

What is a disruption?

Dr Paul Stott, Strategic Maritime (UK), 21st September 2026



Hello and thanks to those following.

I have blogged in the past about shipbuilding's labour shortage and the need for automation. A disruption might help with this issue – but, what do I mean by that?

A disruption is something that changes everything: what follows does not look like what went before. I have posted this photograph before, showing how welding changed what a shipyard is. Post-1960 shipyards would have been unrecognisable to the pre-war generation.

Disruptions are few and far between. The prior disruption to shipbuilding followed the invention of the plate rolls in 1783, which led to the possibility of iron ships.

What can we learn about disruptions in shipbuilding from the introduction of welding?

Firstly, welding was not introduced to enable block fabrication. It was introduced to enable the emergency shipyards in the United States to operate with semi-skilled female labour. Block fabrication was, to all intents and purposes, an unintended consequence.

Secondly, the technology was introduced from outside, in the case of welding from civil engineering and automotive.

Thirdly, the shift from picture 1 to picture 2 did not happen overnight. Block building started to come into its own 15 years after the introduction of welding. (The first iron ship followed around 40 years after the patenting of the plate rolls).

Fourthly, there is no way that people working in the context of the left hand picture could have envisaged the right hand picture. It is very difficult to envisage what doesn't exist – this is central to the nature of a disruption. It is not about doing better what you currently do.

Finally, the change involved investment. The entire global industry was virtually re-built over 25 to 30 years following WWII. Disruption does not come cheap or easy and brave decisions are required.

Next week – what is not a disruption?