

# Tips to streamline your artwork process and improve right-first-time

Making Pharmaceuticals  
Coventry, 30 April 2019

ANDREW LOVE  
VP Capability Development  
Be4ward Ltd



**2009 to current: Vice President Capability Development, Be4ward Ltd, assisting a number of Pharmaceutical clients with packaging management related engagements.**

**2007 to 2009: headed GlaxoSmithkline's pharmaceutical Global Packaging Strategy.**

- Defining GSK's global supply chain strategies for each product dose form, standardising packaging equipment, components and SKUs.

**2001 to 2007: global head of pharmaceutical packaging for GlaxoSmithkline, responsible for:**

- Structural design, artwork and creative services, packaging legislation, complexity reduction, technical capability development and packaging supplier base development.
- Across portfolio of 25,000 SKUs and 150,000 packaging components.
- Led Global Pack Management Project, a £25m re-engineering of GSK's product change management capability.
  - Implemented Product Lifecycle Management software to 4000 users in 160 markets.
  - Ensuring timely & accurate product changes to meet product launches whilst maintaining product safety information.
  - Reduced information/artwork related recalls by 80%.
  - Rationalised artwork supply from 250 studios to 4 global artwork service centres, one based off-shore in India.
- Established GSK's global packing design capability to drive product standardisation, legislative compliance, effective packaging support to product launch and the company's capabilities to manage SKU portfolios.
- Led definition of GSK's strategy for serialisation, authentication, anti-counterfeiting and product coding.

**Prior: GSK and specialty chemical industry in various supply chain and operational roles.**

- Experiences in merger integration, supply chain process and systems implementation, product acquisition and divestment, lean and six sigma deployment and operational management.

**Masters Degree in Engineering, MBA and Chartered Engineer.**

**Based in London, UK. Contact details: [andrew.love@be4ward.com](mailto:andrew.love@be4ward.com), +44 203 318 0939.**

# Accurate artwork design is an essential process in the supply of pharmaceutical product...

## Why is artwork important?

- We can only sell our products if they are properly packaged.
- We can only ship our products when the text on the packaging is correct.
- Our patients' lives rely on this text being absolutely correct.
- Our corporate reputation and profit are directly impacted when the text is incorrect.



A minor error in transmission can have catastrophic results.

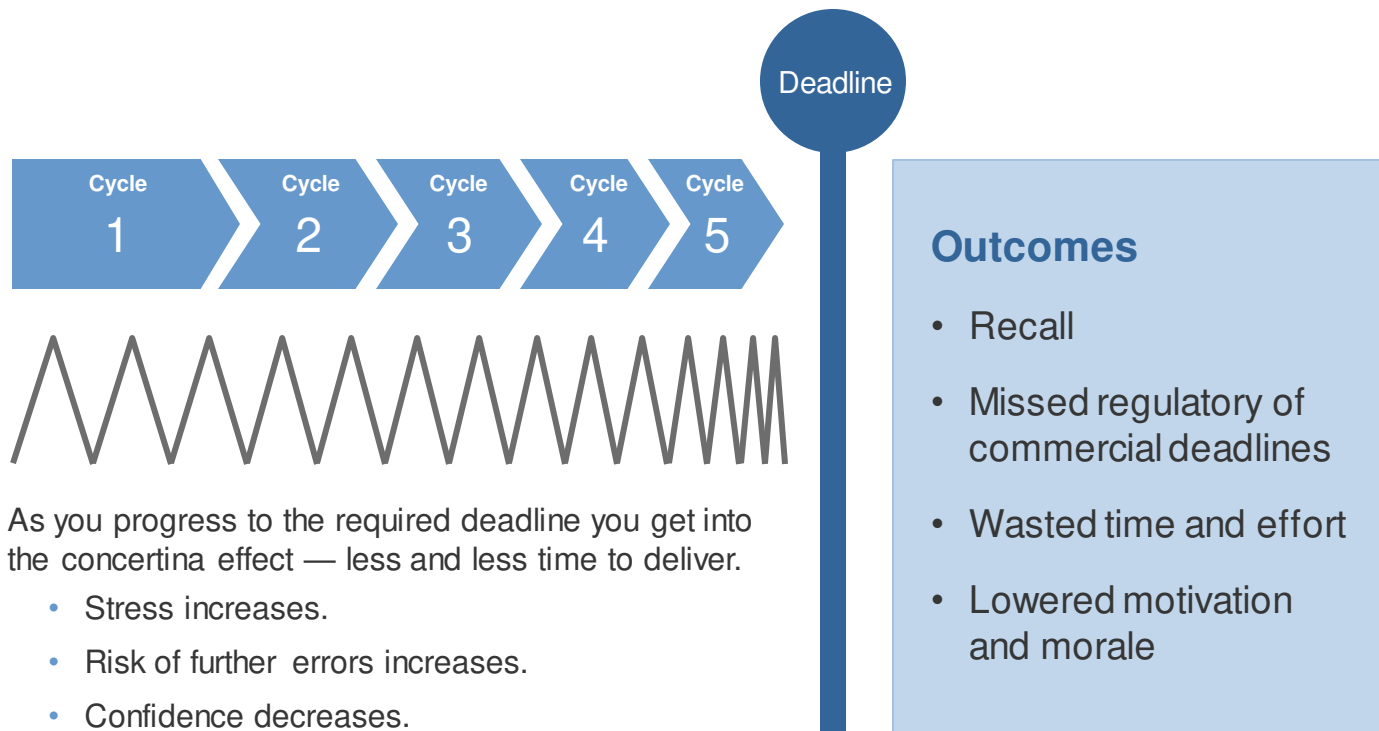


## How PharmaCos see artwork

- Critical enabling process supporting product launch and patient safety
- Same level of GxP attention as the efficacy of an active, packing line clearance and change control
- Not a strategic competitive advantage

...and still one of the highest causes of recall in the industry.

# Right-first-time artwork is a critical outcome, impacting achievement of your company's goals



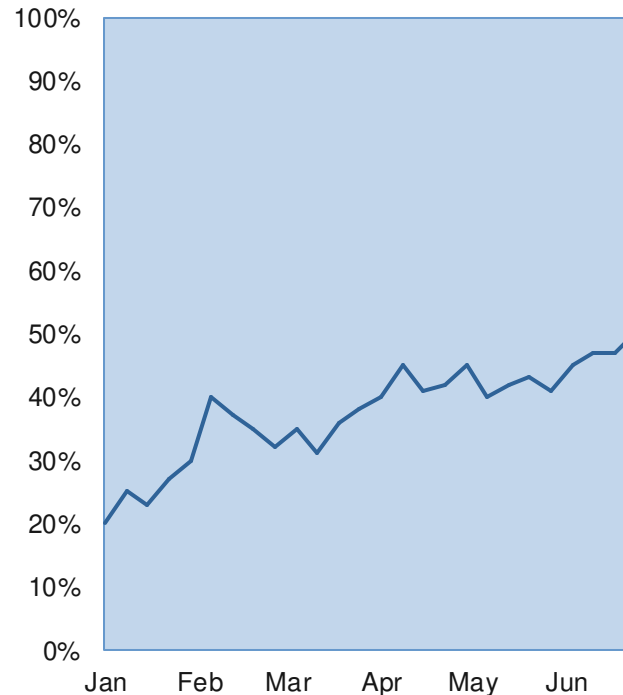
High right-first-time improves speed and ensures repeatability.

# Measure your right-first-time — if you don't measure, you don't manage

TIP **1**

## At what points in the process do you measure:

- Artwork creation?
- Proof reading?
- Artwork approval?
- Receipt of components?



## What scope of changes do you measure?

- Non-product introductions?
- Safety changes?
- Technical changes?
- Text/routine updates?

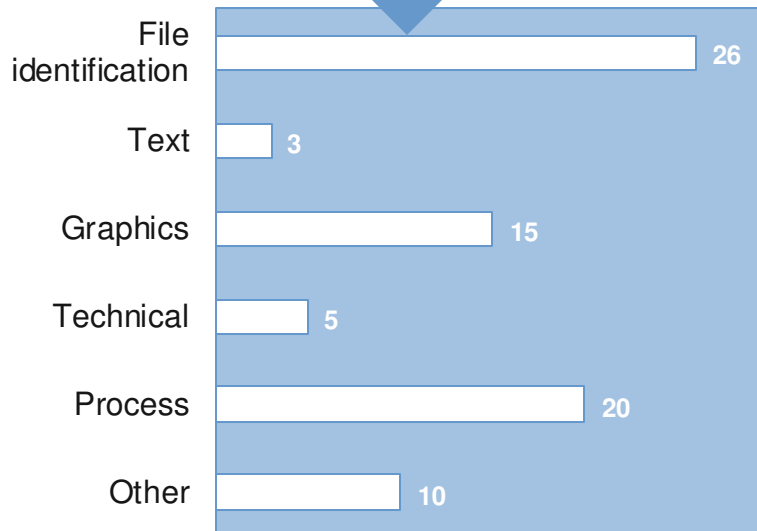
Right-first-time of >95% should be your goal.

# Use codes to categorise errors, then ensure a thorough root cause analysis to eliminate source of errors

TIP 2

## Types of error codes

- File identification
- Text
- Graphics
- Technical
- Process
- Other



## Target major error types and thoroughly root cause.

- |        |  |
|--------|--|
| Step 1 | Define the problem                             |
| Step 2 | Collect data                                   |
| Step 3 | 5 Whys   |
| Step 4 | Identify root causes                           |
| Step 5 | Recommend and implement solutions              |
| Step 6 | Keep measuring to ensure solution is sustained |

Companies with high RFT are obsessive about eliminating source of errors — this is where they channel their energy.

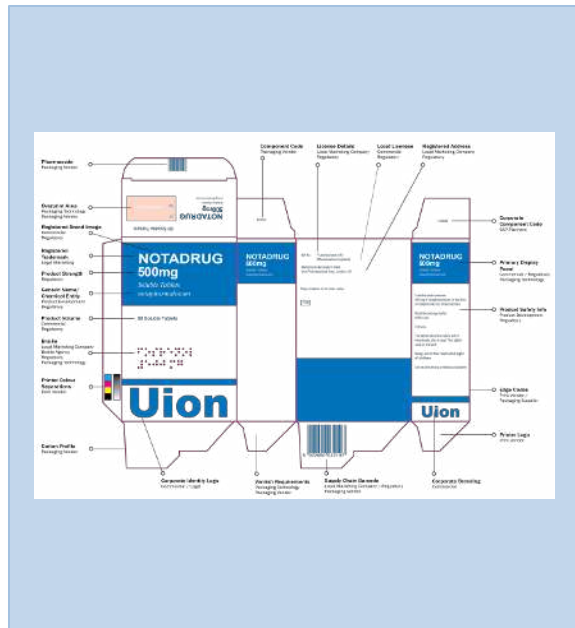
# Make sure all of the input information is correct before starting



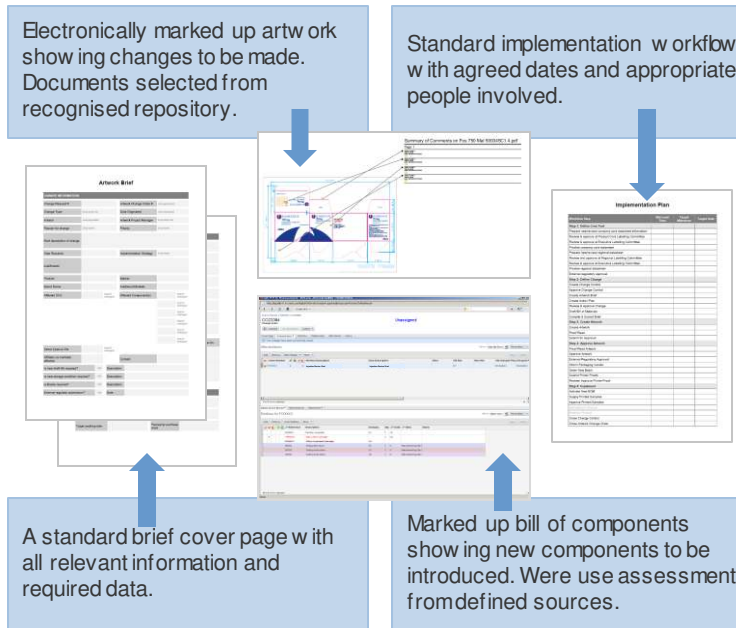
The information required for an artwork comes from many sources — existing and new.

This needs to be collated into a requirements document — The Brief.

This needs to be approved by the relevant stakeholders.



Garbage in = Garbage out.



A standard brief cover page with all relevant information and required data.

Marked up bill of components showing new components to be introduced. We use assessment from defined sources.

A full and comprehensive definition of the change required.



- Collaborative Review
- Mandatory**
- Artwork
  - Regulatory
  - QA
  - Planning
  - Packaging Vendor
- Optional**
- Commercial
  - Co-licensee
  - Distributor/Local Agent
  - Print Supplier
  - Legal

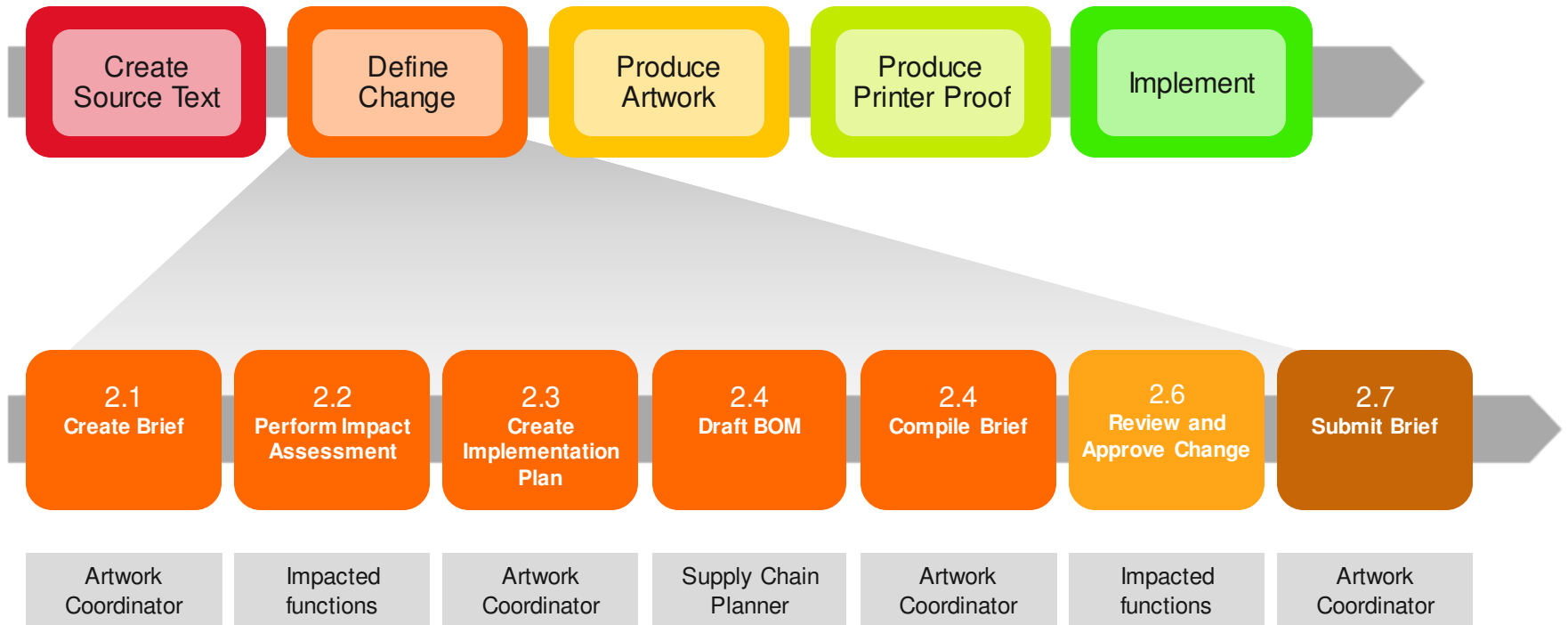
To verify supplied data and endorse the change.

It is tempting to start an artwork before all information is available but that will just result in rework loops — losing time and wasting effort.

# Ensure there is a comprehensive and effective end-to-end process with clear roles and responsibilities



## EXAMPLE PROCESS



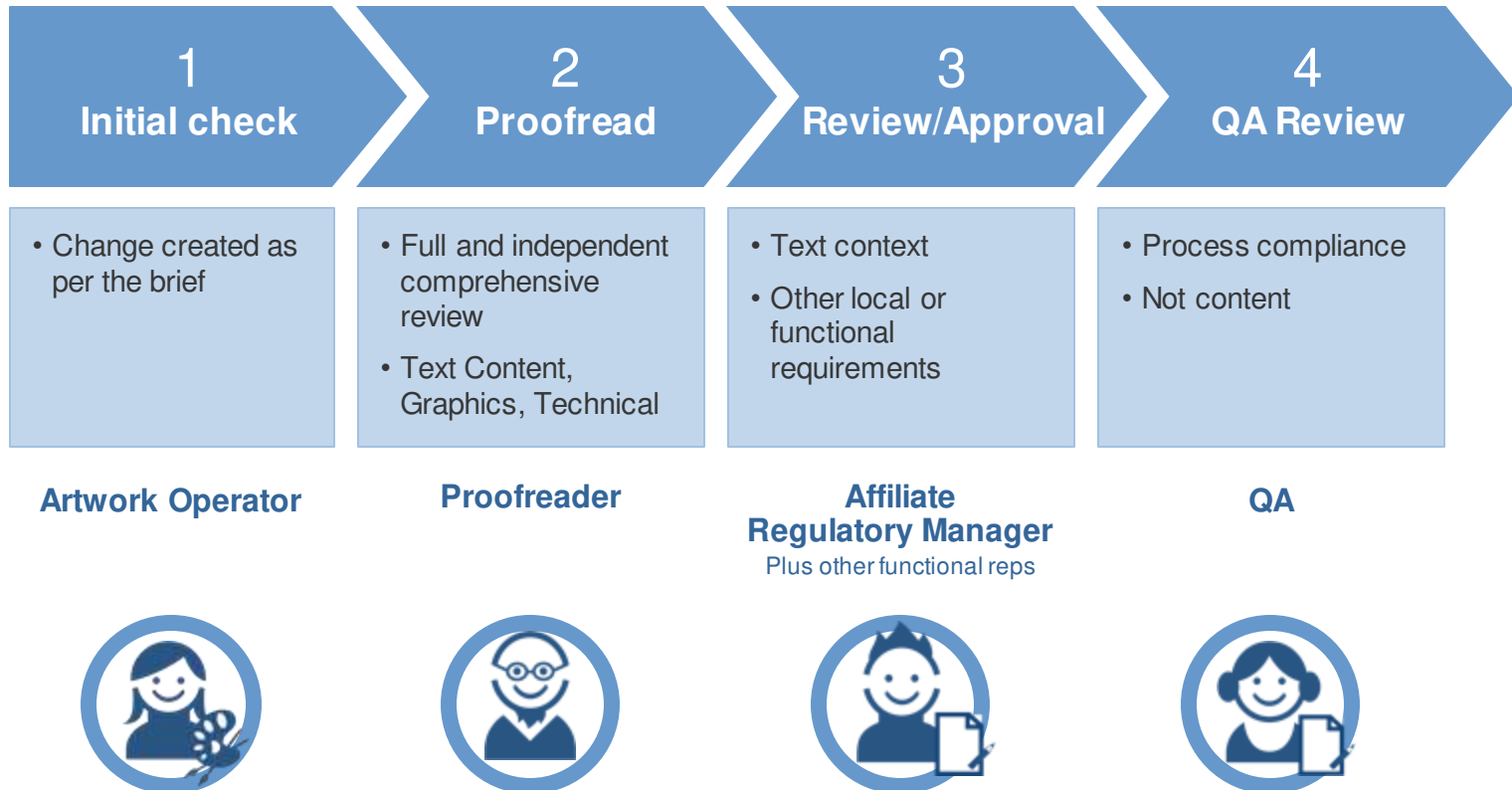
Make sure the end-to-end process “joins up” — it is clear who should do each step and the performance expectations for each step is defined and agreed.



# Make sure the right quality of checks are undertaken by the right people

TIP **5**

There is typically a four step process to assure the quality of the master artwork file

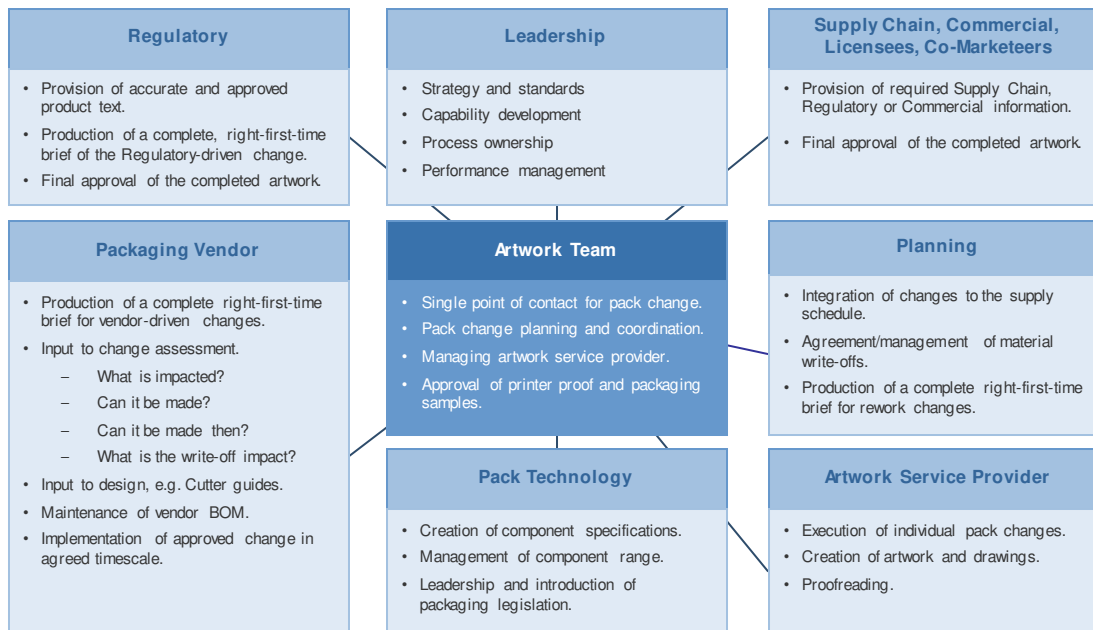


Understand who checks each element and how — back up with detailed checklists.

# Ensure all people in the process have the appropriate skills, competencies and capabilities through effective training

TIP 6

## Many people are involved in this process but do it only as a small part of their role.



## Consider what E&T interventions are required.

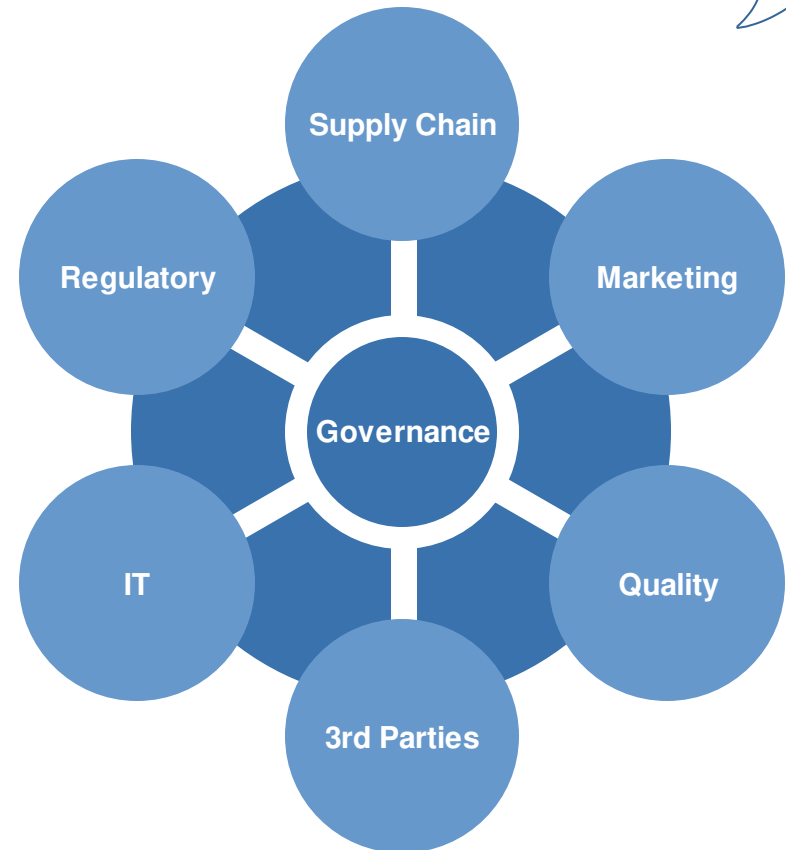
- Initial training when implementing new/revised processes
- New starter training
- Specialist skill training, e.g. proofreading
- Face-to-face
- Web based
- Online and offline
- Assessment of competency
- Ongoing monitoring

You are expecting people to do quality critical tasks right-first-time — you need to give them the skills and capabilities to be able to and you need to monitor they remain effective.

# Ensure there is effective cross-functional governance

TIP 7

- The artwork process impacts many parts of the organisation.
- Each part has a contribution to make in achieving right-first-time.
- Leadership needs to take accountability for the performance of their function.
- Leadership needs to sponsor the improvements required in their function.
- The governance team needs to define targets and agree priorities.



All impacted parts of the organisation(s) need to be appropriately represented in the governance forum — change has to be driven down through each function.

# There needs to be an appropriate and scalable suite of IT tools to support the process and people working with it



## Functionality

<b>Document Management</b> 	<b>Translation Management</b> 	<b>Submission Management</b> 	<b>Forecasting</b> 	<b>Planning and Workflow</b> 	<b>Change Control, Authorisation and eSig</b> 
<b>Bill of Material/ Pack Catalogue</b> 	<b>Artwork and Drawing Desktop</b> 	<b>Proof Reading</b> 	<b>Collaborative Review and Approval</b> 	<b>cPDF/Print Ready Artwork</b> 	<b>Performance Management</b> 

## Capabilities

Disaster Recovery	User Permissions Management	Information Security	Error-free WYSIWYG and Printing
Resource Management	Defined Artwork Related Data Sources	Informing and Alerting	Global Multi-Organisation Information Access

Providing visibility, information, document control and minimising the risk of human error — available across the extended organisation regardless of geography.

# Ensure there is quality time and quality facilities to do quality work

TIP 9

## We expect people to do quality critical tasks right-first-time

We need to give them sufficient quality time...



- Clear plans and agreed step leadtimes.
- Visibility of deadlines and pipeline of work.
- Allow parties to plan their time.

...and appropriate facilities to operate in.

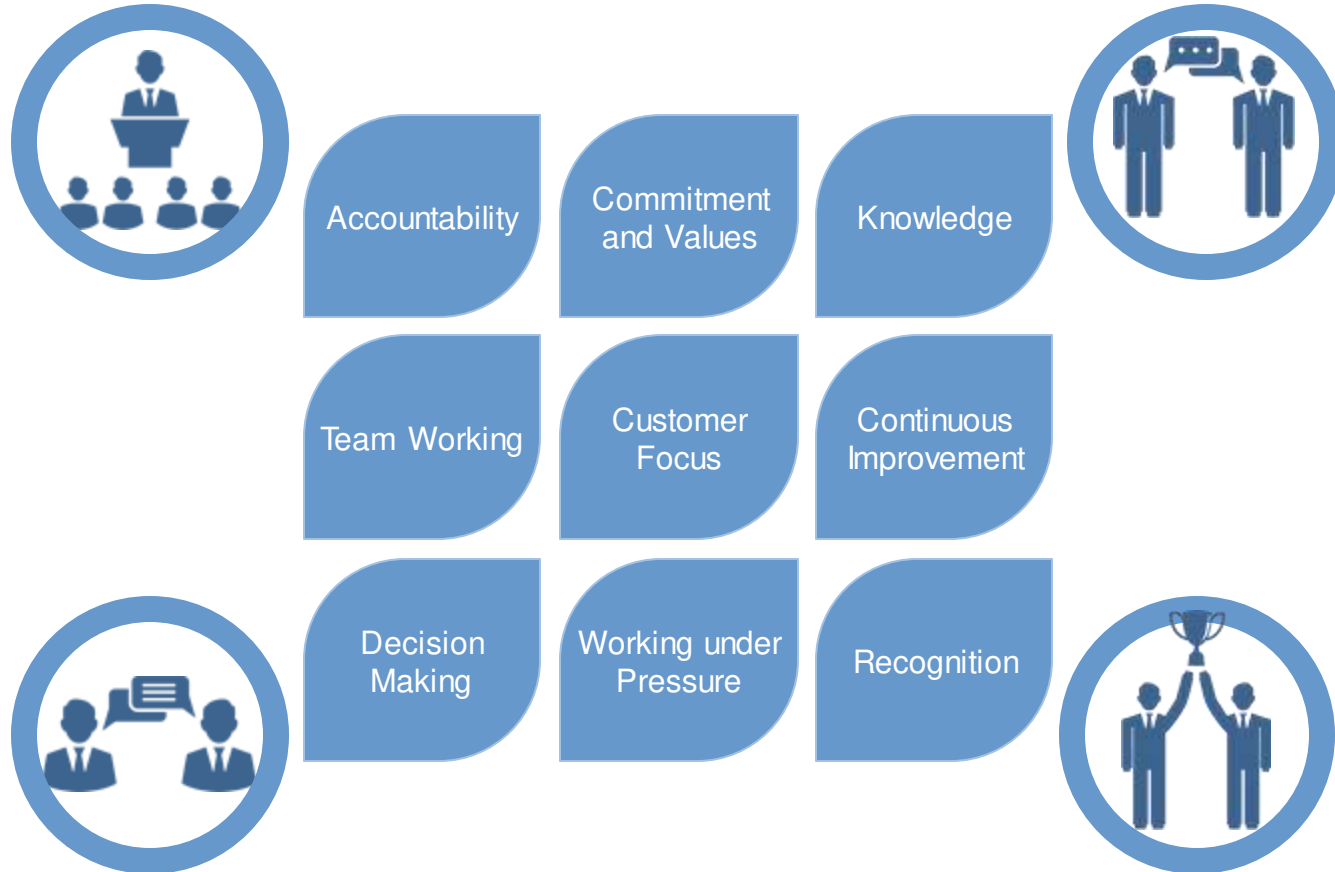


- Space and equipment, e.g. two screens.
- Lighting, temperature, ergonomic factors.
- Clear desk mentality.

“I sent you an artwork 15 minutes ago — have you approved it yet?”

You need to have the right culture, displayed across all teams involved in the end-to-end process to ensure success

TIP **10**



Having the right culture will lead to the right behaviours  
— leaders need to model and reinforce.

## In summary

- Packaging and artwork still present a significant compliance risk.
- Delivering right-first-time artwork is a complex endeavour involving many moving parts.
- Achieving high right-first-time is achievable, but requires focus and persistence.
- There are many parts to achieving high right-first-time.
- Being right-first-time increases speed, reduces waste and raises confidence.

Right-first-time is a mindset not an outcome.

# THANK YOU



## Contact details

[Andrew.love@be4ward.com](mailto:Andrew.love@be4ward.com)

48 Warwick Street, London W1B 5AW

London, UK: 0800 098 8795, 0203 318 0939

Montreal, Canada: 888 308 8657



# Be4ward is a niche management consultancy with award winning success in delivering pack change and artwork capability

**Be4ward provides specialist consulting services to the global pharmaceutical industry.**

**Our team combines operational management experience, subject matter expertise and excellent consulting skills to help our clients deliver successful change.**

**Whilst we have in depth knowledge of the supply base in our areas of focus, we provide independent advice to our clients.**

## **Our current areas of focus include:**

- Packaging and artwork management.
- Product coding, serialisation and anti-counterfeiting.
- Product complexity management, late customisation and postponement.
- Secondary packaging supply chain design.
- Post merger legal entity and brand integration.

## **Contact details**

- 48 Warwick Street, London W1B 5AW
- London, UK: 0800 098 8795, 0203 318 0936
- Montreal, Canada: 888 308 8657

