Okay, in truth, the current process is reasonably good.

But it could be better

Unfortunately, if it's not doing as well as it could, you're losing money...

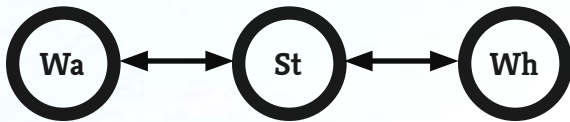* Not that you need telling –
you're senior hospital executives!

So what exactly is wrong with the current process?

There are a few

REDUNDANCIES

e.g. the hospital stores

(Wa) ←→ (St) ←→ (Wh)

It is

INEFICIENT AND EXPENSIVE

On average, it costs

$39.91 & **$87.40**

for every daily order process   for every weekly order process

It is

INEFICIENT AND EXPENSIVE

On average, it takes about

10 hours and **45 minutes** to complete a daily order

But only about

1 hours and **45 minutes** is actually spent working

It is

INEFFICIENT AND EXPENSIVE

On average, it takes about

14 hours and **35 minutes** to complete a weekly order

● ● ● ● ● ● ● ● ● ● ● ● ● ● ◗

But only about

3 hours and **20 minutes** is actually spent working

● ● ● ◗

It is

INEFFICIENT AND EXPENSIVE

- There is a **significant wait time to receive goods** into wards if the item is out of stock
- **Checking if an item is out of stock** also takes time and is a manual process
- Plus many more issues

BPR: MAKING IMPROVEMENTS

- Remove the intermediate hospital stores (direct to ward delivery)
- Replace paper based systems with electronic methods (e.g. ePayments, eInvoices etc)
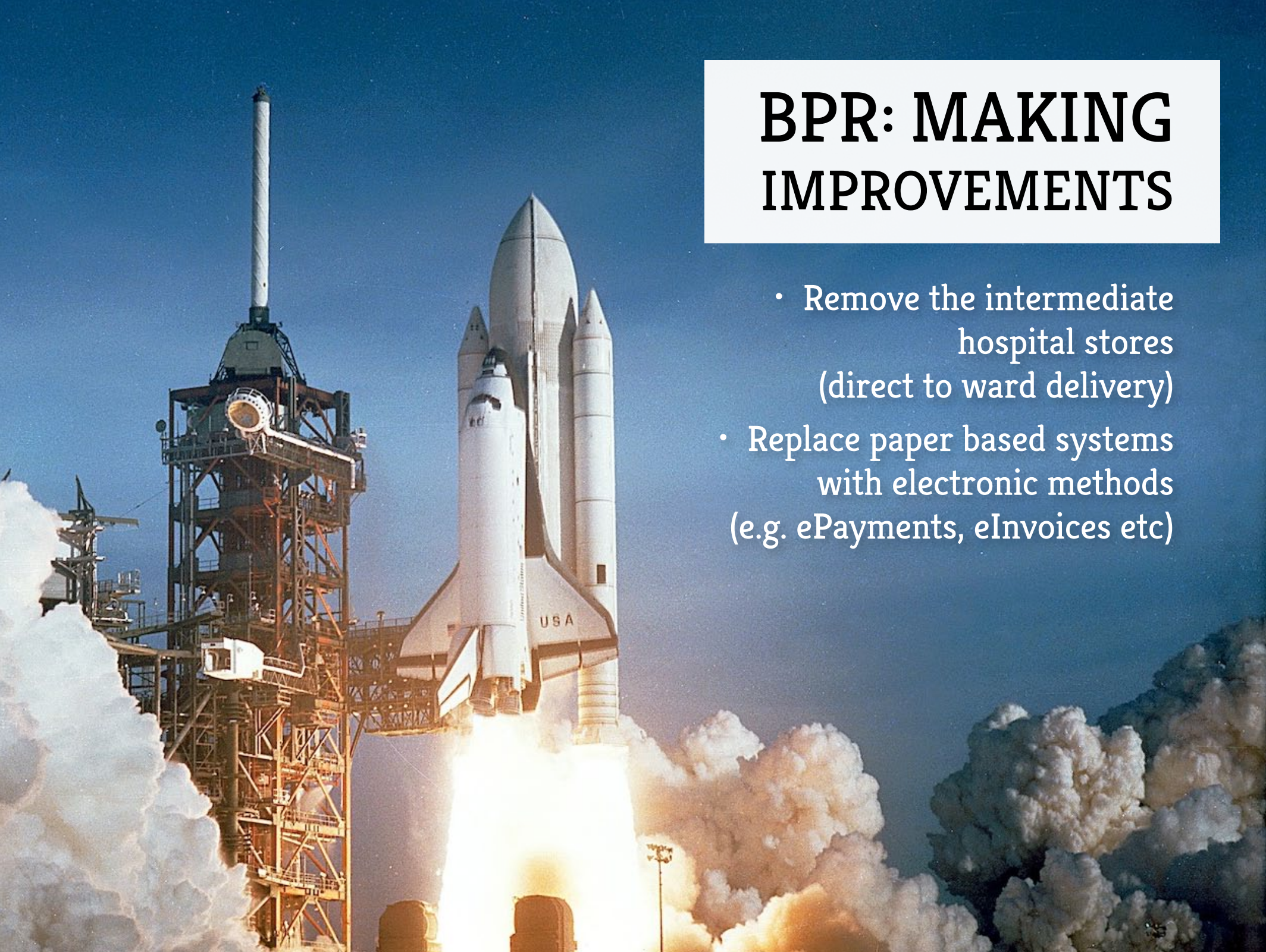
Stage 1
IMPROVEMENTS

Stage 1
IMPROVEMENTS

Wholesaler

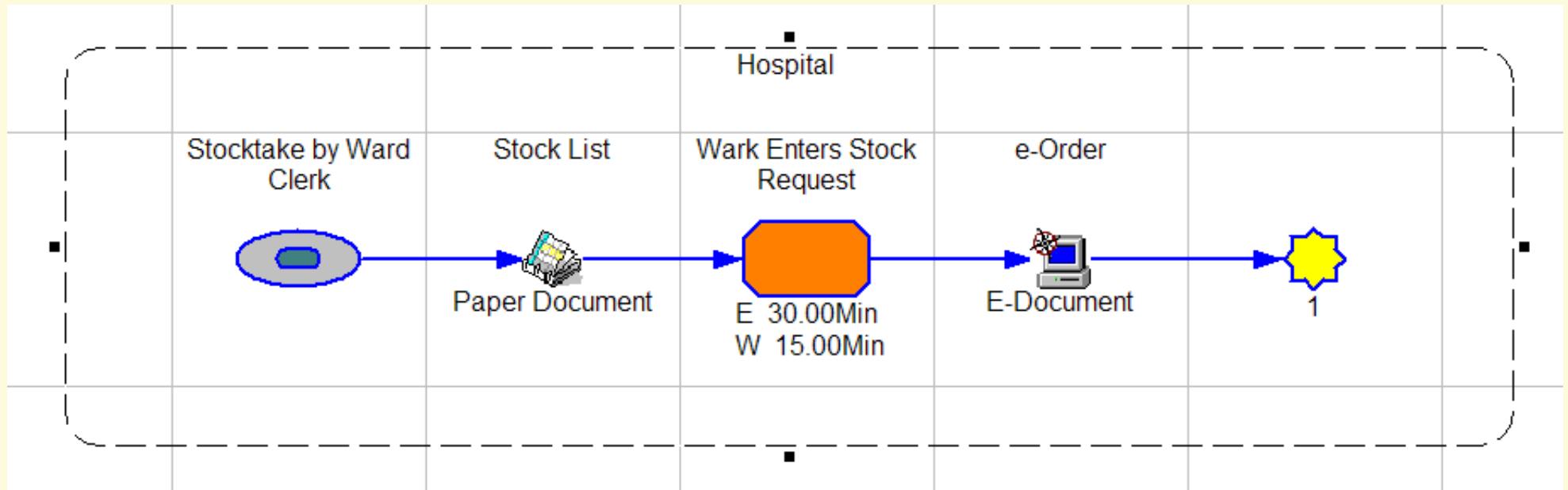|								
1	Wholesaler Receives e-Order E 10.00Min W 10.00Min	e-Order E-Document	Decision on Stock E 10.00Min W 5.00Min	Have Stock Yes 80 No 20	e-Picking Slip E-Document	Pick Order E 240.00Min W 30.00Min	Packing Slip Paper Document	Delivery Order E 240.00Min W 45.00Min	Delivery Docket Paper Document	2

Backorder Entry
E-Document

Hospital

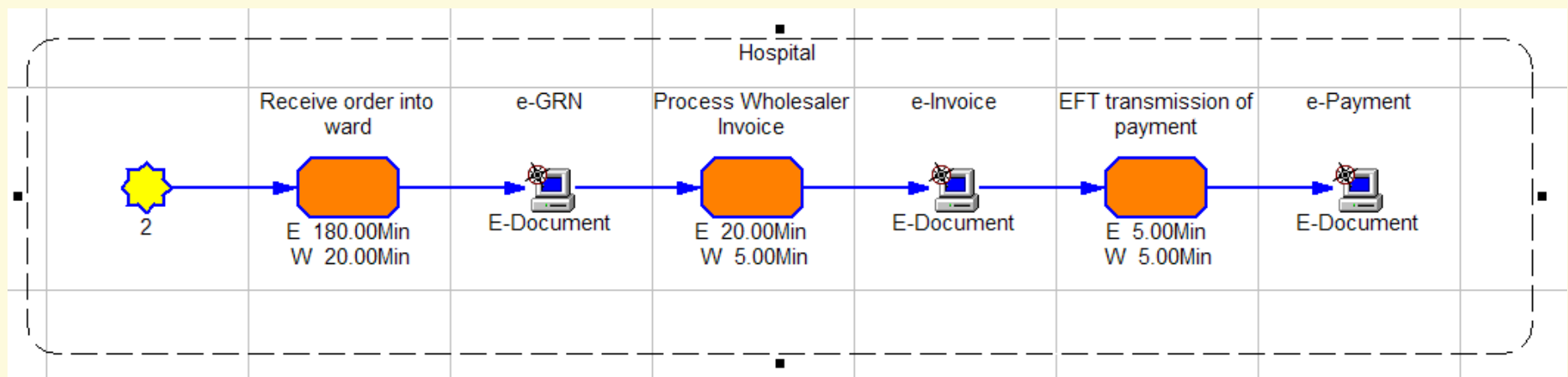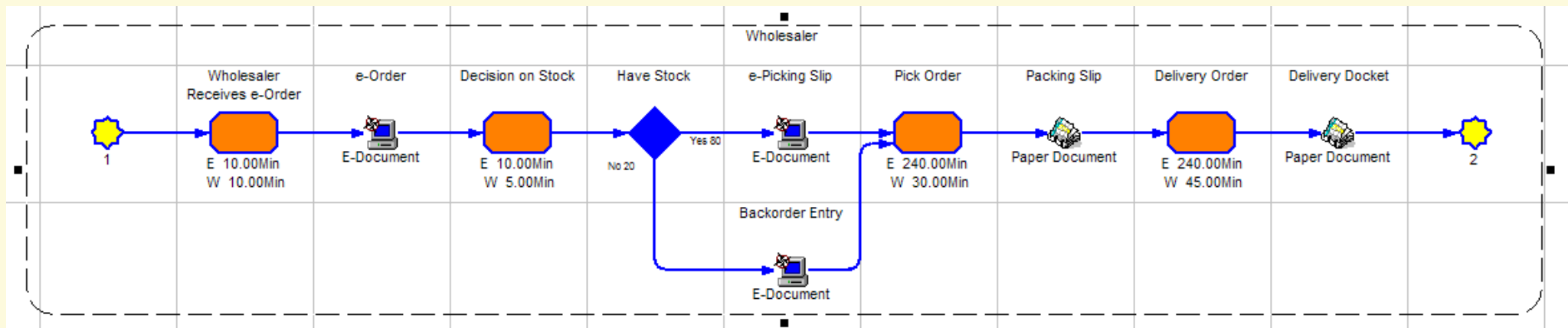|						
2	Receive order into ward E 180.00Min W 20.00Min	e-GRN E-Document	Process Wholesaler Invoice E 20.00Min W 5.00Min	e-Invoice E-Document	EFT transmission of payment E 5.00Min W 5.00Min	e-Payment E-Document

Putting the 'e' in 'Procurement'

- **Web Services** is the recommended option
- It is a method of communication over the Internet
- Widely used, flexible, strong support, easy (and cheaper) to implement, bright future
- Suited for implementing an SOA

Getting Real Fancy: More Improvements

- What if a computerised agent makes orders automatically?
  - » Track orders/items with **RFID tags**

- What happens now that there is no stores to 'buffer' orders?
  - » **Batch orders** at the wholesaler

- Could we automate payment with *eOrders*, *ePickingSlips*, eGRNs and RFID tracking?
  - » **Yes**, it is technically possible

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But a further, detailed study is recommended for RFID-related integations

Now for the

ADVANTAGES OF IMPROVING

- **Significant cost reductions** for both the hospitals and the wholesaler by eliminating steps in the supply chain
- **Reduce inventory levels** plus better understanding of ordering and stock
- **Improved business relations** between the hospital and suppliers

Now for the

ADVANTAGES OF IMPROVING

- **Frees up more time for hospital staff** to do more hospital related
- **Improved strategic positioning** for both the wholesaler and hospitals
- **Future use** in terms of integration, adaptation and implementing an SOA

Some Hurdles to Jump Through

- **High-levels of coordination and planning are required** to establish this integrated system

- **Operations need changing** and **staff need to be trained** (or new ones hired)

- **New systems will need to be developed**

- The **wholesaler needs to approve** and be ready for the change

Hard-work and careful planning will yield big returns

**But is this viable?
How much will it cost?**

Yes, the stage 1 improvements are viable

Yes, the stage 1 improvements are viable — if orders from many wards are batched

DEVELOPMENT COSTS

- **Development costs are high** – prdedicted to be in the order of hundreds of thousands

- But **returns are also high** – our improved model with batched orders suggests **cost savings upward of 50%** and **significant daily time-to-order decreases**

These metrics based on delivery to 10 wards. Savings depend on many factors including batching/dispatch.

As-Is vs To-Be

COMPARING IMPROVEMENTS