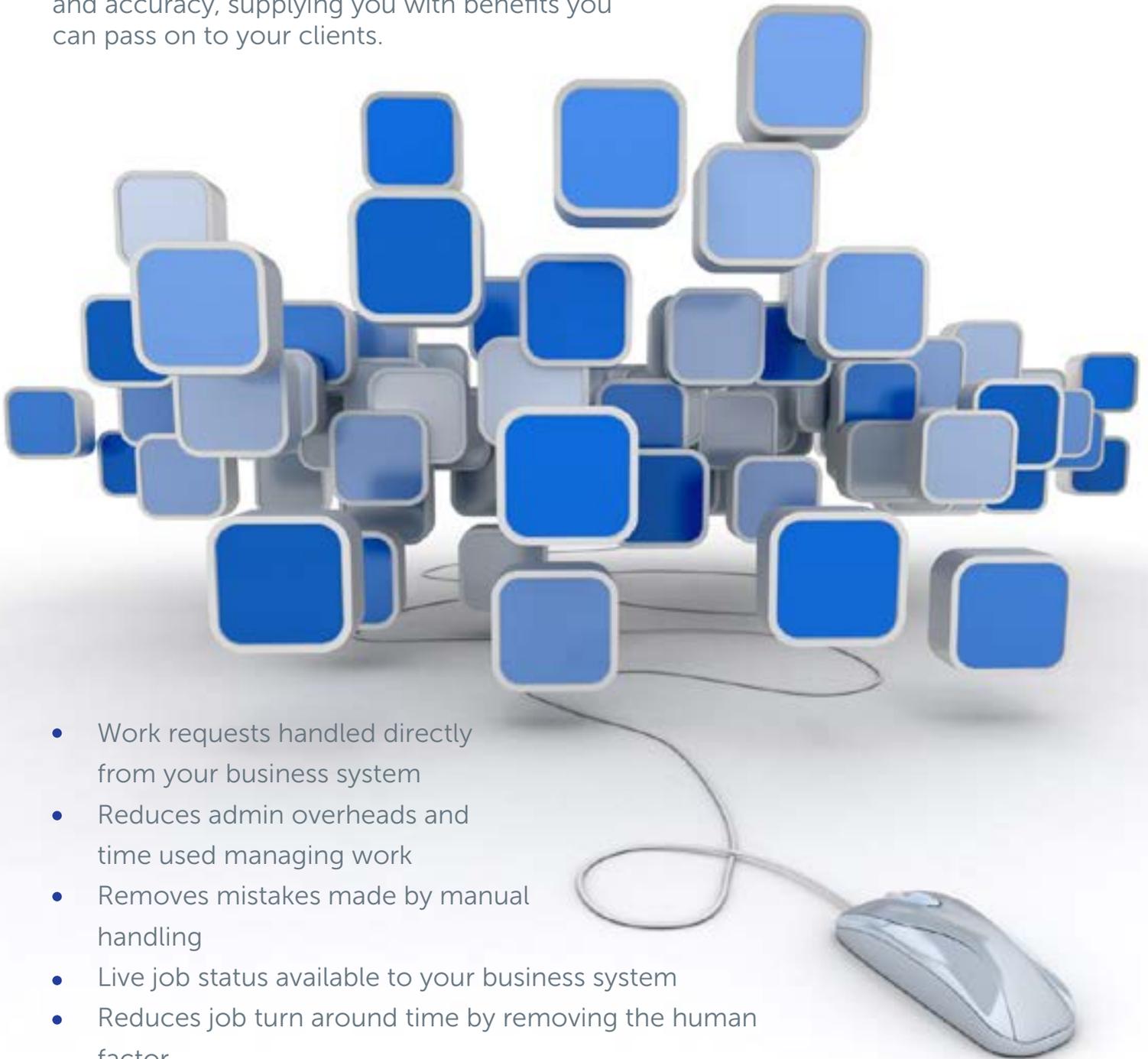# Business to Business Interface

Our B2B interface system means your company's software can communicate directly with ours, synchronising and automating tasks such as ordering, reviewing job statuses and results, invoicing statements and payment control.

This provides you with major gains in productivity and accuracy, supplying you with benefits you can pass on to your clients.

- Work requests handled directly from your business system
- Reduces admin overheads and time used managing work
- Removes mistakes made by manual handling
- Live job status available to your business system
- Reduces job turn around time by removing the human factor
- Invoicing, payment and statements can be processed automatically
- Checking functionality allows early verification of client information
- Lends itself to automation of your customer interface

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End to End Digital Work-flows

As the industry has evolved the information we use has been increasingly moved into digital formats. All architectural drawings we receive for structural design work are now in a digital drawing format and 80% of our issued output is also in digital format.

We are increasingly migrating internal systems to digital format, which give us increased efficiencies, better quality control, better manageability and opportunities to reduce turn-around time.

Recently we have implemented a system where our site services data is directly collected and managed through mobile tablets and we are currently reviewing all of our processes in light of that experience.

- Document authentication via cryptographic signatures
- Field collection, visualisation and analysis of data
- Digitally returning field data to base
- Validation of site work via recorded photos and GPS locations
- Reduced turn-around times for site jobs
- Possibility of sending urgent work to site staff in the area
- On-site generation of details (retaining walls etc.)
- On-site access to main office resources for better live consulting
- Automatic processing of some classes of work
- Online accessibility of job archives for the client

Sharing our Knowledge

Since our founding 34 years ago, we've provided engineering solutions for numerous projects located on sites throughout Western Australia. This experience has helped us grow an extensive knowledge base, and from this we have been able to provide our clients with vital information upon initial consultation.

Our developing on-line capabilities mean we can now begin to share our knowledge easily. This year we will be working on a project to make this information directly available to our clients via our web portal and mobile client devices .

- Preliminary site information based on our experience working in an particular area will allow our clients to make early estimates on site suitability and costing
- Structural details from our own library will be made available for clients as required
- Custom details can be created for a client to leverage their processes, resources and building techniques.
- This information will be available through our Passport portal, "Engineer in your Pocket" mobile app and via the B2B interfaces.
- Other publicly available data sets will be integrated with our data (e.g. Landgate data) to provide rich site information to our clients.

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Engineer in Your Pocket

This year will bring about further development of the tools clients can use to access our engineering resources.

We understand that for some of your site-based and sales staff returning to the office to book in jobs and print drawings can take up much of their valuable time.

Our proposed "Engineer in your Pocket" application will provide your staff with the ability to easily access Structerre resources on their mobile device (phone or tablet), with the added benefit of including GPS location.

- Existing Passport services made available
- Extending those functions to include information that's available from sites (GPS location, photos, sketches)
- Additional engineering tools
    - Preliminary (non-certified) site classification for known areas
    - Cyclonic/seismic classification
    - Engineering enquiry tools (message Structerre about an issue)
- Mobile access to standard details and to all job drawings and documentation
- SMS notifications regarding jobs.
- Mobile booking (book a compaction test via your phone, based on GPS)

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Future Engineering Exchange

Structerre has a commitment to progressive use of technology in our operations. Recently we have been investigating where the industry is moving to in terms of engineering data exchange, specifically in terms of the limitations that are present in current data formats used between companies.

Current drawing formats only represent a design, they do not specify the components of the design. These files require human experience to decipher and can only be used in isolation.

IFC format files are far more powerful as they communicate accurate and explicit design data, leading to simpler interpretation of drawings.

The benefits include:

- Adding an element of automation, speeding the engineering process

- 3D modelling of architectural designs

- Ability to inject the engineering design back into the architect's model

- Allows a collaborative approach for different groups working on more complex designs

- The most common architectural design packages already support IFC format (Revit, ArchiCAD)

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Document Standardisation and Quality Systems

Structerre have always strived to provide quality engineering solutions and as such have a program of computerisation, not just of drawings and engineering tools, but of all our project and work-flow systems.

This enables us to put in place quality control systems and set a consistent standard of work.

Our growth has enabled us to apply resources specifically to improving and maintaining the quality of our product.

- In-house, non production staff dedicated to engineering excellence
- In-house training systems
- Engineering staff striving for CPeng status
- Some sections of the organisation are working towards QA and industry standard certifications
- Standardisation and consistency of drawing formats throughout Structerre
- Certifications and reports from Structerre will be in a consistent format
- Quality control systems to ensure a consistency of quality as Structerre grows