

## Case Study: Scholarly Publishing

The collage features several key elements from a scholarly publication:

- Research Report Page:** A page from "JAPR, Research Report" titled "Statistical Estimation of the Truth Model of the Broiler Walking Ability". It includes sections for "Experimental Procedure" and "Subjective Gait Scoring".
- Table 1:** A table titled "Table 1. Overview of marker observations" with columns for "Chromosome BE", "Marker", and "Frequency".
- Regression Equation:** A circular callout containing the equation 
$$Y_{ij} = \mu_j + \beta_j^{(i)} [2X_{ij}^{(i)} - 1] + \epsilon_{ij}^{(i)}$$
 and explanatory text: "Y<sub>ij</sub> is the single trait estimated breeding value of grandparent i, μ<sub>j</sub> is the overall mean of grandparent j, β<sub>j</sub><sup>(i)</sup> is the regression coefficient within grandparent i, and ε<sub>ij</sub><sup>(i)</sup> is the probability that grandparent i given all other information (Dempster et al., 1977). Segregation probabilities were calculated using all marker frequencies where segregation was observed. STBV were then regressed onto the segregation probabilities. The following regression model was used in analyses both across and within families."
- 3D Model:** A circular callout showing a 3D wireframe model of a measurement system, likely the "broiler walking on the test force platform" mentioned in the text.
- Text Callouts:** Several circular callouts containing XML snippets such as `<sec-type="other1">`, `<title>II. Statistical Estimation of the Truth Model of the Broiler Walking Ability</title>`, and `<math display="block">`.

# Move to Single Source Publishing Pays off for FASS

By simplifying workflow and adopting publishing automation with Typefi Publish, FASS realises significant cost and time to market benefits

## Background

The Federation of Animal Science Societies (FASS) was formed in 1998 for the pursuit of scientific and educational good of animal agriculture. FASS represents the American Dairy Science Association (ADSA), the American Society of Animal Science (ASAS), the Poultry Science Association (PSA) and Food Animal Sciences (FASFAS) and provides services to over 10,000 professionals from animal agriculture.

One of FASS's goals is to bring together scientists and educators in areas of animal agriculture represented by the Member Societies as a means of facilitating the dissemination of scientific and technical information through publications and scientific meetings.

To this end, FASS publishes a set of journals on a bi-monthly and quarterly basis. All journals are published in print and online.

## Challenge

FASS needed to accurately publish peer-reviewed technical journals, typically containing linked references, in-text citations and complex scientific formulae—demanding highly manual and time-consuming editorial and publishing workflows. As a result, FASS had to limit the information they could publish. And with no in-house expertise, FASS had to send print-ready files offshore for conversion to HTML.

But probably the most time consuming aspect of their publishing process was that FASS had to contract developers to add proprietary code into the manuscripts required for math and scientific notation. The manuscripts then had to be returned to FASS for composition using a proprietary publishing system, only to be sent out again for proofing.

Once the authors' changes were returned, these edits had to be added manually before the final print-ready files could be produced. Only then could the journals be paginated and printed and the information prepared for online presentation.

This process was a long, laborious and costly one. FASS needed to make a change to their publishing workflow in order to meet their objectives of delivering information to their audience efficiently and in a timely fashion.

## Solution

FASS implemented Typefi Publish, a long-document publishing solution based on Adobe InDesign Server that provides standards-based, script-less publishing solutions for automating

publishing of richly-formatted documents such as scientific journals. After a review of their current processes, FASS replaced their current publishing system with Typefi Publish enabling them to publish all their journals using an industry-standard publishing solution.

By integrating Typefi Publish with Inera eXtyles; an integrated XML editing tool in Microsoft Word, FASS was able to accurately create content in the NLM DTD as well as publish journals containing cross references with links to PubMed Central and CrossRef databases.

For journals requiring heavy math content, FASS uses MathType; an interactive equation editor that allows the creation of mathematical notation for desktop publishing. Equations are exported as images from MathType and integrated into their publishing workflow.

As Typefi Publish enabled FASS to seamlessly integrate eXtyles and MathType into their publishing workflow, they no longer needed to use external staff, saving significant time and cost.

## Benefits

Through the implementation of Typefi Publish, FASS has significantly reduced their costs and streamlined their publishing processes. Previously, it took several hours to edit and code each manuscript—a step which

*“Increased automation and a more streamlined workflow with eXtyles and Typefi at the core have enabled us to cut journal composition time by more than half.”*

— Louise Adam,  
Production Manager, FASS

has now been completely eliminated.

There has also been a significant decrease in the time it takes to publish a proof for the author's review. It now takes half the time to prepare a proof for the author resulting in a total production time saving of 2-3 weeks per journal.

TypEFI Publish has also enabled FASS to increase the number of pages per journal, an issue previously as they did not have sufficient time to follow the required stringent process for journal publishing to meet deadlines. FASS now receives the manuscript in Word, and edit it using eXtyle, before creating a proof using TypEFI Publish—this initial formatting process saves the Editor 30 – 40 minutes for each journal article.

“The cost and time benefits to get the right information to our

*“The time required for implementation of and training in the TypEFI system was greatly reduced compared with that for our previous composition systems. TypEFI combined our need for highly automated batch pagination with the ease of use of InDesign and replaced a labor-intensive, manual typecoding process used at FASS.”*

— Louise Adam,  
Production Manager, FASS

members on time, have been enormous,” comments Louise Adam, Assistant Director, Editorial and Production Department, Federation of Animal Science Societies (FASS).

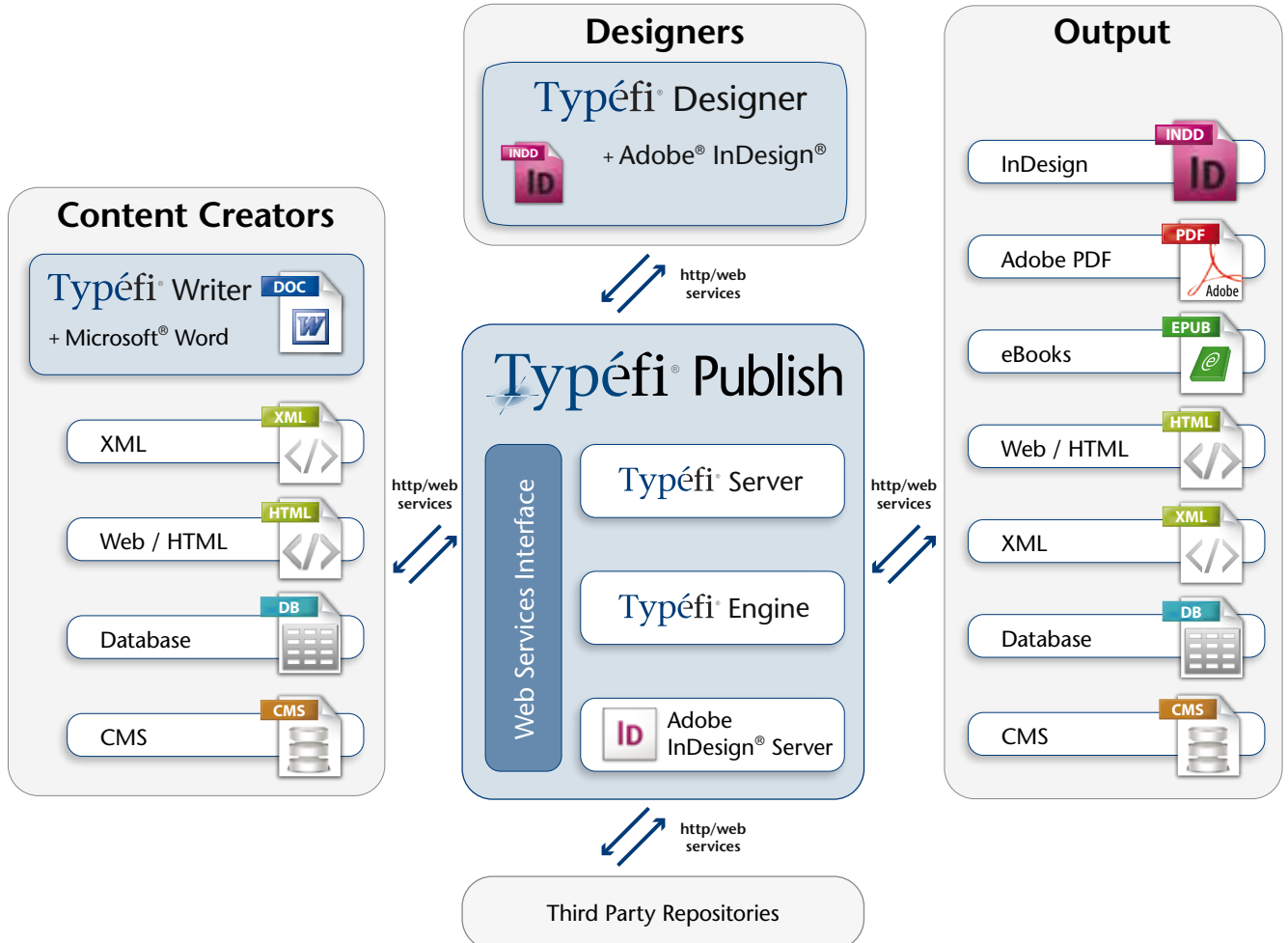
As TypEFI Publish conforms to the NLM DTD, FASS is now looking to further expand its application to content management and online publishing.

“Thanks to TypEFI Publish, we’re now able to integrate the solution into a content management system to manage all journal

content, while automating the processes to handle metadata and publish journals online.” concluded Adam.

### About TypEFI

TypEFI provides the world leading TypEFI Publish automation solution for advertising, marketing communications and publishing industries and provide world’s best professional services in implementing and supporting a fully automated publishing and production process.





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