

retail in
transition

caspar.

Digital technology, new business models and a demographic and cultural shift are disrupting the retail sector. On the one hand, as more purchases are made online, physical stores are at risk of having to close down. On the other hand, while one in two of the largest 1,000 online retailers operating in Germany have physical stores, web-born brands like mymuesli, Daniel Wellington and Amazon are investing in brick-and-mortar stores. These transformations may have deep impacts both on cities and urban life. In this context, *caspar.esearch* has undertaken a systematic investigation aimed at understanding what is really happening in the retail sector, what may happen to city centers and how cities may look like in a future with a different retail landscape.

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Introduction

Over the past decade, digital technology, new business models and socio-cultural shifts have been disrupting the retail sector, making it routine for customers to choose when, how and where to buy a product. While ten years ago they needed to visit a store, search among available products, queue and pay, customers can now look for a pair of shoes on their mobile phone, skimming through a countless number of alternative models while commuting to work. Once they pick their favorite pair, they can pay directly via mobile phone and their new shoes will be delivered within a few days.

The new ways of conducting business affect all product categories, from clothing to groceries. In many countries, market forces are already showing their negative effects on the urban life of small city centers: as more purchases are made online, physical stores are shutting down at an alarming rate.

In the light of these transformations, are we approaching the end of physical stores and urban life as we know it? — Maybe not.

Recent data shows that one in two of the largest 1,000 online retailers operating in Germany have physical stores, while web-borne brands like mymuesli, Daniel Wellington and even Amazon are investing large sums of money in brick-and-mortar stores and 'offline' strategies for customer engagement. In addition to brand and retailer managers, other actors are harnessing the potential of technology and creativity to experiment with new ways of using centrally located buildings, such as new forms of living and working in city centers. In other words, the same forces that are leading to the death of traditional stores are also fostering new store formats and different kinds of urban experience. Despite our inability to predict what is going to happen, one thing is certain: future cities will look very different from contemporary ones. Understanding the transformations underlying retail activities is necessary to anticipate the future needs of urbanity and plan cities accordingly.

In this context, the *caspar.esearch* unit has undertaken a systematic investigation of current trends in technology, real estate, urban planning and mobility aimed at understanding how the retail sector is changing and affecting city centers and urban life.

This research work is intended to shed light on how transformations in the retail sector are poised to transform urban centers. The main goal is to stimulate a discussion on how to plan cities, design public spaces, re-purpose buildings to meet human needs while addressing the imminent challenges of our cities.

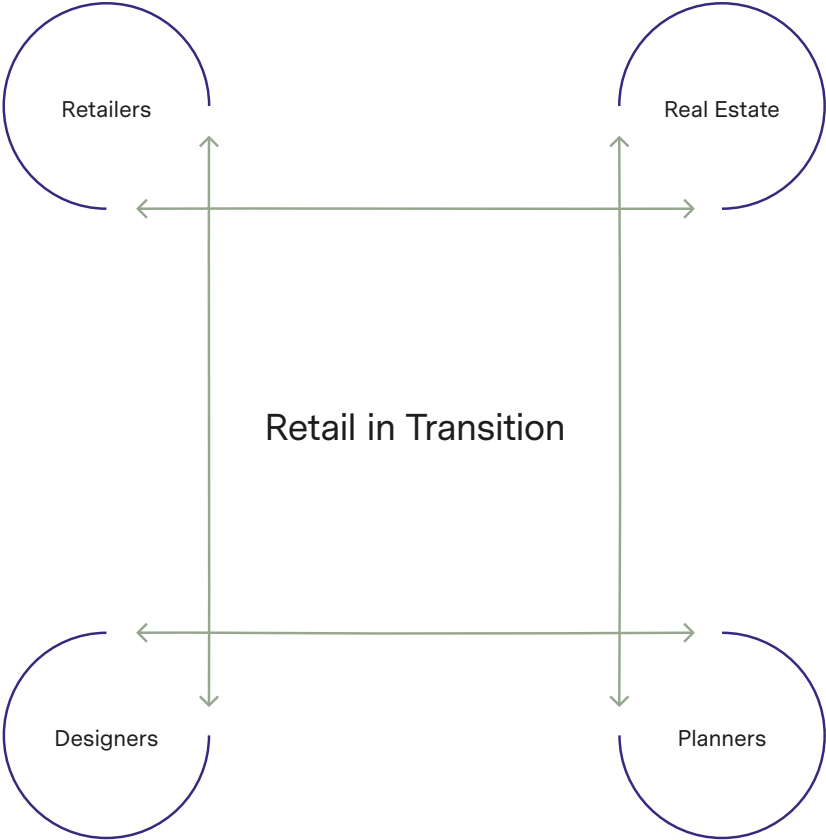
Architects, urban planners, retailers, property owners, real estate developers and city officials may find useful insight on the changing retail landscape.

However, the complexity of the topic and its multidisciplinary nature does not exclude any actor from this important discussion. Indeed, we hope that the book will arouse the interest of a broader audience, including real estate managers, owners of small shops, consumer associations and citizens.

Overall it was a great pleasure and challenge to rethink the city of the future. As architects, we are convinced that the changes we see in commerce can, if they are correctly understood, be directed towards an additional benefit. Therefore we create individual spaces, in which citizens can unfold their full potentials. We call it: *Maßstab Mensch* – the driving force behind our work.

So we do not only envision change, but also a hope that cities in the future will have to recreate a stronger bond with their citizens. Retail will return to the spotlight, a victory for the European city.

Research Structure



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Part	Content	Target group
Part I Retail in Transition	Building on statistical data from market analyses and governmental organizations, Part I outlines the major trends shaping retail activity, including the spread of ever more sophisticated omni-channel paradigms, consumers behaviors towards certain product categories, the rise of the experience economy and the surge in parcel deliveries. In addition, Part I explores the spatial displacement of retail activity in Germany and its effects on urban centers at three levels of analysis, e.g. at the urban level, at the street level and at the plinth level.	Retailers and brand managers, urban planners, city officials and city managers.
Part II Cities in Transition	Part II introduces three strategies to face the imminent reduction of retail space in large city centers: 1 retaining shopping activity through new retail concepts, 2 fostering a functional mix and 3 improving accessibility and the public realm. Each strategy is based on web research and is accompanied by real-world case studies of innovative ideas and urban experiments.	City authorities, architects and urban planners, retail managers, city managers, real estate experts, futurologists.
Part III Case Study: Cologne	Part III begins with a morphological study of Cologne in an attempt to identify recurring spatial structures suitable to host the alternative functions elaborated in Part II. Architectural collages are presented to re-imagine Cologne's public spaces may look like if the three strategies presented in this work are implemented.	City authorities, architects and urban planners, citizens, real estate owners and developers.
Part IV Visions of Future Cities	Part IV includes a sequence of architectural collages illustrating the possible future appearance of four public spaces in Cologne and other german cities. The highly futuristic nature of these collages is meant to stimulate a creative discussion regarding new uses of existing buildings and public spaces, including intersections and canals.	City authorities, architects and urban planners, retail managers, city managers, real estate experts, futurologists.

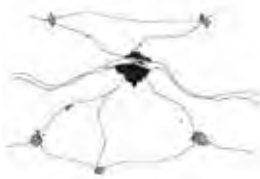
Preindustrial urbanism

until 1850

Modernization of cities

1850–1940

Context



Urban cores emerge at crossroads of goods and ideas. The main urban functions are located in central areas: market, church and town hall.



The rise of railroads and trams. Separation between the hectic and central shopping streets and the quieter residential areas outside of the city.

Street

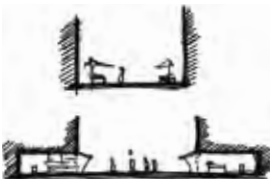


Major streets at the crossroads of traffic and activities. Social and economic life takes place on squares, streets, quays and bridges, where markets are held.



Development of wide boulevards through historic centers. Traffic flows are separated. Shops are located along major routes, squares, tramways and stations.

Plinth



Living, working and trading takes place in the same building and street. Goods are displayed on wooden stalls, then integrated in the facades of the buildings.



Building facades are turned into attractive storefronts to attract passers-by.

The age of the car: welcome to suburbia

1940–1970



Enormous growth of car use and car traffic. Functional separation: offices and amenities in city centers; housing and shopping centers in suburbia.



Traffic separation: cohesive space disappears. Suburbs characterized by a hierarchy of roads, including pedestrian paths at different levels.



Open building allotments in suburbia allow a new store design: windows at the front; supply and storage in the back streets; separate entrance for dwellings above.

Rediscovering the human scale

1970–1990



“War on cars” and emphasis on the human scale. New shops and supermarkets are developed in centrally located shopping malls.



Rediscovery of public space as areas to walk, meet and gather. City centers are pedestrianized.



Small-scale housing developments within city centers. A few new shopping streets designated. Most plinths are used for residential purposes and designed as closed facades.

Return to city centers

1990–present



Rediscovery of city centers as places for meeting, amusement and shopping as leisure activities. City centers are pedestrianized and beautified.



More space for pedestrian, less for cars. Shared space approach creates common street for everyone. Limited separation between cars, bicycles and pedestrians.



Stronger interaction between streets and adjacent houses, shops, restaurants and cafés, where the new creative professionals work and meet.

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Retail in Transition

Key Points

While accounting for less than 10% of total retail sales, e-commerce is growing at a high pace.

Most retailers are developing omni-channel strategies to offer consumers multiple paths to purchase.

The rise of the Experience Economy: Europeans are spending more on experiences and less on “stuff”.

Urban and mobility trends associated with the changing retail landscape are affecting the attractiveness of the urban environment at various scales.

While accounting for less than 10% of total retail sales, e-commerce is growing at a high pace.

Germany is Europe's second largest global e-commerce market after the UK [1].

In 2016, online retail sales were estimated between €44.2 [2] and €57.6 billion [3], accounting for about 9.2% of total retail sales. Multiple forecasts expected this figure to grow between €48.7 [2] and €52.5 billion in 2017 [3] and predict it would reach €77.2 billion in 2020 [3]. From a global perspective, Germany occupies seventh place of the global online retail sales ranking, preceded by Denmark, Finland, South Korea, Norway, China and the UK (Figure 1). Despite Germany's relatively low market share, online retail sales have grown by 73.93% in the past 5 years, with an absolute growth of about €4 billion per year (Figure 2). Josef Sanktjohanser, president of the Handelsverband Deutschland (HDE), acknowledges digitalization as the engine of the retail sector and the primary cause of its structural transformation [4].

[1] CRR; RetailMeNot. "Retail e-commerce sales as share of retail trade in selected countries from 2014 to 2017". <https://www.statista.com/statistics/281241/online-share-of-retail-trade-in-european-countries> (Retrieved 18.05.2018).

[2] IFH Institut für Handelsforschung, HDE Handelsverband Deutschland (2018) Handel Digital, Online-Monitor 2018.

[3] eMarketer "B2C e-commerce sales in Germany in 2015 with a forecast to 2020 (in billion U.S. dollars)". <https://www.statista.com/statistics/280178/b2c-e-commerce-sales-in-germany> (Retrieved 18.05.2018).

[4] "E-Commerce: Gleiche Rahmenbedingungen in Gefahr". <https://www.noz.de/deutschland-welt/wirtschaft/artikel/1029263/e-commerce-gleiche-rahmenbedingungen-in-gefahr> (Retrieved 18.05.2018).

Figure 1. Percentage of e-commerce sales in the retail sector. Top 9 countries worldwide (2016). Source: CRR; RetailMeNot

50%

0%

16.9% UK

15.5% China

12.1% Norway

11.3% South Korea

11.2% Finland

10.4% Denmark

9.2% Germany

7.7% USA

7.4% Canada

Most retailers are developing omni-channel strategies to offer consumers multiple paths to purchase.

A decade ago, a person would visit a store to buy a product that he or she had seen advertised on TV or in a magazine. A shop assistant might have provided information about the quality of the product and, after the purchase, if the product did not fulfill the expectations, he or she could have returned it to the store. This set of logical actions leading to the purchase of a product is referred to as “path to purchase”.

Technological development, new business models and mobile phone/internet penetration have multiplied the “paths to purchase” available to customers. For example, it is now possible to obtain information about a product through review websites and blog posts before (or while) visiting a shop. It is also possible to order a pair of jeans from a mobile app from one’s sofa and have it delivered directly to one’s home; or to pick up the grocery bag at the store after work, instead of queuing at the local discounter. Technology enables online and offline experiences to merge in the so-called “omni-channel concept”, a paradigm that is widely recognized as the new standard for customer engagement. Retailers and other players are competing with one another to devise enticing and profitable omni-channel systems following consumer preferences and expectations, which – empirical evidence suggests – diverge along different product categories. We don’t buy groceries the same way we purchase electronics, both online and offline. Figure 3 outlines the results of a large-scale survey conducted in Germany, revealing which alternative paths to purchase people are likely to follow to buy some of the most common products, including groceries, fashion, technology and furniture [5].

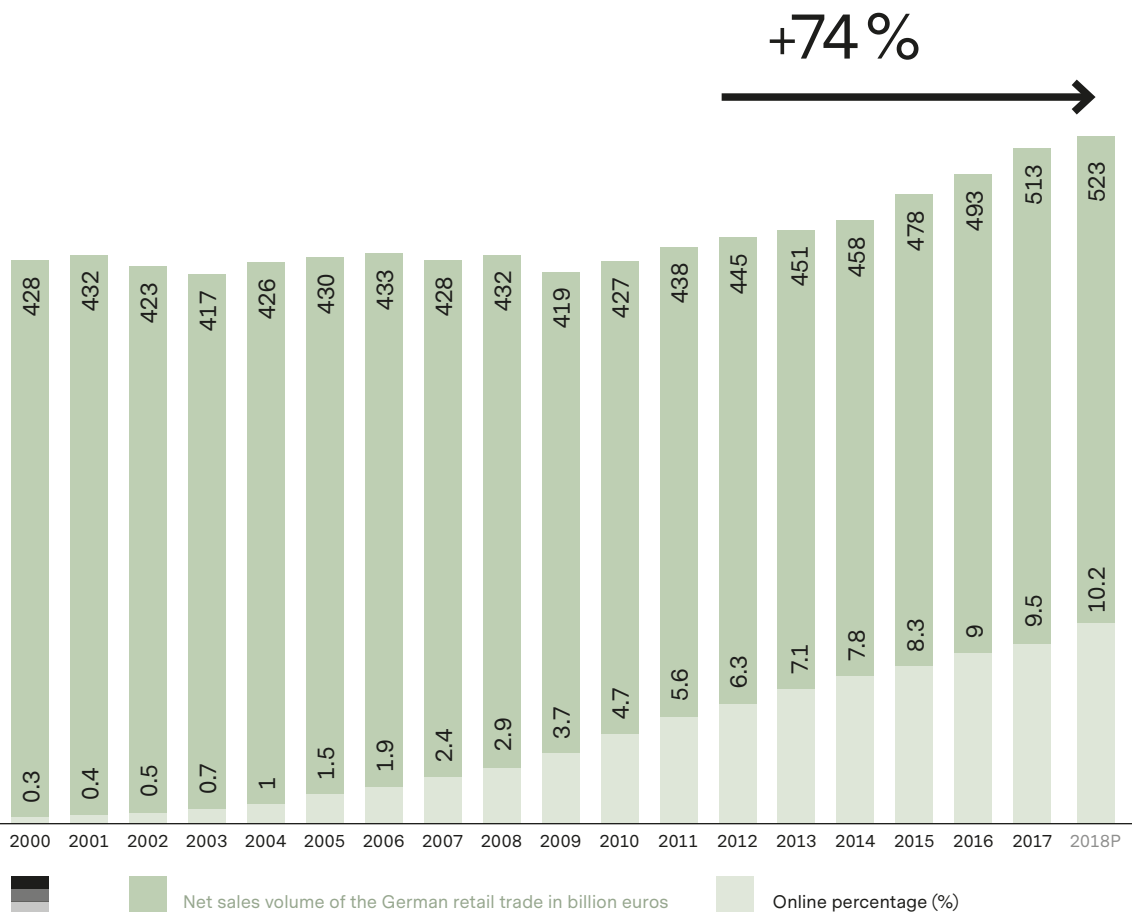
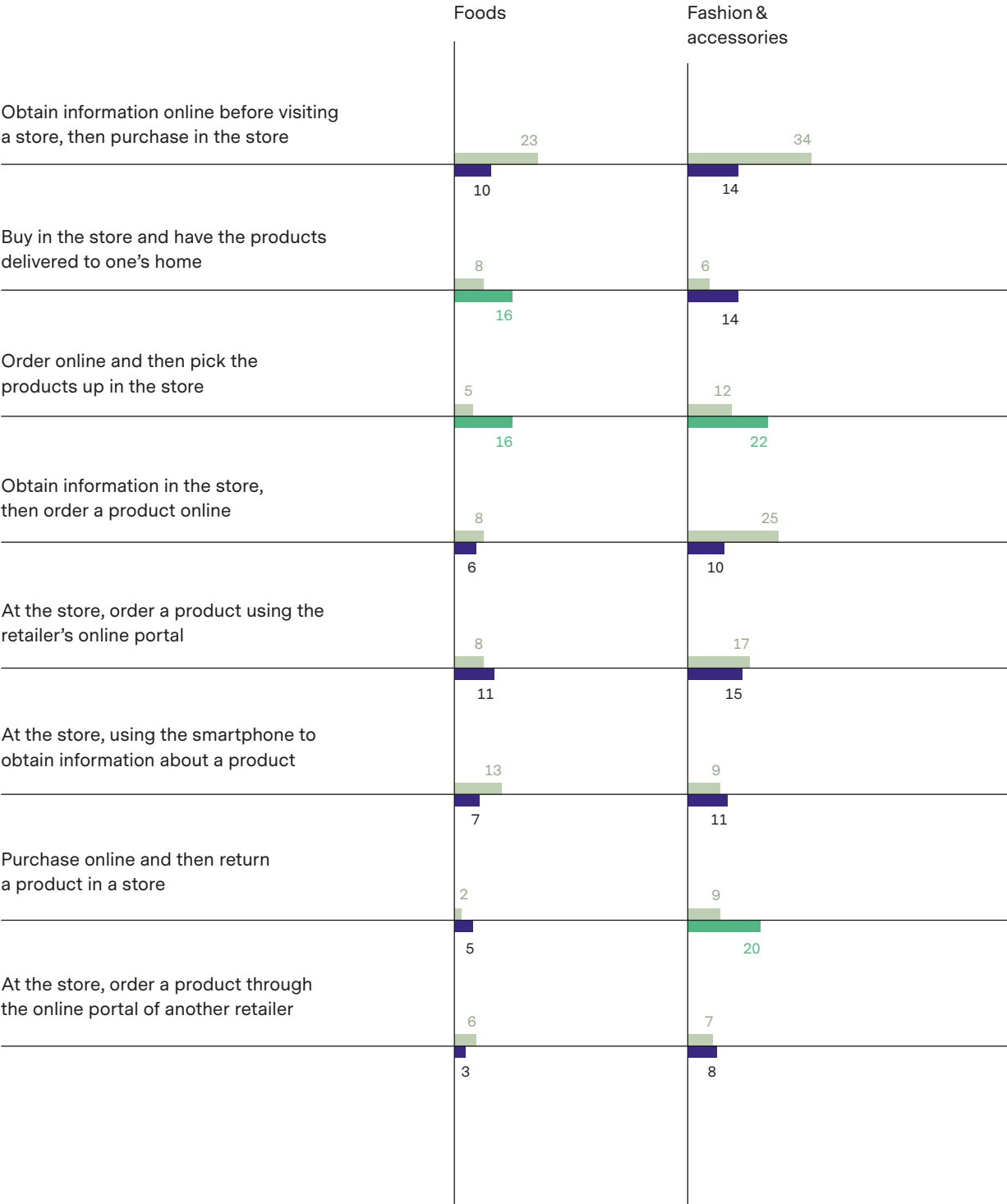


Figure 2. German online share in retail trade in the narrower sense in percent. Source: [2]

- Which scenarios have you already used?
- Which scenarios will you use in the future?
- Preferred future scenarios
(e.g. highest agreement response)



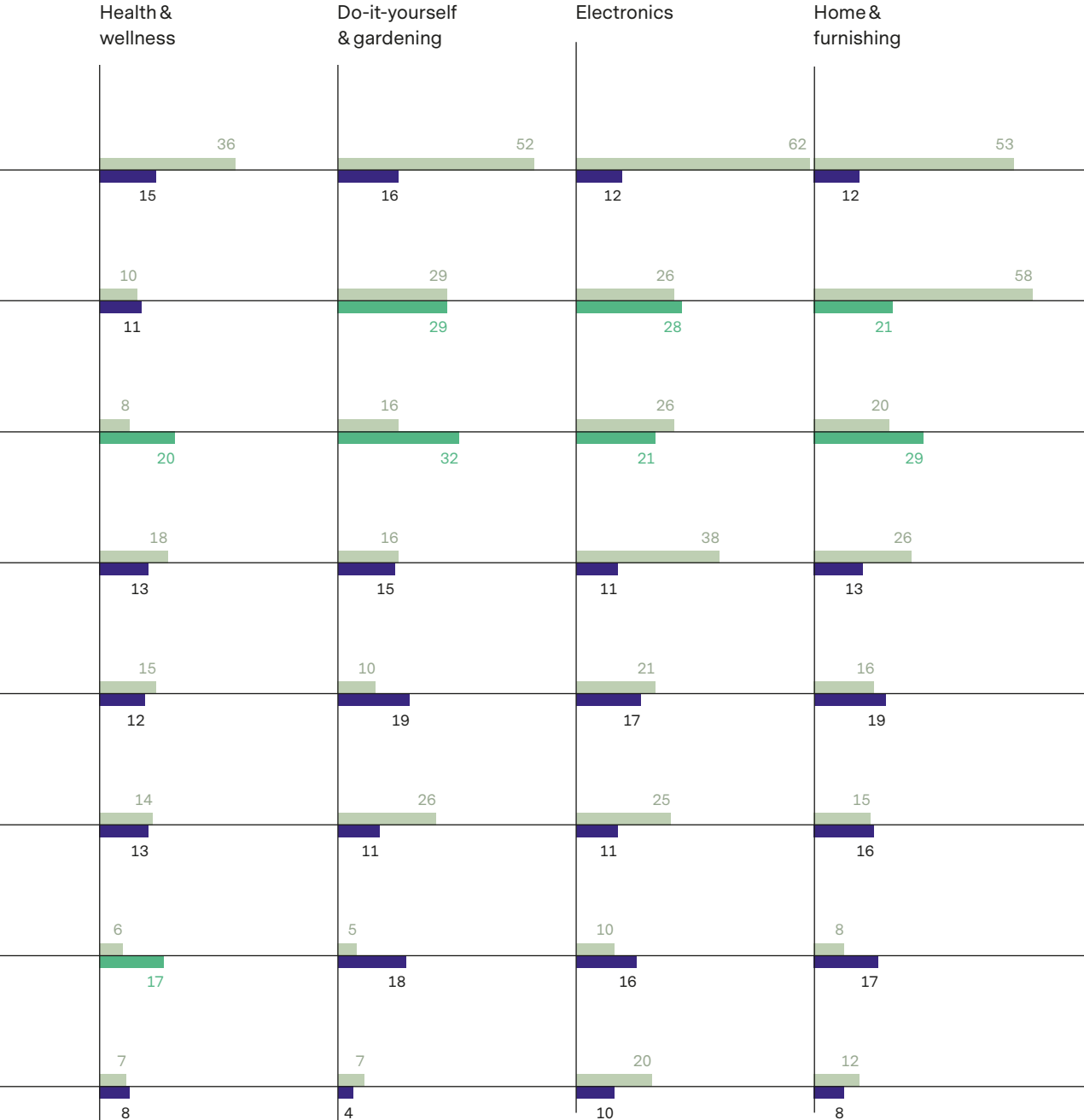


Figure 3. Preferred omni-channel scenarios per product category. From left to right: groceries, fashion & accessories, drugstore products, do-it yourself & gardening, electronics and home & furnishing products. Source: [5]

Online shopping is not equally distributed across different product categories.

An analysis of the German market reveals that half of online sales are generated by consumer electronics and fashion (Figure 4, right). Almost half of the products purchased in physical stores belong to the category of fast-moving consumer goods (FMCGs), e.g. packaged foods, beverages, toiletries and other goods that are constantly replaced (Figure 4, left). Although they represent only 7.7% of total online sales, FMCGs have recently experienced an impressive growth. In 2016, the annual rate of change of online sales increased by 20% [2]. Within FMCGs, the grocery segment grew at a 38% rate between 2014 and 2015 [6], as new players have entered the grocery market. For example, in the US, tech giants like Amazon and Google are testing grocery deliveries, e.g. Amazon Fresh. In Germany, Deutsche Post offers home delivery of groceries through a new online service called “allyouneedfresh”.

[6] SYNDY (2015), “The State of Online Grocery Retail in Europe: An Extensive Guide for Retailers and FMCG Brands on Key Grocery Market Developments and Trends across Europe and the US”.



Figure 4. Shares of sectors in offline & online volume, in percent (2016). Source: [2]

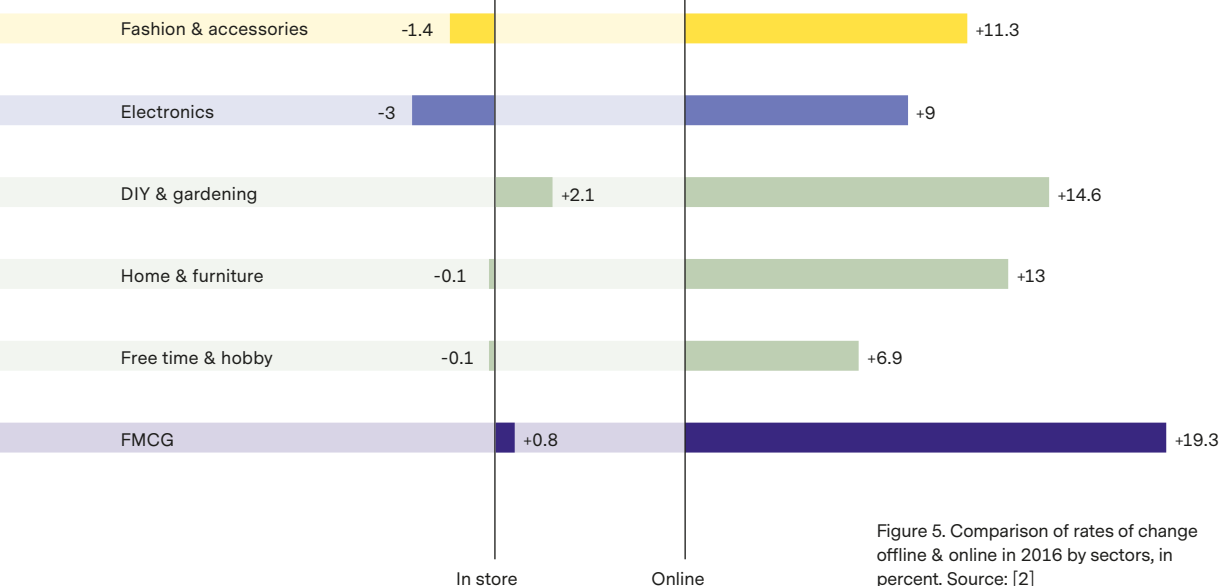


Figure 5. Comparison of rates of change offline & online in 2016 by sectors, in percent. Source: [2]

The rise of the Experience Economy: Europeans are spending more on experiences and less on “stuff”.

In the age of abundance of choice and merchandise, consumers are allocating more of their time and budget on experiences, such as dining out, spending time enjoying a cup of tea at a café, or watching a movie at a theater. This socio-economic shift is referred to as “experience economy”.

Multiple studies reveal that Millennials (those born around the period 1980–95) in particular prefer experiences over material items (72% according to the Harris Group [7] and 61% according to YPulse) [8]. In fact, this trend seems to be intergenerational. Data from EUROSTAT indicates that, in the past five years, Europeans have been spending more in restaurants, on holidays and leisure experiences,

although figures differ from country to country according to social, cultural and economic factors. For example, in 2016 Germans spent almost 4% more on food and beverages than they did in 2010 (the average increase for the EU 19 countries was 1.6%) [9]. In the same time frame, Germans spent 8% more in restaurants and hotels (average of EU 19: +6%) [10] and 8.2% less on clothing and footwear (average of EU 19: -5.9%) [11] (Figure 6).

In Britain, the European country with the highest penetration of online shopping, spending in pubs, restaurants and theaters increased by 20%, 16% and 13% respectively, while department stores recorded a 1% drop and household appliances fell by 2.5% [8].

[7] “Millennials. Fuelling the Experience Economy”. https://eventbrite-s3.s3.amazonaws.com/marketing/Millennials_Research/Gen_PR_Final.pdf (Retrieved 18.05.2018).

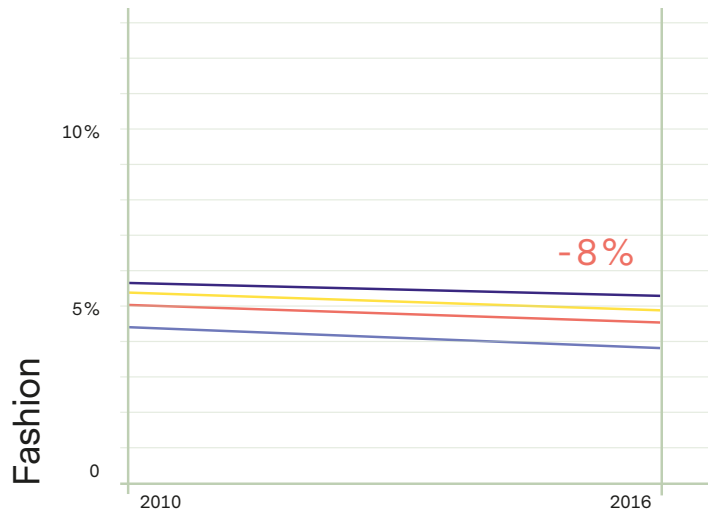
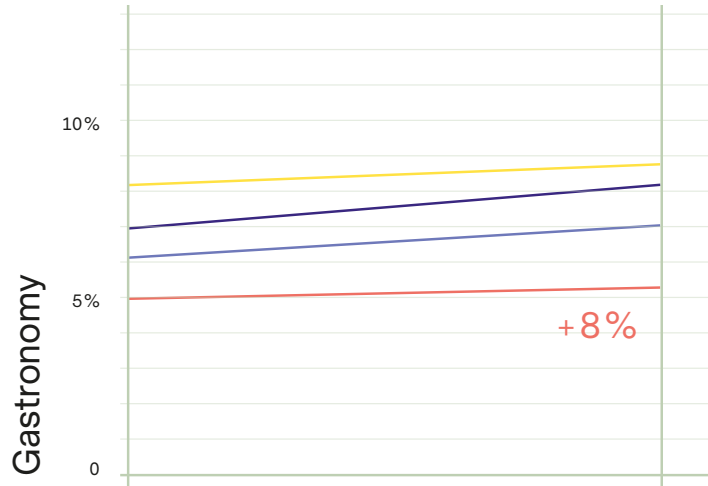
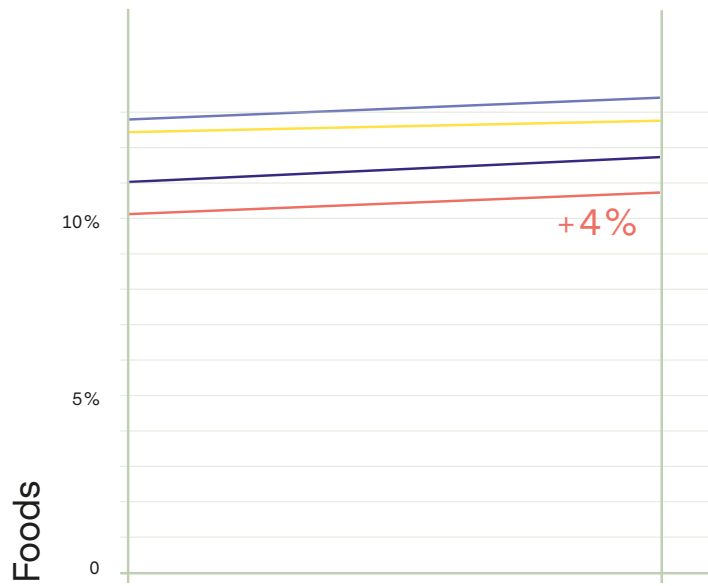
[8] “Just Do It: The Experience Economy and How We Turned Our Backs on ‘Stuff’”. <https://www.theguardian.com/business/2017/may/13/just-do-it-the-experience-economy-and-how-we-turned-our-backs-on-stuff> (Retrieved 18.05.2018).

[9] “Final Consumption Expenditure of Households, by Consumption Purpose – Food and non-alcoholic beverages” (Retrieved 2.03.2018).

[10] “Final Consumption Expenditure of Households, by Consumption Purpose – Restaurants and hotels” eurostat.eu (Retrieved 2.03.2018).

[11] “Final Consumption Expenditure of Households, by Consumption Purpose – Clothing and footwear” eurostat.eu (Retrieved 2.03.2018).

Figure 6. Final consumption expenditure of households, by consumption purpose, e.g. food and non-alcoholic beverages (left), restaurants and hotels (middle) and clothing and footwear (right); % of totals. Sources: [9; 10; 11].“



- EU 19
- Germany
- Netherlands
- France

Retail activity is undergoing a process of displacement characterized by four dynamics.

As online commerce and the experience economy are expanding, urban retail activity is undergoing a process of displacement characterized by four dynamics:

1. Retailers are returning to city centers from greenfield sites and the city outskirts [12].
2. While chain stores and international franchises can afford prime rents in central locations, small boutiques and family-owned stores are being pushed to the edge of city centers [12].
3. Shopping centers are being built in inner city areas. Between 2000 and 2016, the number of malls in Germany almost doubled (279 vs. 476) [13]. A study by the EHI Retail Institute estimates that urban shopping centers increased 21 points, while the percentage of shopping centers on peripheral districts decreased 21 points (Figure 7) [14].
4. While prime locations in large cities are enjoying the benefits of a retail relocation, smaller suburban towns are fighting for the survival of their retailers.

This pattern of displacement may not be sustainable. Experts predict that vacancy rates in city centers and fluctuations among stationary retailers will rise continuously [12] with nefarious consequences for urban life and attractiveness.

Furthermore, while urban shopping malls may represent a financially sounder alternative to scattered boutique stores, they are not the solution to the crisis of physical retail, let alone to the imminent de-attractivization of city centers. Indeed, forty-five percent of retailers interviewed by EHI Retail determined a decrease in customer visits in the second half of 2016 [13].

The future of malls is also uncertain; according to a report published by the LA Times, as much as 25 % of American malls will close in the next five years and many vacant structures are currently re-developed into offices, educational facilities and warehouses. Although the USA has a larger number of malls, it is unclear how this trend will affect Europe [15].

[12] "Paradigm Shift in City Centers" <https://www.across-magazine.com/paradigm-shift-city-centers> (Retrieved 18.05.2018).

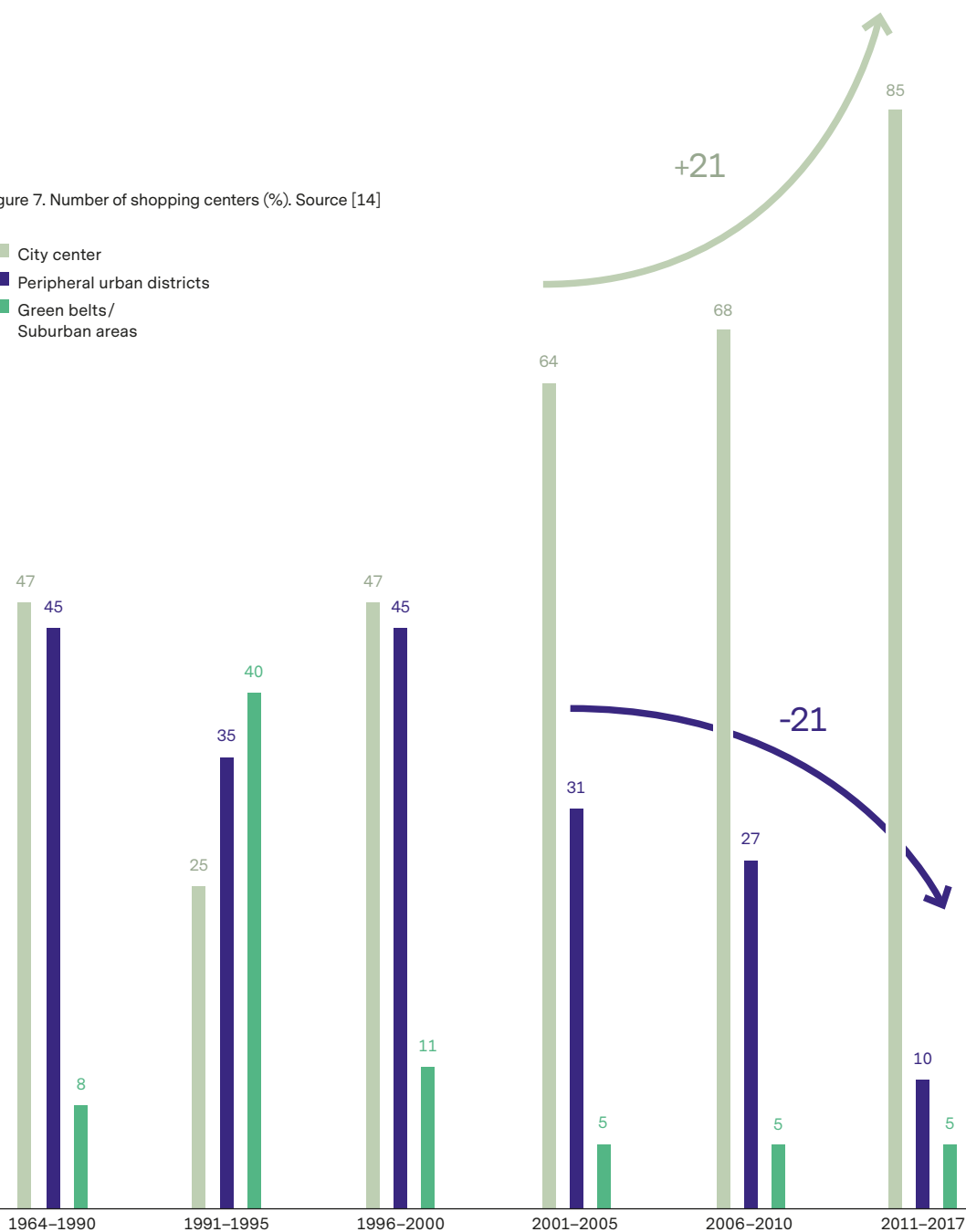
[13] "Warum Shopping-Malls in Deutschland ein schleicher Tod droht" <https://www.businessinsider.de/shopping-malls-in-deutschen-staedten-kaempfen-ums-ueberleben-2017-5> (Retrieved 18.05.2018).

[14] "Verteilung der Shopping-Center in Deutschland nach Standortlage und Eröffnungsjahr (1964–2017)" <https://www.handelsdaten.de/shopping-center/verteilung-der-shopping-center-deutschland-nach-standortlage-und-eroeffnungsjahr> (Retrieved 18.05.2018).

[15] <https://www.latimes.com/business/la-fi-malls-closing-20170531-story.html>

Figure 7. Number of shopping centers (%). Source [14]

- City center
- Peripheral urban districts
- Green belts/
Suburban areas



The growth of e-commerce increases the volume of parcel deliveries which exacerbate traffic and pollution in cities.



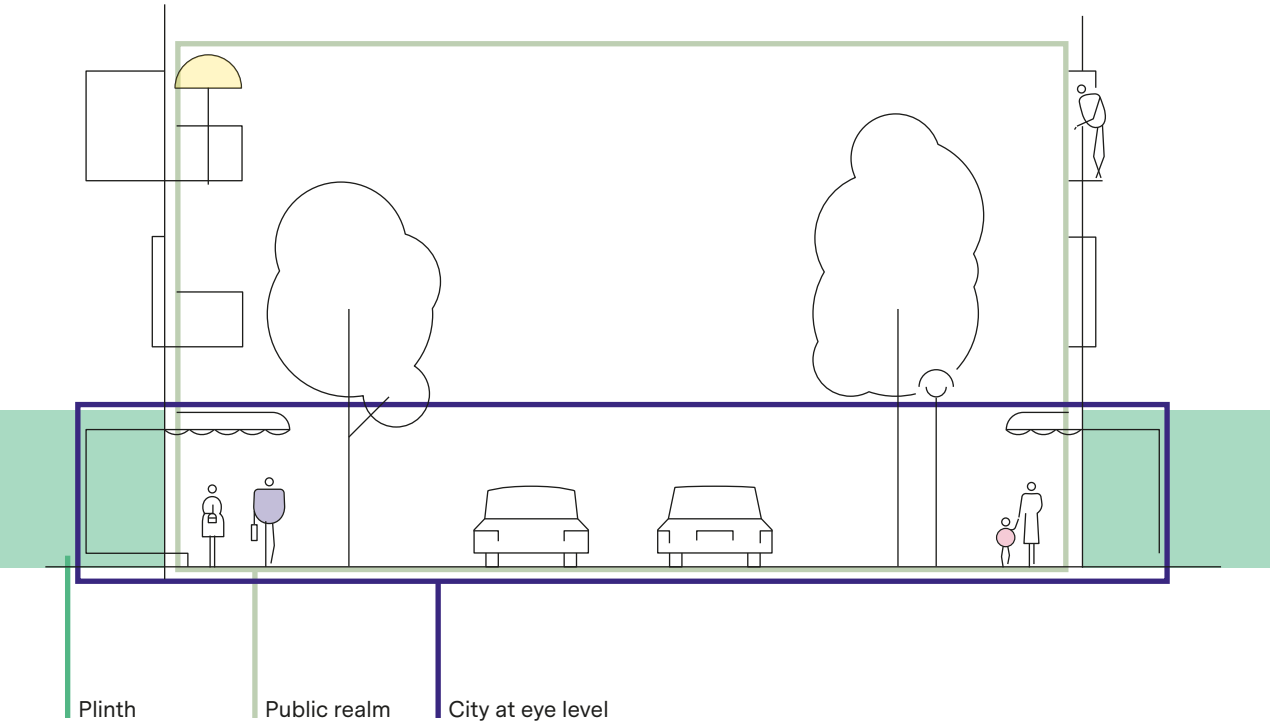
Figure 8. Annual revenue of the parcel market in Europe from 2010 to 2020, by segment (billion euros). Revenues for 2018, 2019 and 2020 are estimates (X^E). Source: statista.com

As online orders grow, so does the number of delivered parcels. The annual revenue of the European parcel market has grown by 91.6% between 2012 and 2017 and is expected to grow by a further 33.3% until 2020 with online retail giants like Amazon promising same-day deliveries. Figures from several sources indicate that this growth is due solely to the Business-to-Customer (B2C) segment, as annual revenues from the Business-to-Business (B2B) segment have been slightly decreasing since 2010 [16]. A study from the American mailing company Pitney Bowles estimated that parcel volumes surged almost 50% globally between 2014–2016 and will increase at rates of 17–28% annually up to 2021 [17]. The stark growth of B2C parcel deliveries poses two major threats to the quality of urban centers, both environmentally compromising. On the one hand, more deliveries means increased traffic and air pollution. A New York study from the University Transportation Research Center found that truck drivers may spend up to 60 minutes driving around looking for a space to stop. On the other hand, because parcels are delivered in cardboard boxes, their surge increases the litter that can be found along central streets with negative consequences for the environmental quality of urban centers. Delivery companies are already testing alternative forms of delivery using drones and small electric vehicles which – they hope – will make deliveries more efficient. Although these efforts are able to reduce traffic and/or pollution, they do not seem to solve the cardboard problem, which is equally threatening to the attractiveness of a street.

[16] Apex Insight. “Annual revenue of the parcel market in Europe from 2010 to 2020, by segment (in billion euros)” <https://www.statista.com/statistics/235412/b2c-market-share-of-parcel-services-in-europe> (18.05.2018).

[17] “Crowded Streets: Cities Face a Surge in Online Deliveries” (Retrieved 18.05.2018).

Urban and mobility trends associated with the changing retail landscape are affecting the attractiveness of the urban environment at various scales.



Plinths, public realm and the “city at eye level”. Based on source: [18].

[18] STIPO (2016) “The City at the Eye Level – Second and Extended Version”.

N.B. The criteria proposed by the author of the book are based on a systematic literature review of some of the most relevant thinkers who studied the human perception of public space, including Jan Gehl, Kevin Lynch and Jane Jacobs.



Figure 9. Unattractive plinths do not encourage people to stay and interact with a building.



Figure 10. A vibrant plinth makes a street attractive, the background for meaningful human activities.

Although it is impossible to predict what urban centers will look like in a future dominated by online commerce, it is possible to speculate how the trends discussed in the previous paragraphs may affect urban attractiveness.

In the diagram on the next page, the trends concerning urban development and mobility are linked to seventeen criteria for great streets pertaining to accessibility and functional mix [18]. Blue arrows indicate “positive influence”, while white arrows indicate “negative influence”.

The diagram portrays a mixed reality in the future. On the one hand, the fact that web-borne brands and other companies are opening concept stores or pop-up stores in urban centers might have a positive effect on the functional mix of a city. On the other hand, the rise of urban shopping centers and the demise of small retailers (“reduction of the need for retail space” criterion) may disrupt the fine grain

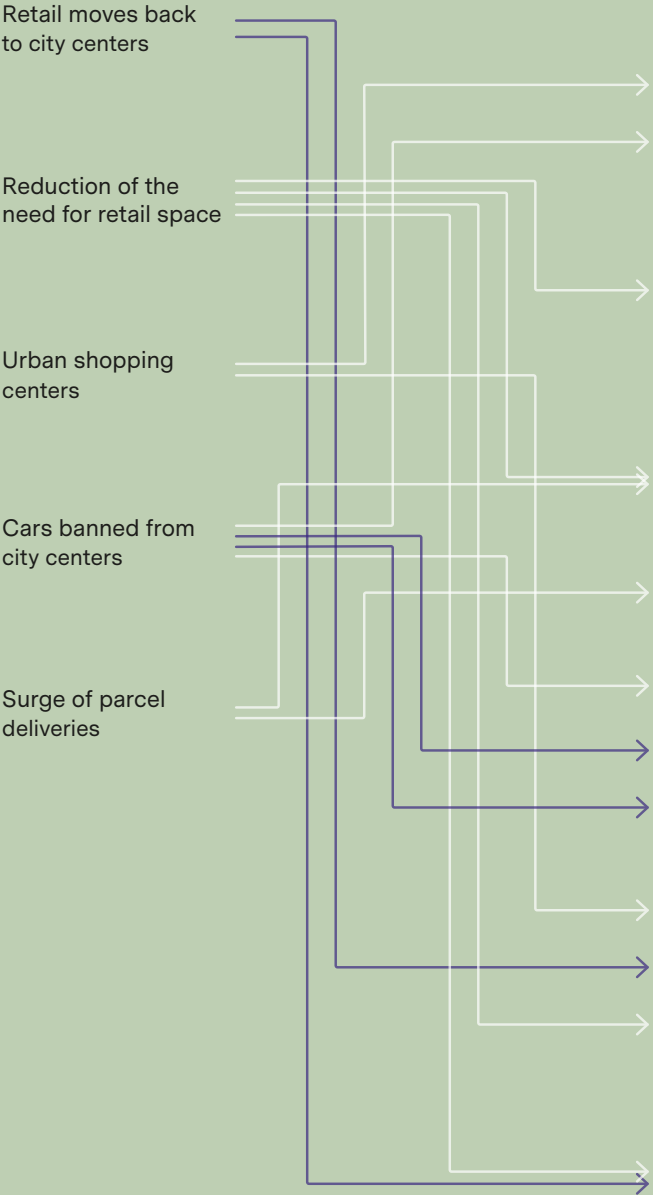
of the urban grid, as well as surrogating urban life inside an air-conditioned environment, ultimately impoverishing the overall urban experience (e.g. “unpleasant to walk and cycle” and “unpleasant views” criteria). Likewise, the increased traffic and cardboard waste associated with the surge of parcel deliveries poses a major threat to user comfort. Finally, the establishment of car-free zones may have either positive or negative outcomes for urban centers. If cities will manage to guarantee accessibility through alternative means of transportation, e.g. bikes or buses, then banning cars from city centers would create a pedestrian paradise. Otherwise, it may discourage people from visiting city centers altogether, thus reducing the pedestrian stream and the overall urban flair.

The progressive reduction of retail activity along shopping streets, coupled with (and fueled by) the scarce accessibility of city centers, induces people to spend more time inside the new generation of large urban shopping centers, where they can enjoy food, leisure, events and other amenities.

Under this paradigm, streets will struggle. If a street loses footfall they become less attractive, both from a functional standpoint (stores close down), from a material standpoint (facades become rundown) and from a human standpoint (less activities taking place).

However, streets hold potential; they are the connective tissue integrating museums, landmarks, office buildings, public transport hubs and the urban shopping centers. The car ban adopted by municipalities encouraged pedestrianization initiatives, although some streets are at risk of becoming deserted and may end up roamed by parcel delivery vehicles.

As retail and non-retail functions take place elsewhere (e.g. inside large urban shopping centers), a large number of plinths – especially along former mono-functional shopping streets – become increasingly empty and lifeless. In order to bring new life to the city, developing interesting, differentiated plinths is the key to a livable and vibrant city.



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position in city's walking routes	Grid Position	Context
> pedestrian stream (5–20 passers-by / min)		
> fine grain of the street pattern		
connection to squares and park	Function Intensity	
> presence of functions with a meaning		
density of the area		
>> pleasant to walk and cycle	User Comfort	Street
possibilities to sit		
> pleasant views, people watching	Walkability	
> parking nearby		
> room for walking without obstacles		
> easy to cross at many points	Program Variety	
> min. 10 doorways per 100 m of facade		
> physical activity, play, interaction		
> temporary activities all year round	Function Mix	Plinth
>> variety of functions		
quality of cafés, shops, culture		

Workshop

caspar.esearch conducted a series of interviews with leading figures from different stakeholder groups. The purpose was to offer exchanges from different viewpoints of a complex problem and obtain valuable insight from industry leaders and administrators, covering topics such as the consequences of digitalization, new retail concepts and the impact of these changes on cities.

Susanne Botschen

Cofounder of Mytheresa and MarthaLouisa, Chief Executive Officer of ccms invest GmbH. Together with her husband, she was CEO and owner of THERESA and Mytheresa, an e-commerce site focusing on women's luxury fashion, until their exit in 2014.



“For online platforms, service means customer care on all levels, smooth navigation, smooth check-out process, lots of paying options, fast and efficient shipping.”

“The city has become a bit lame, it needs to be more interesting.”

What has changed in luxury retail since you founded your e-commerce site?

We established Mytheresa in 2006 and a lot has changed since then. E-commerce plays a bigger role than before and especially in luxury retail, there is still room to grow; presumably it will double by 2025. Large online retailers are still growing further, becoming massive and active worldwide. Small companies are having difficulties but there are still chances of course, new players, new platforms, new ideas. But particularly in the luxury segment, to arrive and play along with the big players is very complicated. Search engines like Google had also changed e-commerce in a big way; every time a customer purchases something from us, we have to pay a percentage of the sales revenue to the search engine the customer used to find us, so that is also part of the equation.

What does ‘service’ mean on an e-commerce site?

Our business has become a sophisticated and demanding service; there is no more patience, no more time, everyone wants what he or she wants right now, with the best possible service. For online platforms, service means customer care on all levels, smooth navigation, smooth check-out process, lots of paying options, fast and efficient shipping. Customers expect a VIP treatment on all levels, demand every benefit that they can get, free shipping is a permanent expectation in our field. Flawless and fast, that is service. The sales platforms are of course the key, from product selection to purchasing options, how to handle returns, everything has become incredibly complex and more sophisticated over time.

What drove you to open a digital sales channel at that time?

After 30 years of successful stationary retail we wanted to extend our successful business to other cities and with an e-commerce platform you have the whole world at your feet, which was an inconceivable opportunity at the time. My point is that a luxury multi-brand can only survive today if it is backed by an e-commerce platform and not many have that.

Do you see innovative concepts in your industry?

Small beauty brands are quite interesting and successful, they are open to collaborations and the pop-up concept is right for them. Gastronomy is also a relevant topic in today's agenda. You can find it everywhere in London or New York, but not in Germany, where we still have a huge opportunity, too. If you want to grab a quick bite, like a wrap, ramen or a poké bowl, you don't have any options. Usually these types of places are run by young people, but they cannot afford the high rents that the inner city demands.

How do you see cities and the typical shopping streets in Germany along these trends?

The city has become a bit lame, it needs to be more interesting. Main streets are populated by mono-brands, they are full on weekends but there is nothing else to do. Cities need to create more experiences, host different activities, the so-called mixed use. Also, stationary retail needs to remain attractive in terms of design. The customer need to have the same options and variety as they have online, every product, every size and the same type of service. This, of course, includes shipping services and various payment options.

Do you believe your clients changed since the popularization of E-commerce? If so, in which way?

Online purchasing has absolutely changed offline consumer habits. E-commerce got us used to comfort, we no longer have patience or time to lose and now we expect the same from stationary retail. Particularly in the luxury segment, consumers tend to make an 'experience purchase', for example, they fly to New York to get a limited series product, a one-time. And you must be fast, otherwise you will miss your chance. On the other hand, if you do it online, the product will be sold out in minutes. Other factors become important, cost changes, originality, the fact that you could get it there and nowhere else, etc. The fact that you get something special, something that is available at a certain place, for a limited amount of time, now has another value.

“Main streets are populated by mono-brands, they are full on weekends but there is nothing else to do.”

“The mix is the key and gastronomy is perfect for this, for the city, for large department stores. Interesting, well-designed, little cafés, food markets, they attract people and make them stay.”

Would it be possible to organize something like this in Germany?

It is difficult to translate these new trends from New York or London to German cities, but even there, one could have more imagination. The world has become one, cities need people that think in an international, cosmopolitan way. What works in the rest of the world will certainly work in Germany, it's just a bit slower.

There is still room for better shopping experiences and more variety; new gastronomy concepts, beauty, home and living, for example, are underrepresented in German cities. A cool, modern café is always an attractive spot. That is tightly connected to the shopping experience, buying something, eating and drinking a little bit and so on. In the luxury area, Milan presents an interesting mix of shops, a comfortable city, cafés. Once again, the key is the mix and gastronomy is perfect for this, for the city, for large department stores. Interesting, well-designed, little cafés, food markets, attract people and make them stay.

Did your retail design changed over the years? In what way? Did you require more or less square meters after digitalization?

Retail design has changed. In the luxury area, you only need a basement, ground floor and first floor. Certainly, no one goes to the second floor: that's a good place for a restaurant! The second floor is only for restaurants, maybe home products if the floor area is too large. But it needs to be well-designed, have a pleasant ambience, it is not enough just to have it.

How do you engage with the customer on a digital platform?

The customers know exactly what they want. It does not matter where they make the buy, as long as they get it fast and easy. There is no loyalty to the brands as in the past. There is, however, some degree of loyalty regarding the product presentation, for example, in shipping boxes, which adds up to an idea of a 'brand spirit'. It may be a small thing, like in the past, the readers of Elle and Vogue. They showed the same things, but you had another feeling of it. You need to develop customer loyalty with other methods, for example bonus programs. Again, you could offer your best customers free shipping, or even better, extra time to return items.

John Cloppenburg

“Competing with the internet, our stores have to be rethought in order to better emphasize visual merchandising.”



Member of the Executive Committee of Peek & Cloppenburg KG, Düsseldorf, an international fashion company with about 16,000 employees and stores in 15 countries throughout Europe.

“People still like to come to the cities. They just spend their time a little differently than they did 20 years ago.”

How has P&C’s retail design evolved since e-commerce has burst on the scene?

Let’s say it’s work in progress. Before e-commerce, stocking the biggest selection of merchandise in each city was sufficient in drawing the lion’s share of customer demand. Nowadays however things have changed. Very few stores worldwide can pretend to be enough by themselves. Maybe Selfridges, Harrods, Gallery Lafayette, or any comparable player could say they represent an event-like experience with their main stores alone. But almost everyone else is not able to compete selection-wise with the aggregated offer on the internet. So our stores have to be rethought in order to better emphasize visual merchandising and to really make it as exciting and easy as possible for our customers to find what they wanted or even better, to discover something that they didn’t even know they wanted. This has made our business quite a bit more multi-dimensional than it already was. However, it’s also exciting to reimagine to a certain extent our whole approach to textile retailing. Especially in the way some stores have combined offers of totally different products and other offers on their sales floor. I think that with some new concepts one can already experience that occasionally putting one and one together in retailing can equal more than two.

Do you think integration with brands and offers from other industries outside of the fashion business may be successful?

As I mentioned earlier, I think there are already examples where both parties of a collaboration between a fashion retailer and a partner or many different partners from another industry or industries manage to benefit from each other’s appeal. In a way it’s the same phenomenon as we’ve experienced with the shopping centers. A single store can do the same thing. However, I think it needs to be much more curated in order to touch a nerve. But when you catch that wave, it can develop a tremendous momentum. The trick is, as always, to dare to be different. Not too far out, but also not really comparable. Easier said than done, of course.

Is your digital customer different from your stationary customer?

Yes and no. There are many customers online who also choose to buy from us offline. I think it’s a matter of trust in the brand and the familiarity with our brands and quality. For these customers we can offer a way to shop with us even when they are too busy to visit our store. On the other hand, there are those customers for whom we are just another source for the clothes and brands they want to buy. These customers are often very bargain-driven and much harder and expensive to acquire.



Which lessons can be learned from the digital arena which may also be applied to the stationary store?

Personally, I don't really like to categorize the customers in online and offline customers. Online and offline are just two different channels in order to reach the customers. As always, the key lies in understanding one's customers and reading their minds in order to know what they want and how they want to go about acquiring. Online there are obvious tools for doing it, offline it still is more of a human factor. Although I think the offline world is hard at work to close the gap at least a little bit, for example, through loyalty programs and better CRM (customer relationship management) in general. In the end, we need to make it as convenient as possible for the customer, no matter which channel he or she opts for.

In what way has e-commerce integration affected the interior design of your stores?

It's a bit of a challenge to be quite honest. On the one hand, I think it has tended to influence the design in general to be more modern. The last thing one wants to be in this new world is somewhat old-fashioned and classic. On the other hand, the way stores have come to be organized since the online retailing revolution has moved completely away from the category-driven presentation towards the total-look presentation. Especially since

all the major brands demand to be represented as a shop-in-shop total look. Personally, I see this trend with mixed feelings. It tends to make retailers more or less exchangeable and it really makes it more difficult for retailers to be a brand by themselves. In the menswear segment in our stores, the category presentation is still much more lasting. Our experience actually is that a competent category area – in terms of brands, pricing and quality – still yields some of the highest productivity and return on investment. If it really was as totally outdated as some suggest, I wonder why all the online stores also offer the customer the product differentiation option for them to find what they are looking for in the easiest way possible? I must admit though, the womenswear is already a bit further in terms of its move from product to total-look presentation.



How are these changes affecting the retail business and the cities?

Online retailing seems to have caused a footfall crisis for the stationary business. When some of the demand has been satisfied before people even leave the house to go to the city, it's no wonder you have less people coming to the stores. So the challenge for retailers is to convert more footfall into customers and/or to achieve a higher average price in order to make-up for some of the loss they are going to have to deal with. As I said before, easier said than done.

How will these developments shape the cities?

That's a very difficult question to answer. My gut feeling is, that people still like to come to the cities. They just spend their time a little differently than they did maybe 20 years ago.

How do you see this trend in the long term? Is there a future for downtown areas?

I definitely like to think so. Humans are social beings and as such the cities are the perfect place to be social. The inner city's appeal actually seems to be quite high if one was just to look at the price of real estate. Of course, there are always critical voices regarding the question of how to manage the masses commuting to and from the cities. Some people have actually suggested it might be better if less people were to come to the cities. They should shop online and have a smaller environmental footprint. I am slightly skeptical of these voices. Especially considering the amount of merchandise being returned to the warehouse from the online channel.

In the end, just like in retailing, those cities that are well managed and are able to make it as easy as possible for their citizens to acquire or accomplish what they are looking for will be attractive for customers and thrive.

“The online retailing revolution has moved completely away from the category-driven presentation towards the total-look presentation.”

Ralf Rothberger

“The number of our online customers is growing and this growth is also reflected in the stores. For example, we have lots of customers who research online but purchase offline.”



Chief Marketing Officer of C&A, an international fashion company with more than 50,000 employees and stores in Europe, Asia and the Americas.



In Germany, about 10% of retail commerce takes place online. How is this trend reflected at C&A?

Over the last 10 years, the share of apparel bought online has increased to more than 20%. The biggest issue for cities and for retailers in cities is the decreasing number of people visiting the stores. Inner-city footfall in general has dropped. Over the past year, we have therefore been focusing on increasing the number of visitors to our stores. This in-store traffic is of course closely linked to the overall attractiveness of malls and inner cities.

Does the shift towards e-commerce compensate for the loss of traffic?

Losing in-store traffic doesn't necessarily mean winning online. It's all about the purchasing occasion. Take a mother sitting at home in the evenings while her kids are in bed. The decision is not whether she shops online or whether she comes to a C&A store. It's about making the purchase during her free time and therefore she shops online. Another example, take a regular Saturday morning after breakfast, when people decide to go downtown to visit a festival or a Christmas market. While they're in town, they may follow their impulse and decide to do some shopping at a brand that appeals to them.

It is wrong to think that what you lose in the retail stores, you win online, but if you are not online, you lose the spontaneous shoppers.

So you think you need a multichannel strategy to continue operating?

Definitely. For C&A, having an online shop is imperative. Not having an online shop would mean losing those customers who shop spontaneously – and outside shopping hours.

“Why aren’t cities more creative?
We should create special events and
experiences together.”

Do you think your customers have changed in any way since e-commerce has become so popular?

E-commerce has affected consumer behavior and expectations significantly. There are moments, when online shopping requires less effort and is just more convenient than going to a brick-and-mortar store. However, for the majority of our customers, shopping at our stores is still the preferred option – we count more than 3 million visitors a day in our stores worldwide.

It is in fact the mid-market that is under pressure from e-commerce and discounters alike. Apparel discounters have grown over the past years. The discounters benefit from an issue that’s hardly acknowledged when it comes to online shopping: credit checks. Some consumers with insufficient credit score have difficulties making online purchases, regardless of whether their rating is correct or not. Their only option is to shop at inexpensive apparel discounters mostly operating offline.

Looking at the other end of the spectrum, highend brands do not suffer as much because their customer base looks for the exclusivity of the in-store shopping experience.

How can digital and physical stores be integrated?

Our share of online customers is growing significantly and this growth is also reflected in the physical stores. For example, our newsletter subscriptions show that we have many customers who research online but purchase offline. Over 30% of our newsletter recipients don’t shop online but go to the store instead.

Have you noticed differences between your store customers and your e-commerce customers over the years?

Our online customer is about 10 years younger than our offline customer. Many customers view merchandise differently today. They don’t necessarily need merchandise, but their purchase is driven by an impulse and a desire to buy, regardless if they need it or not. The key question therefore is what makes them want to buy. We have to give consumers a reason to come into our store while they’re out and about, having a cappuccino or lunching downtown.



Have your retail designs changed over the last years?
What about the product presentation or the number of products on shelves?

We have been refurbishing our stores for years: ceilings, flooring and lighting – everything is new. We've also changed the way we present our products. And what we learned is that customers expect a certain in-store experience. Vital to a thriving business is to always be one step ahead when it comes to offering both an inspiring collection and store environment. It's about keeping a location attractive.

Until the 1990s, once we refurbished a store, we didn't touch it for the next 7 to 10 years. Now with the accelerated changes in technology and new trends emerging, this cycle has reduced to every 3 or 4 years. Our philosophy is therefore to adopt and modernize like a house, one room at a time, adapting to new needs as they arise. It's a permanent evolution.

What role does the city play in your business now?

In addition to the continuous optimization of our stores, the appeal of the area where the store is located and the city as a whole are extremely important. The decline in footfall that retailers experience is often also driven by the fact that the city center have become less attractive and more difficult to reach. This is therefore a pressing topic that needs to be continuously addressed by city authorities. Ideas to become more attractive as a shopping and leisure destination range from making cities cleaner, to improving public transport and parking options. For example, lowering the cost of public transport or parking fees. The key is to first attract customers into the cities, or shopping malls and as a next step into the stores. Therefore, the currently discussed inner city tolls will not necessarily increase the attractiveness of the city center.

Can you measure the impact of how attractive a city is? How is your relationship with the city administration?

We are constantly opening, refurbishing and closing stores. It is a continuous evaluation process, depending also on rental contracts. If a city loses attractiveness, discussing the rent with the landlord must be on the table, otherwise we cannot operate profitably.

We're therefore more often in contact with landlords than with city authorities. When it comes to renovations, we often face strict rules and regulations imposed by the local authorities. Take a façade logo for example: sometimes we are allowed to keep an old logo or take it down, but not to put up a new one. That's why we sometimes have a refurbished store with an old façade. The level of freedom varies from city to city. When it comes to opening times, events and the attractiveness of inner cities, we often do speak to the local authorities to remind them to consider the interests of the retailers. These are two sides of a coin. The retailers make inner cities more attractive but the attractiveness of the cities determines which retailers can remain in the city center.

With digitization and multichannel options growing, do you require more or less retail space in your stores?

The steady decline in traffic over the last 10 years has reduced the turnover per square meter. And since we rent the entire building, it's difficult to reduce store space – it's often a matter of take it or leave it. One solution could be to share buildings with other retailers, as we do with Decathlon in Dusseldorf/Germany. We reduce our square meter space while still getting the same turnover. This may not be a blueprint for every location, but depending on the city and the landlords, it may be a viable alternative.

Do you think 'click and collect' will become more relevant in future?

Our aim is to deliver a full omni-channel experience to our customers, connecting offline and online for seamless shopping. Next to the online newsletter and social media, 'click and collect' is vital to us as it already accounts for one third of all online purchases. Our customers appreciate the convenience of 'click and collect', which enables them to never miss a parcel delivery and instead drop by our stores at a time of their choice, sometimes also to complete or correct an order.

“It's wrong to think that what you lose in the stores you win online. If you are not online, you lose the spontaneous shoppers.”

Do you have any plans to integrate technology even further? For example, 'bagless shopping' or 'smart mirrors'?

It's ultimately up to each retailer to identify the technology strategy most suitable to their business model. For C&A, for example, equipping store staff with tablets and RFID technology works well, as it helps them advise customers and monitor stock levels. Smart mirrors on the other hand – as great as they sound in theory – don't work in my opinion for mass retailers. They are simply too difficult to implement in all our shops given the sheer number of stores we operate.

Many brands collaborate with other sectors like technology or food. Do you think these types of partnerships have a future?

We have successful partnerships with other brands, as long as what they offer is within our customer's price point and needs and makes shopping at C&A more attractive. As part of this collaboration, for example, we offer a jeans brand that's a little above our own price point. Yet it works well as we extend our assortment without cannibalizing our turnover. Another partnership involving toys allows us to provide a dedicated in-store area where kids are entertained so the parents can relax and enjoy their shopping. A win-win situation for everyone involved.

Do you think German opening days and hours could be improved? Do you feel there is any progress when it comes to initiatives like 'open Sunday'?

The question of opening hours is extremely important, particularly in smaller cities where stores close earlier. Limited opening hours will prevent customers from making that trip downtown. Opening a store on Sundays is a complex issue. They create a certain shopping experience our customers love, as the atmosphere is more relaxed. Opening Sundays works perfectly in combination with a special occasion, like the weekend before Easter, or in May the days before bank holidays, or the weekend before school starts. Those occasions must fit into the life and calendars of our customers. Get the cities on board to host events and you have the right ingredients for customers to flock to the cities, as we see every year with the Christmas markets in Germany.

How are cities and the typical high street in Europe affected by these trends?

The question is: Why are cities not more creative in trying to become more attractive? It's about teaming up with city authorities to create more of these events together. Offering a complete experience, which should make sense for the customer, for the retailer and for the city.

“Cities can do many things to become more attractive. One is improving access by lowering the cost of public transport and by making it easier and cheaper to park.”



Dr. Markus Wiedenmann and Holger Weber



Dr. Markus Wiedenmann is the CEO and Managing Partner of Art-Invest.

Art-Invest Real Estate is a long-term oriented project development and investment company headquartered in Cologne with projects in metropolitan regions of Berlin, Düsseldorf, Frankfurt am Main, Hamburg and Cologne/Bonn.



Holger Weber is Head of Research of Art-Invest.

For years, e-commerce has been increasing in popularity. How do you perceive this trend and what effect does it have on the retail landscape?

Holger Weber: Naturally, there is an imbalance between online commerce and stationary retail. Online sellers have completely different price structures to compete with brick-and-mortar stores; the latter must be in the inner city, these retailers have to pay a high rent, whereas e-commerce can place its facilities on greenfield sites. Brick-and-mortar retailers have also extra costs for logistics, tariffs, employees, etc. Therefore, they have little chance of competing with online commerce.

Dr. Markus Wiedenmann: Cities have also changed. You can feel that, for instance, if you walk down the main shopping street of Cologne, the Hohe Straße: everything is close together, there is no real 'experience' related to strolling through a downtown street, it is not a pleasant feeling. You have to make the public space more attractive; there is a need for green spaces, gastronomy, courtyard flooring and mixed uses. There should not only be fashion retailers, but also cafés, ice cream shops, service stations, etc. Going to the city should be an experience and not just the satisfaction of a need. I believe that cities so far had a poor understanding of this topic and therefore failed to improve in that area. Nevertheless, I also believe that this is not just a matter of city administrators but of private investors. The Business Improvement Districts (BID) in Hamburg are a good example. They are very successful and everyone benefits from them, including the city not having any costs regarding street renovation. We have tried to implement something similar in downtown Cologne for some time now through the ISG (real estate and location association) and I believe that we could easily improve the streets through private funding, but this is a very difficult and tedious topic.

Why is it so difficult? It is because it's quite a challenge for the city to organize this or due to the lack of interest on the side of the realtors?

MW: The problem is that it's rather seen as a structural help measure for a weak area that needs developing in general. The city would attend to a street and try to redesign it, that was the idea. What I say is, you need to take the best street available and when it works there, you can say 'Whoa, look how beautiful this place has become!'. You should start with the best locations available, as Berlin did with the Kurfürstendamm and then work your way outwards to the less attractive areas, not the other way around. There is a great potential and I see owners eager to invest, because they understand that the 'quality of stay' of a location does not only concern the property but also the public space around it. And for that, Cologne has little resources left to spend.

This corresponds with our thesis: The attractiveness of the city has to improve and one way to get there is to implement mixed uses. According to your experience and perspective as developer and owner, which additional uses could you combine with the classic retail property?

MW: We need other uses in the inner cities. We never thought that there would be grocery stores on Schildergasse or car dealerships in downtown areas. However, there are now: Car companies were often relegated to the outskirts and industrial areas, but companies like Tesla and others have decided to be present in the inner cities, not with classic concessionaires but with showrooms.

HW: Obviously, digital commerce is responsible for this: you can check your favorite car color and accessories online and then get all the personalized details, which is something that you could not do in the past. Today, you don't need to exhibit twenty cars in a large store; you can just show one and the extra colors and accessories on a screen. The bottom-line is, you can bring more uses to the inner city, but the main problem remains to be that the best locations are just too expensive. The problem for us on the real estate side is that everything has become a showroom now and it is hard to measure the profitability of the property in terms of sales. There are, however, other tools, like the one we tested

in Brick Spaces in Düsseldorf. There, we measured the traffic, first on the streets, then in the store and finally we measured how many of the people effectively made a purchase. From there on, with some investment in technology, you can have an efficient instrument to evaluate a property and say:

'We have the best location, it costs some money, but here is the data, visitors per hour, frequency, spread over weekdays, holidays, seasons and so on. We can track these changes over time and adjust the property costs accordingly.'

We measured Munich a while ago and you could easily see the peak of visitors during Oktoberfest, something like 20,000 visitors per hour – which is comparable to London.

We can see how many visitors walk by the store 24 hours a day, through the entire year; you can measure precisely how many customers visit your store, which seasons attract more customers than others and so on. This information is crucial to the client, in this case, the retailer, as a powerful selling argument or an argument to adjust the rent accordingly. Before this was possible, we had a more or less basic knowledge about how good a property was, but mostly dealt on a take-it-or-leave-it basis. Now, this information can be useful to both parties in order to negotiate more efficiently.

“The ‘quality of stay’ of a location does not only concern the property but also the public space.”
— Wiedenmann

This is interesting. Do you think that in retail, the property and the building must be ‘digitalized’? Since digitization, other retail concepts have evolved, selling concepts that are not related to physical sales but include other factors that attract retailers, for example, brand building. The question is how architecture can join this game? What can stationary retail offer that online retail cannot?

MW: I believe online retail cannot tie you to a certain brand; you are a successful online retailer once you have a strong brand, when people look you up. For example, take selling a pair of shoes online, somebody says: ‘I’m looking for a pair of black running shoes’, but if your brand isn’t as strong as, let’s say, Adidas, you’re going to have a hard time making the sale.

HW: There is a niche where classical retail can shuffle in: the inner-city production of small batches, personalized products and the like. Nike stores did it and Adidas tried it in Berlin: they run a pilot store where you could make a 3D scan of your body. Afterwards, a piece of knitwear or a pair of shoes could be produced according to your exact measurements with colors and materials of your choice. For 200 euros you got a unique piece that fitted you perfectly.

This way, a production activity takes place in the city, but it is not made for mass consumption but for a more motivated, upper-segment customer who wants something beyond a standard piece of clothing. Naturally, tailors and shoemakers were there at the beginning of commerce and in the future, similar activities will be reintroduced to the city.

Going back to real estate, what does this mean for the buildings? You’ve done many retail projects, what are your thoughts regarding the future of retail? How do you see them conceptually? Do you see new business models such as Brick Spaces?

MW: One of the big topics today is flexibility. Nobody knows what is going to happen in retail in 5 or 10 years, but ultimately, it is clear that you will not need much space. Retailers need just enough to bring a customer and a product together.

When the customer actually says: ‘I want to buy this product’, he doesn’t need to have it right there, he can have it delivered, which is more comfortable. You made a purchase decision, but you don’t need to drag it home, except if you want to have the ‘success experience’ of walking down the street with a designer store bag.

The margin of profit has also decreased; in the past, you could only purchase stationary, so retailers could afford premium locations. Now, they are competing with companies that pay less rent: a warehouse on the outskirts of a small city is just fine for an e-commerce warehouse. The cost structure is completely different; in stationary, you additionally need salesmen, consultants and so on. This is why the margin is lower; you must be more efficient in terms of floor area and display twenty brands in your store instead of just one.

We find the trend towards mixed uses positive, but in German inner cities, such as in Cologne, Düsseldorf or Frankfurt, we hear that there are problems regarding mixed uses including gastronomy. Whereas in other big international cities, everything that is new and fun is always connected to a gastronomic experience. In this, we see a chance of diversification. Retail has become boring and hence it does not work anymore. Many big retailers have slowly begun to include their own cafés, restaurants and pop-up concepts. They see this as an interesting way of allocating side areas to other uses in order to generate traffic.

HW: There is also a generational change. Nowadays, you can find anything online, so young people are more interested in special, limited edition products that are only available for a small period. The usual way to get these is to pay overprice on auction sites. So, when they hear that a new pair of shoes like this will be available in a particular store in the city, they run to get them.

Returning to the digitization of real estate, which other ways are there to implement new technologies in buildings other than measuring traffic?

MW: Measuring traffic is relatively passive and it is important in order to assess a property and its value. On the other hand, the interaction with the consumer will be more important at some point and the brands are just getting started on this trend. They are becoming very good at identifying individual needs. When you visit their websites, for instance, they know what you have already bought and what you still need. They are starting to do similar things

on stationary retail as well, if you have a special app installed and you walk by the store, you will get notifications with offers and discounts.

I saw these changes for the first time when I was looking for a school satchel for my son; there I realized that stationary retail had completely changed. In the store, they had just one satchel of each model, and it was clear that they did not want to sell us a satchel, they could not have cared less. What the store wanted was my son to pick a satchel among the countless models and say: 'I want this one'. They then knew that this specific satchel was later going to be purchased: Instead of focusing on getting my kid a school satchel from the store, they considered it more important for him to decide on a certain brand. It was there that I realized for the first time that in the past, if you went to a store, they had a limited variety of products on site and they wanted to sell one in the store. For them it would have been a catastrophe if I went online and got the same product 10% cheaper. For that reason, I think, in the city of the future, the brands will establish their own stores in order to have contact to the customer instead of through the typical intermediary retailer. They are the ones that don't stand a chance; the price structures are becoming more and more transparent. The customers profit from product advisors or consultants in the store and later buy the product cheaper online; and you can't do anything to stop that. These types of retailers will have a rough time, but the brand itself will be safe.

“With some investment in technology, you can have an efficient instrument to evaluate a property.”
— Weber

What are the factors that are important to you in order to pick a location for development? In other words, what do you expect from a city development to make a commercial property attractive, what should a city do so that you invest in a particular location?

MW: What I wish for, or what my thesis is about, is not a secret: the visitors to the city no longer go there to satisfy a need. Instead, they are seeking an experience. This experience is tied to the ‘quality of stay’, which is tied to cleanliness, tidiness, variety, free Wi-Fi, – again, general attractiveness. In Hamburg, for example, we displayed artworks in the public space. A mixed use is also important, but it is hard to achieve; everyone wants to have a small café nearby. At the end of the day, we can only define general conditions; the retail needs to reinvent itself, we can only think for ourselves. We tried with Brick Spaces, thinking and collaborating, bringing pop-up stores and ‘space as a service’ together in an easy and fun way. We decided not to rent some properties permanently but to use them as attractors. Customers want new experiences and I think they find it interesting if a store changes every two months, selling completely new things that you can’t get anywhere else.

HW: It is also important to make clear that the location is indeed a pop-up store and that it only lasts, let’s say, two months. If the public notices that the tenant changes very often, they might perceive it negatively. However, if the customer knows that the concept includes a change every two months, they will surely visit the store on a regular basis to see what is new.

MW: And there could be a new story every time. For example, in Cologne, you could have a pop-up concept just with products from Cologne, from beer glasses to bed covers. One month you sell products related to the Cathedral, the next one to football and so on. A new thing every month will keep customers interested.

HW: The pop-up as a service is still confined to renting spaces. An established company can do that for itself, but smaller companies which have, let’s say, a single product, just can’t do it. What is yet to be developed is a platform that provides a comprehensive service for a manufacturer or a brand, which does not only include renting a space for a short period but also providing equipment, a payment platform, even staff for the store.

“Customers want new experiences and I think they find it interesting if a store changes every two months.”
— Wiedenmann

Markus Greitemann



Markus Greitemann is the Deputy City Councillor for Urban Development, Planning and Construction of the City of Cologne.

“Customers must be able to recognize individual added value offered by the company’s physical location. This can be a special service or an individual experience.”

What are the effects of digital change on Cologne?

The impact of digital change on the retail sector is similar in all developed countries. The trend towards digital shopping presents retailers with several existential problems. This is also the case in Cologne. Apart from food retail trade, which is still hardly affected and a marginal group with highly specialized or individual product ranges, almost all sub-sectors are affected. Most companies that refuse to accept digital change will inevitably disappear. Those who want to maintain their physical presence must have a parallel digital presence – that means they need to pursue a so-called “online/offline strategy”. In addition, customers must be able to recognize individual added value offered by the company’s physical location. This can be a special service or an individual experience.

The retail sector reports that fluctuation in German city centers is continuously worsening and that retail sales are therefore declining. How can you as the City of Cologne react to this? How can Cologne react to the digital transformation?

Let me first make one remark: For decades, many owners of retail properties in the city center of Cologne have been aiming to generate rental revenues that were at the limit of what is obtainable. As a result, owner-managed stores, which in the past made a decisive contribution to the individuality of Cologne as a retail location, have increasingly vanished from central locations. The attitude of property owners has ultimately contributed to the trend towards the depletion of the supply landscape.

Regarding your question: The possible reactions of a municipality with regard to the urban retail landscape are limited. They are restricted to the optimization of framework conditions. One of these framework conditions is the digital accessibility of the store locations. With its local respectively regional network provider NetCologne, Cologne is one of the absolute frontrunners in Germany. All of Cologne’s densely populated areas have access to an efficient glass fiber network. Another framework condition is reachability. The focus of many customers on the car leads to bottlenecks at peak times. However, the supply of parking facilities in the city center is principally good. The same applies to the public transport infrastructure. The municipality is also responsible for the general outdoor quality of staying in the city. There have been improvements in this field in recent years, for example with regard to the design statutes or lighthouse projects such as the Rheinboulevard. Basically, however, there is still a lot of room for improvement. Activities of the municipality are required here.

With regard to changes in the retail sector, German cities are increasingly competing with each other in terms of attractiveness. How can Cologne distinguish itself?

A unique characteristic is the image of Cologne with its cathedral, old town and Rhine panorama, anchored in many people's minds, which is now complemented by other facets such as the Rheinhafen and the Rheinboulevard. Even a rather accidental phenomenon such as the „Kölner Liebes-schlossbrücke“, the Hohenzollernbrücke with its thousands of love locks, has become part of the individual image of Cologne.

A unique selling proposition explicitly related to Cologne as a retail location is the structure and layout of the centrally located shopping streets. In most cities, there are a handful of locations highly frequented by pedestrians which are not necessarily interconnected. Cologne, by contrast, has over a dozen well-known shopping locations. The special highlight: Cologne can offer a so-called circular tour. Those who start their shopping tour at Wallrafplatz will reach Neumarkt via Hohe Straße and Schildergasse. From here, you can get to Ehrenstraße via Mittelstraße and Pfeilstraße or Benesisstraße. If continuing from there, you can walk along Breite Straße to return to Hohe Straße. This circular walk alone includes eight different shopping locations. Some of them feature highly individual stores. Of course, the two top locations Schildergasse and Hohe Straße are strongly affected by multi-branch operations, while Ehrenstraße and Breite Straße are affected to a lesser extent. One reason for this is the high rent level already mentioned. In recent years, however, rising rents on Ehrenstraße, for example, have also caused individual shops that were no longer able to pay the demanded square meter prices to move to directly adjacent side streets. These

have thus become more attractive. All in all, the decline in traditional owner-managed stores is countered by a substantial increase in the opening of partly very creative stores. This was also the case in shopping locations that were unheard of twenty years ago, such as the Belgian Quarter or Venloer Straße and side streets in the Ehrenfeld district. Further inner-city shopping locations with an individual atmosphere are the Südstadt around Chlodwigplatz and Eigelstein. Creative stores have also been opened recently in central shopping locations in other urban districts, such as Nippes and Mülheim.

Less positive, however, is the development of smaller supply centers in some districts. Here, the density of stores often does not reach the critical mass to be able to persist as a real center. In such locations, only a few uses such as supermarkets and basic gastronomic facilities will often remain. However, there can be no talk of a continuous depletion of the Cologne retail landscape.

International actors in the retail sector are also aware of Cologne's attractiveness as a shopping location. Cologne's central shopping streets are a popular pilot market for foreign retail chains wishing to enter the German market. A current example is Dyson. After London and Milan, the British manufacturer of vacuum cleaners has just opened its third European store in downtown Cologne. This is a real unique selling proposition.

“Basically, the trend in inner-city shopping locations is towards a stronger gastronomic use.”

In our study we found out that it is more and more about experience and less and less about needs. What added value does Cologne offer and what can the public space do to promote the experience?

One of Cologne's added values is the mentality of its inhabitants, which makes for a relaxed, Mediterranean-like atmosphere. A visit to the brewery pub after shopping is part of the program for many day visitors. In addition, there are attractions such as the cathedral, the old town or the Rhine promenade as well as the chocolate and Olympic museums. There is room for improvement with regard to cleanliness and public squares. The quality of stay in some of the squares is to be improved.

In our opinion, monotonous retail landscapes such as Hohe Straße or Schildergasse are hopefully a relic of the past. What does your image of Cologne in 30 years' time look like and what do the tools for this look like?

Describing Hohe Straße and Schildergasse as monotonous retail landscapes is, in my opinion, somewhat exaggerated. Admittedly, there is still a lot of architectural mediocrity from the 60s and 70s, but there are also quite attractive buildings such as the Blau-Gold-Haus, the Kaufhof department store, the former Hansen Building, or Peek & Cloppenburg's Weltstadthaus. Zeppelinstraße and Breite Straße with the customer magnets Globetrotter and Karstadt are also not to be sneezed at.

Unsatisfactory are, however, neglected corners in the surroundings, for example, the former WDR parking garage between Roncalliplatz and Rathaus. I hope that in this case we will soon come to a good solution with the investor of the so-called Laurenz Carree. Apart from that, the project backdrop to the Historical Center is in progress, which includes numerous upgrading measures to be implemented in the coming years and will achieve a noticeable improvement of the surroundings.

By “monotonous” you also mean the retail offer. This could, of course, be more diverse. But it is very difficult to bring individual owner-managed stores to the high-price areas of Hohe Straße and Schildergasse. And chains are also justified. Their branch stores will not disappear completely. In order to strengthen the individual profile of these shopping locations, the parties involved, in other words landlords, users, the city, KölnTourismus and other players such as the Chamber of Industry and Commerce and City Marketing, would have to sit down at one table and develop or commission a concept. The city has no direct influence on the individual decisions of landlords. There are tedious tasks ahead, and before that it also needs political decisions. Basically, the trend in inner-city shopping locations is towards a stronger gastronomic use. Such a structural change must be closely accompanied with regard to a minimum quality of further providers.

Are there already approaches where you could implement this change and how does the cooperation between city, trade and real estate owners work?

There are already approaches, but not yet in inner-city prime locations. For example, on Severinstraße in the southern part of the center, just under two years ago, the first statutes for an Immobilien- und Standortgemeinschaft (ISG, real estate and location association) in Cologne were enacted by a council resolution. The ISG is made up of building owners who are committed to implementing a broad range of measures. These range from buying new Christmas lighting, to greening the street, to a neighborhood caretaker responsible for a more sophisticated appearance. What is special about the ISG is that it is financed by a levy determined by official decision, which is divided proportionately among all property owners and holders of heritable building rights in the area. The city makes no financial contribution. The fact that the first ISG was set up for Severinstraße, which is rich in tradition but also shaken by the collapse of the Historical Archive and the construction of the subway, confirms the identification with the location. A large proportion of property owners live in the immediate vicinity and are very familiar with the situation. There are also initiatives and active retailer communities at other locations, which we on the part of the city are happy to support.

“A unique selling proposition explicitly related to Cologne as a retail location is the structure and layout of the centrally located shopping streets. The city has over a dozen well-known shopping locations and offers a so-called circular tour.”

2

Downtown in Transition

Key Points

Action 1

Retaining shopping activity through new retail concepts.

Action 2

Fostering a functional mix by bringing new functions to the city centers.

Action 3

Improving accessibility and the public realm.

The growth of online commerce and the ensuing processes of physical displacement of retail activity described in the previous paragraphs are the outcome of market forces, technological development and socio-cultural transformations.

Although such trends are nearly impossible to reverse, it is possible to mitigate their negative effect on urban centers through policies, planning, urban design and private initiative. In fact, the loss of retail functions and the reduction of space needed for physical stores and storage space may provide an opportunity for city centers to integrate new uses into their fabric, including new forms of housing, workshops and production. Finally, new forms of mobility are needed that would allow people to comfortably reach centrally located premises via multiple modes of transportation. In this chapter, three strategies to re-program city centers are discussed.

Goal

Preserving the attractiveness and liveliness of city centers

“How to react to the decline of traditional commerce and keep urban centers lively and attractive?”

Strategic level

Re-program city centers

1. Retaining shopping activity

In light of the growth of omnichannel paradigm, what will physical stores look like in the future?

2. Fostering a functional mix

Which activities can take place in the growing stock of empty premises along current shopping streets?

3. Improving accessibility and the public realm

Which public realm transformations are necessary to foster human interactions in urban centers?

Tactical level

New concepts for brick-and-mortar stores

← Alternative uses to repurpose retail spaces →

→ Innovative mobility schemes

Actions

- The store as a center of experience
- The store as a place of co-production
- Pop-up stores
- Gastronomified stores

- Food production
- New forms of housing
- Manufacturing and creative businesses
- Art and leisure
- Energy production

- Free public transport
- Multimodal transport system
- Decentralized fleet of on-demand, self-driving cars

Action 1

Retail shopping activity through new retail concepts.

The rise of online commerce, as well as the multiple trends discussed in the previous sections are forcing brands, retailers and store managers to re-imagine the function and look of physical stores. Several companies are already experimenting with new store formats in cities across the globe. An investigation into innovative store formats revealed four recurring ways to conceive stores in the digital age:

1. Stores as centers of experience,
2. Stores as places of co-production,
3. Pop-up stores and
4. Gastronomified stores.

Interestingly, a handful of store formats integrate elements from more than one of such categories, e.g. the Nike and Adidas flagship stores are both places of experience and co-production, thanks to in-store fabrication and rapid prototyping technologies.

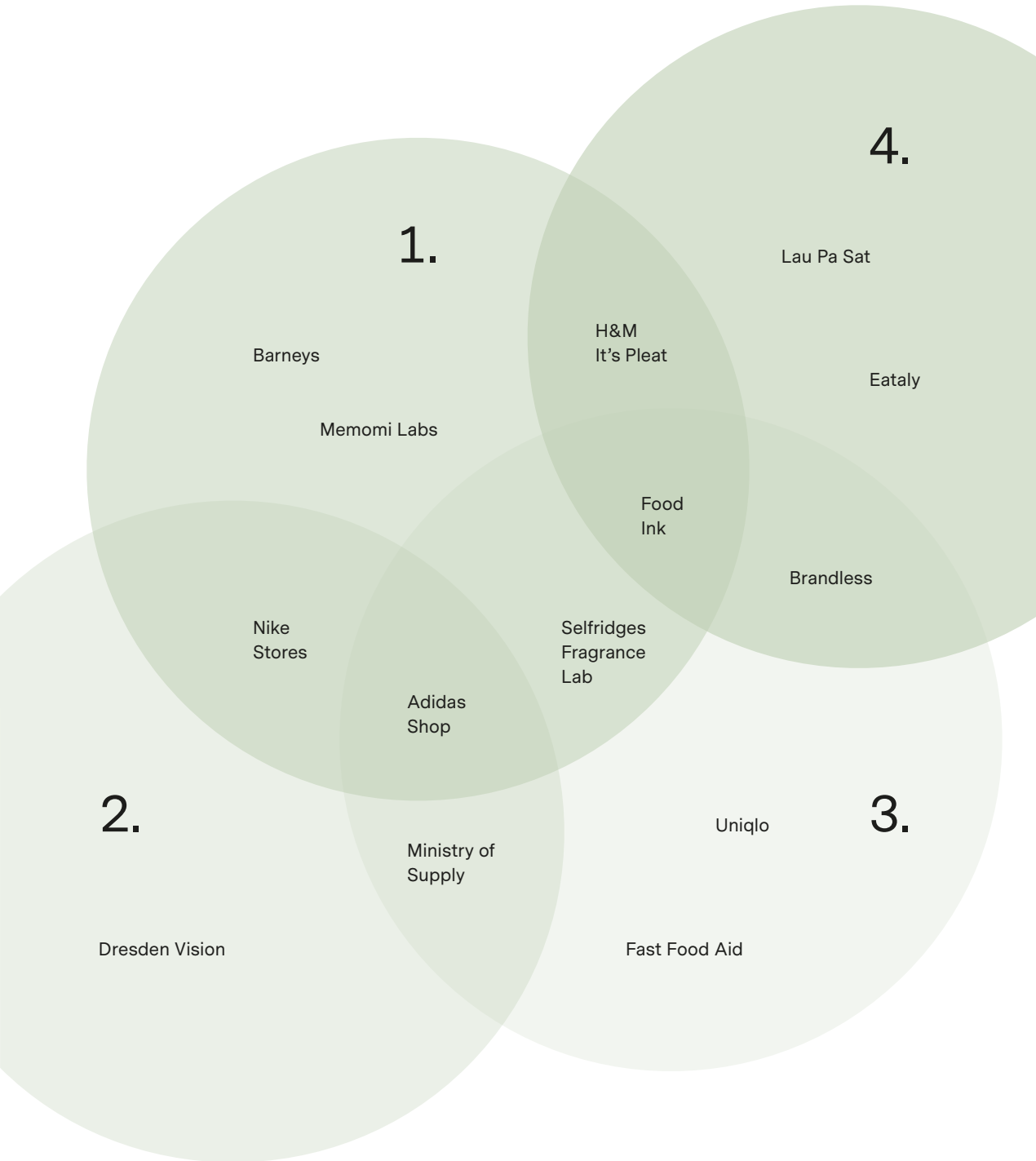


Figure 12. New retail concepts, examples and case studies

Action 1

1. The store as a medium: from place of inventory to center of experience

“Our dependence on stores to serve as distribution points for products is rapidly diminishing as digital media, in all forms, become remarkably effective at serving our basic shopping and distribution needs which, until recently, could only be fulfilled by physical stores. Now, just about anything we buy can be on our doorstep in a matter of days, if not hours, via a myriad of online shopping options.” [19]

Instead of inventory of products, several innovative companies are re-purposing brick-and-mortar stores into hubs for physical experience and customer engagement. Indeed, while online platforms offer time-saving, comfortable channels for shopping, they cannot surrogate the direct sensorial relationship with a product (and a brand) enabled in physical stores. This strategy is turning the tables between media and stores, to the point where – as Stephens argues: “The store in essence will become an immersive and experiential advertisement for the products it represents and a direct portal to the entire universe of distribution channels available.” [19]

Sensorial experience seems to be particularly important for high-engagement product categories, such as clothes, shoes and jewelry. From an architectural standpoint, the sensorial experience should convey brand awareness by offering a distinct ambience. The idea to conceive physical stores as “media” may also benefit web-borne brands who may struggle to compete for online visibility. By establishing physical stores, these brands may reach out to people and divert traffic towards online channels for sales and distribution.

[19] STEPHENS, DOUG. The Future of Retail is the End of Wholesale (2015, February 05). Retrieved from <https://www.businessoffashion.com/articles/opinion/future-retail-end-wholesale>

Opportunities

- Foster high customer engagement and brand awareness.
- A contribution to the “experiential economy” by the retail sector.
- Physical and sensorial experience cannot be replicated by digital technology: stores allow customers to have first-hand contact with products.

Barriers

- Not suitable for all product categories, especially low-engagement products.
- Store design requires higher investments than traditional “inventory store”.
- Since stores become media to streamline traffic and online sales, retailers need new metrics to assess store profitability, i.e. analytics, data intelligence.

Action 1

1.The store as a medium: from place of inventory to center of experience

1.1 Memomi Labs



Together with make-up experts, customers can 'virtually' try out different products.



Visitors can experience variants and colors before committing to a product.



At the end of every session, the results can be saved or shared.



Products can be compared 'side by side' in real time.

Memomi is the creator of the Memory Mirror, a digital mirror platform that allows customers to virtually 'try on' different products through artificial intelligence, virtual and augmented reality.

Due to partnerships with several companies, users can try several products ranging from clothing, eyewear, footwear, accessories and make-up in real time without any of the inconveniences of the actual try-on experience.

In addition, images and videos can be shared on social media, enhancing customer experience.

Action 1

1.The store as a medium: from place of inventory to center of experience

1.2 Barneys Digital Table



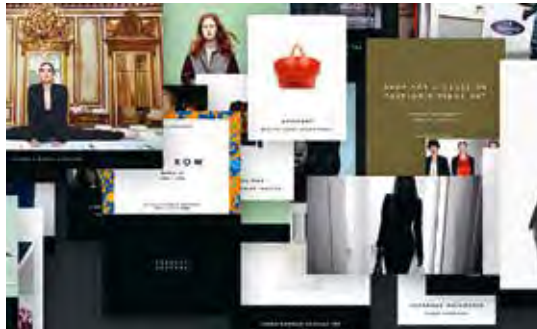
The café is located on the 8th floor of the Manhattan flagship store.



The table displays an endless flow of images, videos and blog content.



Customers can order a coffee and pastries direct from the table.



Visitors can seamlessly discover the brand's catalog, watch videos and order from the café.

Fashion retailer Barneys included a restaurant space on the 8th floor of their flagship store in New York. The centerpiece is a 9-meter long banquet table made of touch screens where the customers can seamlessly discover the brand's collection, order food and navigate fashion blogs. The continuous surface shows an endless flow of images, text and videos for the visitors to interact with, while enjoying a cup of coffee and a snack overlooking the store.

Action 1

1.The store as a medium: from place of inventory to center of experience

1.3 Selfridges Fragrance Lab



The Fragrance Lab is a part of the 'Beauty Project' initiative and integrated into the larger department store.

Atmospheric effects set the mood and prepare the customer for a unique experience.





The customer's reaction to various stimuli serves as information for the fragrance design.



A unique in-store experience involves questionnaires and the physical presence of the customer.

As part of a larger initiative, high-end department store Selfridges launched a concept store where customers can acquire a unique scent tailored for them.

The consumer's physical presence, her responses to questions and environmental stimuli serves as information for the alchemy of the fragrance to offer a more meaningful, multi-sensory and customized consumer experience.

At the end of the journey, the visitor can pick up her personalized fragrance along with a 'fragrance formula' that will outline the key findings gleaned from her olfactory journey and how this influenced the final scent.

Action 1

2. The store as a place of Co-production

The economy of abundance is bolstering a demand for customized consumer products.

“Mass personalisation is set to become a reality, with 36 % of consumers saying they are interested in personalised products or services, according to research by the business advisory firm, Deloitte [...]. This desire contrasts with a relatively low take up so far, only one in six consumers has ever bought these products or services.” [20]

In other words, mass-customization will coexist with mass production and since physical stores are the meeting point of the customer with the product, several brands are turning stores into centers for co-creation and personalization.

In his research on customer behavior and mass-personalized products, Professor Nikolaus Franke of the Vienna University of Economics and Business indicates that consumers are willing to spend up to 40 % more on a personalized T-shirt than on a regular one.

Transforming stores into centers of co-production would also cater to some deeper psychological wishes of the modern man. “Modern lifestyles separate many people from creative and emotionally and physically rewarding activities. Many are engaged in mundane and highly repetitive work which has no direct relationship to daily consumer routines, creating alienation of many workers from their daily activities. Co-production allows consumers to become re-involved in production-like activities which have a direct link to their daily life and desires.” [21]

[20] Black, W. (2016, June 07). Making it personal – One in three consumers wants personalised products – Deloitte UK. Retrieved from <https://www2.deloitte.com/uk/en/pages/press-releases/articles/one-in-three-consumers-wants-personalised-products.html>
[21] Etgar, M. (2009, December 01). Ways of Engaging Consumers in Co-production. Retrieved May 18, 2018, from <https://timreview.ca/article/307>

Opportunities

- Taps into customer desire for individuality.
- Products can be sold at a higher price point than similar mass-produced products.
- Creates a playful experience that increases customer engagement and improves the connection with the product and the brand.
- Fosters an activity in retail stores other than shopping, i.e. workshops, experimentation.

Barriers

- Format limited to a few product categories; in particular, fashion and furniture, but it can expand in the future thanks to new technologies.
- Requires an organizational complexity, e.g. production time vs. capacity to serve high number of clients, extra space for raw material, etc.

Action 1

2. The store as a place of Co-production

2.1 ECCO Quant-U



Two 3D printing machines at Quant U.



Finished shoes and 3D printed soles.

A glimpse of the scanning process.



Quant-U is an experimental project developed by the shoe company ECCO. In the brand's concept store W-21 and ECCO Studio in Shanghai, the customer's feet and movement were digitally captured by a series of 3D scanners and in-shoe sensors in order to produce a personalized 3D model of the midsole. The customized components are 3D printed in silicone and ready to use within an hour. Both scanning and manufacturing of the components are done in-store, creating not only a unique product but also an innovative customer experience.



The interior decoration resonates with the brand.

Action 1

2. The store as a place of Co-production

2.2 Ministry of Supply



A shop assistant inspecting a 3D printed jacket.

The 3D printer at Ministry of Supply.



Thanks to the adoption of an omni-channel strategy and 3D printing technology, Ministry of Supply stores offer customers the possibility to customize their garments and print them in the store. Large 3D printing machines are exhibited in the store and contribute to the aesthetic of the shop.



The machine in action.



From the website. Emphasis on the in-store, personal experience offered by the brand.

Action 1

2. The store as a place of Co-production

2.3 Dresden Vision



Customers choose every part of the eyewear.



They can try on their personalized product immediately.

Dresden Vision has developed a modular system for eyewear consisting of interchangeable parts; frame, pins, lenses, everything can be assembled in-store in 15 minutes, creating a distinctive customer experience. Over time, customers can modify their glasses, combining parts and colors at will. The store is thus not only a sales point but also parts workshop and optometrist lab, where customer experience takes a central role in creating a personalized product.



Several colors and combinations are available.



Customers can also choose preconfigured sets.

Action 1

3. “Another scale”:

From permanent stores to small, temporary pop-up stores

Retail analysts have noticed a mismatch between demand and supply in the retail real estate market. On the one hand, landlords offer large footprint spaces, charging high rents for long-term contracts (10-year lease), but the shifting conditions in stationary retail render such projections difficult. On the other hand, a growing number of small innovative manufacturers would be interested in renting retail space but cannot afford such high prices, nor do they want long-term contracts. One of the consequences of this dynamic is the increase in vacant premises. This situation has led some experts to advocate for new forms of space leasing comprising smaller units, shared spaces and short-term contracts. Such format, also known as “pop-up”, may have several advantages over traditional retail formats. “For retailers, the stores can offer lower rents and far less commitment. For the landlords, renting out to a short-term tenant is better than not renting out at all”. [22].

Pop-up stores seem especially advantageous for emerging brands. By opening pop-up stores, new companies can attract new customers, build brand buzz, test new products, locations, seasons and markets, or target new customer segments. Ultimately, pop-up stores represent an innovative marketing format based on scarcity, exclusiveness and surprise [23]. From a product standpoint, pop-up stores better suit high-engagement products, e.g. luxury and lifestyle products. However, the pop-up format has also been used by social organisations and NGOs for non-commercial functions, for example, Amnesty International’s pro-free speech pop-up store in Hong Kong or “The Street Store”, a Facebook-based organization that focuses on open-space pop-up stores to offer second-hand clothes to homeless people, while connecting them to their local communities. Because of their temporary nature, pop-up stores can also be used as an urban strategy to re-activate unused public space.

[22] Hughes, C. J. (2017, May 30). Pop Up Goes the Retail Scene as Store Vacancies Rise. Retrieved May 18, 2018, from <https://www.nytimes.com/2017/05/30/realestate/commercial/pop-up-stores-retail-vacancies.html>

[23] Niehm, Linda S.; Fiore, Ann Marie; Jeong, Miyoung; and Kim, Hye-Jeong, (2006) “Pop-up Retail’s Acceptability as an Innovative Business Strategy and Enhancer of the Consumer Shopping Experience”, Apparel, Events and Hospitality Management Publications. 1. https://lib.dr.iastate.edu/aeshm_pubs/1

Opportunities

- Pop-up stores contribute to create emotions of surprise and buzz in the city due to the ever-changing cityscape.
- May encourage new brands to occupy vacant spaces.
- New companies are emerging that bring together landlords and potential short-term tenants, while managing the rent process (e.g. the German start-up “Brick Space” operates similar to Airbnb for pop-ups).

Barriers

- Current rental contracts are based on a 10-year lease and there are cultural and legal barriers to be changed.
- Resistance from landlords because getting tenants would require more effort and increasing risk.
- Rental cost in prime locations may remain too high for emerging brands.

Action 1

3. “Another scale”: From permanent stores to small pop-up stores

3.1 Brandless, New York, USA



Assortment of products offered both online and in the pop-up.

The pop-up combines products and a small café.





A collection of colorful, hand-drawn cards and book covers displayed on a wall. The cards feature various themes such as "Rain clouds don't cry", "Love", "Wonderful", "Laugh more, love more, live more", and "Smile". Some cards are attached to black hangers, while others are pinned directly to the wall.

The brand's intention is to engage and spark a conversation between its followers.

Action 1

3. “Another scale”: From permanent stores to small pop-up stores

3.2 Uniqlo, New York, USA



The typical shelving from Uniqlo is also visible from the exterior.



Inside the container, products can be purchased and tested.

101



The pop-up container can be moved and placed on different events.

In order to introduce the Japan-based retailer Uniqlo to the United States, LOT-EK repurposed two containers designed as fully equipped, branded pop-up stores. Each container is fitted with shelving space, cash-wrap and dressing room. The containers could be placed in different city neighborhoods in New York, being able to adapt for special events and occasions. Functioning both as retail space and mobile advertising, the interior and exterior design resembles the classic Uniqlo shelving, expressing the products on the façade as a communication device.

The container performs as a sales point, experience center and communication device.



Images courtesy of LOT-EK Architects.

Action 1

3. “Another scale”: From permanent stores to small pop-up stores

3.3 Fast Food Aid, Tokyo, Japan



The interior of the Fast Food Aid store resembles a medical facility.



Advisors provide vitamin supplements according to each customer's nutrition habits.

Fast Food Aid opened in 2016 as a concept pop-up store but sold no products. People would receive free vitamins and nutritional advice in exchange for their fast food tickets in order to supplement and improve their eating habits. The fictional store was part of an advertising campaign for the Japanese restaurant Dohtonbori, promoting healthy and conscious nutrition and received many advertising awards.



A vitamin diet is recommended to each customer.

Image courtesy of Dohtonbori Co. Ltd.

Action 1

4. “Gastronomification”: From mono-functional places to hybrid hubs

When visiting a shopping mall, it is not surprising to find food courts, cafés and restaurants. For decades, landlords and mall managers have noticed that food and leisure encourage people and families to spend more time in a shopping center and buy more. The recent rise of the experience economy has propelled this trend, leading to the growth of food and beverage (F&B) services within retail real estate. JLL estimates that, in the UK, Canada and the US, the amount of space dedicated to F&B will reach up to 20% or more of total retail space by 2025.

In light of this trend, the question is whether such hybrid hubs of retail and food may work outside the air-conditioned envelope of a shopping malls and contribute to attract visitors to urban centers. As Vincent Healy, Acquisitions Director at Busaba Eathai, commented: “The main difference between trading in a shopping center and a non-shopping center location is that there is a captive market in a shopping center, so performance is more predictable. You know if you served 20,000 covers this year you are guaranteed 21,000 next year. The opening hours are also different and the customer mindset is affected by the fact that they have been shopping already, they are in the mood to spend money and they want to be rewarded and refreshed.” [24].

The “gastronomification” of stores may be implemented at a small scale, e.g. a café in a bookstore, or at a large scale, like the example of Lau Pa Sat in Singapore: an urban food court located at the intersection of the business center, housing units and shopping streets.

[24] JLL, ICSC. (2017, April 19). The Successful Integration of Food & Beverage Within Retail Real Estate. Retrieved from https://www.icsc.org/uploads/research/general/Food__Beverage_Study_US.pdf

Opportunities

- Food and beverage services are associated with customers spending more time in shopping centers (attracting more customers, thus driving up sales).
- The presence of cafés and restaurants disrupts the mono-functional shopping street, while creating opportunities to do something after normal working hours, thus contributing to the development of the “24/7 city”.

Barriers

- Food and beverage offers must be personalized according to the customer base of retailers. A generic offer of chain coffeehouses or bakeries might make the street unattractive.
- Best practices of food and beverage integration into real estate are mostly focused on large shopping centers, not shopping streets.

Action 1

4. “Gastronomification”: From mono-functional places to hybrid hubs

4.1 Eataly, Milan, Italy



Central court at Eataly Stockholm. (Ph. Annika Berglund)



Traditional decoration in a modern retail space at Eataly Bari. (Ph. Claudia Del Bianco)



Retail space and gourmet food preparation coexist at Eataly Bologna. (Ph. Claudia Del Bianco)

Eataly is a high-end chain of grocery stores offering traditional grocery shopping, restaurant and café functions and leisure events, e.g. concerts and food-related seminars. Stores are located in central areas and feature an open internal layout with mixed functions, so that the tables of the restaurant are adjacent to the food shelves.



The open space at Eataly Munich. (Ph. Tommy Losch)

Images courtesy of Eataly – www.eataly.com

Action 1

4. “Gastronomification”: From mono-functional places to hybrid hubs

4.2 Lau Pa Sat, Singapore



Lau Pa Sat amidst the skyscrapers of Singapore.

Interior view of Lau Pa Sat.



Built in the 19th century, the market is one of the oldest buildings in Singapore, located at the heart of the financial district. Its program changed from wet market to hawker center and finally to a massive food court hosting 200 stalls and ready to cater for 2,000 visitors. In the evenings, a street food market opens in its surroundings, adding even more seating capacity and food variety.



Below the brick roof, people buy and consume food.
(Ph. Gurmit Singh)



Lau Pa Sat at night is a thriving social gathering place. (Ph. Dion Hinchcliffe)

Action 1

4. “Gastronomification”: From mono-functional places to hybrid hubs

4.3 H&M – It’s Pleat, UK



Cafés attract the public and engage customers.

‘It’s Pleat’ combines natural products and natural decoration.





Decoration items are also available in the home sections.

As an addition to their affordable fashion and homeware stores, H&M included a café where customers can have healthy breakfasts, lunches and treats while they shop. The menu focuses on healthy, fair trade and locally sourced food, using decomposable packaging and compostable materials. Combining natural products and natural decoration, the items are also available at the Home sections of the store, offering the possibility of experiencing products before purchase as a plus.

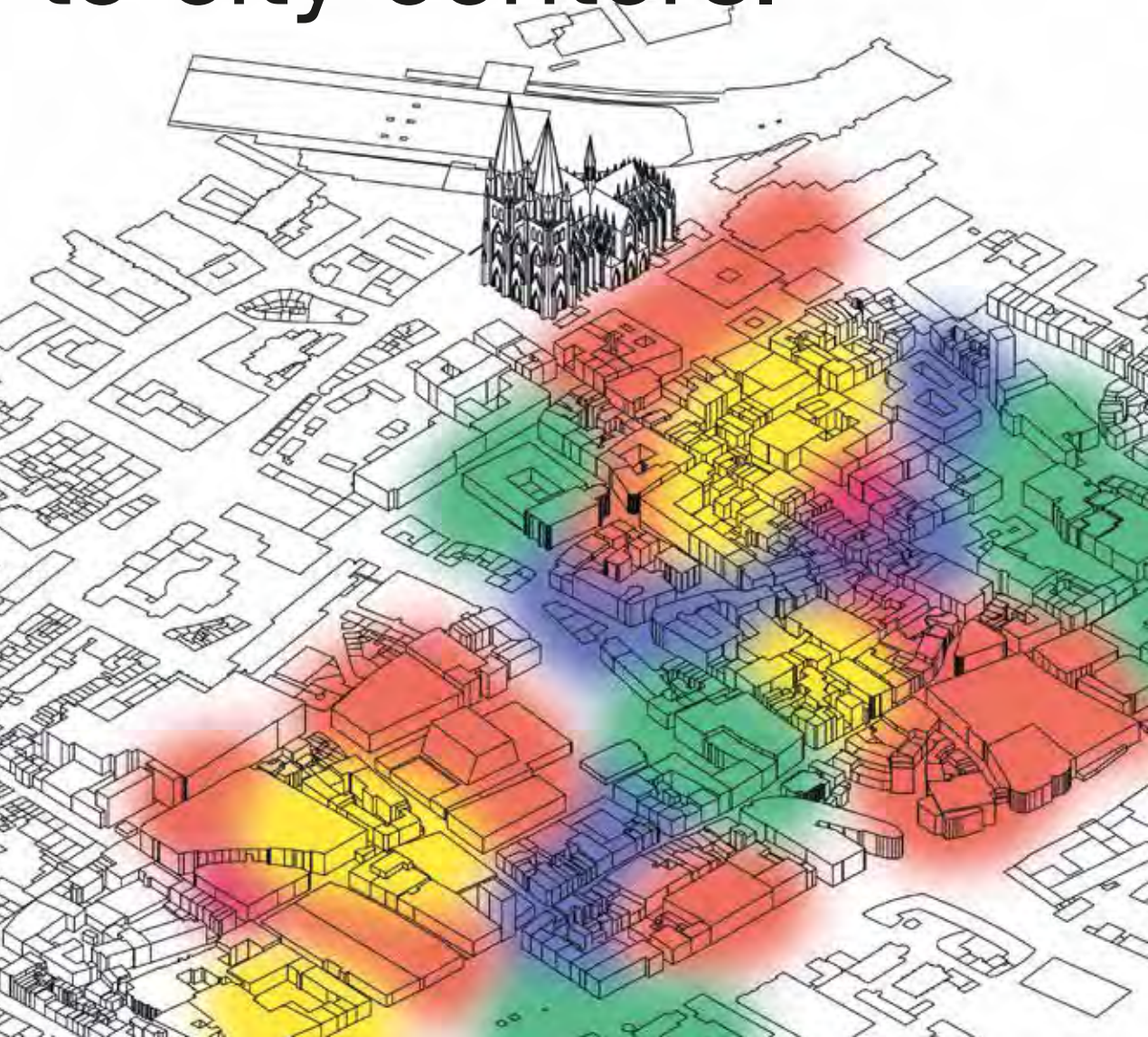


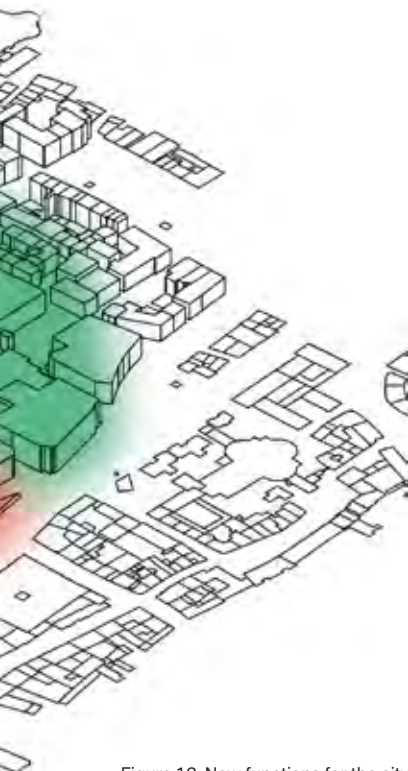
Photographies courtesy of “It’s Pleat”.

The decoration matches the company’s approach to fashion.

Action 2

Fostering a functional mix by bringing new functions to city centers.





In the future, the demand for retail space may sink dramatically. As a result, today's shopping street may be comprised of two rows of empty premises, while the large buildings that now host shopping centers and parking lots may face vacancy problems like their suburban counterparts in the US. An urban center with less storefronts may sound worrying since retail has historically been a key urban activity and is still a major catalyzer for urban economies. However, current retail space may be re-purposed to host a different range of functions, including

1. food production,
2. new forms of housing,
3. manufacturing and creative businesses,
4. art and leisure and
5. energy production.

The dream of the acolytes of Jane Jacobs was a mixed-use city to foster human interaction, safety and liveliness associated with the pre-industrial era. Perhaps, the city center of the future will incorporate this principle not only at the city level, but at the building scale as well. The post-retail city may be comprised of hybrid places: café-workshops, housing on top of retail galleries, grocery stores located on the ground floor of urban farming blocks, micro apartments on top of art workshops clustered around a shared inner courtyard. Thanks to technological and logistics advancements, different functions may take place in the same space at different times of the day or of the season, thus providing liveliness 24/7. For this to happen, not only new activities but also new social actors need to be lured into the city centers.

Figure 13. New functions for the city of the future and case studies investigated.

Action 2

1. Food production in the city: urban farming, vertical farming and green rooftops

Urban agriculture is the growing of food within and around cities made possible by integrating ecological systems into the urban fabric. Depending on the scale, location and degree of integration with other economic systems, urban agriculture can take different forms.

For example, urban gardening involves citizen associations who produce small quantities of organic food without a profit goal. These programs are often initiated to strength community ties, rehabilitate members of society and promote food education for children and adults. Other forms of urban farming, such as vertical farming, are meant to produce higher quantities of food to be sold in local or regional markets. Unlike urban gardeners, urban farmers invest in technology, chemical products, real estate and logistics to maximize productivity. In recent years, the urban agriculture scene has grown and diversified, embracing principles of social inclusion, education and sustainability. With people becoming more aware of the quality and origin of food and thanks to the growth of the experience economy, urban agriculture (in all its forms) seems to hold a great potential for cities.

Opportunities

- Increase of employment opportunities for low-skilled workers.
- Provision of a framework for social integration, especially for disadvantaged groups.
- Urban agriculture can take place both in vertical and horizontal spaces.
- (In certain neighborhoods of certain cities:) Reduction of the “food desert” phenomenon.

Barriers

- Current technology does not always make urban agriculture profitable.
- Air pollution may hinder urban agriculture development.
- Low yields compared to traditional agriculture.

Action 2

1. Food production in the city: urban farming, vertical farming and green rooftops

1.1 Pasona HQ, Tokyo, Japan



Exterior view of the Pasona HQ. (Ph. Toshimichi Sakaki)

Hydroponic tomatoes hanging over the conference room.





Casual meeting space. (Ph. Luca Vignelli)



Pasona employees harvesting rice in the hall.

The headquarters building of the HR company Pasona was renovated in 2010. The company worked with the architecture office Kono Design to create a green office where employers can grow and harvest their own food at work. Inside the building, there are almost 4,000 square meters dedicated to green space, plants, fruits, vegetables and rice.

Action 2

1. Food production in the city: urban farming, vertical farming and green rooftops 1.2 Dakakker, Rotterdam, Netherlands



Urban farming amidst glass office buildings.



People cultivating herbs and vegetables.



The rooftop hosts a small cafe.



The building with the Dakakker rooftop farm.

Dakakker was Rotterdam's first rooftop farm. Located atop of an unused building in the city center, the project was part of the 5th Rotterdam Biennale. The farm produces vegetables, herbs and honey (in a small apiculture area) which are sold to local restaurants.

Action 2

1. Food production in the city: urban farming, vertical farming and green rooftops

1.3 Lufa Farms, Montreal, Canada



Employer of Lufa Farms preparing food baskets.



Aerial view of one a Lufa Farm facility in Montreal (Canada).



Interior of a rooftop greenhouse.



Employer taking care of vegetables at the indoor facilities.

Lufa Farms is an agriculture and technology company specializing in solutions to grow vegetables, fruits, herbs and spices in urban greenhouse structures. Besides producing food, Lufa Farms sells its produce to locals through a system of online ordering, customizable baskets and home delivery.

Action 2

2. New forms of living in the city: micro-apartments and co-housing

Since the beginning of the 21st century, people have been attracted to go back to city centers. This trend represents an inversion to the 20th century's escape to the suburbs for its green qualities and its quietness. One of the main reasons attracting people to city centers is the proximity of jobs and other amenities to enjoy during one's free time, including shopping, cafés, access to culture and other leisure activities.

Urban transportation is a key feature of this trend; instead of relying on cars, residents simply walk or bike to their workplace or to meet friends. In fact, many young people living in cities do not even own a car. As a result of the surge of demand for centrally located flats, cities are facing pressure to develop more housing in central areas, where land is scarce and expensive. Unlike suburbans or peri-urban homes, central housing units should be planned to cater to students, young professionals, or single-person households who may not need (or cannot afford) large living spaces.

These demographic groups are attracted to amenities and services and are willing to share living space, especially if sharing means to have more for less money. These considerations may explain the surge of new housing typologies, such as micro apartments and co-housing building complexes.

The lack of vacant space in the urban fabric of city centers has encouraged developers and architects to seek for alternatives to traditional housing or commercial solutions, including the re-purpose of old buildings, e.g. urban malls and office towers.

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Opportunities

- Living in city centers reduces the need for private cars and encourages sustainable mobility, including walking and using bikes.
- Cheaper and more convenient alternative to traditional housing, particularly for short-or medium-term leases.
- Proximity to services and leisure activities.
- Catering to the lifestyle of younger generations and to the financial situation of young professionals.
- May spur regeneration of public space by attracting a wider public to under-used infrastructure.

Barriers

- Space availability and other constraints (e.g. existing building stock to be repurposed) may provide for a limitation in the housing offer.
- May not be suitable for all demographic groups, especially families and elderly people: risk of social homogenization.
- Requires quality public space in order to complement the minimum private areas.
- Strategy may be hampered if the city does not activate programs to regenerate its public space.
- Long-term feasibility is still to be tested.

Action 2

2. New forms of living in the city: micro-apartments and co-housing

2.1 The Collective, London, UK



Communal kitchen for shared meals.



Co-working spaces are also available.



Health facilities are included in the leasing contract.

The Collective created a series of co-living spaces in London. The tenants live in carefully designed private rooms and share amenities like kitchens, cinema, or terraces together with other members. The company focuses on community living, shared activities and the convenience of a central location. They also have a dedicated app for members providing updates on administration, events and group activities at their locations.



A private living space.

Action 2

2. New forms of living in the city: micro-apartments and co-housing

2.2 Kalkbreite, Zurich, Switzerland



View of the inner yard. The roof is accessible.



Exterior view of the Kalkbreite.



Communal spaces include reading rooms and childcare.



Communal living room and café.

The project of the Kalkbreite building complex in Zurich was developed by a citizen initiative. The courtyard building integrates co-housing units, shared spaces (e.g. a community library), hostel functions and service space. Residential units consists of clusters of 8–10 studios sharing large common rooms. All functions are arranged around a common inner yard, a raised podium that can be accessed by the public via a grand staircase.

Action 2

2. New forms of living in the city: micro-apartments and co-housing

2.3 WeLive, New York, USA



Communal spaces at WeLive Crystal City.



Shared kitchen at WeLive Wall Street.



Private apartment of WeLive Wall Street.



Even laundry rooms are designed as meeting places.

WeLive is a company that offers people – mostly young professionals – an alternative form of living to the classic apartment rental. Their flats are small but come fully furnished (including bed sheets and towels) and with luxury common areas, such as cocktail bars, game rooms and terraces. Every aspect of the shared life is administered via an app, such as housekeeping and the organization of events in order to foster a community spirit.

Action 2

3. Working in the city center: co-working, hybrid spaces and urban manufacturing

For centuries, European cities were places of production and manufacturing. But in the last fifty years of technological and economic change, production and manufacturing activities have moved overseas, while cities have specialized in the service sector and knowledge economy.

In recent years, new and more discrete technologies have enabled manufacturing to come back to European cities. The new manufacturing sector, also known as “Industry 4.0”, relies on clean, knowledge-intensive processes enabled by the emergence of informatics, robotics and 3D printing, as well as shifting consumer awareness towards sustainable supply chains and a green economy. While traditional industrialization processes needed a lot of space, often on the outskirts of densely populated areas, the new re-industrialization processes are likely to invest in urban centers equipped with the right physical and digital infrastructure. The new artisans are educated “doers” operating across sectors, e.g. furniture, food and beverages, design and fashion, etc. They seek a high quality of life and the amenities of urban centers.

Besides designers and doers, the digital revolutions has spurred a new generation of entrepreneurs and creative professionals who work as freelancers and seek flexible office spaces.

Opportunities

- Urban manufacturing may bring back an artisan culture and increase urban employment.
- Alternative to the “consumption city”.
- Hybrid spaces may host non-manufacturing activities, such as yoga classes and events.
- Smart technologies can be combined with other activities such as education, culture and retail under the same roof.

Barriers

- Agglomeration economies: cities will compete to attract new entrepreneurs and artisans. Comprehensive policies must complement urban transformations.
- Strong competition from similar mass-produced goods may drive small manufacturers out of businesses.
- Relatively small scale, most likely to require institutional support to grow.
- Often oriented to luxury or ‘designer’ products, small batches and limited editions.

Action 2

3. Working in the city center: co-working, hybrid spaces and urban manufacturing

3.1 Hamilton House, Bristol, UK



Community kitchen. (Ph. Bristol Evilemberger)



Facade and entrance of the Hamilton House.



Artist studio at the Hamilton House. (Ph. Abigail Osborne)



Dance class in one of the multifunctional rooms at Hamilton House. (Ph. Gregory Bond)

Hamilton House hosts a thriving community of artists and workers in the center of Bristol (UK). The building was formerly providing office space but, since 2008, it is used as a community house under the management of the “Coexist” group. Inside Hamilton House, there are artist’s studios, yoga classes, workshops for startups and young entrepreneurs and a canteen. Besides daily functions, Hamilton House hosts a variety of events and concerts.

Action 2

3. Working in the city center: co-working, hybrid spaces and urban manufacturing

3.2 WeWork, Berlin, Frankfurt, Germany



Shared room at WeWork Tower Berlin.



Pantry at WeWork Kudamm Berlin.



Interior of WeWork Neue Rothofstraße Frankfurt.



The typical relaxed atmosphere of co-working spaces.

WeWork is one of the world's main provider of co-working spaces. Their strategy is based on repurposing existing buildings located in "Class B" areas, i.e. side streets in central areas. Customers can rent a variety of office spaces, including individual desks, shared spaces, or multi-person office rooms, while enjoying extra services like coffee, internet and branding consultancy.

Action 2

3. Working in the city center: co-working, hybrid spaces and urban manufacturing

3.3 RDM Makerspace, Rotterdam, Netherlands



RDM combines workshops and social spaces.



Interior of the Makerspace.



The building accommodating the RDM Makerspace is located in the dock area of Rotterdam.

RDM Makerspace is a space equipped with a variety of machines, 3D printers, laser cutters, etc. Located in the Innovation Dock in Rotterdam, the space attracts young “makers” and people who seek experience in the field of manufacturing (with woods, metals, or digital manufacturing). In addition to machinery, the space is managed by a team who offers training and classes to help startups and artisans to kickstart their enterprise.



Some of the machines offered by the Makerspace.

Action 2

4. Cultural and creative activities in the city center

In addition to the Industry 4.0 and the service sector, cities and their inhabitants may benefit from creative industries and the presence of art districts for their vibrancy and experimental character. Likewise, creative industries and artists benefit from compact, urban agglomerations, as reported by a study of the University of Toronto (Spencer 2012). Unlike suburban science-based firms and tech companies, creative neighborhoods tend to develop in dense urban areas rich in social interaction, cafés and events.

Indeed, creative workers need less space than tech firms, they are more likely to live in or near their place of work and move with “slow” modes of transportation, e.g. walking or biking.

To sum it up, city centers – with their mix of functions, leisure and dense social networks – are optimal places for creative districts to emerge. A caveat: empirical evidence suggests that certain buildings (and their function) can catalyze the development of creative neighborhoods, i.e. attract creative people who establish their own studio. Among such buildings are art colleges, music schools, museums and theaters, private galleries, etc.

Opportunities

- Creative spaces can be intertwined with other functions, e.g. artist's studio-housing, small retailers.
- Cities with creative neighborhoods are often perceived as dynamic and interesting. In some cases, e.g. Berlin (Germany) and Portland (OR, USA), they attract an art- and event-driven tourism.

Barriers

- Unlike other strategies, the development of a creative district can only be implemented at the district scale.
- The development of a creative district can only be encouraged, not planned.
- The absence of an art, music, or design college may hinder the implementation of this strategy.
- The absence of strong artistic or cultural traditions in a city/region may hinder the implementation of this strategy.
- As a consequence, the pursue of this strategy is risky and requires long-term investments.

Action 2

4. Cultural and creative activities in the city center

4.1 Holzmarkt, Berlin, Germany



The fringe of the Holzmarkt and the woden canopy.

A view of the Holzmarkt from the river Spree.





Common areas of the Holzmarkt overlooking the river Spree.



Aerial view of the common areas at the Holzmarkt.

The Holzmarkt in Berlin is a prime example of community-led urban regeneration dedicated to art and music. The project involves an area of 12,000m² located along the Spree river in Berlin (Germany) and – over the years – has developed into a creative hub for DJs, artists, artisans and founders of startups (the area includes co-working spaces). The project is still ongoing and may soon provide some co-housing facilities, as well as a student residence.

Action 2

4. Cultural and creative activities in the city center

4.2 Poblenou, Barcelona, Spain



A busy street from Poblenou. (Ph. Francisco Cornellana Castells)



High-rise buildings at the borders of the neighborhood.



Hort Indignat, a communal garden. (Ph. Jorge Fraganillo)



'Poblenou, I love you'

Poblenou, or the 'new village', is Barcelona's new creative district built within a late 19th-century industrial district.

The district has developed for 20 years, when an artist collectives occupied abandoned factories. Although the district presents empty premises, the neighborhood is now undergoing a process of re-generation involving the conversion of warehouses into open-plan homes, galleries, coworking spaces and architect's studios.

Action 2

4. Cultural and creative activities in the city center

4.3 Metelkova, Ljubljana, Slovenia



Typical graffiti decoration on facade. (Ph. Marika Bortolami)



Common areas and public graffiti. (Ph. Marika Bortolami)



Metelkova building. (Ph. Michael Perry)

Located in the proximity of the main train station, Metelkova is the creative district of Ljubljana, Slovenia. Originally a military barracks, the place was abandoned in 1991, then occupied by squatters and – gradually – became an inextricable part of the Slovenian capital. At night, Metelkova attracts large numbers of music enthusiasts, keeping the city alive and thriving.

In 2006, the municipality declared Metelkova a national cultural heritage site.



Public space at Metelkova. (Ph. Marika Bortolami)

Action 2

5. Energy production

A key concept in future cities will be smart technologies; that means smart communication, smart transportation and smart energy use. However sometimes the city has also the potential not only to efficiently manage its consumption but also to produce and distribute energy.

In the context of this report, the importance of energy production in the city relies not only in the direct benefit that consuming less resources implies but also on the new activities and programmatic possibilities that these applications may foster. Traditional utility grids for electricity, water or heating are citywide infrastructures that connect producers with consumers. Current smart technologies challenge this paradigm at least partially, allowing for example to collect solar energy from rooftops and windows, use a certain amount of it and then sell the rest locally or even to the city grid.

The question is then, how can cities produce the energy resources they consume? Apart from solar or wind generators there are even more alternatives to power our environment by harnessing, for example, human movement or automobile traffic.

Most importantly, the relevant question here is to predict how these smart generation and distribution technologies will alter the urban realm, how these infrastructures will affect our cities and what will be the consequences for us, the citizens, once they unlock their potential.

Opportunities

- Efficient and clean energy production and consumption will reduce pollution levels.
- The city has large available surfaces (rooftops, facades) that can be harnessed for these activities.

Barriers

- Some technologies like solar panels may not be suitable for all cities worldwide.
- These local infrastructures often require public and private investment, on top of maintenance costs.

Action 2

5. Energy production

5.1 CityNOW, Denver, USA



Panasonic's smart city technologies in Denver.



Aerial view of the CityNOW proposal.



A view of the Peña Station at CityNOW Denver.

CityNOW is a carbon-neutral smart district initiative by Panasonic. It incorporates numerous energy innovations like solar microgrids and power generating canopies spanning parking lots and train stations. The district is labeled as a 'living lab' and a showcase for smart city services, meaning that public-private partnerships can test smart technology solutions and evaluate results.

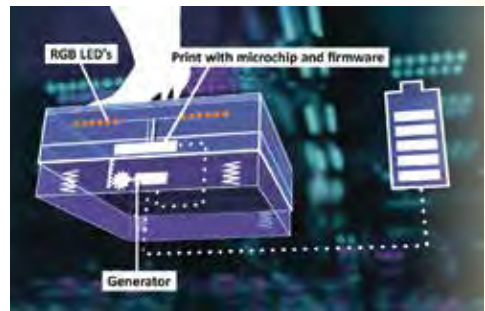


The canopies of Peña Station will generate solar energy.

Action 2

5. Energy production

5.2 Energy Floors, Rotterdam, Netherlands



The Dancer technology.

The Dancer generates power from human movement.





The Walker in action.



The Smart Energy Floor can be used to display information.

Energy Floors is an European company that manufactures floor systems which generate energy either from movement (Dancer) or solar power (Gamer & Walker). The Dancer directly converts human movement into electricity which powers the floor's LED lights.

The Gamer and the Walker are smart energy floors that are equipped with programmed LED lights and walkable solar panels which feed energy into to the local power grid.

Action 2

5. Energy production

5.3 Brooklyn Microgrid, New York, USA



Solar panels on the Brooklyn rooftop.



Energy distribution is managed via an app.



Energy production on top of private buildings.

Brooklyn Microgrid is an initiative that connects local energy producers and consumers. The participants can connect to a sustainable energy network and choose their preferred energy sources, within the community. For example, when the sunlight conditions change, one side of the street can sell excess energy to the other side.

These types of Microgrid projects improve the network's efficiency by managing energy resources locally.

Action 3

Improve accessibility and the public realm

Acting on the functional level of cities alone is not sufficient to ensure an attractive and lively city. In fact, it is likely that, in a future where human activities are no longer bound to traditional physical constraints, the quality of the public space, the urban character of a street or square and their overall accessibility will play a crucial role in determining whether people will shop at home, visit a shopping mall, or enjoy an afternoon in a city center. Surveys indicate that people are still associating the act of purchasing with the enjoyment of a “shopping day in the city center”, thus expressing the human need for urban experiences [5; 25].

Hence, besides retaining retail activity and establishing new functions in city centers, it is fundamental to improve the quality of the urban environment through new modes to access city centers, reduce traffic and pollution and strengthen the character, landmarks and history of urban centers.

1. Fleet of P2P on-Demand self-driving cars

2. Free public transport

3. Multimodal transport system

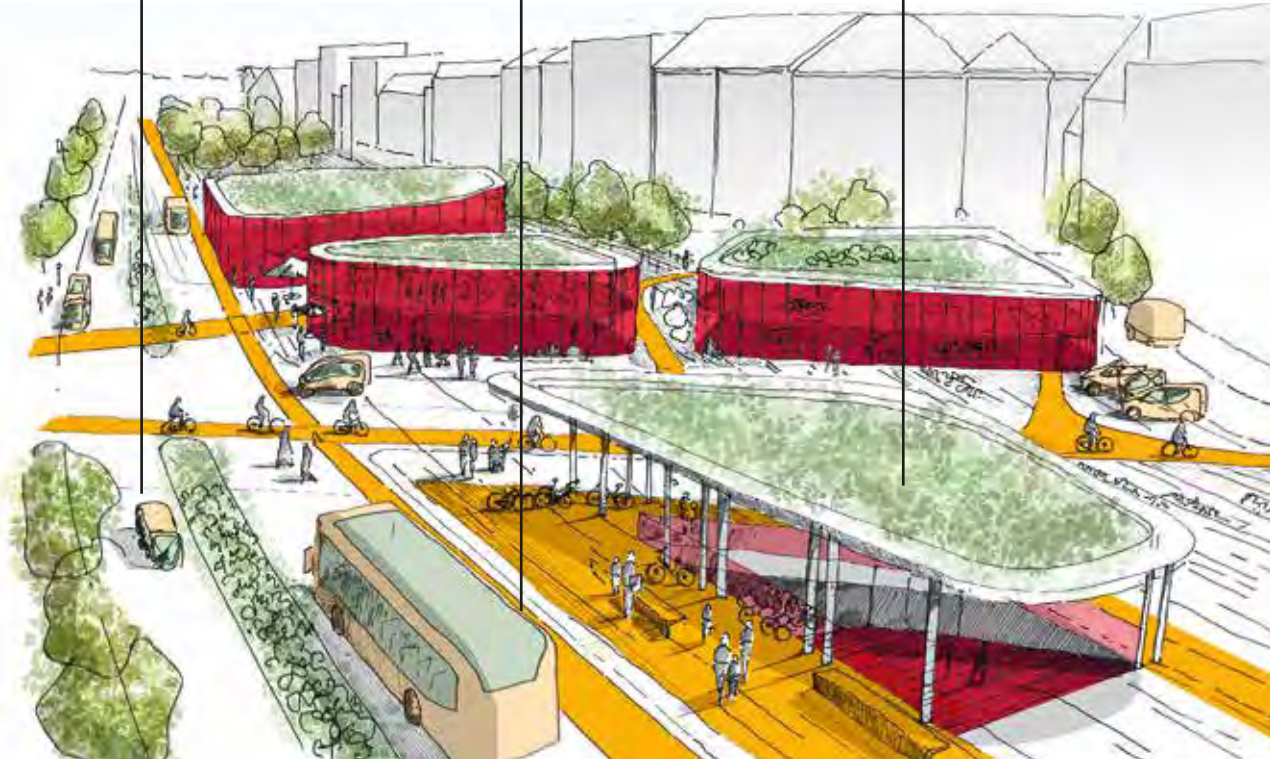


Figure 14. Future mobility concepts.
Image source: <https://www.daimler.com>

Action 3

1. Fleet of P2P on-demand self-driving cars

The car industry is undergoing deep transformations pushed by technological innovation, market forces and the growing awareness – and adoption – of the sharing economy. Three trends, in particular, are poised to transform the way people make journeys:

1. the surge of electric vehicles (EVs),
2. the improvement of self-driving cars and
3. the development of vehicle sharing platforms.

While each trend will have profound impacts on mobility, making journeys more sustainable and more comfortable, it is the combination of the three that will cause a paradigm shift.

When properly integrated into a functioning system, private self-driving vehicles (a growing number of which will be electric) will be part of a network where a demand-supply algorithm will determine the optimal journey of a car, i.e. minimize movements while picking up and dropping off passengers. In this scenario, car owners can use their vehicles when they need it and allow their vehicles to be part of the network when they don't (e.g. at night or when they are at work). With a functioning micropayment system, car owners would earn a percentage each mile their car travels with a passenger. As a consequence, the need for parking space would be reduced, as most cars would be in movement for most of the time (or else, they would autonomously drive back home). A caveat: unlike many strategies discussed in this research, this action requires further technological and logistical development before it becomes reality. Nevertheless, several companies are already investing resources towards the creation of peer-to-peer car sharing platforms as described on the next pages.

Opportunities

- Reduced need for parking space.
- Improved accessibility, especially in areas not well covered by public transport.
- Can be implemented even if city centers are designated as “car-free” (by deploying drop-off points in key areas).

Barriers

- The strategy requires coordination between the private and public sectors.
- Compliance: a reliable fleet requires enough vehicles to become a stable transport medium.
- Organizational risks (Should the platform managing the system be public or private? Should there be more than one platform? How much would the service cost?).
- According to certain studies, this strategy would increase traffic and – in case the fleet is not electric – air pollution.
- Uncertainty effects on public transportation.

Action 3

1. Fleet of P2P on-demand self-driving cars

1.1 Drivy, EU-based platform

Drivy is a peer-to-peer car sharing marketplace where private car owners can rent out their vehicle via an online interface through smartphone or web. By mid-2018, the platform recorded five million users and 50,000 privately owned cars.



The new Drivy website.



The cars are unlocked via the app without any human interaction.



Thanks to convenience and price, sharing platforms are becoming very popular.



Drivy has expanded in main European cities since its foundation in 2010.

Action 3

1. Fleet of P2P on-demand self-driving cars

1.2 Getaround, US-based platform

Getaround is an online peer-to-peer car sharing service that allows drivers to rent private cars for short timeframes. Unlike Turo, the Getaround rental system does not require owner and renter to meet to exchange the key, as everything is managed via a mobile app and a proprietary electronic device installed in all cars (called Getaround Connect). Recently, Getaround has established key partnerships with Uber to expand the kind and quality of its service.





High-end cars like Tesla are available on the platform.



Cars can be rented for hours, days, or weeks.



Several models and sizes are available for short-term use.

Action 3

2. Free public transport

Amid the current debate on climate change, reducing carbon emissions is becoming a priority for many cities worldwide. With its ambitious targets for 2020, the European Union is championing climate actions aimed at reaching a sustainable development. Mobility experts seems to agree that, to achieve the 2020 goals, public transport should become the preferred transport mode when walking or biking is not a viable alternative.

Transport availability and, most importantly, its cost are key features in the future development of inner cities. The possibility of accessing comfortable and convenient public transport is a major factor in the success of revitalization processes; means of public transport serve a wide range of ages and social classes, bringing them closer to urban areas and its benefits.

These initiatives are undoubtedly relevant and their influence on the urban realm is yet to be confirmed, as many experts claim that the negative effects exceed the positive ones.

The two case studies analyzed include medium-sized cities. Further information and case studies can be found on the website: www.freepublictransport.info

Opportunities

- Virtually every time free transport schemes are implemented, cities register an increase of people using the service.
- Reduction of the environmental footprint of people and greenhouse gases emissions.
- May support touristic activity of a city.

Barriers

- Urban financing: if users don't pay for a ticket, money should come from other sources, i.e. taxes and cuts to other public programs.
- Pressure on the public transport infrastructure: as more people use the service, the service quality tends to decrease.
- In some cases, the adoption of free public transport has been accompanied by an increase in private car traffic.
- Some studies show that free transport replaces walking and cycling on short distances, which is contrary to the purpose of a clean medium.
- Current pilot projects are limited to small & medium-sized cities. It's unclear whether such schemes may work in large urban areas.
- Boarding & getting off buses needs to be replanned, e.g. via mobile apps.

Action 3

2. Free public transport

2.1 Tallinn, Estonia

Tallinn introduced free public transport in 2013. The service, which is provided to registered residents, yields a profit of around 20 million euros every year and is loved by citizens (a 2014 poll indicates a 90% approval rate for the scheme). Yet, the increasing number of public transport users is adding pressure to the urban infrastructure, to the point where car journeys had gone up 31%. In other words, the number of cars on the road has increased, not decreased.



One of the green buses in Tallinn.



The green card provides access to free transport.



Promotion of the public transport initiative.



Trolley buses are also part of the free transport initiative.

Action 3

2. Free public transport

2.2 Dunkirk, France

The post-industrial city of Dunkirk has tested a free public transport scheme since 2014. Initially, people could ride buses for free only on the weekends. Since 2018, the scheme operates all days of the week. Besides a positive impact on the environment, this initiative offers a reliable means of transportation for the aging population and it enables poor residents to save some money.



Buses are an essential part of the free transport scheme.



100% free bus service, 7 days a week.



Free bus service on the weekend.



Some buses are free on weekends and holidays.

Action 3

3. Multimodal transport system

Multimodal transportation involves using two or more transport modes to move from point A to point B. Using a shared bike, then the tram and then walk the last mile to reach the workplace is an example scenario of multimodal transportation. As society is facing environmental problems, including air pollution and car traffic, multimodal transportation is often regarded as a sustainable alternative to the car for routine journeys. This mode of transportation relies on the combination of a smaller number of fast transportation systems, e.g. trains and metro, with a larger number of slower modes of transportation, e.g. bike sharing, buses, pedestrian streets. Besides environmental reasons, the adoption of multimodal transport system seems to be aligned with millennials' mindset of “accessibility” over “ownership”. International statistics reveal a decline in car ownership and car usage especially among younger generations.

The establishment of an efficient multimodal transport system requires either the integration of multiple services within a unique ecosystem, e.g. the BeMobility project or the coordination of services provided by different organizations via the use of digital technology and mobile applications (see also Arthur D. Little's business model archetypes for multimodal transport systems).

BeMobility was a Deutsche Bahn initiative combining a fleet of electric bikes with hybrid and electric automobiles through a sharing platform. The combination of multimodal systems, clean technologies and digital booking systems are fundamental for the future of public transport.

Opportunities

- Organization of multiple transport modalities under a common ecosystem.
- Efficient management of public and private transport.
- Most European cities are already equipped with an extensive network of public transport and young generations are already less reliant on cars than previous generations.
- Digital tools can be used to precisely analyze trends and users and plan accordingly.

Barriers

- Requires the coordination of public policies and private initiative.
- Large and complex infrastructures demand substantial public investment.
- Excessive bike or scooter sharing options can affect the appearance of streets and cities.

Action 3

3. Multimodal transport system

3.1 Transbay Center, San Francisco, USA

The Transbay Transit Center is an intermodal transit station aimed at decongesting San Francisco by providing alternative modes to reach downtown area. The station is 440 m long and 50 m wide and comprises four levels, including an elevated bus lane, retail and office space and a park on its roof. Since 2017, the project has been entering its second phase which is to extend the station with two underground levels to be served by Caltrain and California High-Speed Rail.



The center features a park on the roof.



Rendering of the gallery on the ground floor.



Cross-section of the Transbay Transit Center.

Action 3

3. Multimodal transport system

3.2 Kamppi Center, Helsinki, Finland



The interior of the center accommodates a shopping mall.

The Kamppi Center is a multifunctional complex located in the Kamppi district of the Finish capital. The project, completed in 2005, combines office and commercial functions with an integrated transport system, including a central bus terminal, long distance coach terminal, metro station and a car parking area.



The Kamppi Center is located in the heart of Helsinki.



Public spaces integrate the center into the urban fabric.



A chapel next to the entrance of the center.

3

Visions of future Cities

Forecasting the future of cities is an appealing but intricate task, particularly for places we are familiar with and specially in the midst of several technological breakthroughs. The 'vision' sketches reflect on the tense relationship between our outlook as designers, the strictly regulated urban environment in Germany and the unstoppable technological advances that are currently shaping our cities. The sketches resonate on a second tension relative to the generic status of European inner cities and the specificity of programs and architectural solutions that can be provided. Inner cities may now appear the same to one another, but this transition may hold yet another key for variation and differentiation. The citizens seek actively for unique experiences, spaces and products and cities will not escape this logic.

Case Study: Cologne

Key Points

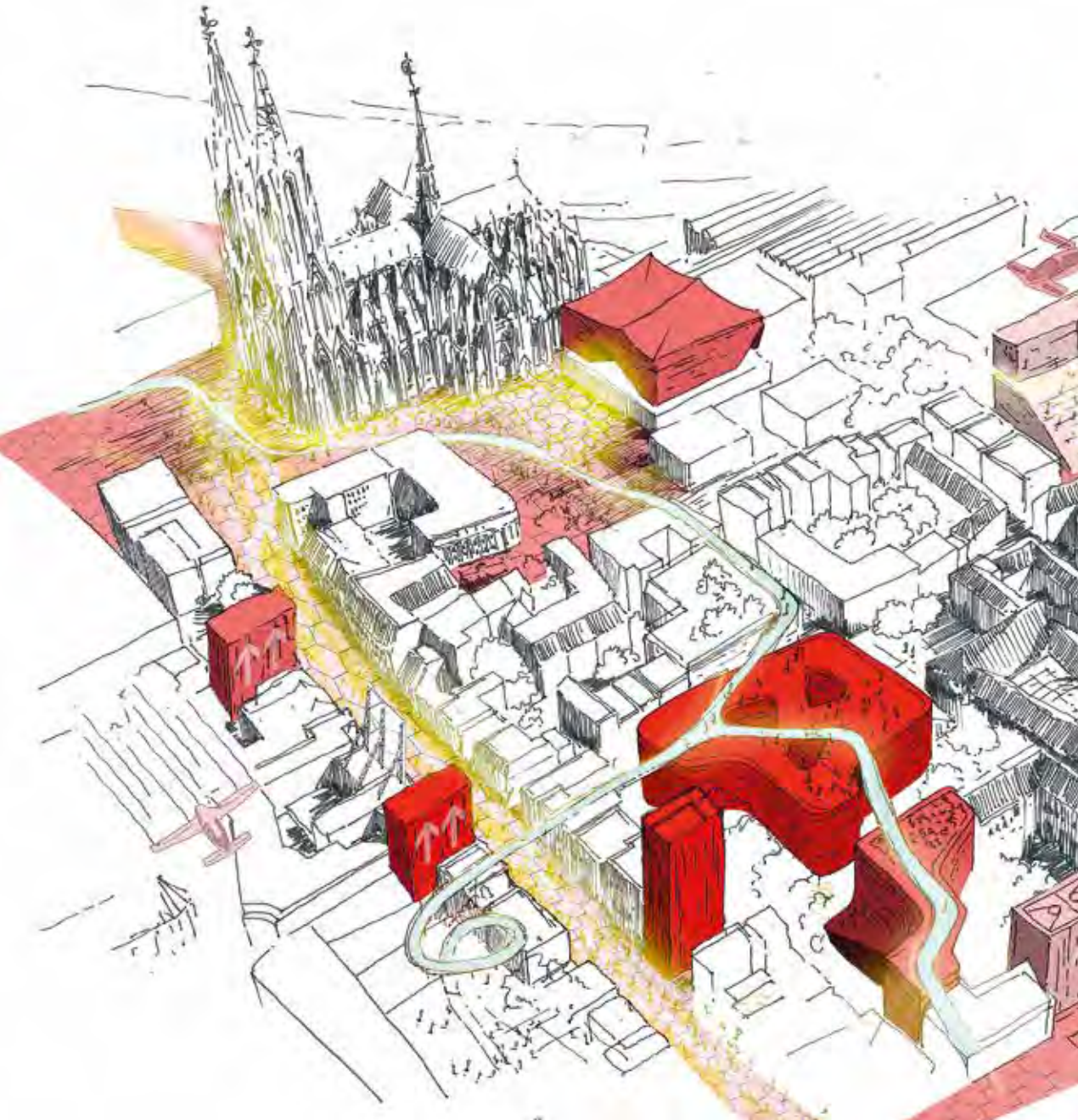
The shopping activity in Cologne is concentrated along three shopping streets & inside five shopping centers.

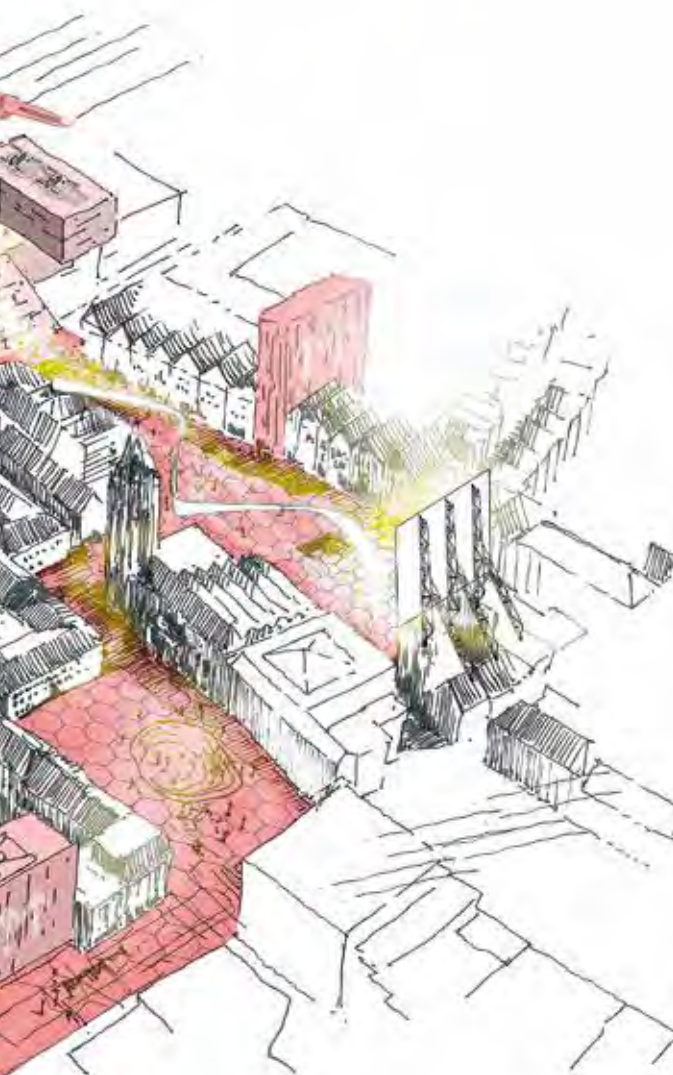
Cologne, like other large German cities, is made up of a finite number of spatial and building typologies.

Monostructures can be repurposed for other activities.

Shopping streets should become 24/7 environments.

The shopping activity in Cologne is concentrated along three shopping streets and inside five shopping centers.





From a real estate standpoint, Schildergasse, Hohe Straße and Breite Straße are designated as A1 or prime locations, i.e. the top retail places of Cologne. Indeed, with an average pedestrian frequency of 16,835 citizens per hour, Schildergasse ranks first among the top visited shopping streets in Germany. This primacy is reflected in the constantly soaring rents for retail space. In 2017, retailers had to pay 225 euros per square meter [26], a price too high for small retailers and individual shops, who are progressively moving out of downtown areas, leaving most premises to international brands and chain stores. In 2016, 87% of all stores situated along Cologne's streets in prime locations were retailers, while 13% offered food and beverages [20]. As a consequence, Schildergasse, Hohe Straße and Breite Straße create a highly monofunctional network of streets where international brands present and sell their products, but where local, specialized retailers cannot operate.



B Ehrenstraße/Breite Straße

H Hohe Straße

S Schildergasse

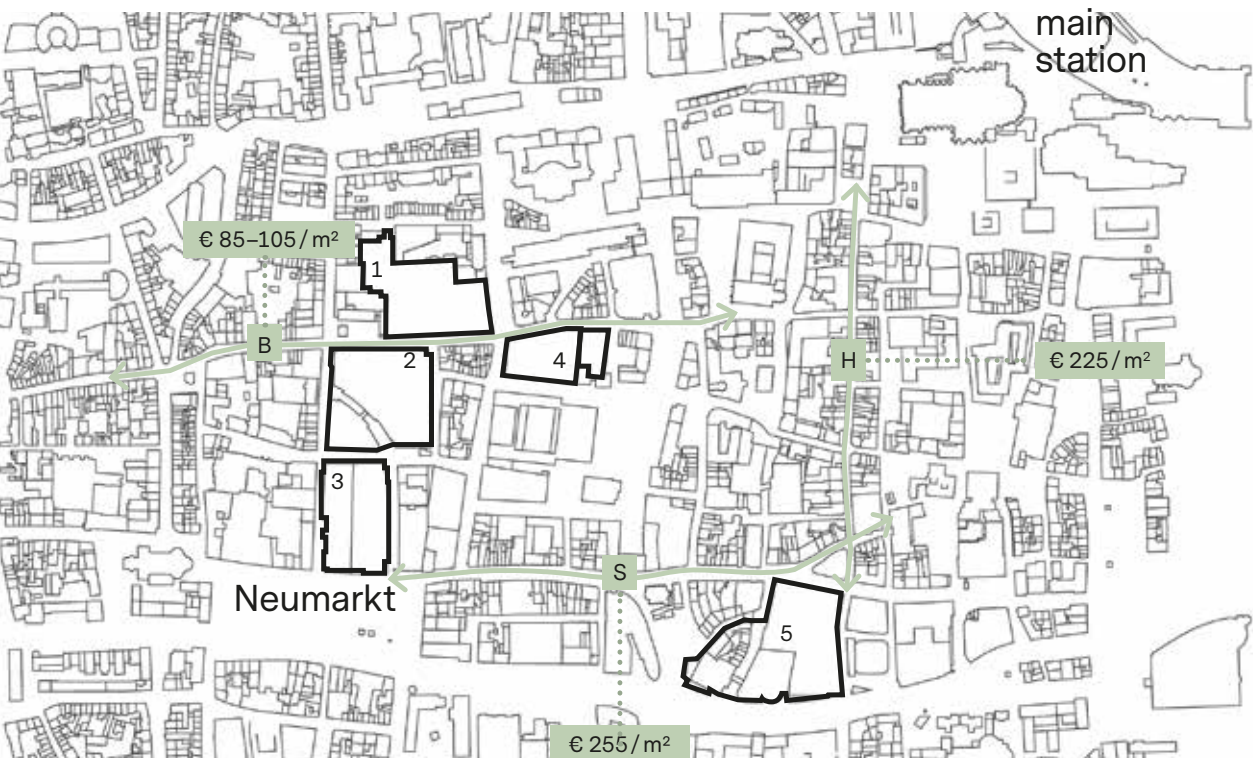


Figure 15. Map of the shopping activity in Cologne and prime rents on Breite Straße, Hohe Straße and Schildergasse.

1

2

3



DuMont Carré

Karstadt Köln

Neumarkt Galerie Köln

4



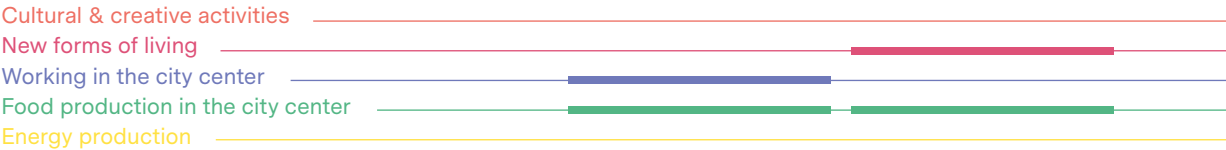
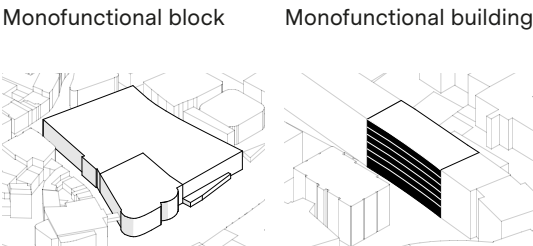
Opern Passagen

5



Galeria Kaufhof
Cologne Hohe Straße

Cologne, like other large German cities, is made up of a finite number of spatial and building typologies.



Any city center is comprised of countless buildings, each with a specific morphology, material and aesthetic qualities, relationship with its surrounding, function, history, etc.

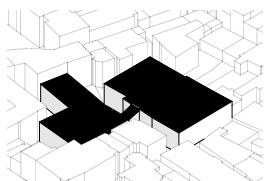
Despite such variety, it is possible to distinguish a finite and recurring number of spatial and building typologies, i.e. architectural and urban structures characterized by common attributes, such as proportions, horizontal or vertical development, position, etc. For example, all shopping centers described in the previous paragraph can be classified as “monofunctional blocks” because of their dimension, scale and lack of an internal open courtyard.

A spatial analysis of the urban fabric of Cologne reveals six recurring typologies, namely

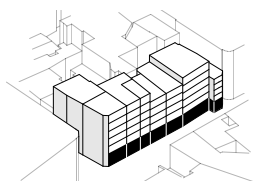
1. monofunctional block
2. ground floor
3. monofunctional building
4. urban void
5. roof parking
6. square/courtyard

The six typologies identified can be used to understand the spatial implications of the non-retail functions hypothesized in Strategy #2. The diagram can be used to understand which spatial typology may accommodate a certain function, paving the way for the development of a general vision of the downtown of the future.

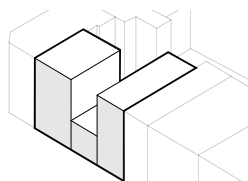
Roof parking



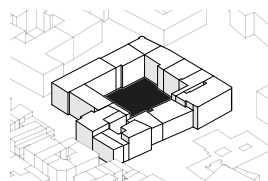
Accessible ground floor



Urban void



Courtyard

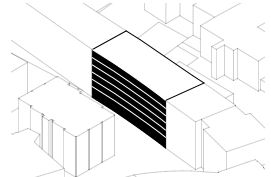
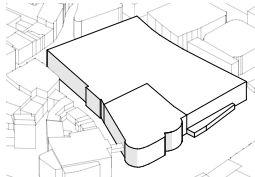




Monofunctional block



Monofunctional building





Roof parking



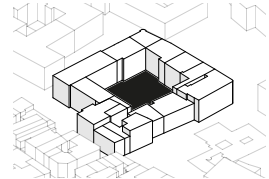
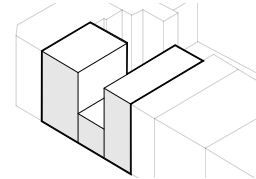
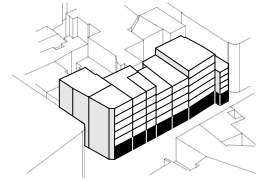
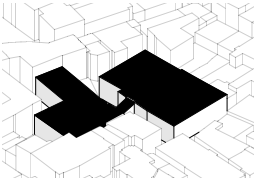
Accessible ground floor



Urban void



Courtyard



A vision for Schildergasse.

Forecasting the future of cities is an appealing but intricate task, particularly for places we are familiar with and also in the midst of several technological breakthroughs. The 'vision' sketches reflect on the tense relationship between our outlook as designers, the strictly regulated urban environment and the unstoppable technological advances.

Another tension is the one relative to the generic status of European inner cities and the specificity of programs and architectural solutions that can be provided. Inner cities may appear the same when compared to one another, but this transition may hold yet another key for variation and differentiation. The public seeks actively for unique experiences and products and cities will not be able to escape this logic.



Figure 18. Cologne. Schildergasse reimagined with alternative uses and novel typologies.



A vision for Schildergasse.

New activities, new programs, new typologies, new buildings and new users (even non-human ones) will certainly populate the inner cities of the future. Some of them will arrive sooner than others, however what is certain is that cities will not remain as we know them.

A new public realm will be defined. Roamed by delivery robots, the shopping streets will expand and enter buildings, sometimes even climbing to the first floors blending themselves into a new kind of public/private space.





Figure 19. Cologne. Schildergasse reimagined, new activities and social actors can be lured back into the city.

A vision for Schildergasse.

According to several experts, a functional mix is the key to an active, lively street. Businesses and cafés bring life and safety to the streets, while living and working areas promote continuous movement and invite different actors across all ages and social classes.

Shopping, learning, working, living; there are several opportunities to improve our shopping streets and support activities all day long, every day of the week.

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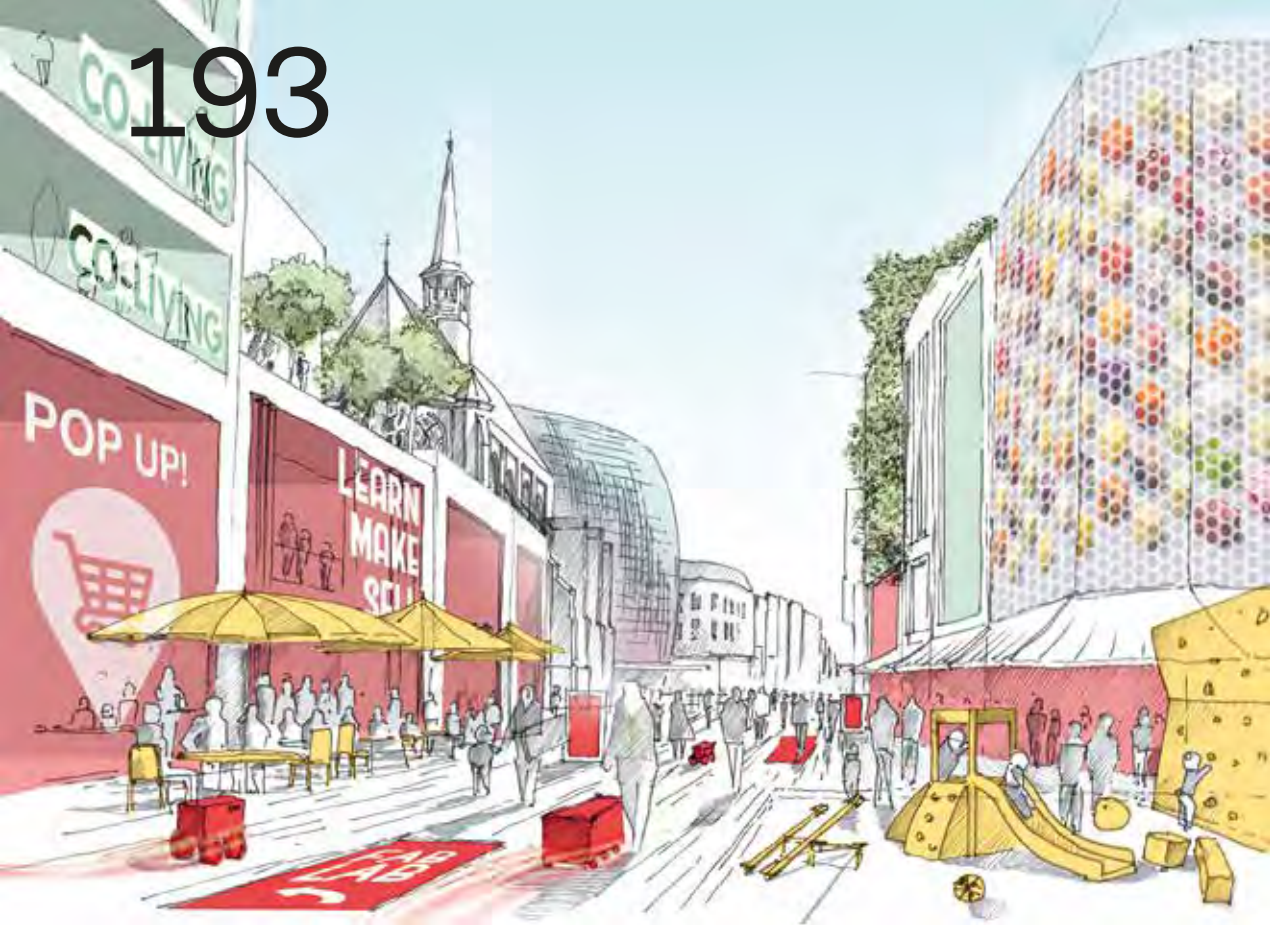


Figure 20. Cologne. Schildergasse. Public space utilized by citizens of all ages and other non-human users.

Further Cities

A vision for Frankfurter Zeil.

Shopping streets will not disappear entirely, however, they will mutate into something different. It is forecasted that part of the retail area will be repurposed for other activities and converted, for example, into working or leisure spaces. Granting access to these new public levels will certainly be a challenge for the future cities.





Figure 21. Frankfurt. Zeil. Commercial streets will be diversified, extending the range of traditional plinths.

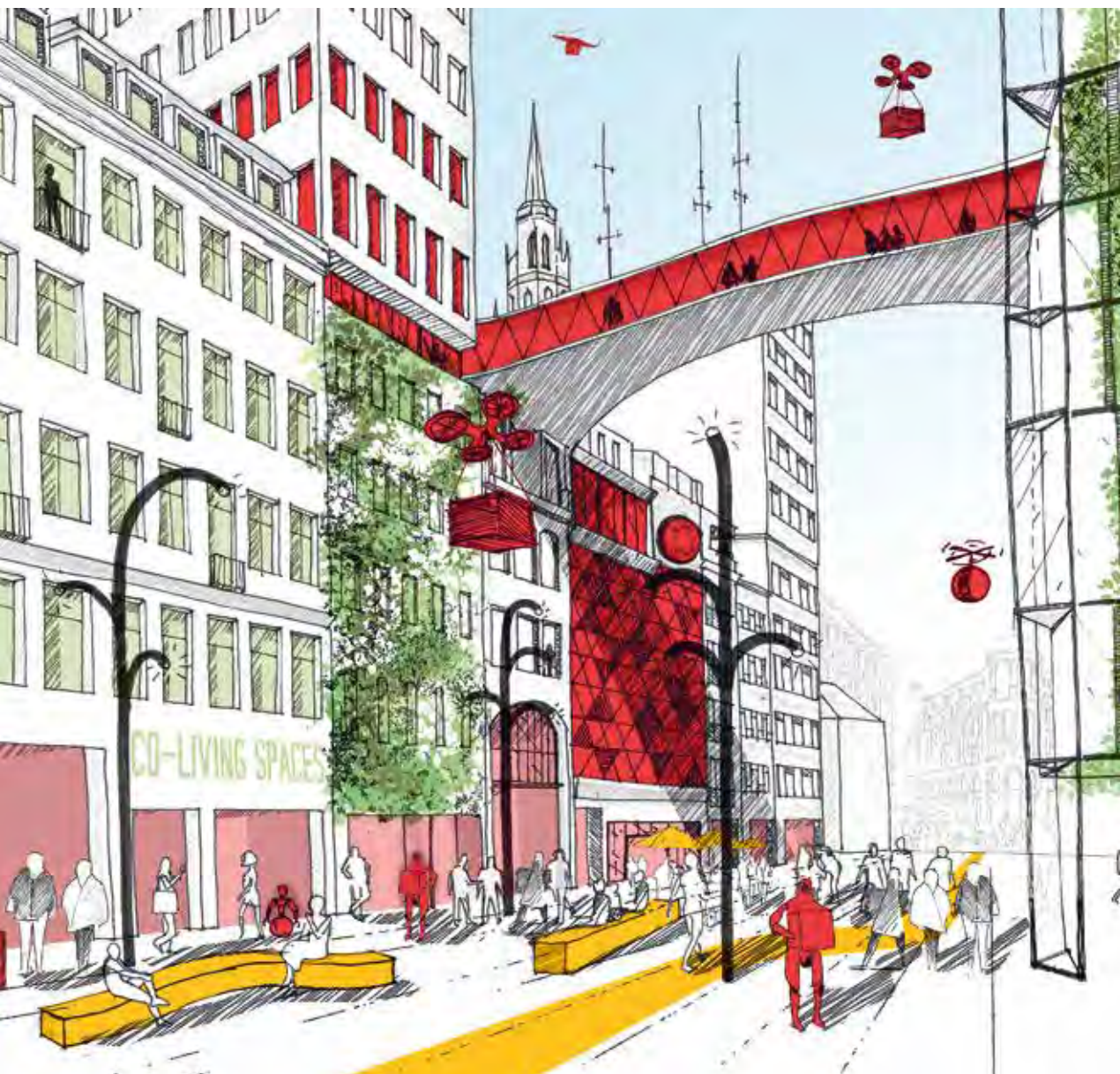
A vision for Kaufingerstraße.

As activities and urban practices change, buildings and typologies will also adapt to new users. Traditional city centers will be altered, new and denser constructions will be available reflecting these changes. Green infrastructure will also be ubiquitous; climate control, food production and communal activities will drive and integrate them to the existing urban fabric.

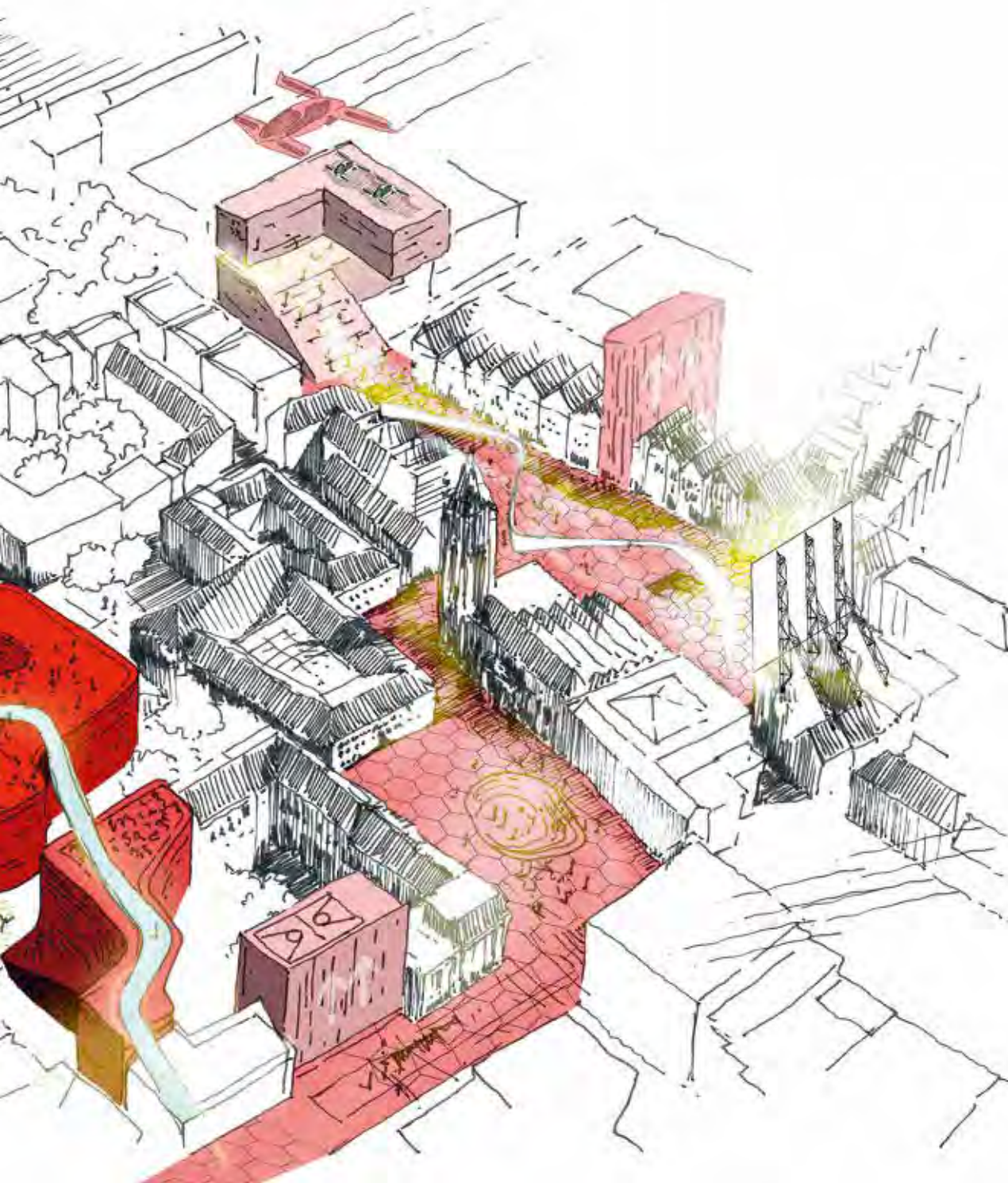


Figure 22. Munich. A fictional Kaufingerstraße, one of the oldest and most important shopping streets in the country.





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Conclusions

We are currently witnessing a series of changes in the city. 'Retail in Transition' is one amongst many transformations developing in them and its multilayered repercussions are yet to be seen. This change involves not only how people use the city but also the cities and their buildings themselves, as the reconfiguration of large parts of the retail infrastructure is already happening or will eventually be required. At the same time, this reconfiguration may also provide an interesting field of experimentation and development for architects and designers. As many examples cited in this report, retailers are already adapting to this new reality; they are creating new concepts and ways to engage with an elusive customer. Digital players are also setting foot in the cities, not only for expanding their already successful businesses but also to provide something that e-commerce can't, that is, to create meaningful experiences. The city is still called upon. As architects and planners, we have the opportunity to shape these changes into significant places and beautiful buildings; several experiments mentioned in this report are oriented towards this direction.

What is certain is the fact that it is the city where these changes will take place. New activities, new programs and new users can be brought back into the city, energizing and revitalizing it. Shopping, living, learning, working, producing, enjoying will be mixed together in novel and exciting ways. For that to happen we will need to 'refurbish the city': readapt outdated infrastructure, rejuvenate buildings, improve green spaces and promote accessibility, among many other necessary tasks.

We see this transition as a huge opportunity. If done right, the European city will experience a renaissance. As we said before, the effects of such changes are not yet fully unveiled, but we are convinced that, if they are managed properly, they may have an incredibly positive impact on our cityscape. And bring the *Maßstab Mensch* back to our cities – the human scale that is tailored to people's needs.

Authors



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