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Level 3 Technology 2024

91617 Undertake a critique of a technological outcome's design

EXEMPLAR

Achievement

TOTAL 04

Introduction

_____ is
Good design is
defined as _____

_____ Good design is about being able to effectively identify, isolate and solve specific problems in our society with an effective product. Good design can be explained by industrial designer _____ with his 10 principles of good design, being: _____

_____ Each of these principles which come together to form a good design, each principle contributes an important aspect to be considered a good design.

What is good design?

Good design does not necessarily have an exact answer, no one truly knows what is good design, but many aspects of design can make a design good and one thing that can separate a good design from a bad one would be suitable for its stakeholders/users, if a design does not meet this can it truly be

considered a good design? Good design can be making iterations and prototypes which can be tested and used in their chosen environment to make it an honest design and make sure it can really work for its purpose. An important part of good design is the design process, following a good design process can be very important to making a design effective, quality and suitable for stakeholders. To make a good design it should be a good balance between aesthetics and more importantly functionality, a design's main focus most of the time should be on its function as the function is what makes a design effective and suitable for its stakeholders. For a good design there must be some type of innovation or new idea, this doesn't necessarily mean reinventing the wheel every time you design something new but redesigning or creating something new like a different mechanism, handle, etc. A good design should be an effective solution to an issue.

What are the elements of good design? What do other people think and say good design is?

Well known industrial designer _____ has one of the most well known and accepted definitions or concepts of what good design is and what makes a design good. _____ definition of good design is a design which includes:



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These aspects which [redacted] has identified all make up integral parts of a good design with each part being important in the development and production of a good product. Another opinion on what good design is comes from a [redacted] article from [redacted] a former [redacted] council member. [redacted] says [redacted]

[redacted]. I believe that both of these opinions are completely valid explanations of what good design can look like but I personally believe that "good design" is extremely subjective and what makes a design good is ever evolving and changing depending on the times and the consumer and the context at which a design is made or used in matters hugely. I believe that the most important part of good design is a functional product which stakeholders and users actually enjoy or a product which alleviates stress or problems from a stakeholder.

What does good design mean to me?

I personally believe that good design is anything that is functional for its intended purpose but also is enjoyable for and improves the lives of the stakeholders using the product. I believe that if anything a good design should only have a positive



Aesthetic vs. Functionality



impact on a users life and should be something that users want to use. I can see that this definition of good design is very broad and very subjective as some products may find functionality with its physical ability to do something while some may be functional with how good it looks or suits its environment. An example of how subjective good design can be would be with designing clothes, for example designing a dress for the average

clothing brand which will go out to thousands of users who would find enjoyment in the product if they think the dress looks good and makes them look good, if the dress succeeded in doing this it would be highly functional and would provide enjoyment to users making it a good design. On the other hand designing suits for firefighters would require a far better balance of functionality to aesthetics as a firefighter would want a lightweight, durable and functional piece of clothing which could hold all the equipment necessary for their job, but a firefighter would also want certain aesthetic aspects as they would want to be recognisable and easily seen. A product which strikes an appropriate balance between aspects in relation to the specifics of its intended environment and its needs by a stakeholder, which is enjoyable and effective to use, makes a design good in my opinion. Specific aspects I find make a good design would be:

- **Durability** (ability to last a long time and is strong), I believe this is crucial to a good design as products should be able to withstand the dangers of everyday life and should be able to stand the test of time.
- **Aesthetics** (suits its environment and looks pleasing to consumers), I believe a design's aesthetics should suit its environment as I believe this links to  idea of a design being unobstructive and I believe the design should look pleasing to customers to improve small aspects of life.
- **Environmentally Friendly** (sustainable design), I believe that a design being environmentally friendly is extremely important, especially in modern times as the safety of the planet is more important than a cheaper product.
- **Functionality** (works as intended, is effective and reliable), I believe that functionality is one of, if not the most important aspect of a good design as a design which aims to improve people's lives has to properly work and be reliable.
- **User-Friendliness** (the design is comfortable, affordable and easy to use), I believe that user friendliness is super important for a product, ranging from being affordable to being comfortable and easy to use and maintain all of these are important to making a good design for users.

How and why views of design change

Design has evolved many times over the years and will continue to change and advance as society does. Design has changed many times through its principles and focuses depending on the societal values of the time, whether this be mass production, making something easy and quick to produce many of during the



industrial revolution or being our modern societies paramount attention to sustainability and fixing the effects of movements such as the industrial revolution. A large part of modern design focuses on sustainability, this is done through the principle of circular product life cycle where design focuses on making all parts of a products life cycle lead back to the first step to make the product sustainable, this is one of the ways that design changes with the times and how the principles of design can alter to suit society. Design changes and flows as society does and is moulded by the needs and requirements of people and society and as different aspects are needed design is changed to fulfil these requirements. Design also changes as technologies are advanced and become more available for designers, for example the extreme change in design which digital designing brought to the world, being able to easily and efficiently prototype and ideate without wasting materials made design much quicker and more innovative. Design as a whole is influenced by so many societal factors, such as cultural shifts, technological advancements, societal movements and more, but design always reflects the needs of the consumer and the values of the society in which it is designed in, which is why it evolves throughout time as people's morals, necessities, inclinations fluctuate.


Due to modern society's view on environmental issues and the concern of people on how we treat the world, companies and designers have had to shift their focus recently towards sustainability and environmental issues and have had to take more accountability for their products and where and what they are made from, shifting how products are made and designed with new aspects in mind. Personally I believe that because of the emergence and widespread realisation of climate and environmental issues, customers have become far more aware and weary of where their products come from, how and what they are made from and whether they are investing in sustainable products, because of this both companies have had to shift their design focuses and customers have also shifted their criteria on which they judge a good product that they would want to buy and I believe this effect will last on consumers forever.

What is good design as we see it in today's world?

Contemporary judgement criteria is the criteria on which people or a society judge something on, the main elements at which a design should be critiqued on. A good design at any point in time would be a product which achieves its society's contemporary judgement criteria and provides its users with a positive experience. In today's world there are a multitude of different aspects on which a design is judged upon and so many different things that make a modern design good, an example of an aspect that could help to make a design good in today's world would be making your product or design sustainable/environmentally friendly, a somewhat modern topic which much of the population cares about, making it very important in a modern design.

Why are contemporary judgement criteria important for design decision making?

Contemporary judgement criteria, or the criteria which present day society judges something upon, is an extremely important and crucial part of designing as it defines the basis for what a designer needs to include and incorporate into the design. Contemporary judgement criteria also helps with the evolution and development of a design throughout time with designs being altered and heavily developed from their original designs. An example of this evolution of design could be seen with cars, a car from the 1940s or 50s was usually a large, heavy, solid metal body with huge engines and bad fuel mileage, throughout the years design has evolved for cars and the ideas of better safety, space and fuel efficiency have been realised, so when we look at a modern car we see a smaller car with a small, sometimes hybrid engine with efficient mileage and a light metal body with safe crumple zones and air bags protecting the passengers. This shows how designs evolve as consumers' needs change and more technology becomes available to the market and the design must change to suit these new specifications and improve designs to make people's lives better. Contemporary judgement criteria is important because it is the modern, present day definition of what is required for a good design and should include everything a modern designer should take into consideration for their design, a contemporary judgement criteria also provides the groundwork on which all or most designs should be judged on their fitness for purpose and gives the basics a good design should consider and include before it tries to appeal to specific audiences. An example of this would be how modern designs have specifications which focus on



environmental and sustainability factors of a design because of our society's needs to lower our environmental footprint from the effects of the industrial revolution, this shows how sustainability could be considered a contemporary judgement criteria which all designs could be judged and evaluated on before they try to appeal to their main audience.

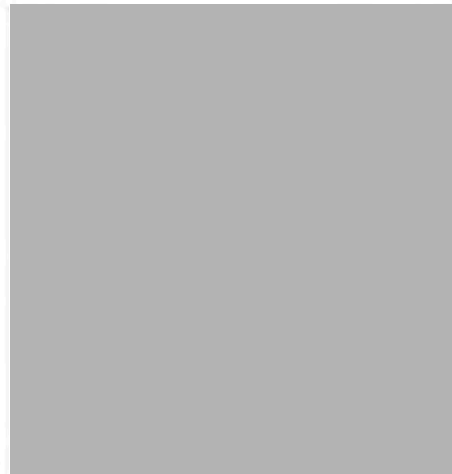
How the judgement criteria impacts design decision making

Judgement criteria has a huge impact on a designer decision making and is extremely important in making a good design. As contemporary judgement criteria are ever changing and evolving it is extremely important to take into account these criteria in order to properly design a design which consumers want to use and therefore it is important to take into consideration this judgement criteria when faced

with a design decision. For example when deciding what type of aesthetics you should have for your design, you have to take into account the people who are supposed to use your product and their judgement criteria and decide on a suitable look for your product based on these opinions. It is extremely important to take this into consideration when designing as a good design in its simplest form in my opinion is something which consumers enjoy and something which makes its users life better and the best way to make something consumers lives better, is to listen to their wants and needs and apply this information to your product and any decision making during product development.

Judging a technological outcomes design

Chairs, an extremely important yet often overlooked part of people's everyday lives, everyone uses them, all throughout their lives, but not many people give them much thought. Chairs often have a few main issues when it comes to their designs, I would say these main problems are their comfortability, durability and environmental impact. Chairs are forever changing and evolving with new designs and styles with different aesthetics and comfortability. The chair I will be critiquing is the [redacted] chair from [redacted], a simple and sustainable chair, made to be cheap, stackable and lightweight.



- **Durability** (ability to last a long time and is strong)

I personally believe that durability is not simply somethings ability to be strong or take damage but also the ability to stand the test of time, because of this I will be critiquing the [redacted] chair on first, its strength and ability to withstand a reasonable amount of wear and tear and second its lifespan and ability to last a long amount of time. The [redacted] chair is made to be strong and stand the test of time, to achieve this the designer of the chair has used single moulded recycled plastic, a strong and durable material with an extremely respectable lifespan of over 40 years without visual damage. The strength of recycled plastic is also extremely impressive with [redacted] saying recycled plastic is '[redacted]'. Clearly the strength and lifespan of recycled plastic is impressive on its own but in the context of the [redacted] chair it is extremely well suited, providing far more than adequate strength for its users while also lasting for a very long time.

- **Aesthetics** (suits its environment and looks pleasing to consumers)

My second judgement criteria for a good design is a design's aesthetics, because I believe that aesthetics are extremely subjective and very hard to judge. I will be critiquing the [redacted] chair in my opinion of its looks and the chair's ability to suit its environment, because I believe that these are the most relevant things to consider for this critique and are also the things I can most

accurately evaluate and judge.

The [redacted] chair has very simple aesthetics with a very simple curvy look with 4 separate simple pastel colours. The colours of the [redacted] chair compliment its minimal look but are also quite naturally inspired with a sunrise orange and high noon which add a sort of

natural aesthetic. I personally quite like this minimal look and I believe that it suits the chair quite well as the choice for a sustainable, one material chair seems to fit in a more bland singular colour. As [redacted] says, a good design must be unobstructive, the [redacted] chair is designed very simply which I believe is the best to match every situation it can be used in as it doesn't stick out too much and bring too much attention away from the rest of the room but also has a little uniqueness being so simple and with its pastel colours. But just because the chair is simplistic and plain it doesn't mean the aesthetics are all good, as many possible consumers may find this to be ugly and may not like the design which could affect its title of being a good design.

- **Environmentally Friendly** (sustainable design)

I have chosen to critique the [redacted] chair's environmental friendliness as I believe that in the modern context of society, sustainability is hugely relevant and regarded as a massive issue by a large population of consumers and I believe that a critique of a good design should also take into account aspects of current society and its populations needs and issues. Many modern chairs are often made from weak plastics and other materials which bend and snap under stress, resulting in the waste of the product and its materials, causing unwanted damage to the environment. The [redacted] chair largely negates this issue with its use of single mould recycled plastic which is a far more sustainable material, using already used plastic at the end of its lifetime in an existing product and melting it down to create another material where it can be used again without having to go to landfill and pollute the environment further. Recycled plastic is not only very durable and sustainable as a material but can also be recycled itself, this means that once the chair is at the end of

its long lifetime or the chair is broken and irreparable the chair can be melted down again and moulded into the chair or another product for another lifetime without becoming landfill or polluting the environment. The recycled plastic used is also sustainably sourced being taken as offcuts from other products from the factory where the chair is made and being reused as a new product, this makes the life cycle of the whole product more sustainable and cuts down on transportation pollution and lowers the overall waste from the factory. The chair also being made with only one material means it's easier and far more effective to recycle while also meaning you also don't have issues with importing materials and the transportation pollution from importing the materials. Because of these features of the chair and its materials I would say that this chair is definitely sustainable, environmentally friendly and the whole process of the chair is clearly designed to be environmentally conscious.

- **Functionality** (works as intended, is effective and reliable)

I will be critiquing the chair on its functionality as this aspect of a good design is very important to making a product which consumers can enjoy using. To critique the chair on this aspect I will be looking at if it works as intended, for example its stacking and lightweight features. I will also judge its effectiveness as a chair design as I believe that it is an extremely important aspect. The chair was intended to be a lightweight and stackable chair for consumers, helping to reduce space wasted and make transporting the chair easier for consumers. The stacking feature is done quite well in the chair with the designers making it so the chair would stack but would stack properly vertical unlike most chairs which stack at a slight angle making it hard to stack a large amount of chairs together. The lightweight aspect of the chair is also done very well as the use of recycled plastic and the overall egg-like shape and design of the chair aims to minimise the material used, resulting in the chairs overall weight being only 2.7 kgs. I would personally say the designs ability to stack and its lightweight attribute make it extremely functional and show that it does work as it was designed to and is very effective in doing so.

- **User-Friendliness** (the design is comfortable, affordable and easy to use)

The final aspect I will be critiquing the chair on, is its user-friendliness. I believe that this is an extremely important aspect, if not the most important as

it directly relates to consumer satisfaction and an abundance of consumer enjoyment relies on this aspect. To critique the [redacted] chair I will be splitting user-friendliness into 3 main categories, the design's comfortability for users, the design's affordability and the design's ease of use. The [redacted] chairs design seems to mostly focus on its cost, weight and using strong/sustainable materials. This focus on those aspects seems to have differed from some of the designing on the comfortability of the chair as the use of flat recycled plastic for the seat and backrest take away from the designs overall user-friendliness. Although the chair has no form of padding though it's not necessarily uncomfortable to sit on, the shape of the backrest and seat clearly have thought about ergonomics in their design and have implemented different comfort measures. The [redacted] chair has been purposefully designed to be affordable and quick to produce with multiple different factors. This affordability comes due to almost all material used coming from offcuts from the factory, cutting down on the cost of materials for the company, as well as the chair being designed to use as little materials as possible per chair. The simplicity and single mould nature of the chair also makes producing the [redacted] chair far cheaper making it cheaper for the consumer. The [redacted] chair is designed to be lightweight and stackable making it easy for the user to move and store the chair when necessary. The light weight of the chair would definitely make it easy to carry, being only 2.7 kgs but the lack of a handle or grips could make it somewhat difficult to actually hold and carry the chair, especially with the chair being one solid shape (not folding legs, backrest, etc). Overall I think the [redacted] chair is quite user friendly and is comfortable, easy to carry and particularly affordable, but I do think there are small possible improvements, such as padding or a hand hole to easily carry the chair around.

Conclusion

To sum up all my points, a good design can not truly be defined by a set of specifications as every design serves a different unique purpose and a good design just has to succeed in its own purpose and improve the lives of its users. Good design is entirely subjective and its definition relies on the needs of its time and the people it is designed for, an example of this would be the [redacted] chair, I would personally say this is a good design as it does its intended purpose, it's sustainable, a modern societal issue and is extremely user-friendly, I believe all these aspects help to make the [redacted] chair a good design, but these specifications cannot be applied to every design out there because they all serve different purposes. Although saying this I believe that there are specifications that most if not all good designs should have, being durability, aesthetics, environmentally friendliness, functionality and most importantly user-friendliness but these are not what define a good design, only certain things I personally believe are important due to modern societal necessities. I

believe that there will never be a true fool-proof recipe for a good design as society and its needs are ever changing, but I do believe that as long as your design is enjoyed by its users and helps to improve their life, that is enough to be considered a good design.

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Achievement

Subject: Technology

Standard: 91617

Total score: 04

Q	Grade score	Marker commentary
One	A4	<p>The candidate explained the concept of good design and why criteria for judging the quality of design change over time and how we see it today.</p> <p>They explained views of design and judgment criteria used to determine the quality of the design of technological outcomes.</p> <p>The candidate provided specific examples to illustrate their points and informative images of the outcome they critiqued.</p> <p>They selected criteria that were appropriate for and relevant to the outcome they were critiquing and critiqued in an objective and balanced way, using appropriate design judgement criteria they had selected.</p>