Using Science to Enhance the Customer Experience

Hypotheses and experimentation are helping the Saudi government transform the way it serves customs users.

Science might not be the first source of inspiration for innovation-hungry organisations, but some researchers including myself are working to change that. Leveraging research on the benefits of a scientific approach, I have coached managers at hundreds of companies in devising a theory, formulating falsifiable hypotheses, conducting rigorous tests and carefully evaluating the results. The payoff is often concrete and powerful impact on the development of new products and services.

The approach calls for managers to first form a theory that frames the idea for a new product or service. This step answers the question, “How do I create value for my customers?” by clarifying the key benefit for customers and making a business case for it. Then, by uncovering assumptions about customers and putting them to robust testing, managers can gain valuable insights ahead of product launch.

Many start-ups I work with have applied the scientific approach to great effect – as described in a recent Harvard Business Review article. But the same approach can be applied to any organisational decision under conditions of uncertainty, including small businesses looking to innovate, large companies and even governments.

Governments and public entities conduct experiments to test new policies as well as business incentives and benefits that can improve employment, innovation and business creation. However, even carefully designed and implemented initiatives born out of such experiments tend to produce underwhelming results. What if government officials, like start-up entrepreneurs, started behaving more like scientists? Testing theory and hypotheses with rigorous experiments would validate – or rule out – ideas early on, ensuring that the proposed final solution truly addresses the issue at hand before public money is poured into large investments.

Customer service at the customs

Saudi Customs, for one, applied the scientific approach to improve its operations, in particular customer service. As the national customs administration of Saudi Arabia, Saudi Customs manages the movement of travellers and trade across the kingdom’s 35 air, land and sea ports. The entity has historically focused on security, revenue collection and trade facilitation. In late 2018, Saudi Customs embarked on a customer experience transformation programme named Josoor, the Arabic word for bridge. I provided counsel on this project.

Saudi Customs first interviewed service users and
employees at its ports to identify customer pain points. Sixteen broad areas of improvement were drawn up, with the biggest centred on the very way services were provided. Despite significant digitisation, thousands of service users including traders and brokers visited ports every day, walking down corridors and going from office to office to resolve issues ranging from import/export exemptions to the status of shipments. With rising trade activity and increasingly complex processes, staff could no longer handle customers knocking on their doors and literally walking in.

Saudi Customs decided to experiment with solutions in one location rather than launching a full-fledged programme across all 35 national ports. But first, it came up with four hypotheses – two focused on customer experience and two on its ability to sustain and manage the new service concept:

1. Customer experience will improve if customers are served in a one-stop centre with attractive facilities and trained staff.
2. The one-stop centre will be more efficient if the number of customer touchpoints is reduced.
3. The one-stop centre will be a viable solution if all services can be successfully migrated from back office to front-line staff.
4. The service model will get off the ground quickly if existing non-customer-facing staff take on the new, previously undefined, customer-facing positions.

To test the hypotheses, Saudi Customs transformed a disused part of Riyadh Dry Port into a prototype customer service centre. Facilities underpinning the envisioned customer journey – from an appealing entrance and reception, to service agent counters and a café – were installed. Six staff were deployed from various business units and trained as customer service agents. A ticketing and queueing system was introduced as part of efforts to monitor and capture performance data.

**Evidence-based decision making**

The pilot ran for three months. The results were overwhelmingly positive, with three of the four hypotheses supported by evidence.

1. Overall customer satisfaction swelled from 64 percent in the baseline assessment to 86 percent.
2. The amount of time taken to serve 80 percent of customers was slashed from 30 minutes to less than five. What’s more, this was achieved with only six employees compared to 15 staff across 13 different offices previously. As one broker said: “What used to take the better part of an hour and visits to different offices now takes no longer than 10 minutes.”
3. The service centre was able to handle requests that didn’t need approvals (80 percent of customer visits) such as issuance of collection orders. Only 20 percent of visits required services involving expert review by business departments or restricted system access that couldn’t be fulfilled by frontline service agents.
4. Staff assessment of the pilot was overwhelmingly positive: 85 percent of the service agents and their line managers were satisfied with the new concept and saw value in it. Yet many employees were apprehensive about switching to customer service permanently. Saudi Custom’s ambition to become customer-centric hadn’t translated into a culture where serving customers was respected or encouraged.

Commenting on the successful pilot, Adel Baraja, General Manager, Marketing & Customer Experience at Saudi Customs, said: “Going down the experimentation route allowed us to test new concepts in a controlled environment and make almost daily adjustments until we got the right reaction from our customers and employees.”

**Tried and tested**

Armed with the feedback and lessons learned, Saudi Customs set out to address the challenges while expanding the one-stop service centre model to all ports. A back-office representative with security access and authorised to approve requests has been added to the model. The pilot team is automating certain approval processes and introducing digital self-service counters. It is also working with human resources to introduce incentives that encourage staff to work on the frontline.

The final design sets a standard operating procedure to ensure that customers receive reliably good service. It also recommends different types of customer service centres based on the port location, visitor numbers and profile (passengers, traders or brokers).

The scientific approach, with its emphasis on structured and rigorous decision making, is now integrated in the Saudi Customs’ customer experience transformation programme. Said Adel Baraja: “Teams are encouraged to solve problems using an evidence-based approach, which entails testing hypotheses and finding out if proposed solutions had clear, tangible benefits before any implementation.”

Such an approach is especially valuable in a
government context, he added. “[It] is instrumental in directing resources towards programmes that have tangible and positive benefits and away from those that don’t.”

**Chiara Spina** is an Assistant Professor of Entrepreneurship at INSEAD. She studies how entrepreneurial firms leverage systematic decision making and experimentation to innovate and grow.

INSEAD Knowledge is now on **LinkedIn**. Join the conversation today.

Follow INSEAD Knowledge on **Twitter** and **Facebook**.

Find article at [https://knowledge.insead.edu/blog/insead-blog/using-science-to-enhance-the-customer-experience-16331](https://knowledge.insead.edu/blog/insead-blog/using-science-to-enhance-the-customer-experience-16331)

Download the Knowledge app for free

---

Copyright © INSEAD 2021. All rights reserved. This article first appeared on INSEAD Knowledge (http://knowledge.insead.edu).