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Technological Influence In Interior Spaces

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ABSTRACT

In my research paper I have covered the topic of "Modern technology of interior design" In the last decade; technologies have had a significant impact on the world of interior design. Design standards are always on the rise with enhanced aesthetics appearing in all aspects of design. Advancements in Interior Design such as cabinetry upgrades, water saving features, lighting features etc have took place in 21st Century. In my literature study I have explained the topics like the new frontier of design at home, water saving feature which has sub points which are. Poor Little Fish Basin, Urinal and Sink Combo, Eco-Drop Shower, Save Faucet, Eco Wash, Eco Gadgets: Water Flush etc. it also converse the topic of light fixtures which covers cove lights, solar lights, track lights, under cabinet lights etc. this completes my overall research paper.

Keywords : Modern technology, interior design, Technological Influence, Eco-Drop Shower, LED

I. INTRODUCTION

In the last decade, technological breakthroughs have had a significant impact on the world of interior design. Like any industry, Interior Design has learned to fluctuate, change and evolve over time. Although many of your favorite Interior Design Styles are still prevalent and very much desired, the Design Style themselves are evolving to reflect current trends that seem to be affecting many markets, such as becoming Eco-Friendly, energy efficient, and technologically enhanced to embrace the scientific knowledge of the 21st century.

Changes such as these are especially evident in Kitchen Designs – which is where you'll find most of the Eco-Friendly design advances surfacing. Bathroom styles have also been affected by new energy effective technology – along with many purposeful and necessary elements found in all rooms of the home, such as in the Lighting Design and basic overall construction from the ground up.

Design standards are always on the rise with enhanced aesthetics appearing in all aspects of Design, including appliances, hardware, and flooring, counter surfaces, and the general overall construction of a home. Which means that you sometimes need to look under the beauty of it all to discover there is a whole new world in the art and science of Interior Design?

21st Century Advancements in Interior Design

Cabinetry Upgrades: Although not new to Interior Design, today's pull out shelving is being revolutionized in a manner that allows for better organization and integration – not only within the Kitchen, but throughout the home. "Touch Activated" cabinetry – where access is gain by simply touching the doors – is becoming increasingly popular. Lighting is being adding inside cabinets for easier navigation and better control of contents. Going green in the kitchen is prevalent with slide out trash and recycling bins being built in most homes today.

Water Saving Features: Water saving toilets and showers have been in the marketplace for quite some

time, but there is a resurgence in their popularity as the Design Industry strives to be more Eco-Friendly. Bidets are becoming increasing popular as environmentalists promote their paper saving features, as well as taking advantage of technological advancements in filtration systems, drains, shower heads, and many other items in the home that control the purity and flow of water.

Techno-Savvy Hardware: LED touch screens are being seen in household mainstays such as the new "smart toilets" – where with a simple touch you can have your feet warmed, music played, seat height adjusted, and lights to help you find your way. Over by the bathtub another LED screen contains memory features so that every user will be able to retain their favorite settings, offer advanced bacterial filtration, and provide an enhanced level of comfort with minimal effect on your water bill.

Outdoor Entertaining: Barbecuing just got a whole lot easier when you utilize the latest technology in gourmet grills with a "hybrid fire" technology that allows you to combine wood, charcoal and gas all within a single grill. The Patio and Porch Design of a home has certainly evolved as well, as builders strive to bring entertaining to a whole new level by providing an aesthetic and Eco-friendly means to extend your Kitchen.

Hands Free Faucets: Prevalent in Commercial Design, touch less faucet systems is becoming more affordable and increasingly desirable for everyday living in homes of all sizes. Keeping the faucet a breeze to clean with less bacterial contamination is one prominent reason for indulging in a touch less system, although equally important is the ability to control the flow and amount of water being used.

Lighting Fixtures: Energy Efficient Lighting has been on the scene for a while, but it has never been as prominent as it is in today's homes. LED technology allows for easy touch screen operation of your entire Lighting Design. Taking it a step further, lighting isn't reserved just for under cabinets and overhead fixtures anymore – it is now being stylishly installed in hardware and fixtures such as; towel bars, tissue holders, toilet seats, door handles … and just about anything else that makes navigation around your home easier, while offering cost saving advantages to power usage.

The I POD Era: With the advancement of electronics, it's becoming an ever increasing popular option to install integrated docking stations throughout the home. Wireless capabilities are found everywhere from your computer to your television to the LED panels that can control almost all aspects of your interior home components, and even the home itself – with more advancements yet to be discovered.

II. LITERATURE STUDY

The new frontier of design at home

One of the biggest advances in the past twenty years has been the introduction of BIM Technology and virtual reality. Designers now have the power to create a digital environment without physically moving anything, which allows for accurate mapping of the available space. At the same time, 3D visuals and live-streaming establishes a new level of transparency between the client and the designer. The client can now give input to every stage of the project from anywhere in the world and simultaneously save time, money and effort. As technology becomes more advanced and more readily available to the public we may not be far away from living in a world where people have an interactive wall in their houses from which to work and communicate with the world. In fact, prototypes of smart houses are already available, like Open arch, a home designed to incorporate a digital layer connecting the house and its elements to the internet.

Water Saving Features

According to recent reports about 1 billion people in the world lack access to clean drinking water and there are millions of people who succumb to water-related diseases annually. These figures aren't only surprising, but also make the privileged think about that the hundreds of liters of water that is wasted each day in their bathrooms. Here is a list of 13

Innovative Water Saving Concept and Product Designs that might be useful in saving liters of freshwater from going down the drain. I know you might think the money saved via using these water-saving products is not worth comparing with their price. But it is still good to see more and more effort is put on this issue and hope we can have affordable solution to save water, preserve the environment as well as save money.

1. POOR LITTLE FISH basin

As consumption is incalculable, saving is often neglected through daily consumption. Rather than forcing people to consume less, thus depressing the using experience, Poor Little Fish basin offers an emotional way to persuade consumers to think about saving water, by making consumption tangible.

There is a traditional shaped fish bowl in the Poor Little Fish basin. While using, the level of water in the bowl gradually falls (but does not actually drain out); it will go back to the same level once the water stops running. As well, the water from the tap is pure, as its pipeline does not connect to the bowl.

2. Urinal and Sink Combo

To save water, Eco Urinal is designed to use the water that was used for washing hands to flush the urine. By this process, we don't have to use water twice after using the urinal. Moreover, it reduces the establishment expenses by optimizing the materials. Upper space of this urinal is made with glass, and it helps to secure a clear view for users. It also promotes people to keep their sanitation because people need to wash their hands to flush the urine after use.

3. W+W Sink/Toilet Combo is an All-in-One Grey water Recycling System

It's obviously compact and perfect for any loft space or small apartment, and its sleek design houses a nifty self-contained grey water system that is capable of reducing water use by up to 25% compared to a standard 6/3-liter dual flush toilet. It's a much trendier and elegant solution to existing sink to toilet grey water systems.

The system uses Roca's "water-reuse technology" and also features an automatic cleaning system that avoids flushing bacteria into the unit's built-in cistern, cutting down on unpleasant odors.

4. Eco-drop shower

The "Mindful Shower Head" above try to remind you the water usage amount by a visual way, while this one just give you more directly touching feeling – makes you stand uncomfortably.

The concentric circles are pretty wonderful when not in use. However, after showering for a long time, they will rise to force you stop showering, accordingly saving water.

5. Save Faucet

Designed by Ramón Yu, the save faucet features an LED display that reads the amount of water that is being used. This simple information encourages users to reduce water pressure to save more water. Another exciting feature of the product is that it doesn't require any external electrical connection to power the LEDs as it is equipped with a turbine that actives as the water pressurizes it to generate electricity.

6. Faucet Buddy Tells You about Water

Faucet Buddy is a cool little chrome gadget you latch onto you existing sink fixtures. It tells you how hot or cold the water is so those morning surprises are no more. Of course, just like any real buddy it'll tell you if you're a water rat; wasting our natural precious resources.

7. Water pebble helps reduce shower time to conserve water

The Water pebble by product designer Paul Priest man is a revolutionary device that can encourage individuals to reduce their shower time to conserve water. The intelligent device measures the amount of water going down the plug hole when you shower and memorizes it.

The first shower use is taken as a benchmark by the device after which it uses a series of "traffic lights" flashing gently from green to red whenever you finish showering. The device allows the user to fractionally reduce shower time to make sure that the device is always flashing green.

8. Eco Bath

Eco Factor: Water saving system mixes fresh water with gray water for toilet flushing. "Eco Bath" system

makes use of gray water but only after purifying it a bit, not by using the latest in UV purification, but simply mixing it with fresh water. The flush tank is connected to a freshwater source as well as a sink. When gray water enters the tank, it is mixed with the same amount of fresh water. This 50-50 consistency keeps your toilet drains unclogged and also ensures that 50% of fresh water is saved in the process.

9. Caudal washing machine saves energy and recycles water

The EcoDual is designed with two separate tanks, with a washing capacity of 6kg and 2kg respectively. For heavy washing, the user makes use of the larger tank and the smaller one is used for washing delicate clothes. The washing machine collects water in a tank located at the bottom part of the washer, which is then filtered and reused in subsequent washing cycles. The EcoDual is also equipped with a deodorization system that can be used for foul smelling clothes. This system blows jets of oxygen and ozone in the clothes killing the germs that cause the bad smell. Thus you can take the bad smell out of your favorite shirt and that too without water!

12. Eco Gadgets: Perfect Flush

While manufacturers are now developing toilets that either save water or don't use it at all, Brondell is working to develop means for homeowners to green their existing toilets by making them run on less water. The company has unveiled a new toilet upgrade dubbed Brondell Perfect Flush that comes with two buttons allowing the user to either use the full flush and empty the tank or use half flush to save up to 50% water.

13. My Shower Curtain is a Green Warrior

Entitled "Spiky," the curtain has a cousin that inflates to trap you inside your shower as sweaty punishment. Given the liability issues, the warrior shower curtains are not for sale, but serve to provoke thought on water-usage. Visitors can set a time and experience the shock of a shower with a conscience as it fills with air.

9. Twist Tap – Faucet Makes You Work for Water

The tap is controlled by an aerator. To get water flowing you have to "twist" and crank it. Anytime people have to apply a little elbow grease to accomplish a task – they may think twice. That's the whole point. Only use water when you REALLY need it. If that doesn't destroy you water world dreams, there's even a digital read-out. My favorite bit is the motion sensor that gives you just splash because sometimes that's all you need.

Lighting Fixtures

Track Lighting

Track lighting is mounted or suspended from the ceiling on a linear unit that contains several light heads, which can be positioned anywhere along the track. The direction of the heads can also be adjusted. In this room, the track lighting is used to highlight the artwork and wall and provide overall light for the space.

Recessed Lighting

This light fixture is installed above the ceiling and has an opening that is flush with the ceiling. Recessed lighting sends a relatively narrow band of light in one direction, so it can be used to provide ambient, task or accent lighting. The recessed lighting in this kitchen adds sufficient light without overwhelming the space.

Under-Cabinet Lighting

Mounted underneath kitchen cabinets, this type of lighting is extremely popular as task lighting in a kitchen. The under-cabinet lights in this kitchen brighten up the room and enhance the contemporary, clean feel of the space.

Floor Lamp

A versatile and portable light source, lamps come in a wide range of sizes and styles. This floor lamp complements the room's design scheme and provides task lighting for the bordering chairs.

Table Lamp

A stylish table lamp can add character to a room while providing task light. This sophisticated lamp could easily be used for reading.

Desk Lamp

Desk lamps provide task lighting, directing light downward on a work space.

Chandelier

Suspended from the ceiling, chandeliers direct light upward. They are typically installed over a table or in a main entry foyer, but they are not strangers to bedrooms and bathrooms. Chandeliers enhance the decorative style of a room and provide ambient lighting.

Wall Sconces

Wall sconces are very versatile. Surface-mounted to a wall, they can direct light upward or downward. Wall sconces can add a stylistic touch to a room and can also provide ambient or task lighting. The sconces in this bathroom provide flattering lighting while not subtracting from the impact of the tiled wall.

Ceiling Lights

Ceiling lights are mounted directly to the ceiling, with a glass or plastic shade concealing the light bulb. Ceiling fixtures have been common in homes for nearly 100 years. The ceiling lights in this hallway complement the chandelier that is suspended from the ceiling.

Pendant Lighting

Suspended from the ceiling, a pendant light directs light down. It can easily enhance the decorative style of a room and add character. In this space, the pendants are positioned to hang low over the bed-side tables.

Cove Lighting

There are three common forms of architectural lighting, and cove lighting is a popular form. Cove lighting is placed in a ledge, shelf or recess high up on a wall, and the light is bounced toward the ceiling or upper wall. In this bedroom, the cove lighting illuminates the ceiling above the bed, adding a romantic feel.

Soffit Lighting

Soffit lighting, another type of architectural lighting, radiates downward, washing the wall with light. In this bedroom, soffit lighting adds interesting dimension behind the bed.

Solar reflectors

Once used extensively in office buildings, the adjustable light reflector is seldom in use today having been supplanted by a combination of other methods in concert with artificial illumination. The reflector had found favor where the choices of artificial light provided poor illumination compared to modern electric lighting.

Fixtures

Lighting fixtures come in a wide variety of styles for various functions. The most important functions are as a holder for the light source, to provide directed light and to avoid visual glare. Some are very plain and functional, while some are pieces of art in themselves. Nearly any material can be used, so long as it can tolerate the excess heat and is in keeping with safety codes.

An important property of light fixtures is the luminous efficacy or wall-plug efficiency, meaning the amount of usable light emanating from the fixture per used energy, usually measured in lumen per watt. A fixture using replaceable light sources can also have its efficiency quoted as the percentage of light passed from the "bulb" to the surroundings. The more transparent the lighting fixture is the higher efficacy. Shading the light will normally decrease efficiency but increase the directionality and the visual comfort probability.

III. CONCLUSION

From the research I have concluded that Technology has and will continue to change the way people view the places in which they work irrespective of what initiatives (technological or otherwise) that the workplace strategists implement. In the coming future many new and latest technology will going to come in interior design and it will help us to improve our lifestyle, comfort and living only.

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