



Got a G.I.G.O problem?

Fast React's guide to improving data accuracy in your business

GIGO or Garbage In Garbage Out (or Rubbish In Rubbish Out) is the widely used IT expression to remind people that software solutions can only provide meaningful results if the data the systems are fed with is accurate, complete and up to date.

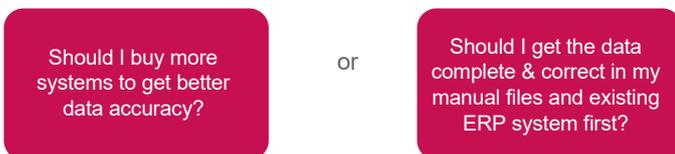
A common problem

The latest developments in technology, including Artificial Intelligence and Machine Learning, are exciting but these rely totally on reliable, centralised, clean, up-to-date and organised data. So as the fashion industry looks at increasing the use of systems to achieve the much talked about '*digitisation and automation of the supply chain*', improving data accuracy and update discipline is critical to see the return on these investments.

It's no surprise then that we spend a lot of time discussing this topic with our prospective clients and helping our clients improve data integrity during our projects with them.

Despite being a very common problem it seems like there is a lack of answers how to address it. Many people see it as a 'what comes first, the chicken or the egg?' type of problem!

What we mean by that is:



The simple answer is both - and here is how...

9 Steps to improve your data

Fast React's success in helping a business is, like any system, dependent on clean and up-to-date data. It's typical that in order to make and update the plan in Fast React's Evolve we pull data from multiple sources such as ERP, PLM, Buyer download and shop floor Barcode/RFID. So, when helping our clients improve their planning process data cleansing, ensuring data integrity and helping improving data update speed and disciplines, cannot be avoided and should be considered part of the overall project.

So here is our 9 step action plan and details of the techniques our clients and projects teams have learnt in 20 years of work, in 45 different countries, to help solve the GIGO (or RIRO) problem:

1. Where to start?
2. Share and Automate Data
3. Clear process and Responsibility
4. People Power

5. Give the data meaning
6. Make data visible
7. User friendly reporting
8. Feedback Loop
9. See the Value

1. Where do I start?

- **How to eat an elephant?** With so much data and so many staff involved, the task can appear overwhelming. The key to success is to break the task down into manageable chunks.
- **Start at the beginning** - This could mean starting at the order intake process ensuring style and order data is completed correctly. Alternatively, some businesses follow the sequence of the plan, so; for example if its May right now they may start by focusing on all data for orders to be delivered in August.
- **Start at the choke point** - Another strategy is for businesses to start on the data they feel is the worst or is having the biggest impact on the business. This could be for example material inventory data or getting timely and accurate daily production updates.
- **Make it sustainable** - one-time cleaning of data is not sufficient, it's critical that at the same time you look at improving the whole work process and try to implement as many of the ideas highlighted in this brief. If not, the problem will return.

2. Share and Automate

- **Create a Data Flow Diagram** – Firstly start by mapping the data flow within your organization including the various systems that the data is currently residing in.
- **Decide the primary source going forward** – Often the same data might be entered in two or more systems. You must decide on one system that will be the 'source' of each data field that the initial data entry and any subsequent updates or changes will only be made in that system. Often the ERP is the primary data source for most of the standard style, order and BOM data, but this could vary.
- **Share data** – Once the data is entered into the 'source' system it should not need to be entered again into other systems or reports. A basic requirement of any system is that it can export and import data so that data can be shared between systems. In order to be successful each solution design needs to carefully consider, not only its own data needs but, how that system interacts with the other systems it will share data with. So, for example the data flow between ERP, Planning and Shop floor systems needs to be considered when each solution is set up.



- **Use data from buyer systems** - for a garment manufacturer this could mean using data downloads from their buyers such as firm and forecast order list downloads or BOM downloads. Often these files are sent as pdf format docs but any system that can create a pdf can create a more easily readable flat data file. Macros and file preprocessing can be used to re-format data into a suitable format for your own ERP or Fast React system.
- **Refuse to use email/spread sheets as core data storage tools** - All good modern systems should have data interfacing, audit trails and reporting tools. So, if we can get data out emails/spreadsheets and into a system it can be shared, reported on and changes to data can be tracked and traced. This immediately will reduce the amount of data entry and risk of errors. However it does mean multiple systems are essential, an ERP alone will not handle all your system or data needs... just like no single app on your phone will do everything for you.
- **Collect data automatically** – wherever possibly try to collect data automatically with minimal human intervention this could mean using RIFD or barcode type systems for inventory control, production and shipping updates.

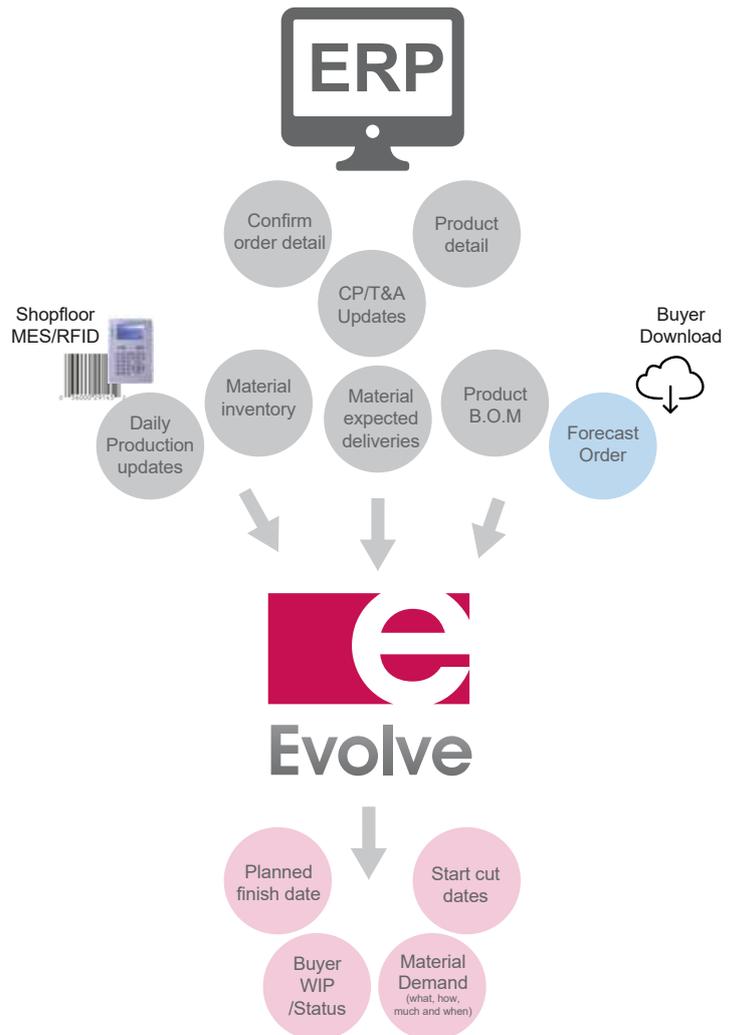
How does Fast React Evolve help?

Reducing manual data entry is a key goal on all our project as this in turn reduces the chances of mistakes and frees time up to ensure staff get the data entered right first time. So, Interfacing is a standard part of all Fast React projects - you must get data out of emails, personal excel files into shared systems if you want to improve it and use it!

At the start of our projects we work with your team to break down the data that is required for effective planning and identify the sources of that data. If the data currently doesn't exist in any system (for example, is currently stored in email or spread sheets), then a decision is made whether to enter it directly into Evolve, or into the ERP, or another system as part of the project. We also work together to decide the best flow of such data i.e. enter into ERP and send to Evolve, or enter in Evolve and push to ERP/other system. Once this has been decided we can then start sharing the data between Evolve and other system.

Evolve's data interface module allows the automated import of data from multiple data sources. Data can also be exported so key plan dates and targets calculated in Evolve can be used in other systems. The diagram to the right illustrates the typical data that would be imported along with their typical source, though it should be noted that each project is unique depending on the data required and solutions used by the client.

Fast React Integration



“Fast React Evolve integrates all our data, including data from our other systems, in one place. We are able to focus on planning rather than manually entering in multiple data sets.”

Ms Nguyễn Thị Thu Hồng (Kitty), Factory Manager, An Thanh, BI (VN) Co. Ltd Bodynits's group

Data Import

- Proven process works with all modern system
- Flat text file (CSV or tab separated)
- Automatic import
- Single or multiple sources
- Easy to maintain and modify by your IT team

Data Export

- Flat text file (CSV or tab separated)
- Format defined to suit system ERP, BI, Xls etc
- Automatic export
- Easy to maintain and modify by your IT team





Evolve
efficient manufacturing for fashion

3. Clear process and responsibility

- **SOP** - It's critical that for each work area and system task there is a documented SOP (Standard Operating Procedure). This need not be complicated, just a simple statement detailed what data is required, who is responsible to update it and when it needs to be completed. For example, production updates should be completed by order for the 5 key production processes. The production manager is responsible, and it must be completed before 8am the day after.
- **Job description** - these SOP should be built into your staff's job descriptions to ensure they are clear on their responsibilities for data.
- **Training** - Data requirements, responsibilities, update and reporting methods should also be built into all staff training programs
- **Maintain** – Getting the right tools in place to ensure SOP are kept means using KPI and exception reports to monitor data integrity and including it as part of the individual and departmental performance appraisal process.

How does Fast React's Evolve help?

Our experienced project teams understand data accuracy is fundamental to success so work with you to help defining planning SOPs to integrate into your overall process. Following that we provide on the job training and mentoring for your internal champion users and assess their progress with regular audit and also a Fast React super exam. Most of our implementation and training consultants come from a fashion industry background having formally worked in planning, sales, IT, production or IE roles so understand very well the challenges you face and can provide practical training to overcome them.

4. Use People Power

- **The more people make use of the data the better it will get!** Take for example data on material availability (delivery and inventory), it's the responsibility of purchasing and warehouse but if we can make the data easily accessible to planning and cutting managers then they can help drive data accuracy and disciplines too. However to do this successfully means you need to action points 1 - interfacing and then 5, 6 and 7 of this guide... so read on.

How does Fast React's Evolve help?

Evolve gets more people looking at and using the data - for example:

- Planners use Evolve to look at material availability info from the ERP so in turn this encourages the ERP users to ensure they have material.
- The sales team use Evolve to check the plan for free capacity, WIP and delivery information. This encourages the planners and production teams to ensure plans and updates are made on time, in line with the agreed SOP.

This approach also helps people save time as they no longer have to chase for data or make multiple manual updates. Evolve's in-built report designer, can automatically send reports to you and your team ensuring the data can be shared quickly with no effort, so that people can focus on making sure SOP's are being followed and data is complete and reliable.

"Linking Evolve to our ERP system has also helped us improve the usage of our in-house ERP system. Evolve gets more people looking at and using the data. As a result, the system has improved data visibility and integrity, and we have also developed several enhancements in our ERP."

Khun Suphonchai Phoosawat, System Analyst , Sabina plc Thailand

5. Give the data meaning

- **Context and Relevance** – trying to check a list of figures for accuracy is a nigh on impossible task. The data needs to be compared to something to give it context and relevance, for example by comparing:
 - material inventory records vs demand for material based on the cutting plan; or
 - order list vs capacity available; or
 - sample approval completion date vs. required date; or
 - actual WIP vs planned requirements.
 By giving the data context we can often quickly 'sense check' it and highlight mistakes such as missing or inaccurate data for correction.
- **Priority** – after highlighting the obvious errors, more details checks can then be carried out based on priority. For example, if we are going to check material inventory records vs actual physical stock we should start with all materials that will be used in the next 2 weeks by looking at the cut/material issue plan. **Below is an example of how the Evolve plan and ERP materials data is combined to give the data meaning, making it visible and user friendly.**



Evolve's Material supply vs demand module makes it easy to check data integrity. The Red colour orders in the plan indicates material have not yet been purchased for several order starting production in 3 weeks from today. Is that true or is data missing?... This visible tool helps us focus quickly on the data that is most important to check.



6. Make data visible

- **LEAN visual process management tools** - converting data into visual images greatly improves data integrity, people are generally attracted to images and pictures so will find data in graphic format more appealing and user friendly. The speed of analysis and identification of data errors because trends or extremes of data will stand out.

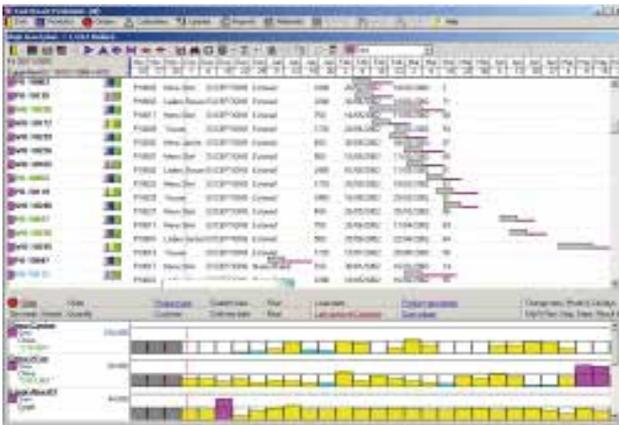
How does Fast React's Evolve help?

For over 20 years Fast React has been focused on creating visual tools that pull your key operations data into 1 shared transparent system. Within our system we have a range of visual tools to visualize different parts of the planning process for different end users.

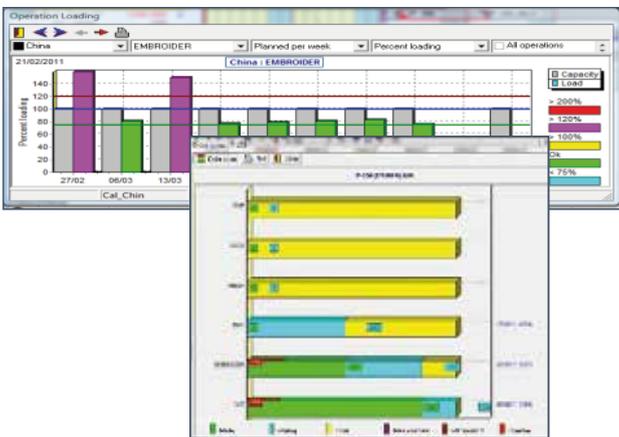
These visual tools are especially powerful during your weekly meetings allowing your team to quickly find, filter, view and discuss the latest status and problems across the business. In turn this user friendly tool promotes the benefit and value of following the SOPs to ensure data is complete and up-to-date.

Fast React Evolve Visual Tools

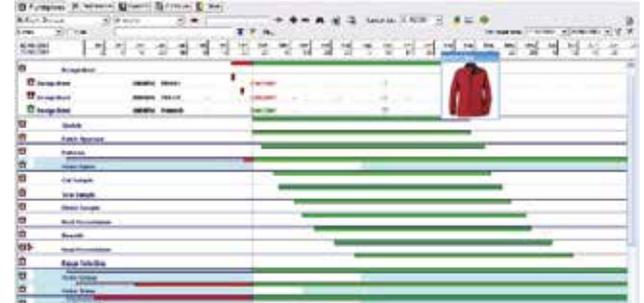
Head office view for Sales and Directors



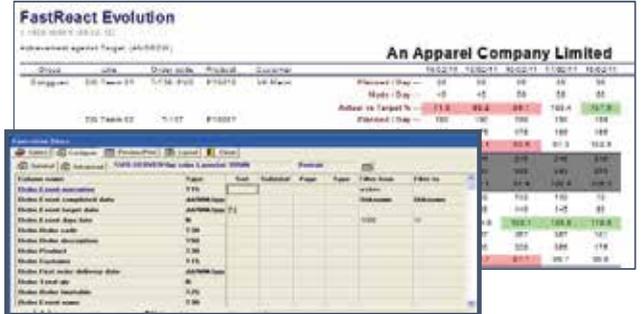
Process & WIP Views for production managers



Pre-production view for merchandisers



Focused Reports for you, your buyers and your subcontractors



Factory Line level view for planners and factory managers



Key Performance Indicators (KPI) for CEOs and MDs



Fast React Systems Ltd – Europe & USA
 Tel: +44 (0)1332 668942
 Email: info@fastreact.com Web: www.fastreact.com

Fast React Systems Ltd – Asia
 Tel: +66 (0)2 664 3326
 Email: info.asia@fastreact.com Web: www.fastreact.com



7. User friendly reports formats

- **Focused Reports** - Its critical that your data is available in easy to access and focused reports. Different users need to have a format that is suitable for their role and task, so the data they receive needs to be filtered, sorted, subtotaled and some basic analysis i.e. alerts, exceptions and comparisons.

All modern systems should have a flexible and cost effective report design capability that enables your team to spend less time making reports and more adding value by analysing and improving data accuracy.

How does Fast React's Evolve help?

Evolve comes with a report designer, and a standard part of all projects is for our project managers to work with you to design a set of reports appropriate to your business.

Evolve's reporting tools make the data easy to access in user friendly and highly customisable formats. We also apply some basic analysis for each end user, i.e. alerts, exceptions to create focused user and task specific reports.

To make it as user friendly as possible, reports can be automatically emailed to users as a pdf file so they don't even need to log on to get critical information, such as warnings of delays and their latest 'to do list'.

If your business has a central data warehouse and advanced reporting/BI tool, Evolve's data can be exported to you database so it can be consolidated with data from other systems data and used for reporting.

"Integrating Fast React's Evolve solution with the existing ERP system, has improved data integrity as we can easily see in Evolve what ERP data means to the plan. With updates on Time and Action and daily output on production, the dynamic situation in the factory can be more easily managed by my team."

"We are now able to quickly generate reports on order status and analyse KPI performance on items, such as Shipment and Plan vs Actual, and this is done within less than 10 minutes. Our old manual spreadsheets would take at least 1 week after spending a lot of time verifying data."

"Our staff can now save 2-3 hours per day just on report generation. This means they have more time to see and solve problems and learn from the past, to avoid the same mistake happening again."

Mr. SL Uttam, President at Busana Remaja, Indonesia

8. Feedback Loop

- **Use KPIs** - some of the data and rules you will use in your business will be based on estimates and experience rather than hard data, but these too need to be checked for accuracy. So, for example, if you set a lead time target of 10 days for sample submit to approve, or if you estimate you will achieve a 70% efficiency on style A, you need to check regularly to see if the estimates are realistic. Using KPIs to get this feedback is essential to fine tune data and rules as the KPIs analysis will highlight exceptions and whether your actuals are much higher/lower than your estimates.

How does Fast React's Evolve help?

Using a combination of our report design tool and KPIs module we can both collect, analyse and highlight plan vs actual discrepancies. As part of our ongoing customer support our Continuous Improvement (CI) program works with your management team to hold periodic analysis and reviews of KPIs and gives guidance on whether the targets set are realistic and, or if changes need to be made.

For more information about KPIs, contact us for a free copy of our Management Briefing on Key Performance Indicators - The Fast React Guide to KPIs for fashion manufacturers.

"At DBL Group we have combined Evolve and ERP to grow and drive our business effectively. ERP offers data capture and its transformation to usable information, whilst Evolve makes use of this data by further refining and extending information to provide complete visibility over capacity utilisation and order status. Fast React truly has contributed to positive figure changes in our Balance Sheet by safeguarding against financial loss and leakage."

Shaerul H. Joarder, CTO - DBL Group Bangladesh

9. See the Value

- **Effort and Reward** - If you can get your team to see that ultimately while it is a chore to update regularly, the end result is more than worthwhile. However, to achieve this you need to get the tools in place. By applying the steps detailed above it should help your system users see how data is essential to do their job. Once your team see that accurate and timely updates help save everyone time, they will see some value in maintaining data disciplines.



How does Fast React's Evolve help?

Fast React users hold their weekly review meetings around the system. By looking at the data together as a team it reinforces the importance of data update SOPs, and helps users see how data integrity is valuable and timely and accurate updates help save everyone time. In other words, they see value in data discipline, its not just a chore.

"Fast React is one of the key tools which helps FGL to manage the complexity of the business. We need to be armed with the flexibility and quick response to the ever changing customer needs.

"This is mainly where Evolve comes in handy. Its seamless integration with the ERP system gives valuable information not only to the planners, but also to other functions as well. Its reporting functions give the opportunity to management to make the decisions quickly and more accurately.

"Undoubtedly, we could mention that Evolve has helped quite a lot in becoming what FGL is today and moreover what it will be in future."

Ashan Jayathilaka, Planning Manager Fashion Garments 2 Co. Ltd, Vietnam (A member of the Hirdaramani Group Sri Lanka)

"The significant shift that we have been able to make from manually prepared sources of information to extracts from our systems has helped us make better informed business decisions."

Mr. Udena Wickremasooriya, Director Brandix Group, Sri Lanka

Conclusion

The need for up-to-date, complete and accurate data is not going to go away. In fact, the need will become greater as the speed of the fashion industry increases and the key trends, such as replenishment programs and mass customisation become more established, you will have to handle more data in less time than ever before.

Another big change is the rise of online businesses like Amazon, ASOS etc. these businesses have built their success on the ability to manage and use data. So, if you want to work with businesses like these you had better get your data in order and such businesses will have no tolerance for slow, incomplete or dirty data.

So back to a question posed earlier... Should I buy more systems to get better data accuracy? Or, should I get the data complete and correct in my manual files and existing ERP system first?

The simple answer is add Fast React's Evolve to your business... There is no one box solution.

We hope you found this management brief useful. For more information about Fast React's Fashion Production Planning and Control System visit www.fastreact.com

- Other CEO briefings topics:**
- **Work in Progress (WIP) Control:** An essential step towards a LEAN business
 - **7 Steps to Effective Planning and Control:** Benchmark your Production Planning and Control (PPC) Process
 - **Digitisation:** Practical Steps for Garment Manufacturers
 - **Productivity improvement:** Fast React's guide to increasing efficiency.

