Interior Design
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Lecture - 28
Interior Design: Interior Design Tech: Visual Merchandising, Modularity,
Portability, Foldability, DIY

Namaste. Hello, everyone. Welcome again to my NPTEL course on interior design. We are at lecture number 28 today. We are talking about interior design technology, and today we are focusing on visual merchandising, concepts of modularity, portability, foldability, and do-it-yourself.

These are all very important and crucial aspects when we talk about interior design projects. So the broad contents are VM, modularity, portability, foldability, and DIY. Starting with VM, we discussed types of spaces and talked about retail spaces. Visual merchandising is particularly important for retail spaces, and in general, it's a crucial concept in interior architecture. VM is the practice of strategically arranging product displays and other visual elements to attract customers.

It could be through color, lighting, decor elements, the presentation of clothing, or certain selected attire on mannequins. And, you know, what is the display scheme? The entire overall glimpse or the feel of a space can be uplifted through VM. The main goal of VM is to provide a positive and impactful customer experience, and driving sales is the primary purpose. This is one way of doing visual merchandising through the elements you see here.

So that was the example from Versace. This is the example of the ZARA store and they emphasize on experiential design. And when we talk about VM and when we talk about ZARA, You know, there are lots of ways to emphasize on this experiential design through interior design, of course, as a whole. So this drawing represents the ZARA showroom interior design layout and circulation.

So this is the circulation and these are the details. So it has products in the center and customers walking around them along long aisles. Of course, visual merchandise that we are talking about. So the showroom showcases complementary attires together to

create a complete outfit. It focuses on arranging products in mannequins and interactive clothing displays.

So these are all the tools to, you know, capitalize on the VM and showcase the products there. Then there are types of visual merchandising and it would be very useful to understand what are these types. So starting with the display windows. Display windows catch the attention of potential customers at the street level itself to draw them into the store. They often help retailers highlight new stock and promotions while communicating the kinds of products shoppers can expect upon entering.

So they are very important, the display windows. Interior displays. Interior displays are smaller in-store presentations that showcase specific products or shopper needs. They can take many forms, from glass cases containing jewelry to mannequins displaying clothing items. Then we talk about point-of-purchase displays.

Now these displays present impulse offers to customers as they approach the checkout counter. For example, supermarkets have specialized shelving for magazines, candy, and soda. Some retailers also feature a deal-of-the-day display that a cashier can retrieve upon request. So these are, you know, sort of very... attractive ways to engage the customer, and you know, during checkout or while they are just about to check out, these kinds of displays attract customers to buy some, you know, more stuff than they anticipated they would end up buying. Then there are seasonal displays. Seasonal products often require specialized promotions and signage.

Seasonal displays meet these needs by showcasing promotions and products that shoppers need within a specific time frame. So some of the common examples could be summer swimwear, back-to-school promotions, and elaborate Christmas decorations. And of course, there is a certain time frame that is attached or associated with these kinds of examples that I just mentioned. And there are many more examples like that. Then there are category displays.

Many retailers arrange products by categories in ways that highlight distinct features. For example, in a grocery store, openly displaying fruits and vegetables emphasizes their freshness compared to other packaged goods and therefore they are displayed in a very elaborate manner. Interactive displays. Now these displays engage shoppers'

attention directly. In-store demonstrations and free samples accomplish this by encouraging customers to interact with them in passing.

In the 2020s, the cutting edge of VM uses technology to enhance the shopping experience. For example, retailers can use display screens that give directions or showcase promotional items. Then a very important part is the e-commerce and in-app storefronts. So many customers may not enter brick and mortar stores at all. But VM applies to online shopping too.

And what is the experience of the user while engaging with these storefronts through e-commerce mechanisms and apps etc. So that's also important. E-commerce product listings typically include screenshots of products linked to similar items, notifying customers about promotional coupons and interesting visuals and more details. Retailers cannot afford to overlook VM techniques. that will make their shopping apps and websites more appealing to visitors.

And therefore, whether it's a welcoming message or it's an augmented reality-based catalog or prompts and instructions to scan and pay and how easy and user-friendly these platforms are, they make all the difference. There are some best practices of visual merchandising, starting with making effective use of light and color. We have talked a lot about light and color throughout the course and we will keep talking about it even towards the end till the end. Given the visual nature of visual merchandising, it's no surprise that light and color are significant ingredients to draw from. According to one retailer, simply updating the lighting fixtures increased their sales by 12%, which is quite significant.

Color is very effective at communicating subtle details. Sometimes a lack of light or color can have a surprising impact. Spotlights can help customers focus on certain products. Framing products with specific colors can also help contextualize the details and make them pop out. So these are important ways of ensuring good practices while practicing VM.

Communicate details with signs. Signage is immensely helpful when communicating specific details. The key is placing signs in ways that supplement the product without disrupting the overall presentation. Following are some excellent examples. So banners.

Hanging banners are an excellent technique for grouping related products together. Consider using them to promote seasonal sales or direct attention to each in-store category. This is particularly helpful here. Always avoid clutter. Making effective use of floor space is a vital technique.

Give your visual merchandising displays a little extra room to breathe. Retailers can use the space around a product display for signs instead of additional items. Now, in the wake of COVID-19, which was a very disturbing event, there are so many lessons to be learned from it. So, in the wake of that event, many retailers reduced shelf space and cut back on the number of display areas. By making the best use of limited space, it was easier to implement social distancing practices.

To make up the difference, they considered digital signage or AR technology. That presented all items on a local screen. So, of course, there are some triggers, events, and occasions where one has to completely change the strategy, address the evolving needs, and present solutions accordingly. So, of course, we have seen those solutions through interior design projects in the wake of COVID-19. Store layout as visual merchandising.

While product displays are an essential part of VM, one does not want them to clash with the rest of the store. So, taking a step back to consider the overall floor layout is very essential. Along with ensuring that there is enough space for displays, it also aligns the entire in-store experience with the brand. So, there are some store layouts, you know, which facilitate VM as a whole, and there are some common examples. So, the grid one is quite popular.

Perhaps the most recognizable store layout is the grid, where products fit into densely packed aisles. I'll show the visuals as well. This technique is common in supermarkets, grocery stores, pharmacies, and many more. Grids benefit retail locations that need to maximize merchandise on display while supporting optimal foot traffic. Then there is the herringbone.

While grids are useful in large retail stores, they tend to feel overcrowded in smaller locations. The herringbone grid variant opens the floor with a central pathway to the checkout that branches into grids on each side. It even creates opportunities for interior displays at aisle entrances, although they can limit the visibility of products within each

aisle. The loop is another popular example. Loops guide customers along a fixed path to see all products and categories before reaching the checkout counters.

This layout maximizes product visibility and streamlines customer traffic, but can disrupt a casual browsing experience. Loops are often found in museums and gift shops, although some retailers like IKEA have been able to implement them successfully and draw benefits from this kind of an arrangement. Now we see over here retail floor plans and what are they best applied for and what is this layout and how does it look like. This is a very useful information. So we did talk about grid floor plans and they are used in grocery, big box, convenience stores.

They are best for shelf stocked goods such as books, toys, some speciality foods, hardware, homeware. And this is how the plan looks like. So the entrance and exit is the customer flow over here. This is the checkout and here we see the power wall. A power wall is a prominent visual display in a retail store that's typically located on the right side of the entrance.

We also see here the loop floor plan. So it maximizes the wall space and leads shoppers along a set pathway. Best for apparel, accessory, toy, homeware, kitchenware, personal care. And this is how the plan looks like. So entrance and exit, customer flow, checkout and more details.

Diagonal floor plans So I've discussed only three, but this sort of comparative inventory discusses more. So there are nine of these that I'm going to showcase in an overview visual manner. So the diagonal floor plans maximize employee visibility in retail stores with lots of product testing. And they are best for self-service kiosks, tech and electronic stores, beauty and cosmetic retailers.

And this is how it looks. The entrance and exit, the diagonal arrangement, the customer flow, and the checkout counter. Then we have the herringbone floor plan that we talked about. It is a type of grid floor plan but with a big center aisle. And it's best used for small footprint stores or stores needing to fit in lots of products.

And this is how it looks. So the entrance and exit are over here. There is also a window display that we see. There is a customer flow, and then there is a checkout. Then there are boutique floor plans.

It's a type of free-flow plan that prioritizes visibility and open space, often highlighting pop-in shops. Best for boutiques and specialty retailers. They use this floor plan to highlight brand collaborations, guests, pop-in retailers, or new product categories. And this is how a typical plan looks. The entrance and exit, the window display over here, and we see the arrangement.

There is this customer flow leading toward the checkout. There is also a free floor plan used for designing retail spaces. They are used in specialty and boutique settings. Apparel, accessory, personal care, and mixed-use stores also. That's interesting, like bakeries that display packaged goods.

And this is how it looks. Entrance and exit, customer flow, and toward the checkout. There is a forced-path floor plan. Customers are guided through a predetermined path and exposed to every product. This is strategized by design to guide customers through the store.

Best for furniture, home decor, experiential retail stores, and showrooms. This is what it looks like. So there is a guided sort of tour, and the customers are expected to follow that path. Angular floor plans. Showcase curated or edited inventories in designer or specialty shops.

So very specifically curated. Designers, artisans, high-end apparel and accessory retailers, and limited collections. This is what the floor plan looks like. Of course, with window displays, visual merchandising, entry, exit, and customer flow. And typical and curated, customized arrangement and display of products.

There is a spine floor plan, easy to navigate and organize product categories with one big center aisle. Small grocers, department stores, and marketplaces use it. So those were some useful layouts and the most common examples, where the store layout itself becomes a very important part of the overall scheme, facilitated through visual merchandising as a key tool and technique for drawing in customers. When we talk about the future of visual merchandising, A lot of it is already happening in the present and will continue for a long time.

And of course, with such rapid changes in technology, of course, there will be a lot of changes and evolution within a short span of time as we can anticipate. So the future of VM is likely to be focused on the use of technology to create interactive experiences

for customers, which I said is already happening. But the advancement and to what level we make this technology engage the users and what kind of interactive experiences are created, they will keep on evolving. And of course, I think they will only improve with the kind of technological changes that we are seeing. So this includes the use of augmented reality, virtual reality, other technologies to create immersive environments that draw customers in.

AI-driven technologies, they are also being used to better understand customer preferences and tailor displays and promotions accordingly. Additionally, retailers are likely to leverage data-driven insights to better inform the visual merchandising decisions. So data is very, very crucial, which helps, you know, inform the decisions regarding VM and the overall design. Now, since we are talking about interesting concepts and technology-driven ways for boosting interior design practice, let us talk about the concept of modularity, which has gained a lot of popularity and it is offering very interesting design solutions.

So modularity in interior design refers to the design principle of subdividing a space into smaller parts called modules. And this does not have to apply only on the space. It also applies to furniture systems and other kinds of design development and details that the designers work on. These modules can be independently created, modified, replaced or exchanged with other components. This is an example of 3D printed connectors and this is overall a furniture system and these modules can be reconfigured and another permutation and combination and other function could be achieved through the modularity.

The concept of modularity is applicable in various fields, as I was just talking about—architecture, product design, interior design, and a lot more. The adaptability of the individual components means that the shelves can be made into a variety of configurations to suit the user's needs. One of the arrangements using the modules is what we see over here, with the different functions assigned to these shelves. No expensive modifications are required for the connecting parts. They can be reconfigured and altered to create different arrangements.

Instead, only the size of the wooden panels is modified. More levels can be added at a later stage by introducing further connectors and panels. So we could expand this, contract this configuration, and have multiple options available. In interior design,

modularity offers several benefits and opportunities, flexibility being the most important one. Modular interiors allow for flexibility in design and layout.

The modular components can be rearranged or reconfigured to adapt to changing needs or preferences. Functionality, of course. Modular interiors are designed to maximize the functionality of a room. Clever storage solutions and modular storage units are incorporated to optimize space and organization. Efficiency.

Modular interiors can be more efficient in terms of resource utilization and construction. Modular components can be prefabricated in a factory setup, resulting in reduced waste and a lower carbon footprint. So, that way, they are quite efficient. Customization. Very, very important.

The modules can be tailored to reflect the owner's personality and style preferences. Modular interiors offer the opportunity for customization. Overall, modularity in interior design provides a versatile and adaptable approach to creating functional and aesthetically pleasing spaces. Some of the examples can be seen here. There is a lot of potential for customization, flexibility, and altering the way space looks by just reconfiguring these modules after a certain period of time.

So, there are periodic changes within the space to suit the mood and changing needs. The concept of portability. The concept of portability in interior design refers to the ability to easily move or reconfigure furniture, decor, and other elements within a space. That's the keyword here. It emphasizes flexibility and adaptability, allowing one to change the layout, style, or function of a room or space to suit evolving needs or preferences.

So again, portability in interior design can be achieved through various means. One of the most important ones is furniture. Choosing lightweight and modular furniture pieces that are easy to move and rearrange. This allows you to quickly transform the layout and functionality of a space without much effort. Examples include chairs with handles, folding tables, stackable stools, wheeled storage units, just to mention a few.

So there is, of course, multi-purpose and convertible furniture. Furniture items that serve multiple functions or can be transformed into different configurations. In one of the lectures, we talk about tiny houses and discuss the importance of multifunctionality, space optimization, relevant furniture design, and unique joinery design. So all of

these—we can also think about those details when discussing the aspects of modularity, portability, and foldability. For instance, a sofa that can be converted into a bed, a coffee table with built-in storage, or a desk that can be folded against the wall to save space.

Portable storage solutions: using freestanding storage units such as bookshelves, cabinets, and wardrobes that can be easily moved around. So aspects of moving and portability. And these could also be combined. Portable plus foldable plus modular, and so on. So portable storage solutions allow you to adapt the storage layout according to changing needs or relocate them when moving to a new space.

This is very handy. Decorative elements. Opting for portable decor items like floor lamps, movable screens, room dividers, partitions, and lightweight artwork. These are also quite useful when we talk about the aspects of portability within interior spaces, within the design of interior spaces. These can be shifted to create new focal points, divide spaces, or even update the ambiance of a room.

Temporary installations: Utilizing removable wallpaper, peel-and-stick tiles, or modular wall panels that can be easily installed and removed without causing damage to the existing surfaces. This gives the freedom to experiment with different patterns, textures, and colors without committing to a permanent change. So that's the most important point. The benefits of incorporating portability in interior design are numerous. It allows you to maximize space utilization, adapt to different activities or events, accommodate guests, and create a fresh look whenever desired.

The benefits of incorporating portability, as we are discussing, are very numerous and very useful. Portable design elements can be particularly useful for those living in rental spaces or frequently changing environments. So again, I could refer to tiny houses here since we are talking about compact spaces and changing environments. Concept of foldability. The concept of foldability in interior design refers to the ability of furniture and architectural elements to fold or collapse into a more compact form when not in use.

It focuses on space-saving solutions that optimize functionality and allow for efficient storage or easy transportation. This aspect is very important. We often forget about the aspects of packaging and transportation. So how do we transport these pieces, which are installed within our interior spaces? Foldability allows for that easy option.

Foldability can be applied to various aspects of interior design, including furniture, partitions, and fixtures. Some examples are, of course, folding furniture. This can include foldable tables, chairs, beds, and even shelving units. Foldable furniture pieces are designed to be easily folded or collapsed when not needed, minimizing their footprint and making them convenient for storage or transport.

These versatile pieces are especially useful in small spaces where maximizing floor area is crucial. Folding partitions or screens can be used to divide or create separate areas within a room. They can be folded and expanded as needed, allowing for flexible spatial arrangements. Foldable storage solutions provide a compact and efficient way to organize belongings. This helps keep the space tidy and clutter-free.

For example, collapsible fabric storage bins or hanging organizers that can be folded and put away when not in use. Foldable fixtures. Certain fixtures in interior design, such as folding countertops or built-in ironing boards that can be folded out and tucked away when not in use, exemplify the concept of foldability. These fixtures are designed to maximize functionality while minimizing the space they occupy. Foldable walls or ceilings are also in vogue.

In some cases, foldable walls or ceilings can be employed to create convertible spaces. These architectural elements can be folded or expanded to modify the size and layout of a room. The concept of foldability in interior design offers practical advantages, particularly in compact living spaces or environments where flexibility is essential. By incorporating foldable elements, one can optimize space utilization, easily adapt to different needs or occasions, and create a more versatile and functional interior environment. The concept of DIY.

DIY, or do-it-yourself interior design, refers to the practice of designing and decorating a space without necessarily hiring a professional designer or contractor. It allows one to unleash creativity, personalize space, and often saves money in the process. Here are some ideas and tips for DIY in interior design, starting with personalization. DIY projects allow homeowners and users to personalize their home decor and express their creativity. From painting walls to creating unique art pieces, DIY projects can add a personal touch to spaces.

Cost Saving DIY projects can be a cost-effective way to decorate or renovate a space or an entire project. By using recycled or repurposed materials, one can save money while creating unique and eco-friendly designs. Inspiration for DIY Magazines, websites, and social media platforms offer a wealth of inspiration and ideas for DIY projects.

From color schemes to furniture arrangements, homeowners and users can find inspiration for their DIY projects and create a cohesive design. Design Principles Understanding basic design principles such as color, texture, balance, harmony, rhythm, and some of the elements of design mentioned here can help users create successful DIY projects. Now, I'm all for these DIY tips, and you know, it's a good thing that users have such tools handy, and they can personalize their own spaces and design their own projects.

But as a designer, I would always, you know, recommend involving a professional designer because understanding the elements and principles of design, the overall design vocabulary, and then working on spaces—transforming them, designing them for user needs while keeping in mind the climate and holistic aspects of design— comes after a lot of training, education, understanding, experience, and practice. So, continuing with the design principles, by following these principles, users can create harmonious and visually appealing designs. But, as I said, it requires a lot of training and understanding.

Also, the skill level. DIY projects can range from simple to complex, depending on the user's skill level and experience. Starting with small, easy projects can help build confidence and skills for more challenging projects. Now, integrating these concepts can create cohesive interior spaces or designs. Like I mentioned a few slides ago, there could also be a permutation and combination of all these concepts—modularity, foldability, portability, DIY—and all of these could be integrated and explored in a very interesting manner.

By integrating modularity, portability, foldability, and DIY in interior design, one can achieve a dynamic and adaptable space. For example, one could choose modular furniture systems that can be easily disassembled and reconfigured according to changing needs. An interesting arrangement over here with different elements put in place—not particularly highlighting foldability, modularity, or DIY, but the

amalgamation and integration of many of those details. They empower users to optimize spaces, adapt to different activities or occasions, and express creativity through hands-on DIY projects.

So, the integration of modularity, portability, foldability, and do-it-yourself offers endless possibilities for transforming interior environments according to evolving needs and desires. I have some of the references here. I hope you enjoyed the lecture. Thank you so much. I'll see you next time.