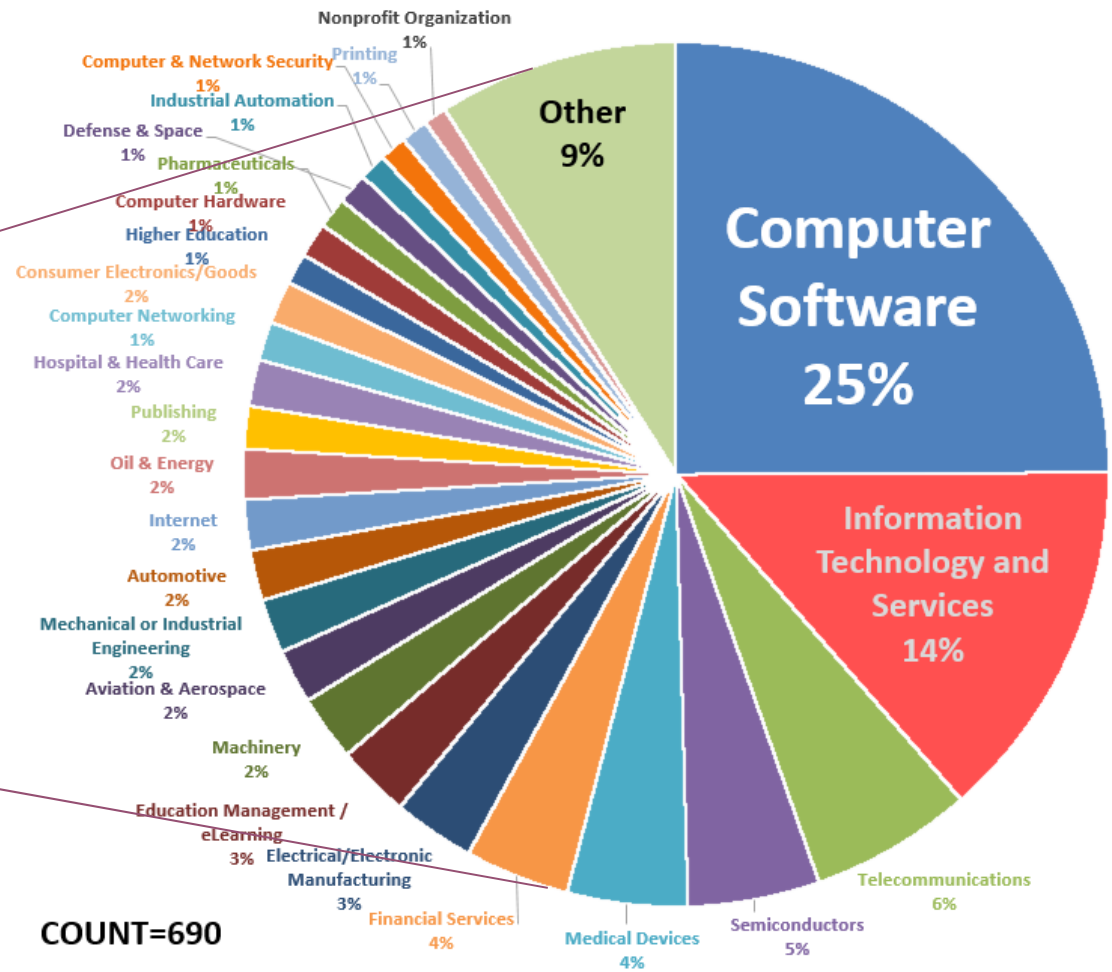
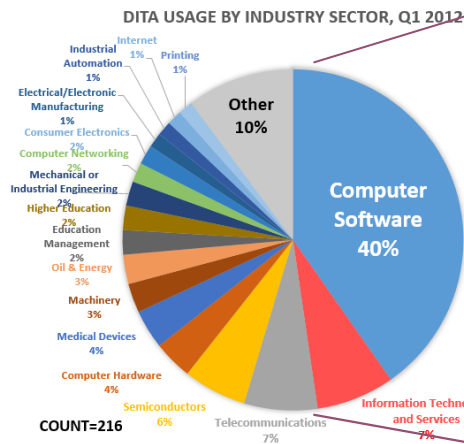


- Overall trend is that DITA adoption is firmly entrenched in tech-related sectors and is moving gradually into other sectors



# Sector Growth Over Time

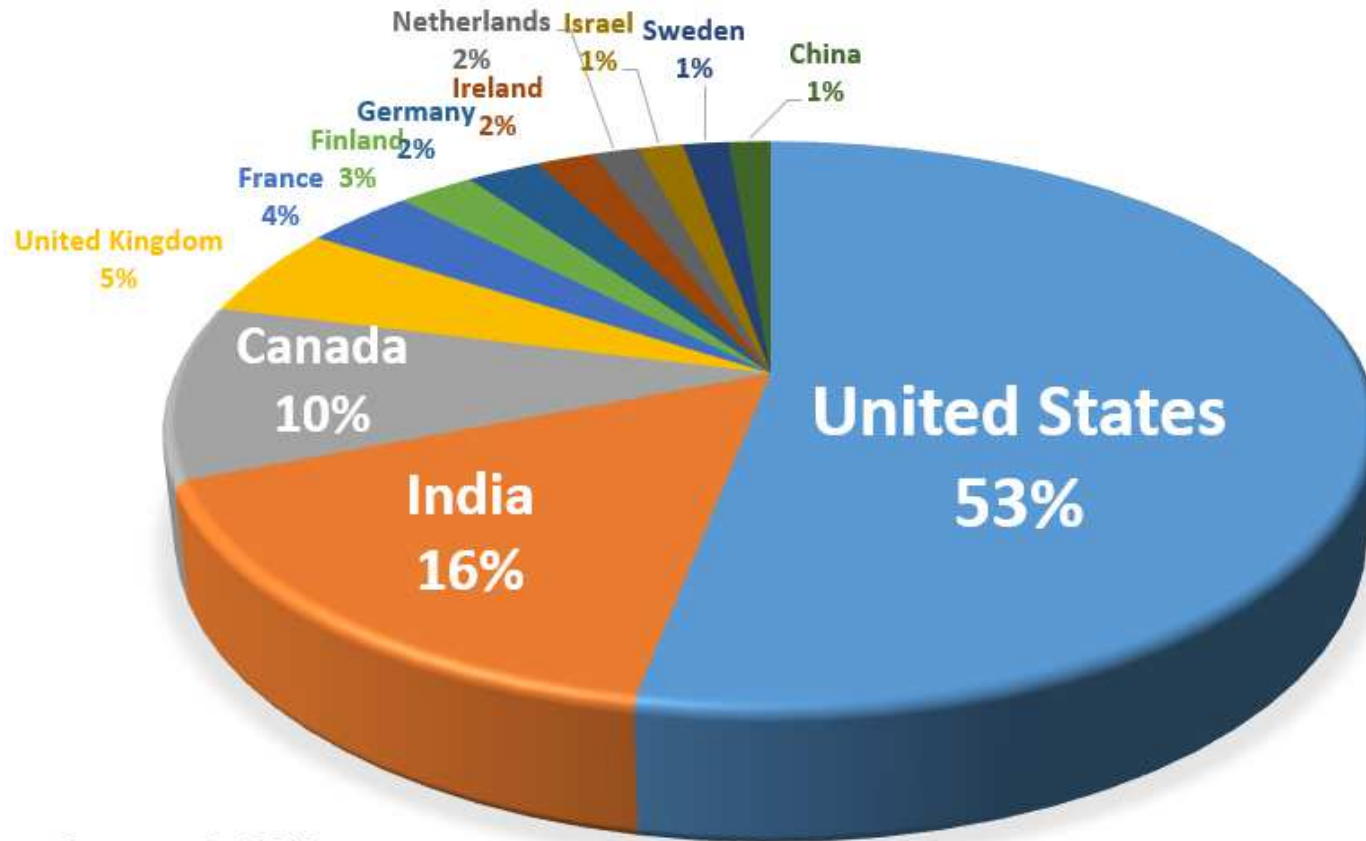
## DITA USAGE BY INDUSTRY SECTOR, Q2 2017





# Where is DITA Being Used?

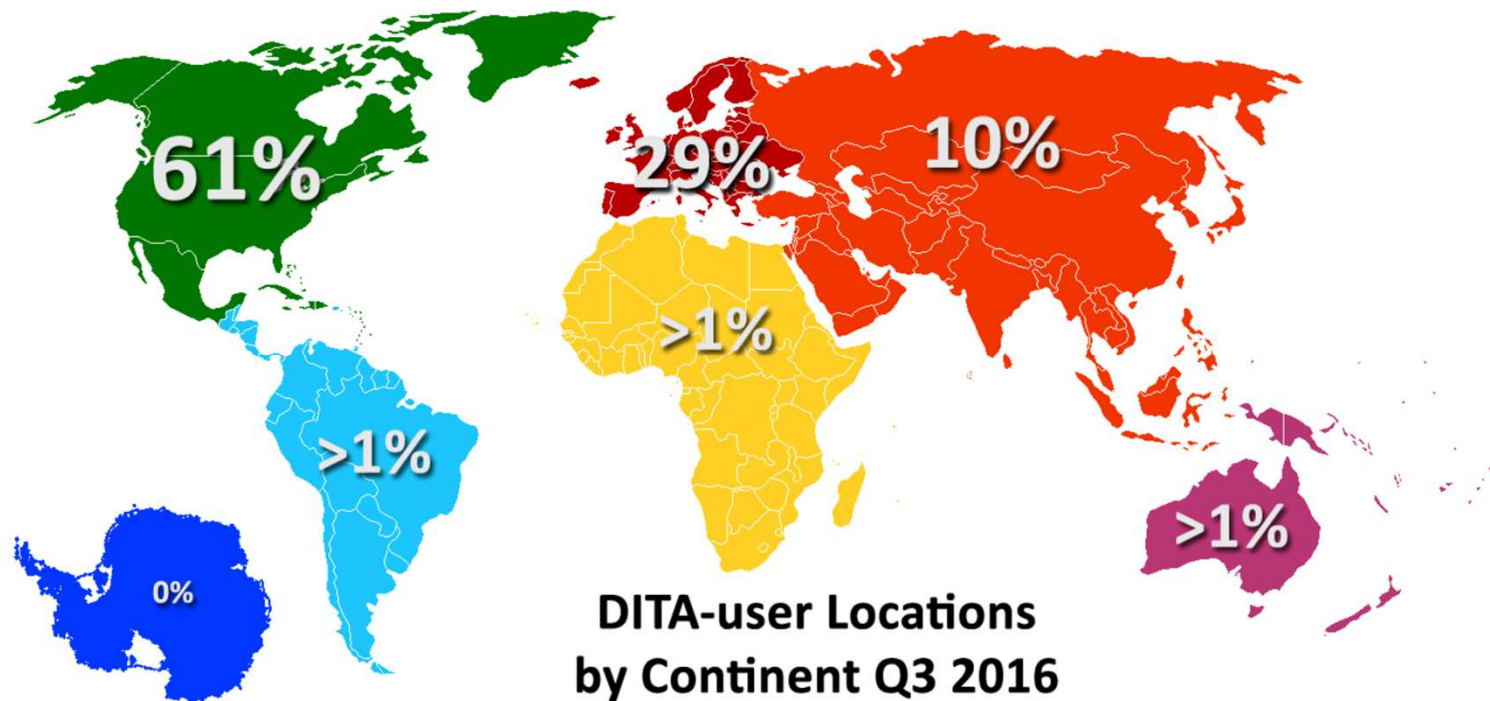
TOP DOZEN COUNTRIES WHERE DITA USERS LIVE,  
JAN 2017



Count: 9,005



# A Global View of DITA User Locations

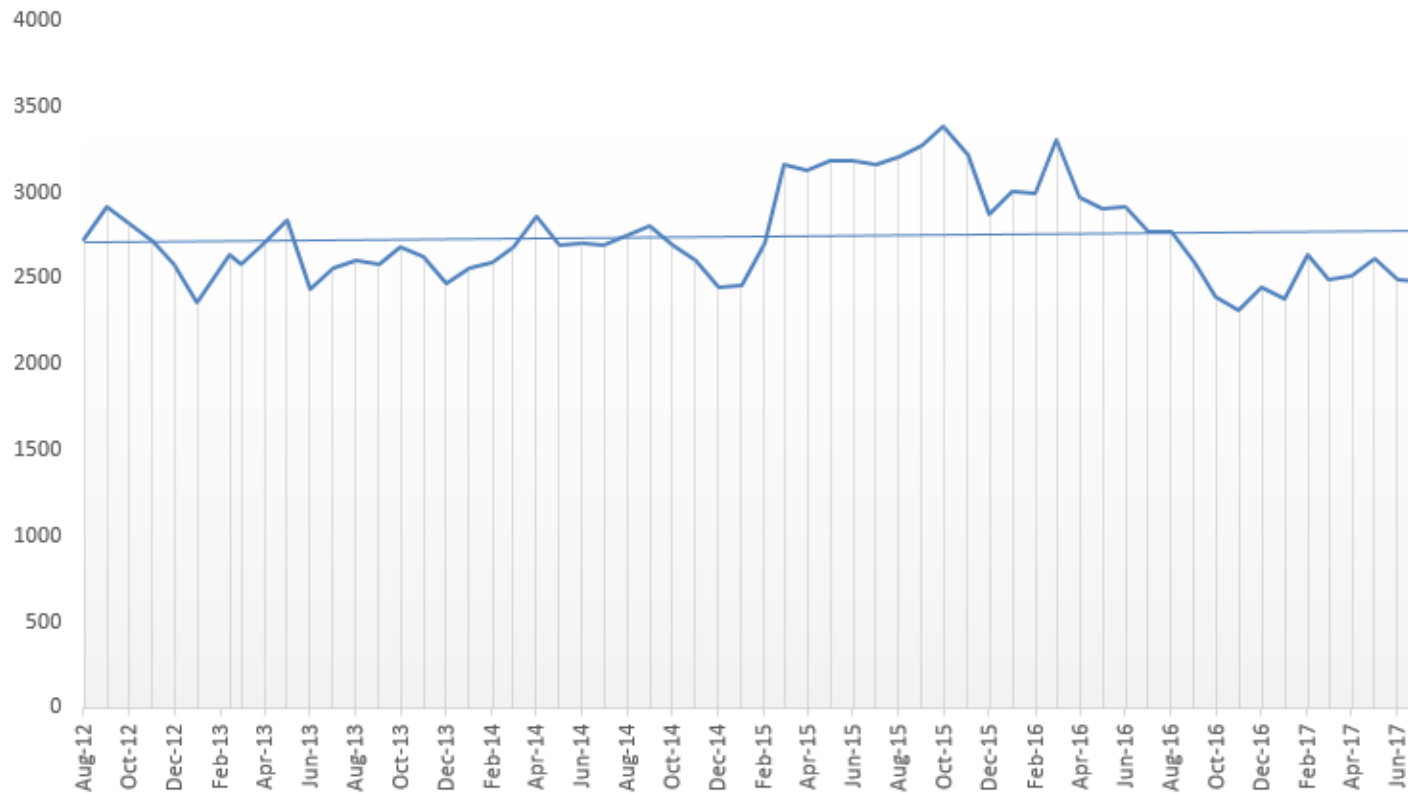


Overall trend is strong growth in Europe and Asia, while numbers of tech writers in N. America with DITA experience increases



# Technical Writer Job Market in U.S.

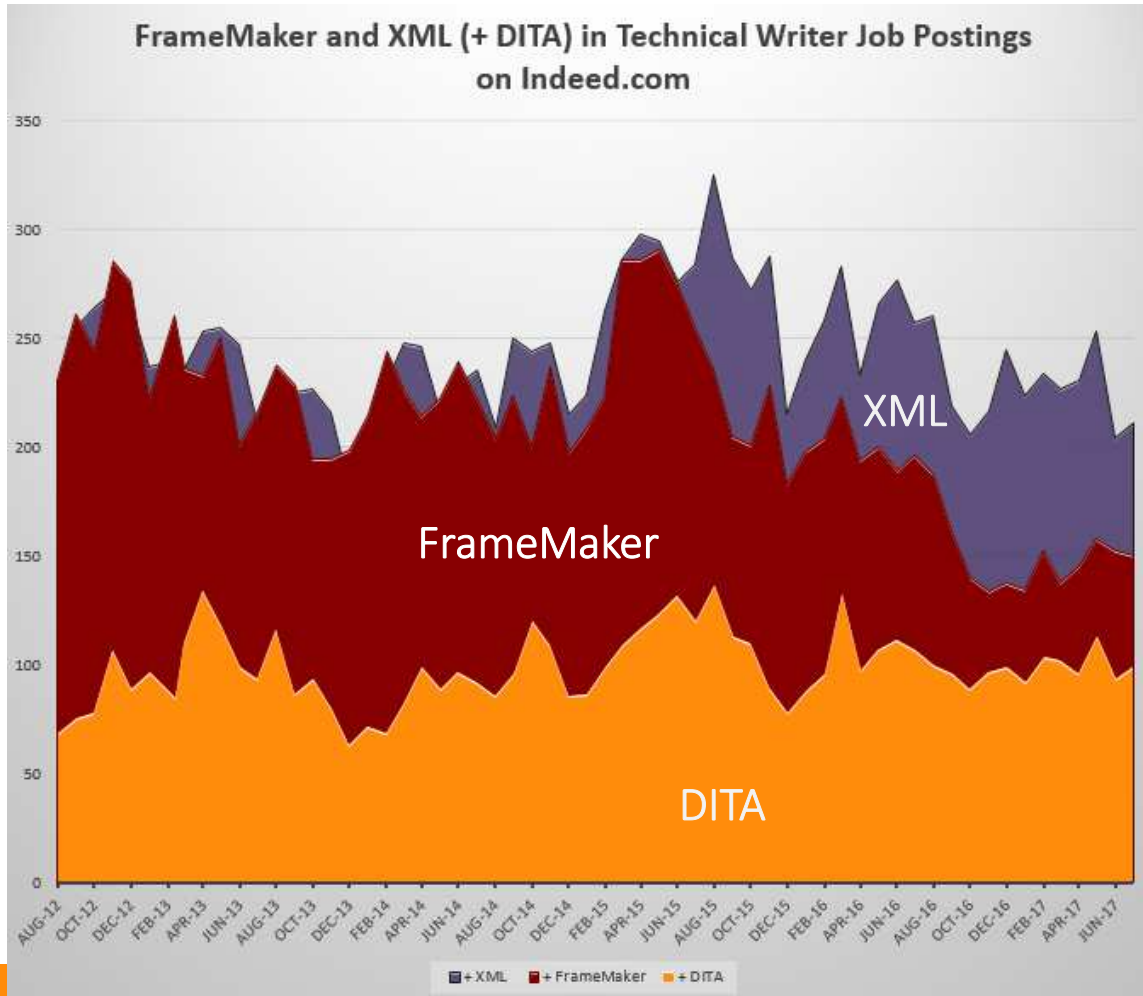
**"Technical Writer" Job Listings on Indeed.com for Q3 2012 - July 2017**



- Up until Q1 2016 tech writer jobs were seeing a resurgence; this has since evaporated. This affects all recent tools/standards trends.



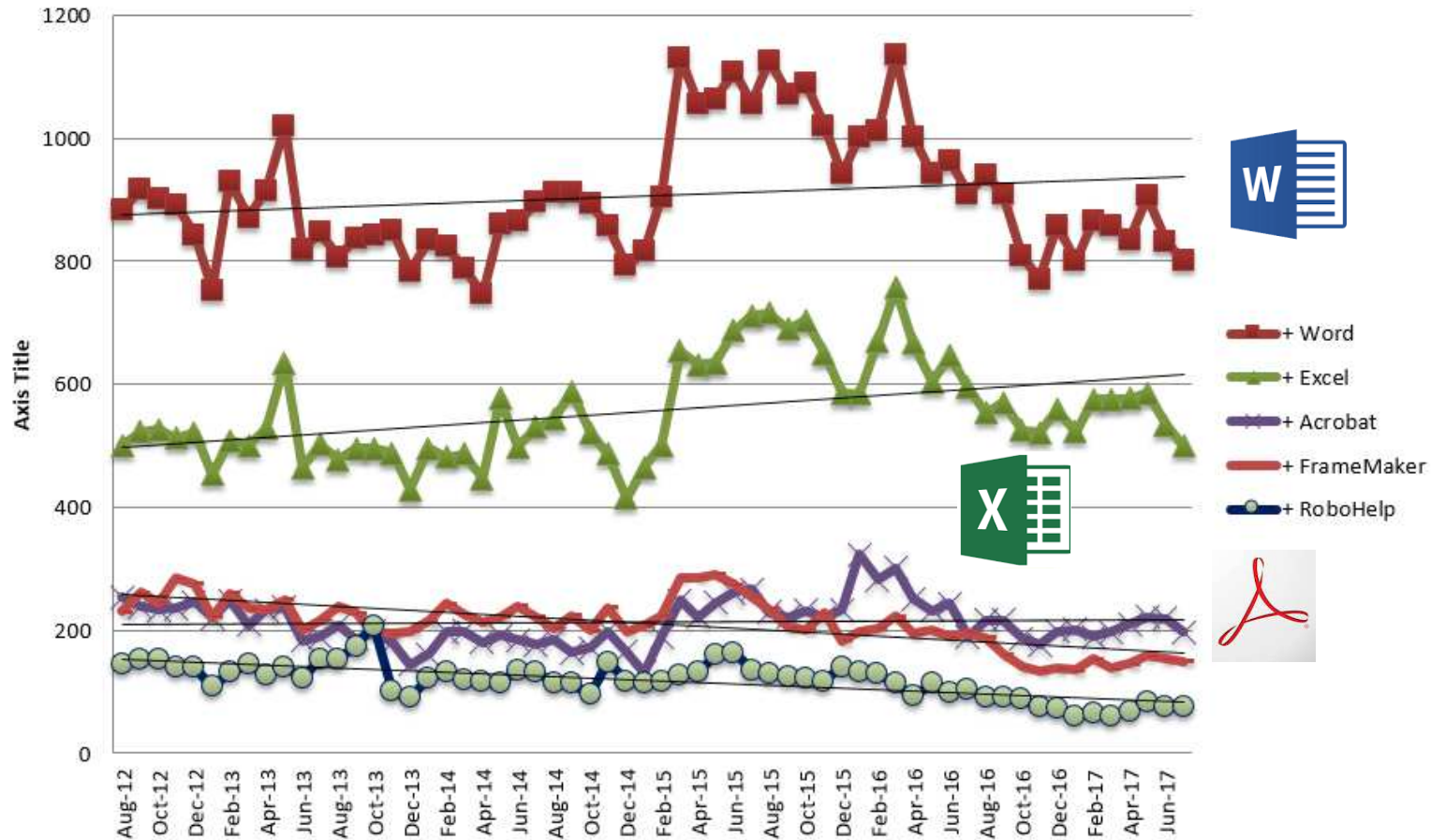
# XML Knowledge Has Eclipsed FrameMaker Knowledge for Tech Writing Hires





# What is the Most Popular Tech Writing Tool?

## "technical writer" Job Requirements on Indeed.com

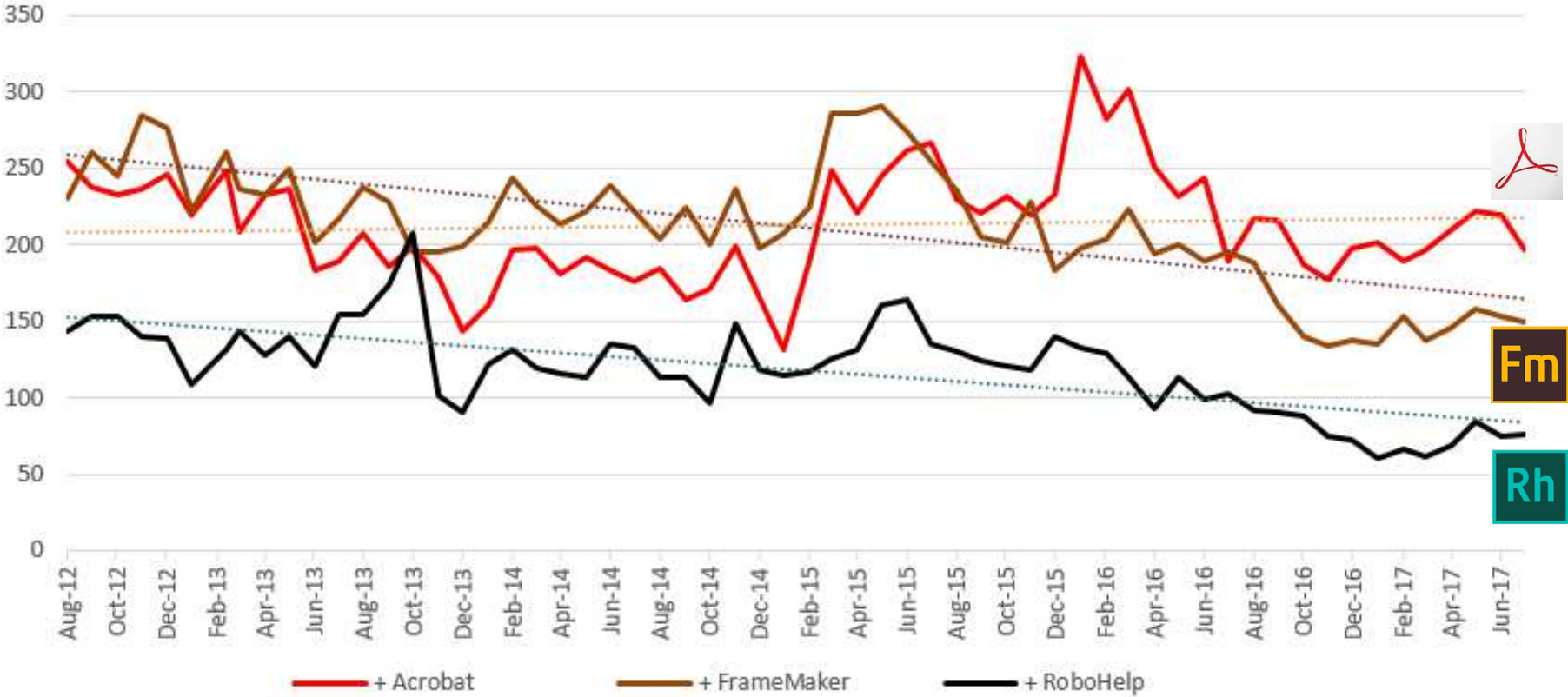


- To put things in perspective, Word is still the most-asked-for tech writing tool in job postings



# Overall Decline in Job Posts for “Traditional” Tools

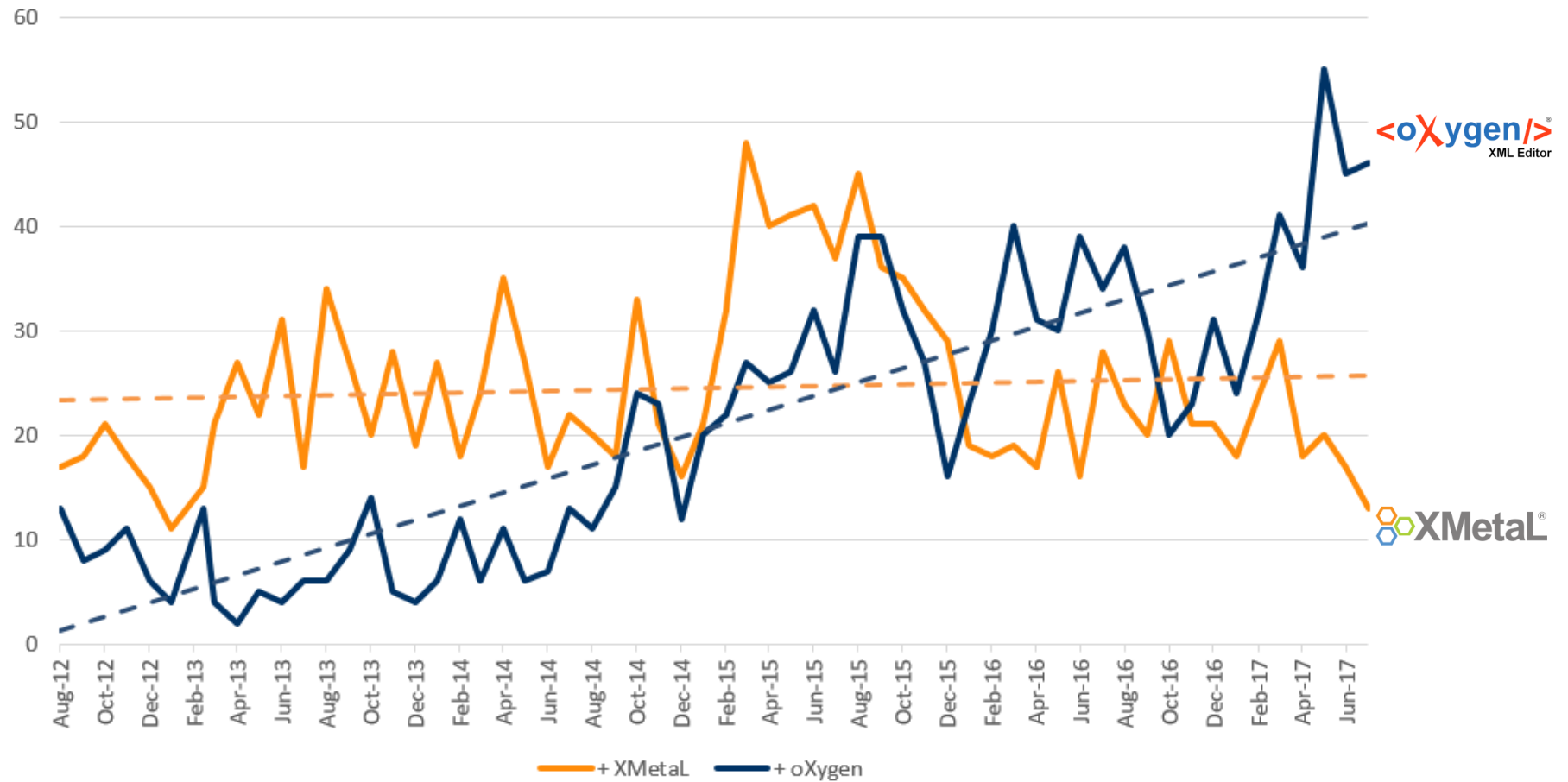
## “Technical Writer” + Call for Traditional Tech Writing Tool Requirements on Indeed.com





# Gradual Increase in XML-based Tool Skills in Job Posts

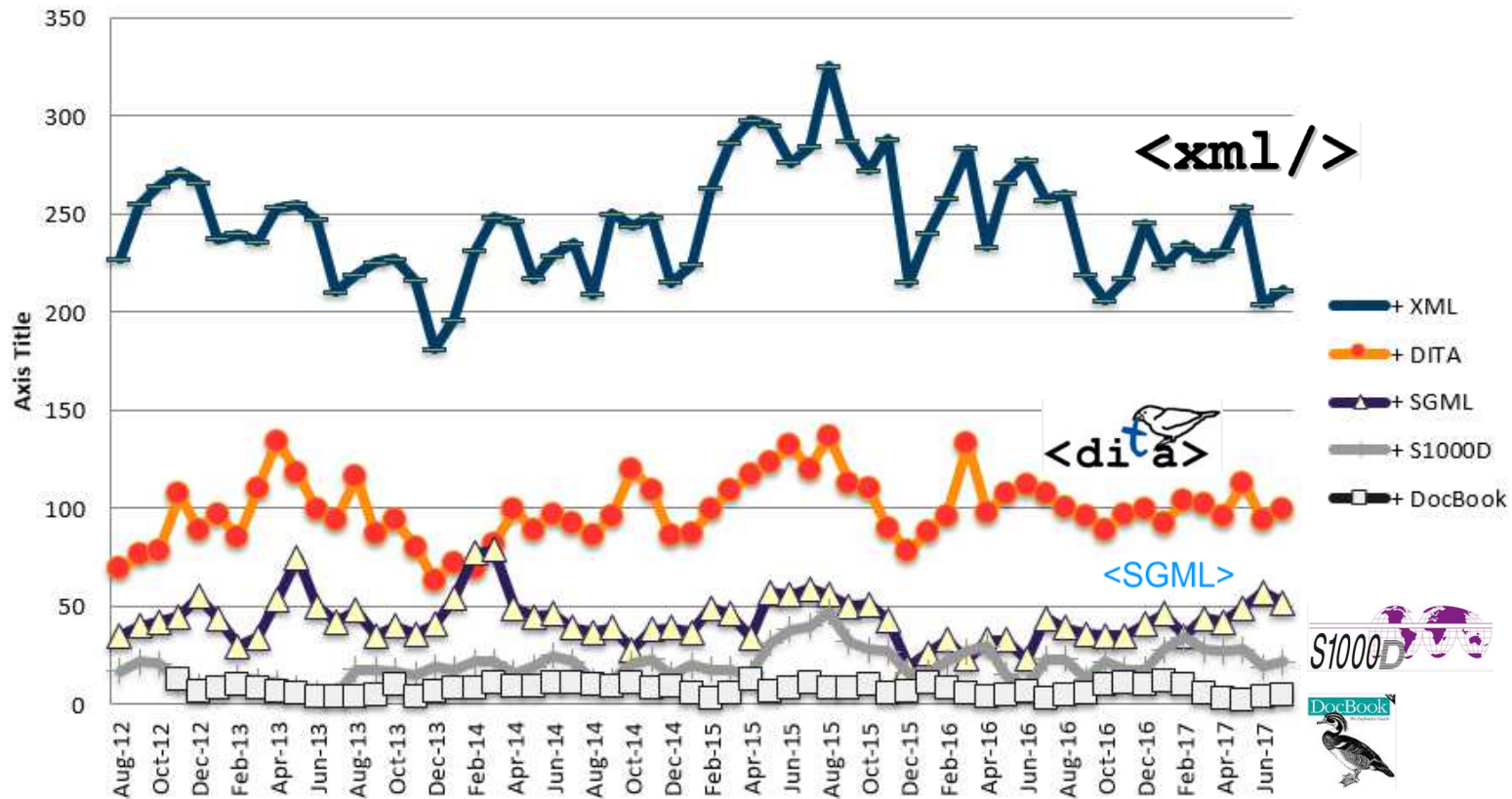
## "Technical Writer" + XML Tools on Indeed.com





# DITA and XML Tech Writing Standards

## "Technical Writer" Jobs and Specific XML (and Related) Standards on Indeed.com

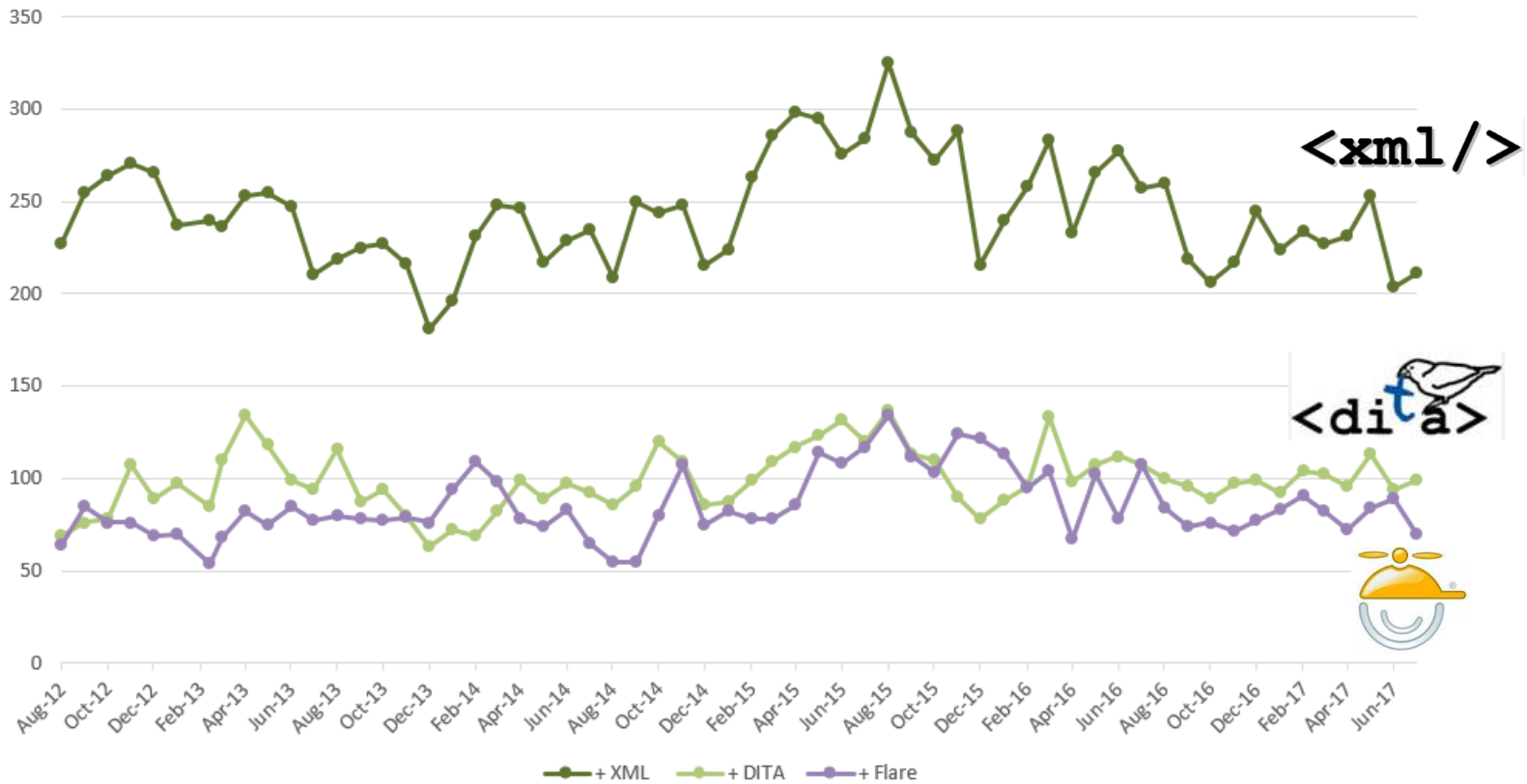


- DITA is the most popular XML-based tech writing standard



# DITA Popularity Roughly Matches that of Flare

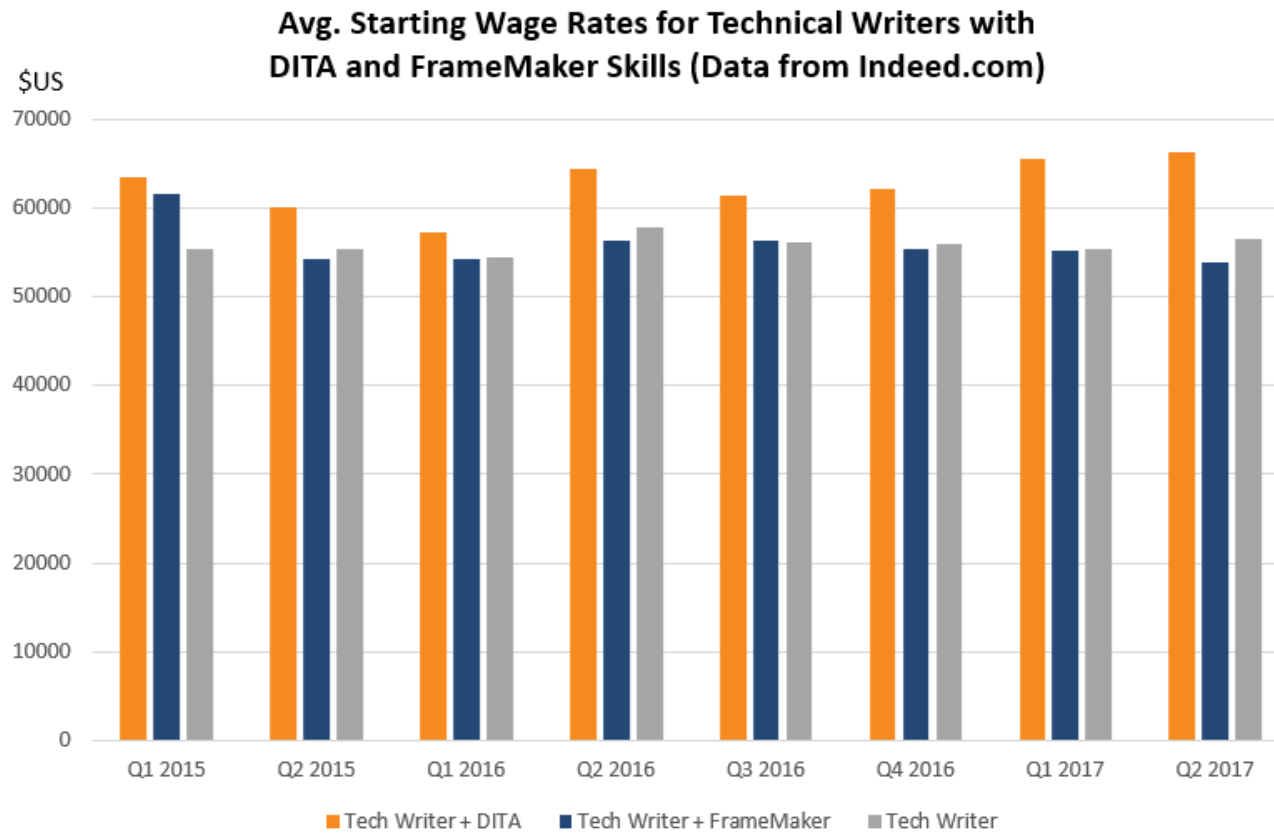
"technical writer" Jobs on Indeed.com Seeking XML, Flare or DITA Experience



- Suggests that DITA is still a niche market (as is Flare)



# Firms Are Willing to Pay More for DITA Experience

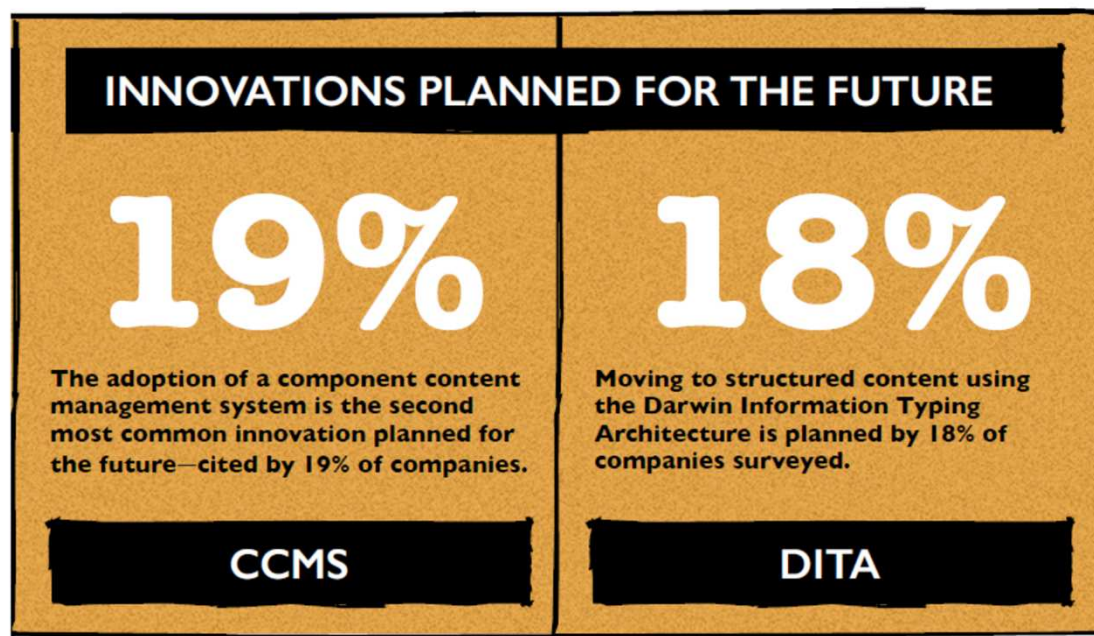


- Consistently firms are willing to pay a premium for technical writers with DITA experience



# Near Term Growth Seems Likely for DITA + CCMSs

- From a survey of 700 technical writing professionals:



The Content Wrangler 2016 Technical Communication Industry Benchmarking Survey Summary



QA



# IXIASOFT

Blog: [ixiasoft.com/en/news-and-events/blog](http://ixiasoft.com/en/news-and-events/blog)

Twitter: @IXIASOFT (and @KeithIXIASOFT)

IXIASOFT DITA CMS Users LinkedIn group:

[linkedin.com/groups?gid=3820030](https://www.linkedin.com/groups?gid=3820030)

Member of OASIS DITA Technical Committee