

Production at the Louis Vuitton factory can be viewed from a central courtyard.

CREDIT: LOUIS VUITTON

The experiential factory

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The title of this article may appear at a first glance somewhat exotic and contradictory by putting together two words that are not frequently associated. If we turn to the Oxford Dictionary for the word 'factory', we obtain a definition that is very much in line with our common perception; 'a building or a group of buildings where goods are manufactured chiefly by machines'. However, making a deeper analysis, that definition stimulates some further thinking.

To begin with, a factory is a building, a well-defined and confined place where something happens, namely goods (in our case shoes) are manufactured. There is a clear connection with the physicality of the establishment, with the walls and windows of the buildings that we are used to seeing in the specific districts that, since the early years of the industrial era, have populated the outskirts of all big cities in our industrialised countries. Areas that

most of the time are unattractive and where equally unattractive working conditions were home to the numerous workers who took part in the daily manufacturing activity.

The second part of the definition is even more interesting where the dictionary says 'goods are manufactured chiefly by machines'. Once again, a clear association is made between the production process as such and the machines that seem to be the only participants in this performance. It is as if the human beings who spent their daily time in the factory did not matter or merely played a secondary role. Having so often dealt with topics such as process automation and robotics, this certainly does not sound like a great revelation. Yet there is an on-going debate on the respective roles of human workers and machines in modern factories and on the best way of ensuring a safe and healthy co-existence between the two in future manufacturing scenarios.

So what does bring us to associate factory with experience? Again the Oxford Dictionary tells us that experience is 'the practical contact with and the observation of facts or events'. Thinking about a factory, this means being exposed to what is happening within its walls, to the manufacturing organisation, to the processes that transform materials and components into the pleasing products we all know as shoes. So an experiential factory is a place where we are given the chance of experiencing how products are made, learning the values that lay behind the manufacturing process and that contribute to the appeal and the attractiveness of what we buy.

INSIDE THE WALLS

But to whom do we refer when we say we? Certainly not to the people who spend their daily hours in the workshop or office areas. The subjects of this experience are therefore others, persons who are not normally allowed

in factories and who are so far only interested in what they produce: the products they buy. The new subjects we are thinking of are consumers who, in the experiential concept, are given the possibility of seeing how their shoes are made from within the walls of factories that become open spaces where they can actually experience the challenging combination of high tech and human touch that modern shoemaking has become.

Experiential factories are therefore places where consumers are exposed to the intricacies of the manufacturing process of the shoes they buy and so can appreciate the true values that underline them. Obviously, this scenario necessitates a profound transformation of the manufacturing, distribution and retail model and calls for a new role and a new place for the consumer.

First, we have to re-educate consumers to the value of manufacturing and overcome the obsolete logistical split between twentieth-century origins of manufacture and distribution. One where specialisation of labour often contributed to an impoverishment of the urban environment, depriving it first of artisan workshops and then of manufacturing itself, as it moved further and further away on the wave of a progressive offshoring and outsourcing of production. For each production pipeline that supplies our consumer goods, we should perhaps rethink our traditional industrial approach. Instead, we should perhaps create examples of the 'experiential factory of the future', an open factory embodying a contemporary revival of the old workshop principle in an environment of sophisticated industrial automation.

A NEW PHILOSOPHY

The underlying philosophy is that only through the direct education of demand on the actual industrial process will we be able in the future to create communities of aware and responsible consumers. The possibility to innovate through the web, triggering beneficial growth paths and development for all those involved, have never been so vast and powerful as in recent years. In this vision, industry must find a way to once again become visible, central and relevant in the debate about the future of the economy and of society.

Old fashioned industrial districts should be turned into new industrial retail parks, manufacturing and commercial clusters centred on offering consumers a brand new purchasing experience. The goal is to create factory retail platforms that are customer-centric and experiential in order to capture and retain consumers using elements of personalisation, individualisation of product and augmented reality technologies to transform the purchase transaction time into a relational / experiential moment. The goal is to also generate input from consumers (the demand side) with viral effects and of sharing with them essential benefits of the underlying strategy, namely innovation, sustainability, inclusion and participation.

THE TRANSPARENT FACTORY

Are there examples of experiential factories that we can already see? Perhaps the most famous and quoted one is the Volkswagen Phaeton production facility. The building is located in the heart of Dresden, Germany, an 800-year-old city known for its arts and craftsmanship. The factory's walls are made almost entirely of glass—over 290,000 square feet of it—and its floors are covered entirely in Canadian maple. Its layout is visitor friendly and is able to receive 250 visitors per day (by advance reservation at five euros each). There is no charge

for customers or prospective customers.

There are no smokestacks, no loud noises and no toxic by-products. Parts arrive and luxury cars depart. It may look like an expensive way to build them but if the process convinces customers they're getting something special, maybe it's worth the added expense. It looks more like the lobby of an opera house than a factory. In actual fact, during the European floods of 2002, when Dresden's opera house was inundated, the transparent factory did indeed play host to the opera Carmen.

A sphere at the entrance houses an interactive video experience for learning about VW. A customer-commissioning centre forms part of the lobby, inside which Phaeton buyers can choose colours, leathers, woods, etc., for their cars. The ground floor houses a restaurant, and on the lower level there is a simulator that provides visitors with a virtual test drive of the Phaeton, VW's intent being to invite many of the customers for a factory visit.

The transparent factory handles the final assembly only. All the smelly, noisy operations, such as stamping, welding and then painting the steel body, take place elsewhere (in Zwickau to be specific). Painted bodies arrive at the factory by truck. The other 1,200 parts and 34 pre-assembled components are shipped to a remote logistics centre some three miles away and are transferred from there to the factory via trams that run on Dresden's public transport tracks. At the end of the



VW's transparent factory was designed to create a multi-faceted experience.

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At Louis Vuitton, all production is carried out in pristine conditions.

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assembly line once all tests have been satisfactorily passed, the Phaeton is either wrapped for shipment by truck or placed in the glass tower, which is another distinctive feature of the establishment, for eventual factory delivery (all cars in the tower and on the assembly line are already sold).

Factory delivery customers are treated to lunch and a tour. Their cars are then parked in the lobby area where an associate familiarises the customer with all functional aspects of the car before he or she drives it away. Isn't that a unique experience that will be remembered forever by the lucky customers who can afford buying a Phaeton (the luxury brand of the VW group)? In this description we have all the relevant features of the experiential factory. Customers are welcomed and treated as special guests, they are exposed to VW brand values, they can personalise the cars they will drive, they are showcased the manufacturing process and eventually they pay and drive away with their brand new luxury sedan.

For the sake of accuracy we have to say that VW discontinued production of the Phaeton in March this year and the beautiful Dresden factory is now left without anything to produce. Nevertheless, this does not in any way affect the validity of the concept and its contribution to the brand corporate image notwithstanding the emissions scandal that rocked the group last year.

IS IT APPLICABLE TO FOOTWEAR?

A luxury car sells for several tens of thousands of euros while shoes might cost in the hundreds; is such an example therefore applicable in our sector? A visit to the Louis Vuitton factory in Fiesse D'Artico in the north-east of Italy could provide us with an answer. The factory hosts several manufacturing lines, each one dedicated to a specific product or family of products, from top of the range sneakers constructed using the most advanced robotic technologies in a fully automated production line, to elegant ladies shoes and high class Goodyear welted mens footwear.

What the factory has in common with the VW facility is the 'transparent glass concept'. Most of the manufacturing areas face an inner courtyard and are visible through large windows that expose the work in progress to occasional or invited visitors. The factory runs and buzzes inside and allows them to glance at the process through the large windows as if looking at the brand's luxury products in one of the flagship stores in the centre of Paris or London.

The working spaces are totally clean, very well lit, silent and with wood flooring as in the VW factory. Standards are certainly above the average of those found in the most modern and well organised conventional shoe factories. They are in fact far more similar to the ambiance

that can be found in LV boutiques. We are, however, looking at one of the top luxury footwear brands, so doubts as to whether all this is generally applicable to any footwear producer are entirely legitimate.

A DREAM OR A VISION?

Yet there is in fact nothing in this concept that makes it inapplicable to other categories of brands or classes of shoes. It is just the concept of the role of the factory and the vision of how it is organised that changes. So, let's indulge in the vision. Let's imagine that, as in the case of the VW glass factory, our experiential shoe factory welcomes us with a 'story telling area' where, with the most modern multimedia technologies (virtual reality and augmented reality), we are presented with the values and story of the product and the brand. We are then shown the 'experiential outlet area' where we can create, personalise or simply order our shoes again using a full wealth of digital technologies to support our choice, digitally see what does not yet exist and even try it on virtually using magic mirrors or similar devices.

The journey continues with the manufacturing line where we see leather and other materials being cut with modern NC machines, uppers stitched with the ability and skill of committed and engaged workers and finally the assembly line where humans and robots work side by side in perfect harmony based on ideal complementary roles shared between humans and their mechatronic servants. Traditional fabrication techniques exist alongside additive manufacturing ones to provide a virtuous hybridisation of technologies and contents that will more and more characterise products of the future.

Eventually, when we leave the shop floor area, we will be able collect our shoes that have been produced on demand, customised or simply picked from stock if already available, fully enriched by a unique learning experience. It is more than Industry 4.0, the fourth industrial revolution, it is 'buying 4.0' a totally new dimension of inclusiveness, one of understanding and participation. Industry 4.0 will rely on workers 4.0 as well as on consumers 4.0. Perhaps it is more a dream than a vision but, then again, all big endeavours start with a dream. 