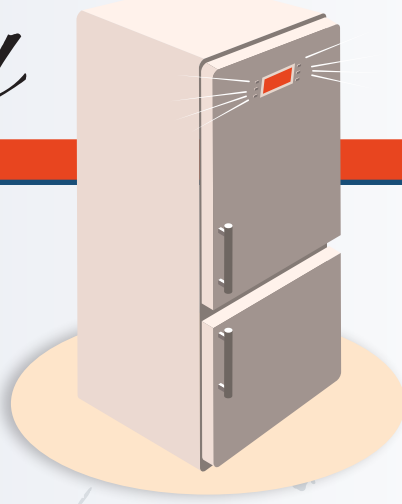


## A Journey Through REFRIGERATOR history

ZUBIAN KARIM THAKUR



BEFORE THE 1800S

Before mechanical home refrigeration systems became common, people relied on natural underground storage options, such as cold cellars, for refrigeration.



In 1748, Scottish professor and physician William Cullen pioneered one of the earliest forms of artificial refrigeration. While he didn't put his technique into practical use, he demonstrated how rapidly evaporating a liquid into gas could create a cooling effect.



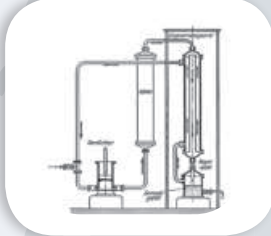
1748



1802

American farmer and cabinetmaker Thomas Moore invented the icebox which is essentially a non-mechanical design consisting of insulated metal or wooden cabinets with a compartment for a big block of ice. Those ice blocks were delivered straight to households along with their ice boxes.

Jacob Perkins, also known as the 'Father of the Refrigerator' invents the first vapor compression system for refrigerators.



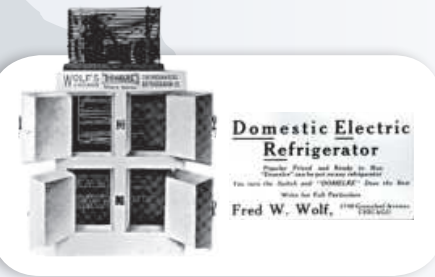
1834



1876

Carl von Linde patents a revolutionary new process for liquefying gases used in artificial refrigeration.

Fred W. Wolf invents the first home electric refrigerator.



1913

1918

William C. Durant begins mass-producing the first home refrigerator with a self-contained compressor. The initial price of a household refrigeration unit ranged from \$500 to \$1,000, or around \$6,575 to \$13,150 in modern currency. Thus, during the early years of its use, household refrigerators were seen as a luxury items.



General Electric introduced the "Monitor-Top" refrigerator, priced at \$525, featuring the first all-steel cabinet, designed by Christian Steenstrup.



1927



1944

85% of American households owned a refrigerator by 1944. Consumers began using their refrigerators' cold compartments to store frozen food. This era also marked the mass adoption of refrigerators.

Servel Company was an American manufacturer of heating and cooling appliances, who were the first to introduce automatic ice makers.



1953



1969

General Electric introduced the first through-the-door ice and water dispenser in 1969 in a custom model.

LG introduced the first smart refrigerator, wowing their customers with its Internet connectivity. Nowadays, refrigerator companies continue to modernize fridge designs by adding sleek features such as LEDs, touch-sensitive commands, and smart features that allow users to control their fridge with their phones.



2000

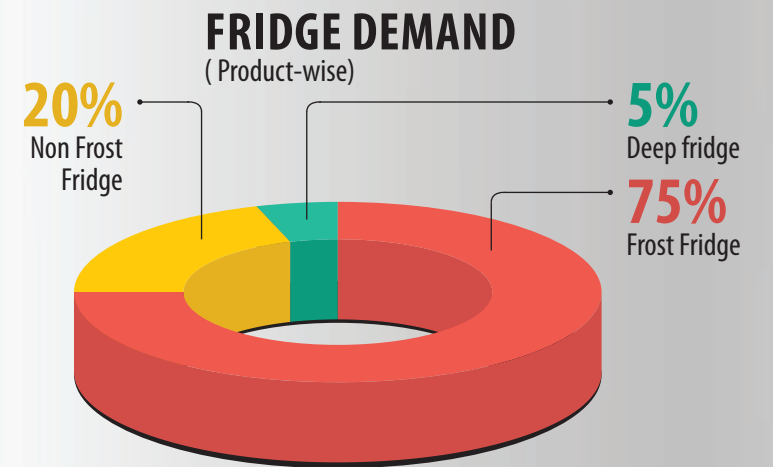


POST 2000

With the new generation, fridges are integrating Artificial Intelligence (AI) into their upcoming models. This, in turn, enhances the service provided by the fridge and improves users' experience. AI implementation in fridges is capable of identifying different food items through AI-image software and providing recipes based on those items.

## BANGLADESH FRIDGE INDUSTRY

### AT A GLANCE



Expected Revenue in 2024:  
US\$ **2.30** bn.

Growth Rate:  
**15-20** percent.

Annual Sales (unit):  
**25** lac

Import 2021-22:  
Tk **1006.90** crore

Market Size:  
Tk **10,000** crore.

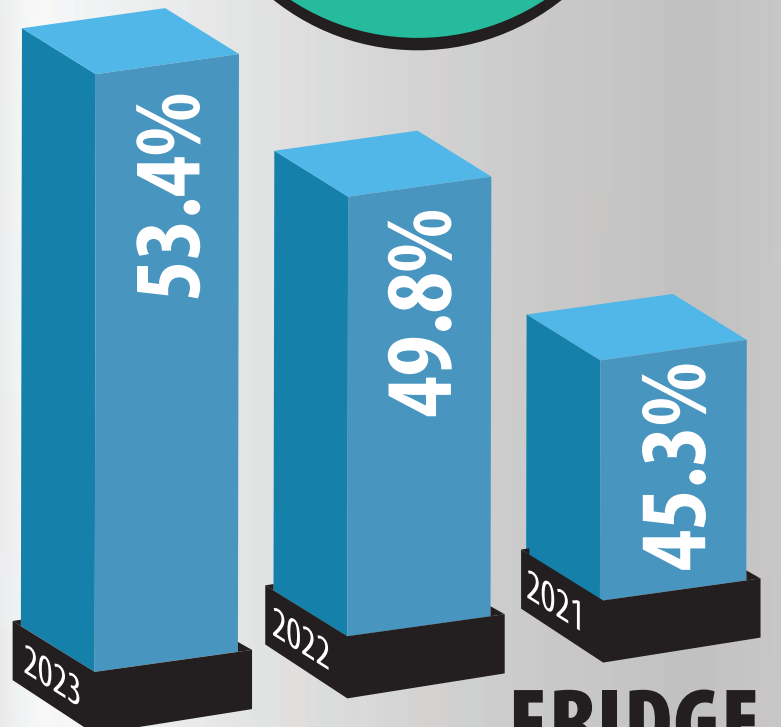
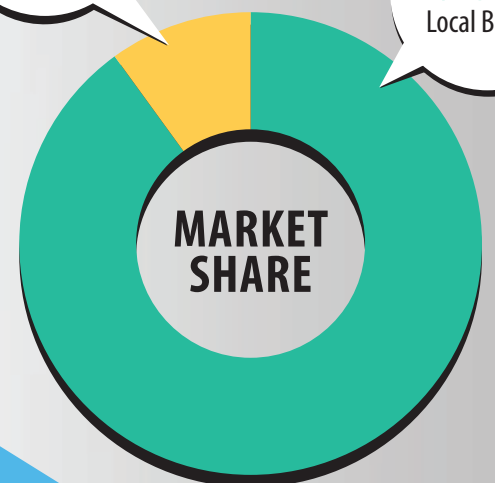
Annual Production (unit):  
**30** lac

Export 2021-22:  
Tk **284.69** crore

Directly involved workforce in fridge industry: **1.5** lac people

10%  
Global Brands

90%  
Local Brands



### FRIDGE PENETRATION RATE