21 Compelling Software Development Facts & Figures

July 2014
Overview

1. The Software Market
2. Software Developers
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Facts About the Software Market
The global IT spend was estimated to be **USD 2.06 trillion** in 2013.

- Forrester¹
An estimated $542 billion was spent on software in 2013 (25% of total IT spend).
– Forrester²
In 2012, the value of the three primary market segments of the global software market were:

1. Applications software, **US$167.58** billion;
2. Application deployment and development software (AD&D), **US$82.8** billion;
3. Systems infrastructure software, **US$92.34** billion.

- Oxford Intelligence³
IDC projects subscription revenue (including SaaS) to grow at a 17.5% compounded annual rate, reaching 24% of total software revenue by 2016.

– PwC
In 2001, 62% of venture capital investments were in software companies, growing to 72% by 2011.”

— Forbes

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From 1988 to 2010, 41,136 mergers and acquisitions in software were announced with a total known value of US$1.451 billion ($1.45 trillion).

- Wikipedia, Institute of Mergers, Acquisitions and Alliances⁶
Facts About Software Developers
There are about **9 million** Java developers in the world creating software for the 3 billion devices running Java worldwide.

– Oracle⁸ & Plumbr⁹
The U.S. Bureau of Labor Statistics projects software development-related roles and jobs to increase at **double the national average** through 2020.

— Forrester 10
The worldwide developer population was 18.2 million (in 2013). By 2019, there will be an estimated 26.4 million developer. – Evans Data Corp. 11
By 2015, the 5.1 million developers under the age of 30 today will increase to over 5.5 million.

- Evans Data Corporation^{12}
The 50 largest US software companies generate about **70%** of revenue generated by the US software industry.

– Hoovers⁷
Facts About Software Problems
37% of IT projects are “at risk” each year.*

– PM Solutions

*A study by project management consulting company, PM Solutions, identifies top causes of IT failure. The report, called Strategies for Project Recovery, covers 163 companies roughly split between small, medium, and large organizations. On average, respondents manage $200 million in projects each year, of which approximately 37 percent are "at risk." The average company in the study therefore faces $74 million of "at risk" projects each year. -
On average, large software projects (i.e. budgets > $15 million) run 66% over budget and 33% over time, while delivering 17% less value than predicted.

– McKinsey⁴
17% of IT projects go so bad that they can threaten the very existence of the company. * McKinsey

*These unpredictable high-impact events—“black swans” in popular risk parlance—occur significantly more often than would be expected under a normal distribution. Large IT projects that turn into black swans are defined as those with budget overruns of more than 200 percent (and up to 400 percent at the extreme end of the spectrum).
78% of IT professionals reported that the, “Business is usually or always out of sync with project requirements” on software projects. 
– Geneca\textsuperscript{16}
Broadly speaking, in the USA, software productivity rates were the same in 2008 as they were in 1988.

– Caper Jones\textsuperscript{17}
39% of developers working with Big Data think a government agency is tracking the data that they create, gather, or use in their database applications.
- Evans Data¹⁸
As of October 31, 2013, the U.S. government had spent about $118 million on the troubled HealthCare.gov website alone.

– Healthcare IT News¹⁹
Facts About Custom Software
On average IT shops spend about 27% of their software budget on custom software development – including software languages, application servers, application architecture or testing issues – compared to 35% spent on packaged application software.

– Forrester

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There are some 50 large banking & finance companies in the UK employing over 1000 staff. On average each spends £5m (USD 8.2m) annually on customized software. This is more than twice as much as life insurance and auxiliary financial & insurance organizations. General insurers outlay the least at £1m.

- Computer Weekly²¹ & KEW Associates²²
About 1 in 8 companies spend more than **50%** of their software budgets on custom development.*

– Forrester

* These companies tend to be highly concentrated in the financial services and insurance industry sector and they are likelier to be smaller businesses - in the 20-500 employee range.
References

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8. Oracle certification, Oracle.
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