

The design industry is an industry which often calls on advanced and technical solutions to create innovative and ground breaking designs. Specialists play a pivotal role in allowing innovation to occur.

## WHY?

Understanding why specialists play a pivotal role in the design industry across all design fields.

## WHAT?

Understanding what a specialist is and the different functions they have, specific to the design field.

## WHEN and HOW?

Understanding that different specialists can assist in the design process at different times, depending on the brief.

## EXAM STRATEGY

To perform well on these questions in an exam, you need to create a 'bank' of specialists to discuss. Also, understand how the input of a specialist differs depending on when they are called upon.

## why do we need specialists?

Specialists are experts in niche aspects of design or surrounding fields. We need specialists because no individual designer knows everything about a given field.

An architect for instance, may not be sufficiently trained in waterproof flooring and may need guidance regarding the constraints of designing a bathroom from an flooring specialist.

A graphic designer may not understand how well a certain print stock would last on an outdoor sign, they may need guidance from a print specialist.

An industrial designer may be producing a tool for people who suffer from arthritis, as such, they may require a specialist in that field to provide advice on design constraints and expectations.

## what are some types of specialists?

Each industry has it's own set of specialists. Specialists often help with the **FUNCTIONALITY** or the **AESTHETIC** of a given design.

## functionality focused specialists

These specialists focus on the practical implications of a given design.

The Architect who designed this building for instance, designed a large, cantilevered (overhanging) building. To ensure that the structure is sturdy, the architect may have called on an Engineer to determine the amount of weight the overhanging part would need to hold.

The architect may then have called on someone who specialises in building materials, to determine a product which would be strong enough to support the weight.

To get very advanced, they may have called on a wind engineer to determine the force of wind acting against the building based on its design and location.



## functionality focused specialists

The Industrial Designer (Object Design) who designed this Kettle for the elderly, may have called on a geriatrician (Doctor specialising in elderly patients) to determine safety parameters, the size, location and colour of key features such as the 'on/off' button, the handle and the lid.

The Industrial Designer may have called on an engineer to determine a safe point of balance, so that the kettle does not tip over. Or an electrical engineer to make sure the electrics were compliant to Australian Standards.

The industrial Designer may have also called on a plastics expert, to determine a plastic which could hand the very hot temperatures without distorting, and perhaps also dissipate the heat so that the outer surface does not get too hot.



## functionality focused specialists

The Communication Designer (Message Design) for this design may have used a signage specialist, to determine a cost effective embossing technique and process suitable for the signage.

*The communication designer may have called on a specialist in Occupational Health and Safety, to determine how large the sign should be, what needed to be on the sign and where the sign should go.*

*The communication designer may have called on a specialist in Visibility Impairment, to ensure that the braille was positioned and composed correctly.*

*The communication designer may have benefited from calling on a materials specialist, who would have advised against using a heat conducive material for a sign that vision impaired people will touch in case of fire.*



## aesthetic focused specialists

These specialists focus on the aesthetic implications of a given design.

The Architect (Environment Design) who designed this building for instance, may have called on a lighting specialist to advise as to an effective lighting composition which would aid in fresh and contemporary aesthetic to compliment the form of the building.

The architect may have employed the services of an interior designer, who may have provided ideas for refinements to the form of the internal space, also discussing different materials for the floors and walls which would compliment the space.

The architect may have also called on an interior decorator, who would have selected a range of furnishings, such as couches, coffee tables, pictures, lamps etc, which would compliment the space.



## aesthetic focused specialists

These specialists focus on the aesthetic implications of a given design.

The Industrial designer (Object design) called on a textiles expert (supplier) to outline a selection of materials that would aid in creating a luxurious and opulent atmosphere and a high quality tactile feel.

The Industrial Designer also may have called on a lighting specialist to advise as to an effective lighting composition which would aid in fresh and contemporary aesthetic to compliment the form of the interior space of the car.



## When do we need to ask a specialist and how do they help us?

A specialist can be brought in at any stage of the design process; Discover, Define, Develop and Deliver.

## specialists in the discover and define stages

A specialist in the discover and define stages may be called on to provide expert context on the design, to ensure that the design direction is more focused and the quality of idea generation in the next stage is improved.

Specialists in these stages are more about providing initial insights into the project, these often involve:

Research specialists - who can provide a detailed historical or contextual context for a design project

Data analysts, who can provide statistical insights into the target demographic of a project, outlining what it is the value and resonate with.

Surveyors (Environment Design), who can provide accurate details of the land in which the building is being built (the envelope), including soil testing and topography.

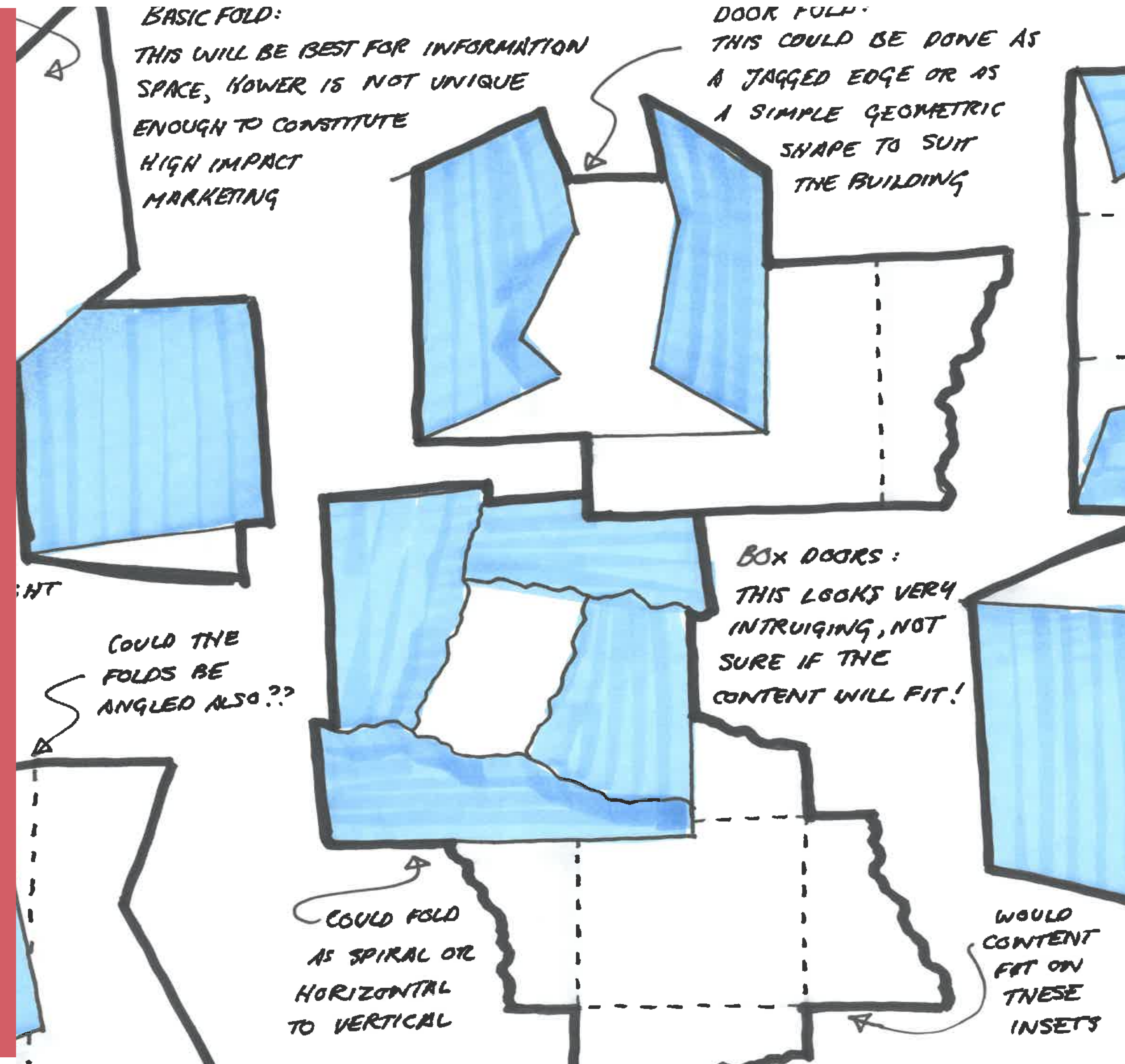


## specialists in the develop and deliver stages

A specialist in these stages is designed to provide insights into different options and possibilities, they may review or critically analyse an idea and provide alternate solutions or options in terms of material selection, colour palletes and production techniques which may help proliferate more ideas.

Print Specialist or Signwriter (Message Design) can provide insight into different stocks and printing processes which could be called upon to generating new ideas or developing an existing idea.

Materials Specialists (suppliers) (Environment and Object Design) can provide insights into different materials available on the market which could be used to help generate or develop ideas.



## specialists in the final stages of the deliver phase

A specialist in these stages is focused on one of two things, critically analysing the details of your work to make sure it is in line with the conventions and regulations required for the particular design. Also for helping with the practical creation of the finished presentation. A researcher or data analyst may also be called upon here to help with the surveying of the audience, to generate feedback for the refinement stage of the process.

For example: An engineer (mechanical, electrical or civil) may be called on to study the design and provide feedback as to the technical details, highlighting areas which must comply with regulations regarding safety and standards.

A 3D Print specialist or Model Making specialist may help with the creation of a three dimensional prototype, drawing on their expertise in the method of Three Dimensional Construction.

A researcher or Data analyst may aid in conducting surveys of the audience to determine which brand design best resonates with them and communicates the nature of the company most effectively.

