Introduction

Elsevier's Journey to digital transformation leveraging micro services

Adrian Wright

CEO

Estafet

- Challenges of the Publishing Industry
- Estafet - Integration Partner
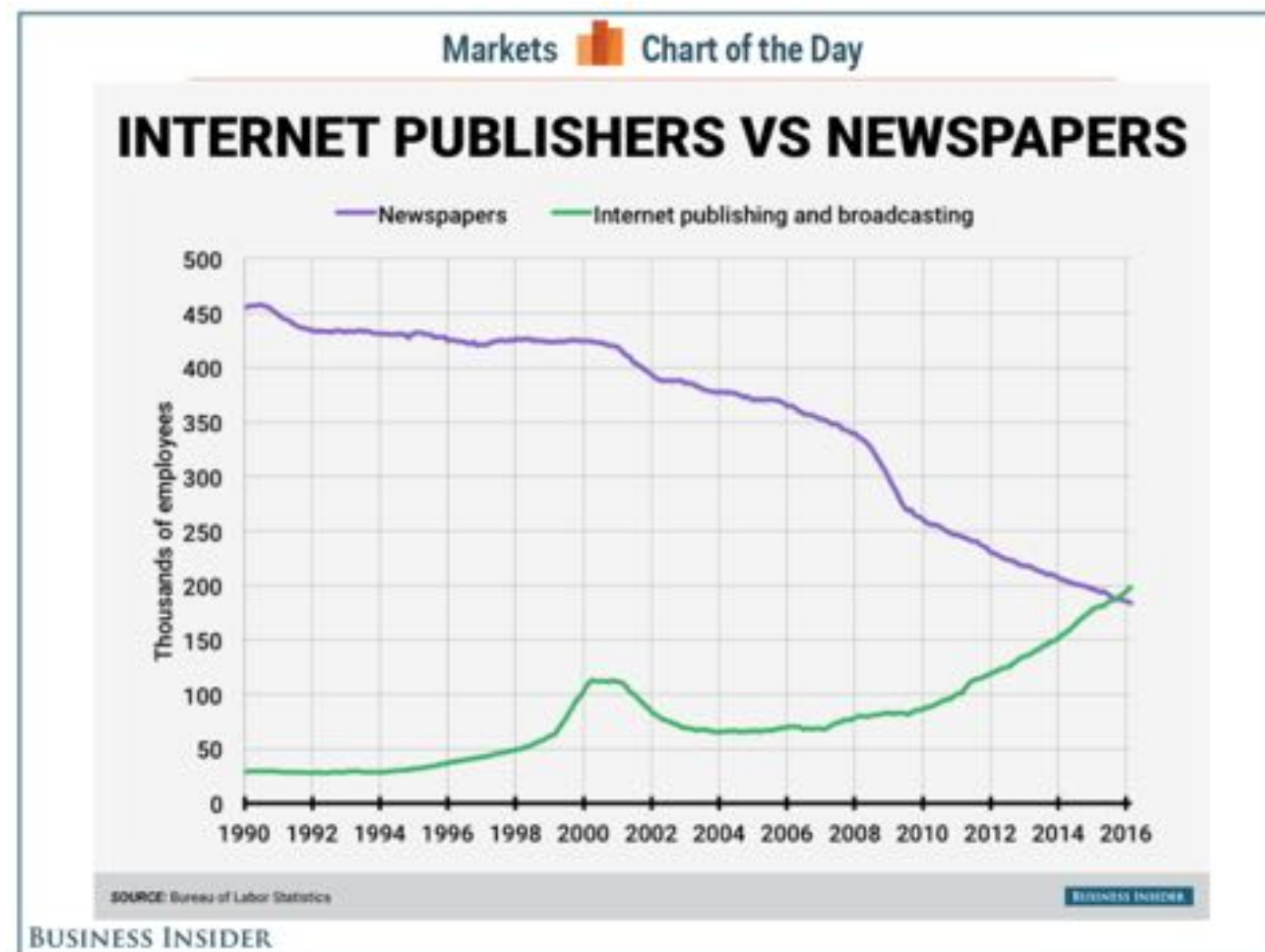- Elsevier - Tom Perry
- Q&A

Newspapers are dying and the internet is rising.
Business Insider Andy Kiersz

Since October of last year, there have been more people employed in internet publishing than by traditional newspapers
The Bureau of Labor Statistics

Elsevier, the modern publishing company, was founded in 1880

to

In short, we enable our customers to make better decisions, get better results and be more productive

Estafet
Innovate | Deliver | Transform

We Help Companies with Digital Transformation

Enterprise Integration	Agile Delivery	Mobile Development	Big Data & IOT
• Integration Experts for 15 years • Specialists in RedHat Middleware	• Agile Experts with Distributed Scalable Agile experience. • Estafet UK & Bulgaria	• Extending Integration Projects • Apple IoS experts	• IOT Big Data Delivery • BI Reporting • Delivering Large IOT Applications

Who are Elsevier?

- 4th Largest data provider in the world
- 30k+ Employees
- $3.5bn Annual revenues

How is Elsevier evolving with the digital transformation?

- Print books and journal sales are diminishing

- Elsevier's mission is to lead the way in advancing science, technology and health

- Electronic reference to decision support

- Print first to digital first

- Deskbound to always available

What was our journey?

We started with no clear integration strategy!

Key goals to achieve were:

- Secure access to our data assets

- Focus on data required to support end-to-end business processes

- Implement a hybrid integration platform

- Simplify integration with open standards and agile methodology

- Lower our overall cost of integration through software, infrastructure, people and delivery

What did our landscape look like?

Explosion in the spaghetti factory!

- Complex architecture
- Point-to-point Integration
- Lots of duplication

What were our key challenges?

- All point-to-point with limited reuse

- Large running costs due to complex nature

- Tight coupling leading to fragile integration

- Large offshore team running day to day managing errors and failures

- Proprietary technologies, difficult to resource

- Large licensing and infrastructure costs

We had to build a solid business case to show the benefits of investing in an integration strategy

What was our goal for integration

N(N-1)/2 connections vs. N Connections
(15 vs. 6 connections assuming just 6 components)
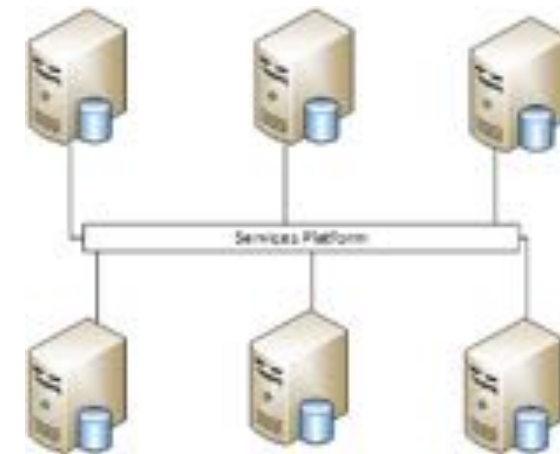
How did we approach our challenges?

Assess our full capabilities rather than just a focus on technology solutions

- Review integration principles
- Define a set of patterns
- Assess our integration products and tools
- Setup integration governance processes
- Evaluate all of our existing interfaces
- Consolidate to provide reusable capabilities

Work with an integration partner to help define our strategy

Estafet

Why Red Hat & JBoss Fuse?

We assessed all major integration products on the market against defined selection criteria

- Overall cost of ownership was low and flexible subscription model

- Good levels of support and customer service

- Open standards built around Java frameworks in use throughout the industry

- Allows full agile, test driven, continuous delivery

- Fast to deliver business value

- Flexibility to deliver very different integration scenarios

Where are we now?

Within 6 months of starting the journey we achieved the following:

- Patterns, principles, reference implementations and governance

- Supported by Estafet as implementation partner to deliver capabilities

- Strong in house delivery team recruited

- AWS deployed fuse platform with 20+ services

- Monitoring of all platforms with JON

- Fully automated, continuous delivery

Where have we deployed for business value?

Integration deployed across a wide range of business processes

- Customer and product master data APIs

- eCommerce integration

- Tax calculation and payment processing

- Advertising and sales processes

- Content production processes for books and journals

What does the future look like?

- Platform is now proven so expanding to support our evolving business processes

- Legacy technologies decommissioned

- Continuous improvement and reviews

- Communication of availability of service capabilities throughout the organisation

- Continue reduction in maintenance costs to drive business value

Questions and Answers