

Independent restaurateurs and technology, what is the future?

Technology use and implementation barriers among European and Japanese independent restaurateurs

METRO Chair of Innovation



“Our purpose is to support the success of SMEs in the hospitality industry. It is therefore our obligation to not only offer sustainable products, but also to ensure the sustainable success of our customers.

That includes as well sharing knowledge, training customers and providing access to innovation.”

Olaf Koch - **CEO METRO Group**



What is the METRO Chair of Innovation?

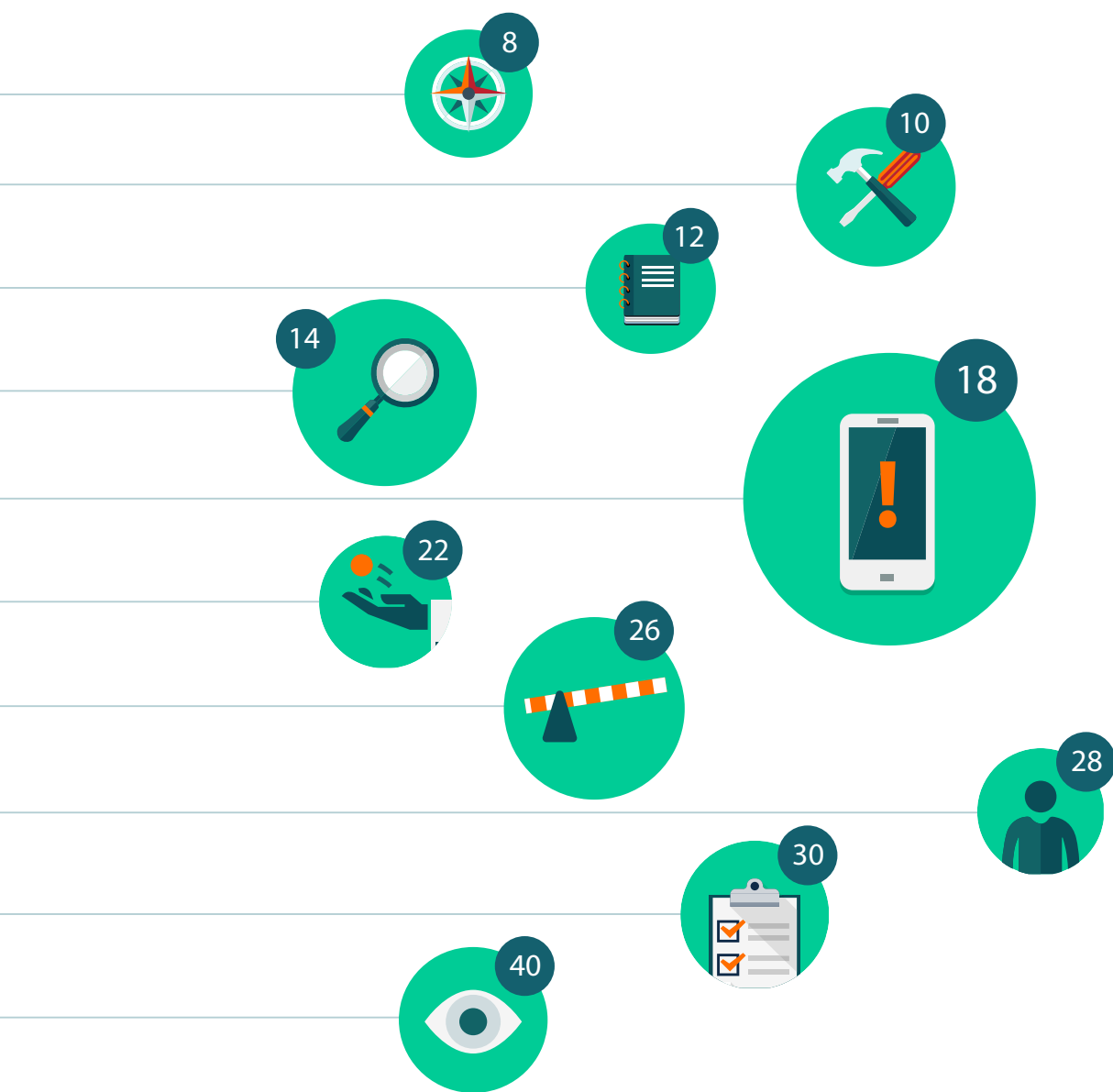
METRO GROUP, one of the world's leading retail and wholesale companies based in Germany, and the Ecole hôtelière de Lausanne (EHL), the first hospitality management school established in 1893 in Switzerland, joined forces in January 2016 to create a research chair to investigate on digital innovation in the restaurant industry.

The first research project of the METRO Chair of Innovation was to measure technology adoption and implementation barriers among independent restaurants in five countries (France, Italy, Spain, Germany and Japan). This booklet presents the results of this first research initiative.

The objective was to measure technology adoption and implementation barriers among independent restaurants in five countries: France, Italy, Spain, Germany and Japan.

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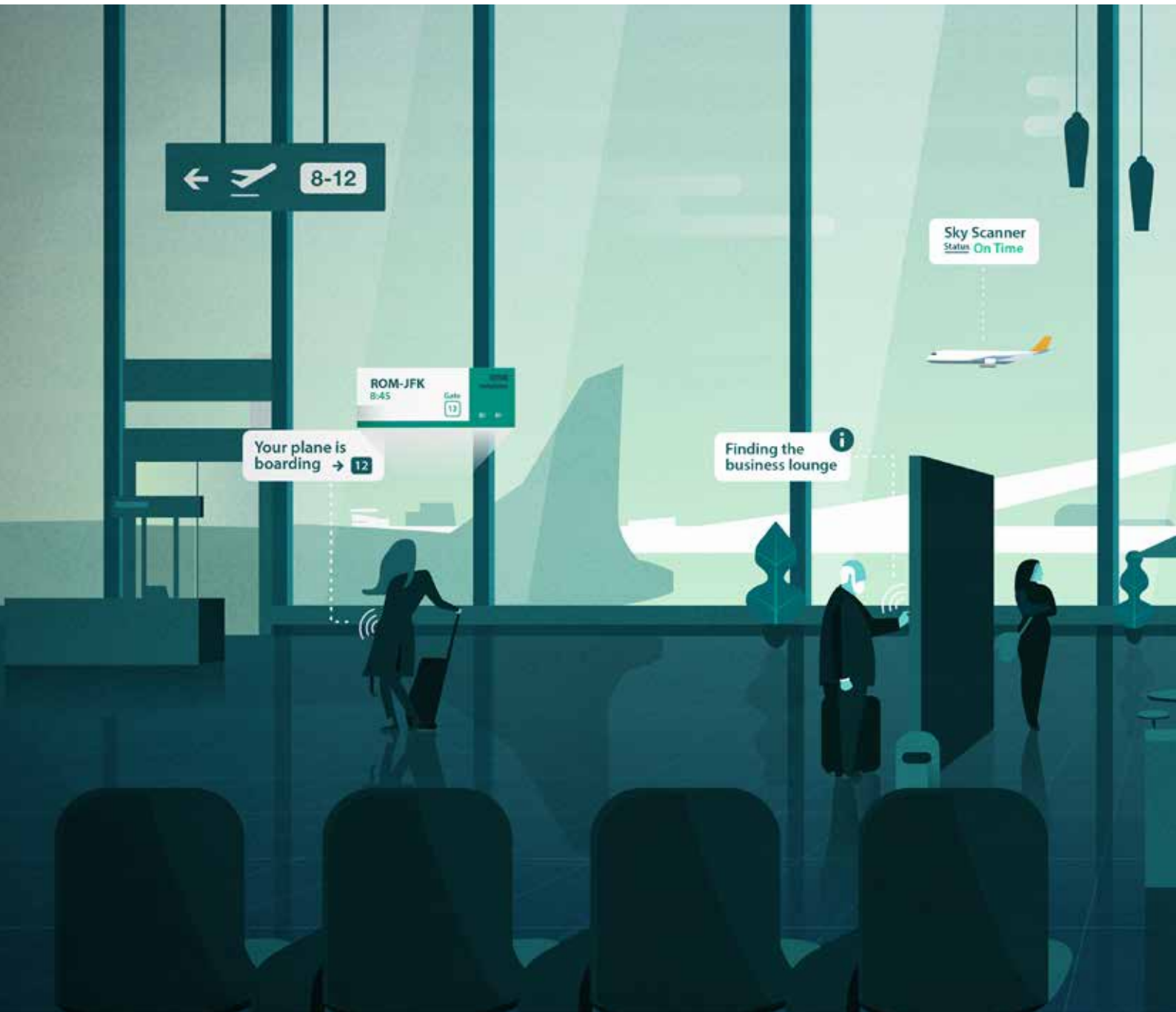


1

Context

Technological tools have invaded our daily life both at work and at home. Industries such as aerospace, auto manufacturing, finance and even healthcare have changed their practices and embraced this digital revolution. These changes have impacted both front and back office activities.

In contrast, the restaurant industry lags far behind in terms of digitalisation. This is especially the case for independent restaurants. Innovation through technology adoption represents one of the most strategic challenges faced by independent restaurant owners but they have yet to change the way they operate.



Numerous digital solutions for independent restaurants are being developed by renowned ICT (Information and Communication Technology) companies and by emerging start-ups. While suitable technologies are available on the market restaurateurs still struggle to adopt more digital solutions to support their daily business.

To understand the reasons why restaurateurs are not using more technology, we needed to assess the current use of technology in the restaurant industry as well as identify the gap between technological solutions used by independent restaurants and their clients' expectations.



2

Methodology

Research purpose

To understand technology use and implementation barriers among independent restaurants in Germany, Italy, Spain, France and Japan.

Sample

3405

**Owners, managers and/or chefs
METRO customers**

3405 owners, managers and/or chefs of independent restaurants in Germany, Italy, France, Spain and Japan

365

**Owners, managers and/or chefs
non-METRO customers**

365 owners, managers and/or chefs of independent restaurants but non-METRO customers have been questioned in order to establish if there were any differences/ similarities regarding their behaviour towards technology compared to METRO customers. Overall, non-METRO customers have similar patterns.

Types of restaurants

In Germany, Italy, France and Spain: full-service restaurants, café/bars, fast food, self-service cafeterias, kiosk and 100% home delivery.

In Japan: izakaya (Japanese style pub), European restaurant, Japanese restaurant (excl. izakaya), Chinese and Asian restaurant, teishoku/bento, bar/pub, and cafeteria.





Scope

Level of technological use, of importance of technology and of future investment intention in technology for 11 business processes:

- Finance
- Communication
- Kitchen management
- Delivery solutions
- Human resources
- Purchasing
- Service management
- Payment solutions
- Marketing
- Stock management
- Booking

Influence of 16 factors on technology adoption:

- Cost
- Clients' expectations
- Restaurateurs' knowledge
- Reliability
- Competitors
- Infrastructure
- Availability of technology
- Government regulations
- Relevance
- Ease of use
- Priority
- Employee knowledge
- Technological offer
- Availability of information
- Trust
- Strategy



Period

June to August 2016: France, Germany, Italy and Spain.
January to February 2017: Japan.



Method

19 interviews with academics, experts and practitioners that validated the quantitative questionnaire.



With all this information in our hand, we were able to create **three restaurateurs' profiles** depending on their level of technology use, with targeted recommendations regarding the digitalisation of their processes.

3

Glossary

Definition of the 11 business processes in a restaurant



Finance

Systems supporting all financial aspects of the business. Eg.: accounting, payroll, invoice, supplier payment.



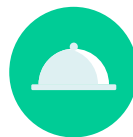
Kitchen Management

Activities that transform inputs into outputs that are sold to customers. Eg.: Production, recipe creation, order management.



Human Resources

How a company manages its employees. Eg.: recruitment, training, planning, motivation, bonus and salary.



Service Management

Processes to deliver a product or a service to customer. Eg.: client welcome process, taking order, menu, communication with the kitchen.



Marketing

Processes a company uses to persuade clients to purchase from the company instead of their competitors. Eg.: gift card, loyalty program, price management, customer relationship management.



Booking

Activities related to booking a table for customers. Eg.: booking management, table assignment.



Communication

Activities related to communication with customers. Eg.: social media, website, emailing, mailing.



Delivery

Activities that deliver your product or service to your customer outside of the restaurant. Eg.: order management, delivery management.



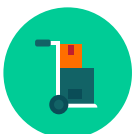
Purchasing

Activities to acquire resources needed to operate. Eg.: finding suppliers, negotiating prices with suppliers, ordering, quality controlling.



Payment Solutions

Methods used to process customers' payment. Eg.: POS (point of sales), card reader, mobile payment.



Stock Management

Processes related to receiving, storing and distributing inputs internally. Eg.: inventory management.

Definition of the 16 barriers faced by restaurateurs to adopt technology solutions



Cost
of the technology solutions available on the market.



Availability of information
given to adopt one or another technology solutions.



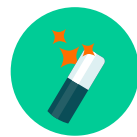
Availability
of the technology solutions on the market.



Reliability
of the technology solutions available on the market.



Employee's knowledge
of technology.



Ease of use
of the technology solutions on the market.



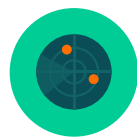
Clients' expectations
in terms of technologies available in a restaurant.



Trust
in technology solutions.



Government regulations
impacting the restaurant industry.



Competitors' use
propensity to adopt technology solutions when they are used by competitors.



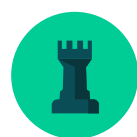
Technology offer
from current suppliers.



Priority
relative to other projects that require existing resources and time.



Restaurateur's knowledge
of technology solutions available.



Strategy
of a restaurant with regard to use technology solutions.



Relevance
of the technology solutions for the restaurant.

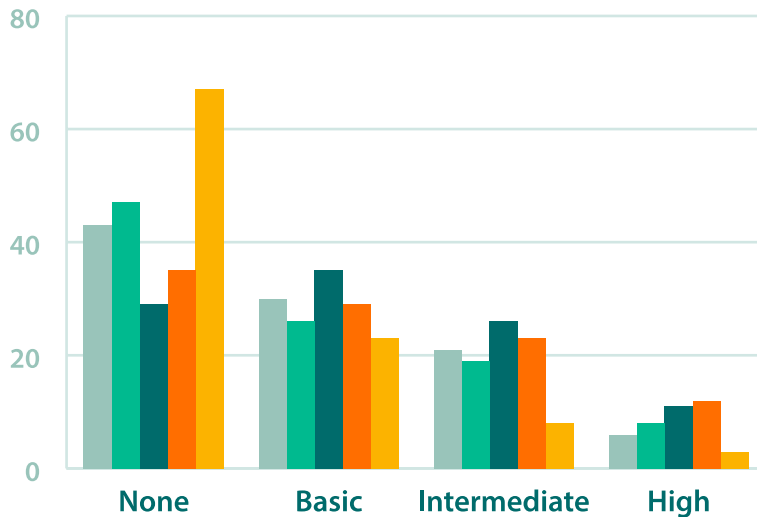


Infrastructure
available where the restaurant is located and/or in the restaurant itself.

4

Do restaurateurs use technology?

Level of technological use in EU and Japan



In Europe, 39% of independent restaurants **do not use technology** to support their daily routine. 30% use technology at a basic level, e.g. using Microsoft Office programs to perform basic accounting tasks or communicating via Internet.

In Japan, 67% of independent restaurants **do not use technology**. Germany and Spain have the highest level of technological use.

* Note: All graphs are in percentage (%).

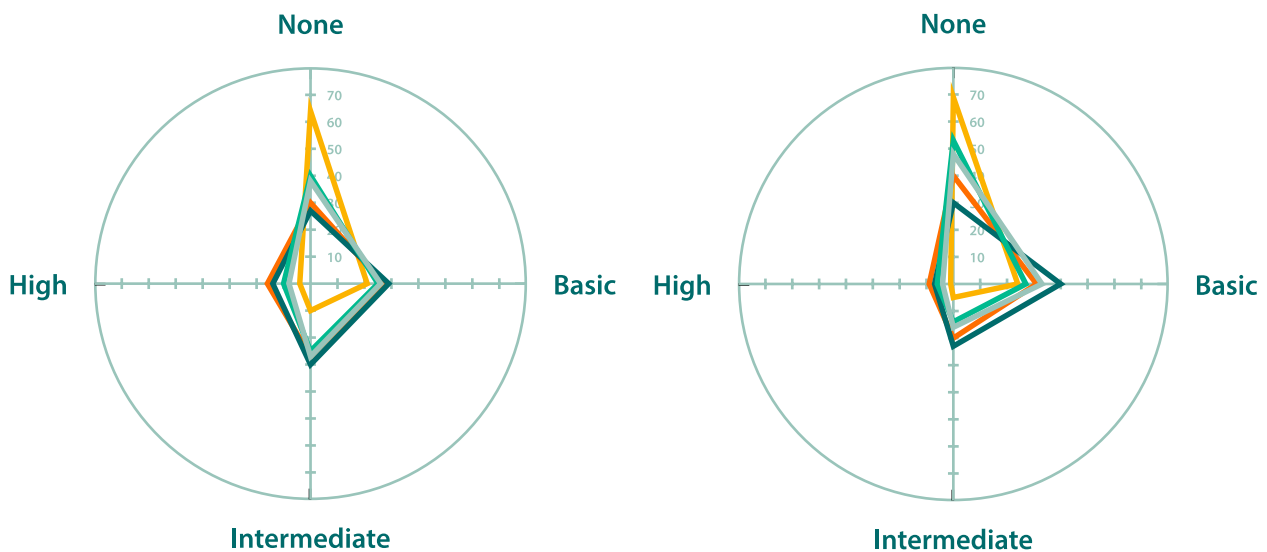
Front office vs. back office use

Front office:

business processes include: marketing, communication, service management, booking and payment solutions.

Back office:

business processes include: finance, human resources, purchasing, stock management, kitchen management and home delivery.

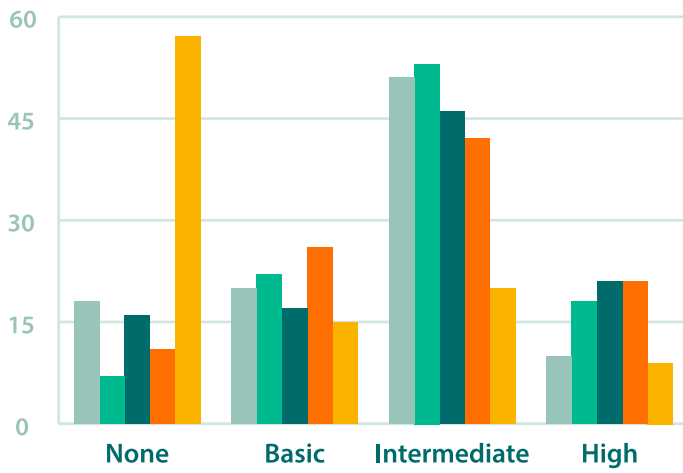


Restaurateurs are **better equipped** in terms of technology for **front office** business processes than for back office ones.

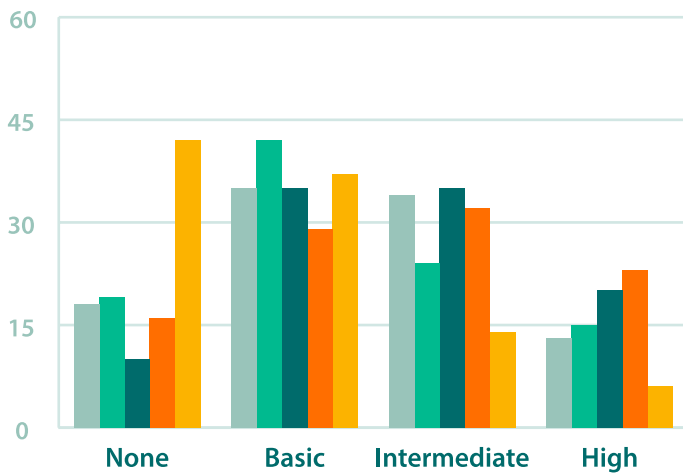
Top 3 business processes



Payment Solutions

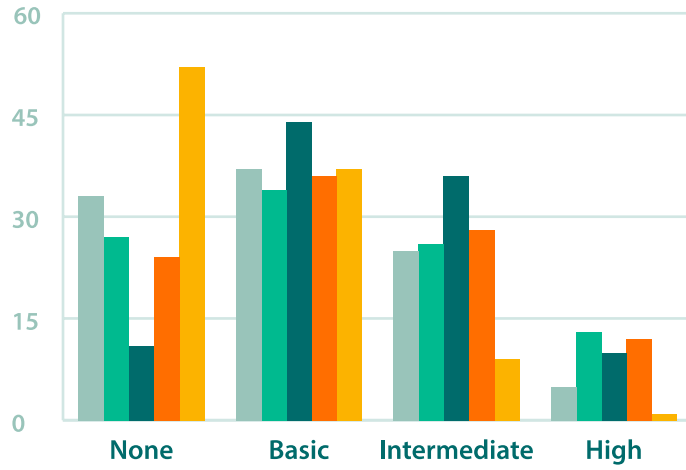


Communication





Finance



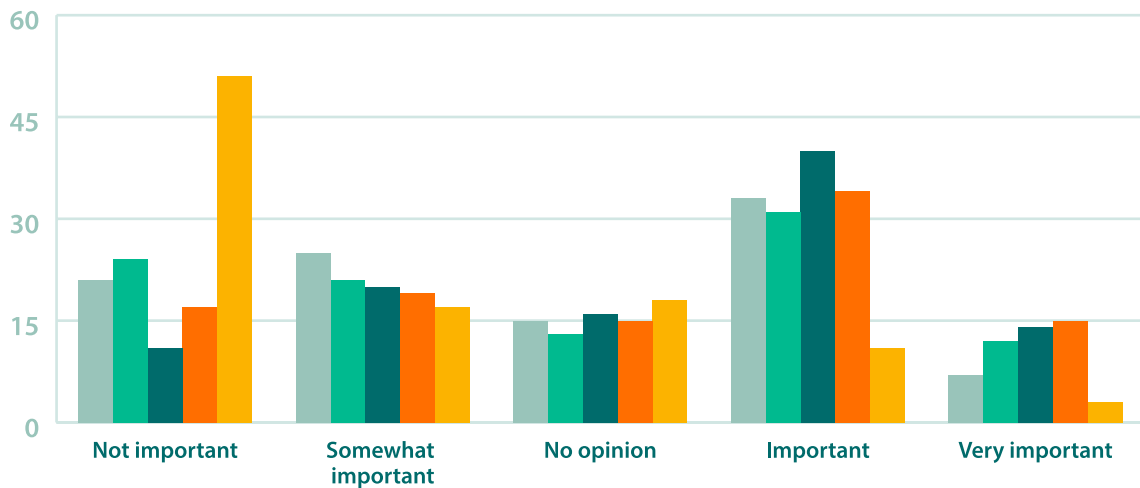
Out of the 11 business processes studied, only three are partially supported by technology:
payment solutions, communication and finance.

In other areas of a restaurant's business, such as service management, stock management and human resources or even purchasing, **digital solutions are quasi non-existent.**

5

Is technology important to restaurateurs?

Importance of technology in Europe and Japan



Most of the countries consider technology important to support their business processes. **Germany ranks first** followed by Spain. Most of French and Italian independent restaurateurs consider technology to be “Not important” or “Somewhat important”. The majority of **Japanese respondents do not consider technology important.**

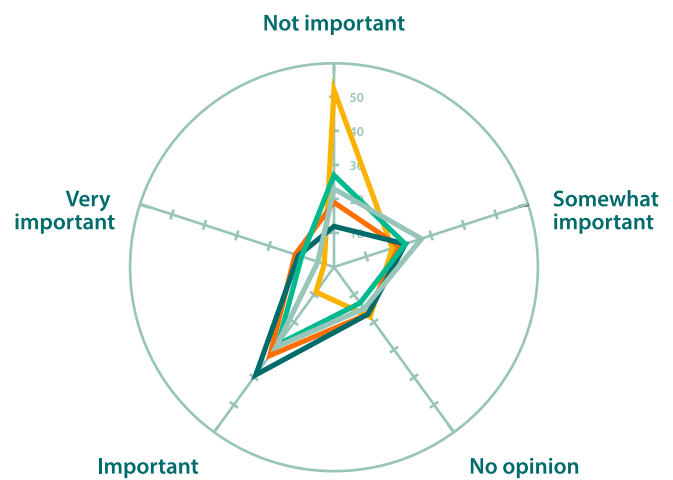
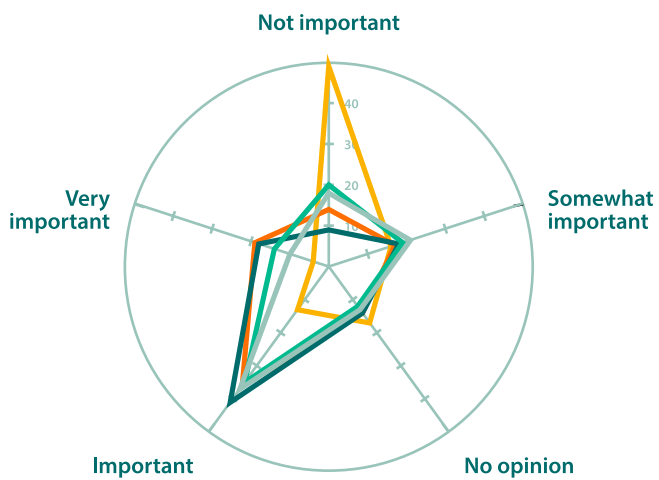
Front office vs. back office importance

Front office:

business processes include: marketing, communication, service management, booking and payment solutions.

Back office:

business processes include: finance, human resources, purchasing, stock management, kitchen management and home delivery.



Restaurateurs find technology slightly **more important** in their **front office** business processes rather than for their back office business processes.

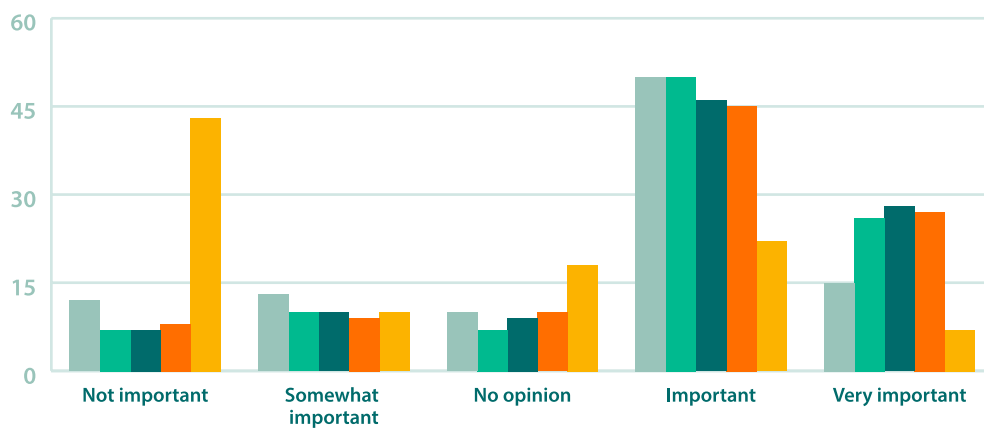
In contrast, **Japanese** restaurateurs find technology **“Not important”** neither in **front** nor **back office** activities.

Top 3 business processes

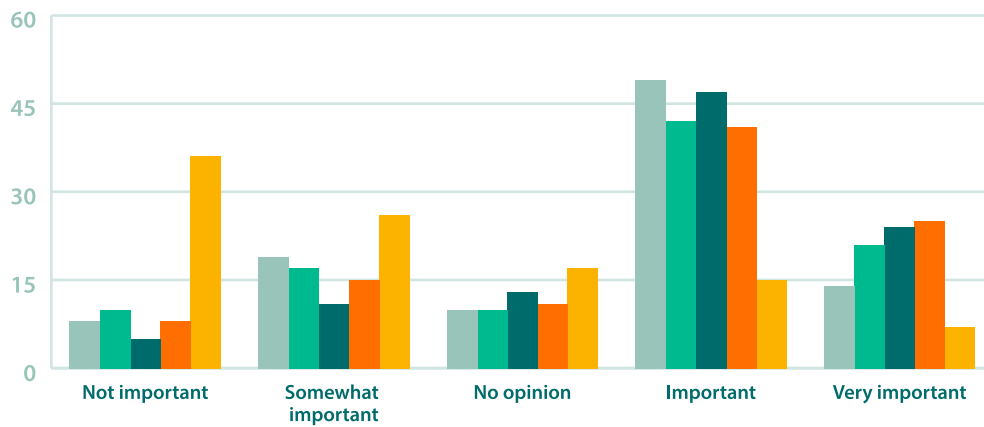
Aligned with technology use results, respondents consider technology important for payment solutions, communication and finance.



Payment Solutions

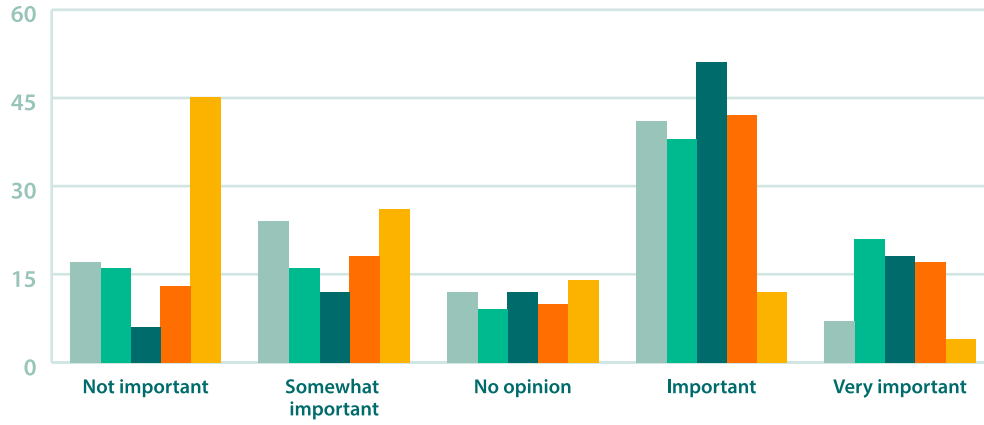


Communication





Finance

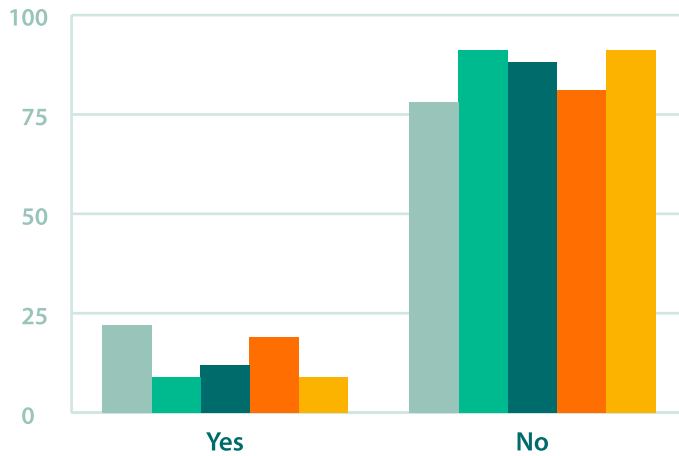


For the **other areas** of their business, for example booking, home delivery and human resources, restaurateurs **do not think technology is important** to support these business processes.

6

Are restaurateurs planning to invest in technology?

Investment intention in technology in Europe and Japan



The desire to invest in technology is very low in all five countries. More than **85% of respondents answered “No”** to the question “Do you intend to invest in technology?”

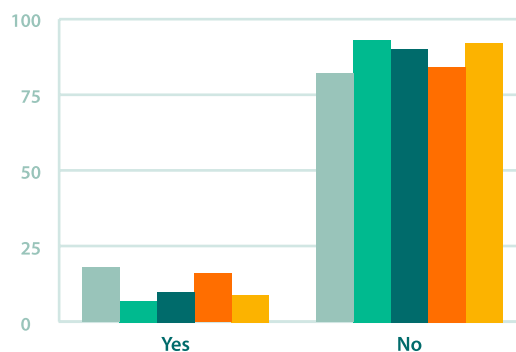
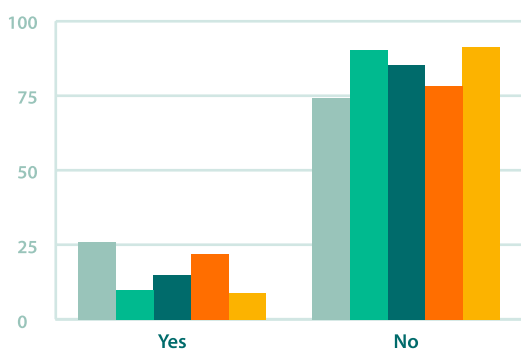
Front office vs. back office investment intention

Front office:

business processes include: marketing, communication, service management, booking and payment solutions.

Back office:

business processes include: finance, human resources, purchasing, stock management, kitchen management and home delivery.



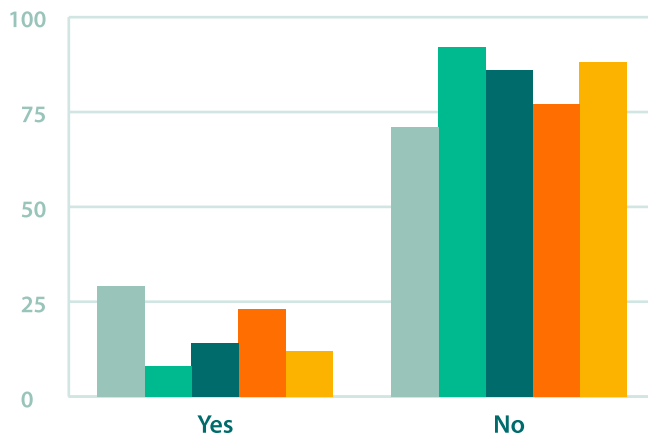
Restaurateurs **do not want to invest in technology**. They are planning to stick to digital tools they already have or to continue to run their restaurants without the help of technology.

Top 3 business processes

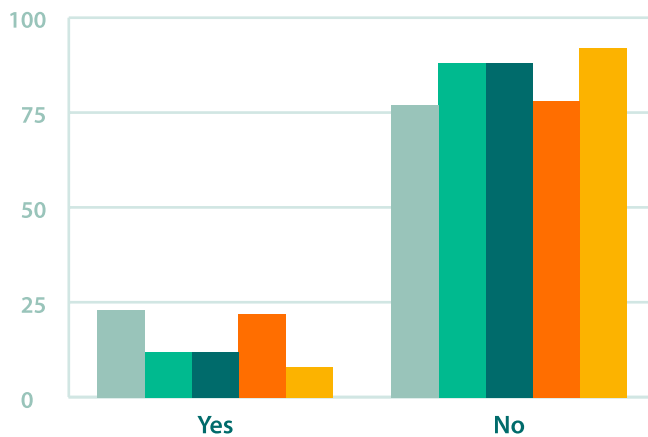
Upgrading their payment solutions and improving their marketing and communication tools are the three main areas in which restaurateurs intend to invest in technology.



Payment Solutions

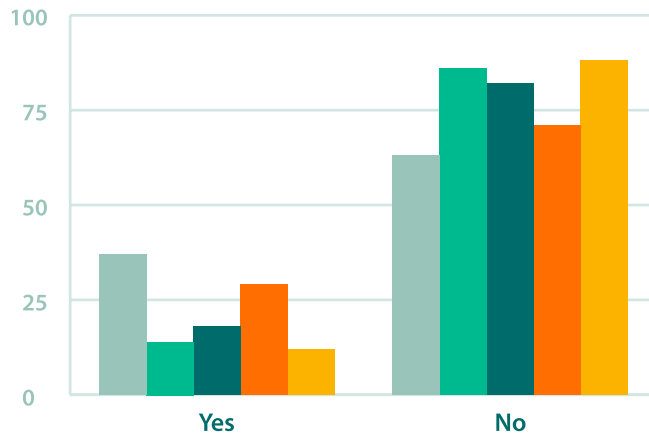


Marketing





Communication



At present, independent restaurateurs do not want to invest in technology solutions for the other 8 business processes. This is mainly due to **three barriers** (see next chapter “What prevents restaurateurs from using technology?”) and also to a **lack of access to knowledge**. This latter prevents them from realising the potential benefits and choosing the right technology solution(s) for their restaurant.

7

What prevents restaurateurs from using technology?

The five countries face similar technological adoption barriers. The study revealed that there are three main factors preventing restaurant owners from adopting technologies in their restaurants



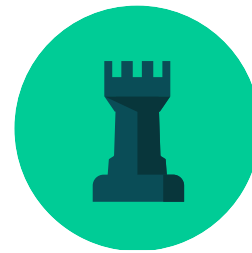
Priority

Technology is not a priority compared to other projects in a restaurant.



Cost

The cost of technology is seen as too high compared to what restaurateurs are willing to spend.



Strategy

Technology (or implementation of technology) is not part of the overall strategy for the restaurant.



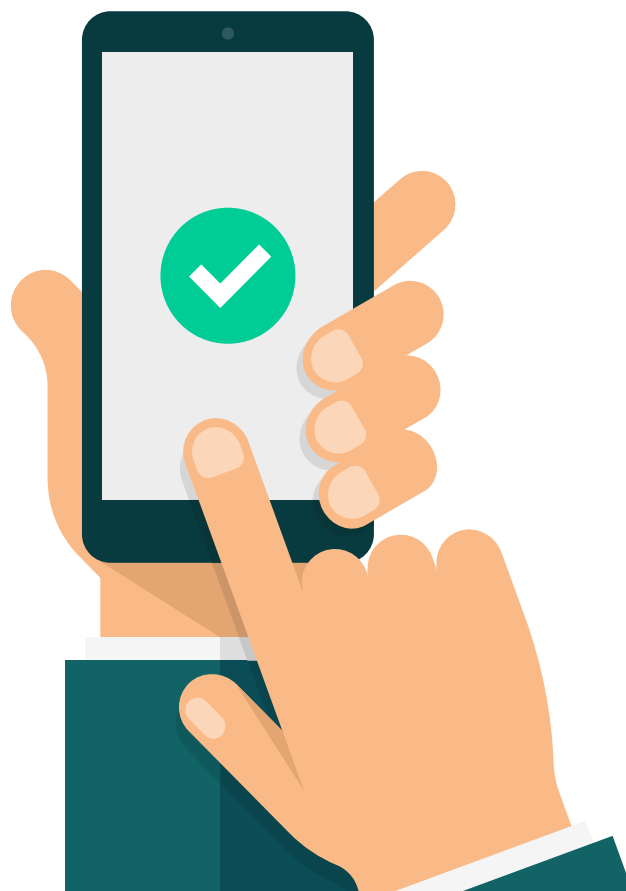
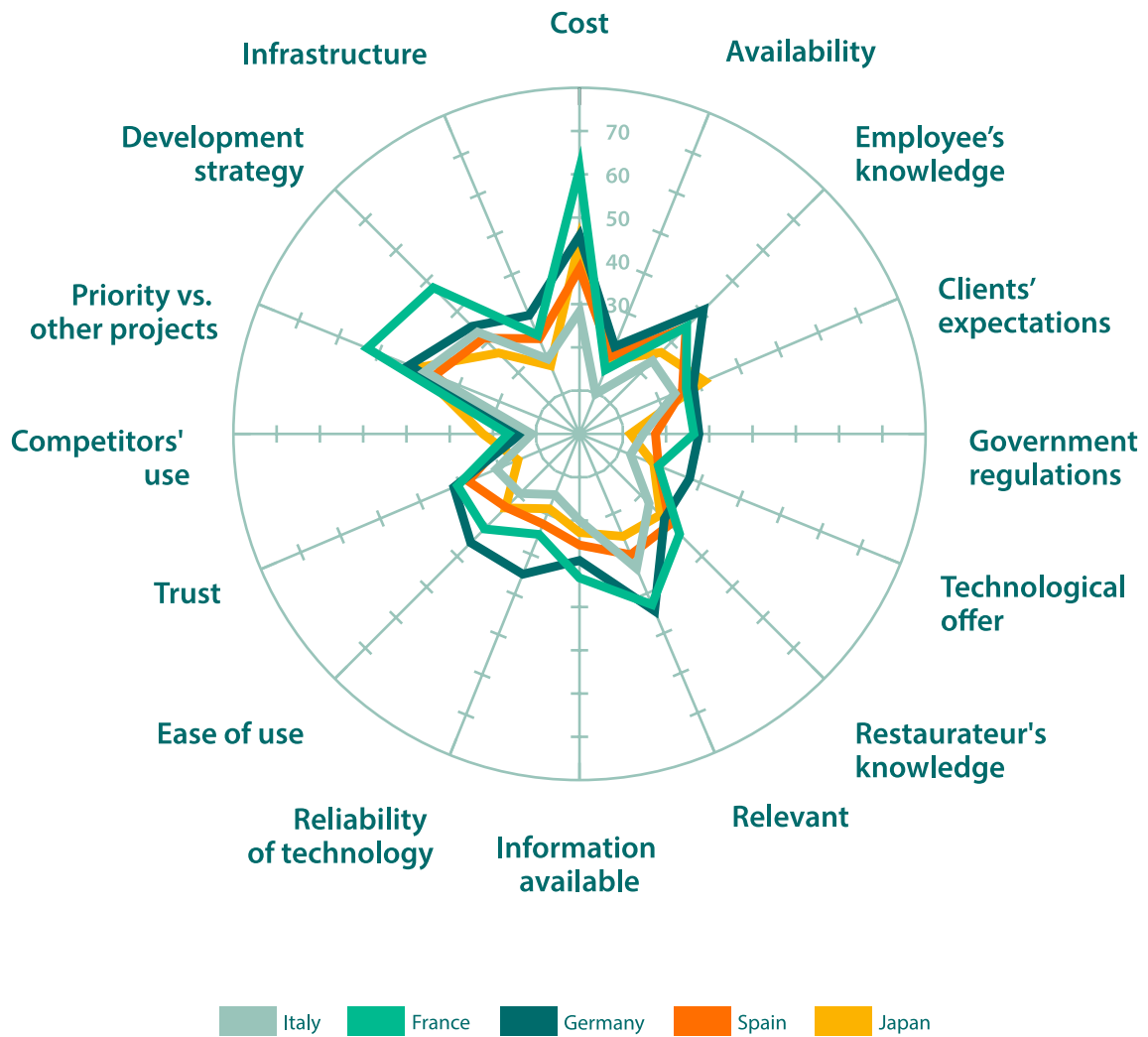
Government regulations



Clients' expectations

External pressure points

Independent restaurateurs face strong external forces from government regulations and end-consumer expectations. The implementation of mandatory accredited POS for financial controlling and the daily use of smartphones by end-consumers will force restaurateurs to invest in technology solutions.



8

Restaurateurs' profiles

Three restaurateur profiles were created according to the kind of technology they were using in their restaurant.



The Traditional

The traditional restaurateur does not use technology in his/her restaurant, does not possess a computer and prefers the classic "pen & paper" method.



The Moderate

The moderate: has a computer and uses basic tools such as Microsoft Office software (Word, Excel).

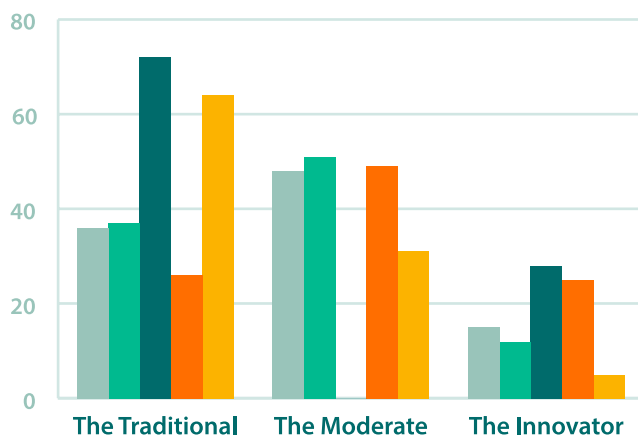


The Innovator

The innovator: uses mobile devices connected with his/her point of sales, has a relatively good understanding of the importance of social media in attracting clients, meeting their needs and retaining them.

Number of respondents per profile

Not surprisingly, the majority of respondents fall into the “Traditional” category.



* Note: In Germany, only two profiles were created (Traditional and Innovator), because there were very few differences between the Moderate and the Traditional profiles.



Agathe

28 years old – Moderate
Owner of “La Vie des Champs”, Geneva.



As of September, I'm opening a 100 seat restaurant in Geneva, Switzerland. For 4 months, I've been trying to find a POS system that combines both payment solutions and an accounting software, but also a system with a user-friendly interface, adapted to the needs of my restaurant and therefore not too expensive.



agathe@laviedeschamps.ch

9

Recommendations

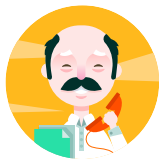
While solutions to support back office processes are already available on the market they are often seen as not being worth the investment. Also, the fact that the technology offer is fragmented and that solutions are often incompatible with each other makes it difficult for independent restaurateurs to find and implement an all-in-one solution tailored to their specific needs.

For each of the four top business processes, we identified examples of digital solutions.



Finance

Systems supporting all financial aspects of the business. Eg.: accounting, payroll, invoice, supplier payment.



The Traditional

Download Excel templates: an accounting spreadsheet and income statement.



The Moderate

Get an accounting based POS report. Create a simple dashboard (Key Performance Indicators).



The Innovator

Buy a payroll module linked to POS.

Examples:

sage

[sage.fr](https://www.sage.fr)



[xero.com](https://www.xero.com)

FRAG Paul.
Der Personalassistent

[frag-paul.de](https://www.frag-paul.de)



Bruno Collomb

Innovator

Managing Director "Gourmet Conception", Annecy.

“

Thanks to technology and in particular to the App Menu du Jour MDJ, I can publish my menu daily on the App and also on Facebook. This approach allows me to reach on average 1 000 potential clients daily for free. In addition, the App allows me to make my Facebook page livelier. Today, this tool is essential for my communication strategy.

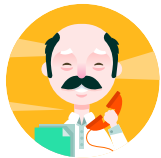


info@gourmetconception.fr



Marketing

Processes a company uses to persuade clients to purchase from the company instead of their competitors. Eg.: gift card, loyalty program, price management, customer relationship management.



The Traditional

Ask a member of your staff to participate.



The Moderate

Install free Wi-Fi for your customers.



The Innovator

Create and use a Customer Relation Management software.

Examples:



5loyalty.com



qoodos.fr



keetiz.com



zenchef.com



Natalia Waldburger-Ruiz

47 years old – Moderate
Owner and manager of “La Casa del Abuelo”, Madrid.



It's not easy to adapt to evolving technology. In the group of 4 restaurants, we share one Facebook page and Instagram account, but it's sometimes difficult to agree on the post content. Each week, we also send to all restaurant managers and the family a report on clients' publications on TripAdvisor and Google.

Personally, I'm more responsible for the F&B and I use Excel a lot combined with other programs tailored to restaurants. I even subscribed to an Excel course, as I need to have a better level!



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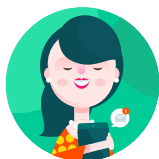
Communication

Activities related to communication with customers. Eg.: social media, website, emailing, mailing.



The Traditional

Create a Gmail account and a Google My Business page. Discover your clients' review on TripAdvisor. Claim your business on TripAdvisor.



The Moderate

Respond to Tripadvisor and Google comments. Create a Facebook page. Sign in on an online booking platform.



The Innovator

Invest in Facebook ads.

Examples:



[google.com/business](https://www.google.com/business)



[tripadvisor.com/owners](https://www.tripadvisor.com/owners)



[ikentoo.com](https://www.ikentoo.com)



[theforkmanager.com](https://www.theforkmanager.com)



[pro.menu.du-jour.fr](https://www.pro.menu.du-jour.fr)



Jennifer Mulinde-Schmid

34 years old – Innovator
Owner of “Schwarze Heidi”, Berlin.

“

As a restaurant owner, I use technology solutions in various business processes. To communicate with my clients, I actively use Facebook and Instagram. For the human resources: I manage my employees with a tool called Frag Paul. It is very helpful for the shift management. I also have a bonus salary program: I give my Chef 1% of the profit when the restaurant is performing well. For the purchase of most of my goods, I have done my own list where I can compare prices from my three different suppliers: METRO, Salgros and Hamberger. In terms of stock management, it is quite poor on my side as I don't have a good system. I use the OrderBird system as payment solutions and I am also testing the Cockpit program provided by METRO. It helps me, for instance, to find out directly when I reach my break-even point.



info@schwarzeheidi.de



Payment solutions

Methods used to process customers' payment. Eg.: POS (point of sales), card reader, mobile payment.



The Traditional
Buy an accredited POS.



The Moderate
Get your POS on the cloud.



The Innovator
Implement mobile payment.

Examples:



[orderbird.com/
en/ipad-pos-system](https://orderbird.com/en/ipad-pos-system)



laddition.com



ikentoo.com



tillersystems.com



paymytable.com



sumup.fr



eazeat.me



Cindy

26 years old – Moderate
Waiter at “Le Chai d’Adrien”, Paris

“

We mainly use Facebook for our social network, because everybody has Facebook. We post our menu, our events, and our new dish and cocktail creations. We also use Instagram to post pictures of our creations: it’s very visual and fun for clients. Our manager decided to give us the responsibility to manage these social networks, because we are always in contact with customers: we know and feel what they want. My colleagues say: “She is very into Facebook, Instagram, Twitter. She is very 2017.”



lechaidadrien@gmail.com

10

Takeaways



27%

of independent restaurants use technology



40%

think that technology can help them to support their business



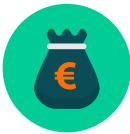
14%

plan to invest in technology in the future

Technology is both used and important for



Payment solutions



Finance



Communication

Restaurateurs want to invest in technology for



Payment solutions



Marketing



Communication

The principal barriers to technological adoption are



Priority

Technology is not a priority compared to other projects in a restaurant.



Cost

The cost of technology is seen as too high compared to what restaurateurs are willing to spend.



Strategy

Technology (or implementation of technology) is not part of the overall strategy for the restaurant.

Final Words

Independent restaurateurs are struggling to understand how technology could help them face the **three main challenges** they now encounter: **attract customers, meet their clients' needs** and **manage their costs**.

At present, their failure to grasp the importance of technology could have serious consequences on the very survival of their business. The **adoption of digital solutions** will not only help them face these challenges, but also contribute to promoting **sustainable development** within the restaurant industry. In the past 10 years, chain restaurants have performed better and have taken over the market, leaving little space for independents to survive.

The delay of technology adoption by independent restaurants is primarily due to a **lack of access to knowledge** and **technological skills**. This is why this issue can only be solved by giving restaurateurs **incentives to learn** and **to get trained**. This matter will be part of the second mission of the METRO Chair of Innovation.

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“We are committed to developing research, expanding education and contributing to sustainable development through innovation in the restaurant industry.”

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