MISL TOTAL DOCUMENT MANAGEMENT

MISL Case Study –Hewlett Packard

MISL was approached by Hewlett Packard (HP) to help with a unique and challenging project for an HP customer in the financial services industry. For reasons of confidentiality the end customer cannot be identified in this case study. The project resulted in the largest throughput of images in MISL's 34 year history and the implementation of a data processing server farm that concurrently ran 192 processor cores to extract the resulting data. The project was delivered on time and on budget and was another example of how MISL was able to influence the project design to best suit the customer's urgent requirements.

The Challenge

The challenge for the end customer was related to a large body of unstructured data in the form of statements that were held as exposed images on microfiche. The microfiche was generated historically at the same time as the statements were printed and dispatched to account holders. The microfiche was generated by a computer output to microfiche machine.

The customer had a need to extract key data from the images of the statements to discern which account statements included a type of insurance payment, the value of that payment in relation to the statement balance and other key information. The customer did not require scanned images of the statements, only the extracted text information to be fed into a line of business database application.

MISL were approached to try and find a solution to the problem. The key challenge being the scale of the task. There were 6 cabinets of microfiche to be converted. There were approximately 600,000 pieces of microfiche each containing 269 image frames. Within each frame there were 2 statement pages and each one had to be checked for the presence of the insurance payment and, if present, then had to have a series of data fields extracted.

The project needed to be completed within 6 months and in a highly secure environment.

Project Design

MISL was involved with the design of the project from the outset and a series of meetings were attended to define both the process for extracting the data and the mechanisms for the data to be validated and entered into the ultimate line of business database systems of the end customer.

It was quickly established that the project would need to take place at MISL's premises because to scan the quantities of fiche involved was a significant task. The originals were viewed at their storage location and tests were carried out to establish the image quality required to automatically extract the text data.

Then MISL underwent several security checks by the end customer to ensure that their information would be secure when on MISL's premises.

As the project was to be set up from scratch this afforded MISL the opportunity to work closely with the customer to define the best processes. At this stage a third party company was involved in the design process; Kofax. Kofax is the industry leading data extraction software system that would be used to interrogate the scanned statement images to identify those with an insurance payment and extract all the relevant information.

As part of the project design process MISL worked closely with the customer's database team to understand the structure of the information on the statements, how the statements were generated and various checks and balances to validate the extracted information. MISL identified the various phrases that appeared in the statement wording to indicate the presence of the relevant insurance payments and the relative locations of other information on the statements. We also validated each field of data to be extracted and defined various checksum and variance checks on account numbers and amounts to ensure the accuracy of any extracted data.

This information was used in conjunction with Kofax to define the parameters for the software configuration and the required hardware capacity required to run the software.

Project Set-up

MISL procured twelve Wickes and Wilson 7700 series microfiche scanners for the project and had them set up in a dedicated area in the MISL premises. The scanners were connected to a stand alone network for the customer that was insulated from any external connectivity (by not being physically connected to the internet in any way) and from the other data processing activity going on for other customers within MISL at the time.

MISL procured significant server infrastructure to both hold the scanned images and to process them using the Kofax software. The data processing servers totaled 192 processor cores. The Storage space for the project, which was encrypted at rest, totaled 12 Terabytes.

Once the project facilities were set up MISL collected the microfiche cabinets from the customer location over two trips and transported them to MISL's premises in Hoddesdon for processing.

With sample scanned data in the first weeks of the project MISL worked closely with Kofax colleagues to set up and test the data extraction process to ensure accuracy and that all of the information was being captured and exported in the correct format for the customer.

Once this had been established and test data had been successfully uploaded into the customer's line of business database system and validated; the project was ready to start.

The MISL process

MISL employed a team of 24 scanner operators and 10 quality assurance personnel exclusively on this project over a 6 month period. The processing happened 5 days per week over 2 shifts from 8am until 5:30pm and from 6pm until 2am respectively.

The scanning activity ramped up to full capacity within the first month and from that point onwards each scanning station was scanning a single piece of microfiche in approximately 55 seconds. This was no mean feat as each sheet of fiche needed to be manually loaded into a glass caddy for

insertion into the scanner and then, within the scanning software, the images needed to be registered for position before the final scan could be initialised.

After scanning, a percentage of the images went through a quality assurance check by the QA team to ensure that the image quality was maintained and consistent.

The resulting images were then automatically processed by the Kofax system and exports of data were output, checked and sent for delivery 3 times per calendar month.

The data was validated and exported to external, hardware encrypted, USB2.0 hard drives for delivery to the customer. The hard drives had external keypads with a 12 digit code for unlocking them and were encrypted to AES 256 bit levels. The data was delivered in a data secure bag to the customer location and then, once delivery had been verified by the MISL delivery driver and the customer, the passcode was emailed to the customer contact to unlock the hard drive.

The customer then uploaded the data to the line of business system and carried out further validation and checking to ensure that the data was accurate and fit for purpose before accepting the consignment as complete and correct.

The entire process for over 320 million statement images was completed inside the contracted 6 month project duration.

Conclusion

This project was an example of how MISL can utilise their experience to plan and implement a complex, large scale project in a feasible and effective way. The customer's challenge was significant and time frames were very tight. On this basis MISL got involved with the project design and specification process and then worked with other companies, such as HP, Kofax and the scanner supplier Wickes & Wilson, to define the best approach to the project.

MISL scaled up the staffing, implemented a dedicated processing team with equipment, network infrastructure and server processing power in a record time. We then project managed a huge work effort to deliver the project while consistently monitoring and validating data quality for the customer.

MISL's approach to any project is built on working with the customer and partners to find the most appropriate solution to deliver the desired end result. The range of capability and knowledge available within MISL ensures that we can collaborate with our customers to solve the most complex imaging and data processing problems.

Project statistics

- Duration: 6 months
- Total number of microfiche scanned: 600,000 approx.
- Total number of collection locations: 1
- Total number of images scanned: 320,000,000 approx.
- Total number of cabinets collected: 6

MISL TOTAL DOCUMENT MANAGEMENT

Reference Contact details:

Ian-Ames-White
Advanced Document Services & MPS
Printing & Personal Systems

ian.ames-white@hp.com
Mobile + 44 (0)7771 812 186
PC + 44 (0)3305 871 506
Fax + 44 (0)1749 671586
Hewlett-Packard Company
Cain Road, Amen Corner,
Bracknell. RG12 1HN
UK

MISL Contact Details

Steven Clarke
Sales & Marketing Director

Tel: +44 (0) 1992 470 060	19 Pindar Road	Tel: +44 (0) 1992 470 060
Email: steven.clarke@misl.co.uk	Hoddesdon	Fax: +44 (0) 1992 460 690
	Herts	steven.clarke@misl.co.uk
	EN11 0DE	www.misl.co.uk