Carlsberg accelerates and secures frontline adoption of global continuous improvement program with connected workers.

Introduction

Established in 1847, Carlsberg Group is one of the leading brewery groups in the world today. With over 140 brands and 40 thousand employees worldwide.

In 2020 Carlsberg launched the “Smart Brewery” program which aims to empower colleagues at the line and increase efficiency by adopting technology and data with a human centric approach, accelerating digital transformation and supporting operational excellence.

Carlsberg Excellence & The Objectives of a Connected Worker Program

As a key building block of “smart brewery”, Carlsberg sought a connected worker platform which could provide a single pane of glass for frontline teams across a wide range of work processes, including but not limited to; Clean inspect and Lubrication, Defect tagging, quality checks, hygiene, changeovers and related shiftly meeting boards.

“Zaptic came out as the right solution for us. In terms of flexibility, capability to roll out across the whole world and the solution that I want to have.”

Carlos Zaramello, Senior Director, Continuous Improvement - Carlsberg Excellence

Three strategic business objectives underpin the smart brewery project:

1.

Accelerating the global roll out of Carlsberg Excellence, Carlsberg’s continuous improvement program, which is based upon TPM, Lean and Six Sigma. This would be achieved by accelerating and securing daily adoption of standard work processes, and promoting autonomy of frontline teams, enabling efficiency improvements and savings.

2.

Accelerating digitalisation of shop floor processes and new ways of working. This would be enabled via the introduction of a no code authoring capability which gives the operational teams themselves the ability to digitise their own workflows using their own operational knowledge.

3.

Future proofing the businesses ability to attract, onboard and upskill workers, with the support of a modern digital working experience for frontline teams. At the same time, this capability would promote more autonomous, diverse and fulfilling work.
Before Zaptic

Motivators and Inefficiencies

Like many Lean FMCG shop floor environments, the information people needed to do their daily work on the shop floor resided in many different places:

- Paper based procedures, checklists and problem solving tools.
- In peoples heads, many of whom were leaving at taking that knowledge with them.
- Or in a variety of siloed applications, such as ERP, EAM and PLMs were never designed for people who actually do the work on the lines.

In other words, the information people needed was not easy to find in a timely manner at the point of use. The same was true for collaborative intensive work such as defect handling:

As Carlos explains:

“Before, an operator had to create a tag by writing on paper and putting it on the machine. Today, using Zaptic he takes a picture, writes the problem and manages the conclusion of that tag digitally. The same type of process is done for CILs, plus hygiene assessments and safety.”

Stéphane Piard, Process Engineer:

“Before we had paper. People had to fill out by hand then go into excel to follow up and assign tags to people. Now with Zaptic, we receive the issue on our phone or laptop instantly. We can see easily where it happened, with pictures and videos, to help us understand perfectly what the issue is and assign it to the right people.”

The How

Zaptic Digitally Enables Operators

Carlsberg selected Zaptic’s connected worker platform to provide a single pane of glass for frontline teams across a wide range of work processes, including but not limited to; clean inspect and lubrication checks and work instruction, defect tagging, quality checks, hygiene audit, changeovers and related daily direction setting boards.

For operators, Zaptic provides a single point of guidance, data capture and communication.

What you want is to digitally enable operators to be autonomous. With digitalisation with Zaptic, we are making accelerated steps towards that because they can easily raise and manage problems, and execute activities on the shopfloor which before was cumbersome with paper and escalation methods that were not that easy. - Carlos

Cédric Meyer, Global highlights that:

Before to create a tag, for the operator it took 5 minutes, now with digitalisation we create a tag in less than 1 minute.

For frontline leaders, Zaptic provides real-time visibility on daily performance to support better decision making, faster:

Process Engineer, Stephine:

“As a process engineer, Zaptic helps save a lot of time because it’s easier to identify issues via the Boards, and to take action immediately, without any paperwork.”
Cédric explains:

“As an example, many of our sites have seen a very good improvement in our CIL completion rate. It’s due to the fact that with pen and paper, it’s very difficult to have real-time rates as you capture it on paper and then transfer it to an excel spreadsheet in order to calculate your CIL completion rate. Now, with Zaptic it’s something we have real time.”
Before Zaptic

Results and Improvements with Zaptic

At first glance, perhaps the most apparent result has been the speed of roll out and adoption by sites. In the first 12 months, Zaptic has been successfully deployed to packaging lines at 15 breweries, across 10 countries and languages.

Within the plants, accelerated adoption of work processes is driving measurable improvements across efficiency, quality and safety.

Carlos explains that:

“Today, an operator in the line knows exactly what he needs to do at this machine, at this time.”

Zaptic enables the operators to do what they need to do and by doing what they need to do, we drive Overall Equipment Effectiveness (OEE) Improvement.

When asked about the key drivers of success for the project, Cedric pointed to two “unique aspects of the Zaptic platform”:

Ease of Use

“What is really important to us is that the system is intuitive. With Zaptic, It’s intuitive and it requires less time to train thousands of operators and it gives them the opportunity to execute their job autonomously using the tablet to perform their work properly.”
“Zaptic has enabled operators to easily highlight unsafe conditions and implement resolutions faster. We have seen improved hazard closure rates, reducing possibilities of accidents.”

“We see a huge improvement in the way we run our quality checks, our hygiene checks on the lines after implementing Zaptic, frequently resulting in 10 to 15 points of compliance higher.”

No Code Approach

“I am not an IT person, I have no clue what a code is and what is very good with this ‘no code approach’ is that a person like me can digitalise in an easy way with the drag and drop functionality all that I need.”
What’s Next?

Carlsberg Group has already rolled out Zaptic within 15 breweries worldwide with the goal of 50 breweries using Zaptic to connect and empower frontline teams to work with greater autonomy and efficiency.

Now that Zaptic is part of the daily workflow for frontline teams, more connections are being made to integrate and connect frontline workers to other core IT systems.

Carlos explains: We see that Zaptic is complimenting our other IT systems like SAP and MES. Zaptic is managing processes that are not managed by MES or SAP. We are seeing more and more opportunities to integrate, having Zaptic activities - such as quality checks or changeovers - being triggered by signals coming from our MES or SAP. Exploring this connectivity further, as well as the use of AI based recommendation engine, are two important items on the roadmap ahead.

There are many more use cases we will be expanding to. Today, we have already implemented key use cases such as tags, CILs, hygiene audits, quality checks, and related boards for daily management systems. We take a phased approach with different packages of use cases, with the next wave including Changeovers, Root Cause Analysis, Troubleshooting guides, One Point Lessons and Kaizens.

Zaptic is working continuously with Carlsberg towards obtaining the goals of their digital transformation journey. Providing on-going support in the daily use of the software, with frontline users front of mind is an essential part of that.
“We had a lot of fun working with Zaptic, first of all for the operator it’s a new way of working. I think it’s more than fun, it’s rewarding because when you get this kind of thing on the shop floor and you see people use the application in their daily job, it’s a great reward for me.”

Cedric Meyer, Global Excellence Senior Manager

Carlsberg Excellence