

WHAT MAKES FINNS SO INVENTIVE?

Finland has reinvented itself in just one short century. Our national character and Northern heritage have boosted us to the top of all kinds of country rankings from cleantech to innovation. So how did this happen?

The Arctic climate gave us guts – or 'sisu' as we call it. This means we keep on trying and never give up – a necessary trait in an innovator or an entrepreneur. We've always been among the first to embrace new technology – and develop it ourselves. World-class education is available for all – a great human foundation for innovation of all kinds. These are some of the reasons why we're among the world's top ten countries in terms of patented inventions per capita.

Photo: Sakari Piippo, Prime Minister's Office

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Our unique relationship with nature means that sustainability comes naturally to us. That's why one of our technological strengths is innovation that makes both economical and environmental sense. Finland was ranked number 2 in both the 2014 Global Cleantech Innovation Index and EU Eco-innovation scoreboard 2013. Brand new Finnish products include waste recycling robots, service providers in energy efficiency or waste collection and biodiesel, bioethanol and gasification technologies for various biomass and waste applications.



Our long winters leave us lots of time to think. When the closest neighbour is far away and it is freezing outside, mobile communication starts to make a lot of sense. No wonder that mobile phones put Nokia on the road to world fame. Thanks to Matti Makkonen and other technology developers, we can use mobile phones to send text messages. Even the 160 character-limit is no problem, since you could fit the entire dialogue of a Kaurismäki film into less space.

Long dark winter nights demand entertainment. When it comes to games, Rovio, Supercell and Hill Climb Racing are just the tip of the iceberg. Max Payne even made it into a Hollywood film. At the beginning of the 20th century, Eric Tigerstedt had the idea of combining movies and sound. In the absence of suitable components for amplifying sound, he made major improvements to vacuum tube construction.

Practical problem solving is also in our nature. Maiju Gebhart probably got fed up washing and drying the dishes, so she invented a combination of a cupboard and a rack, on which wet dishes could be placed to dry. To be able to enjoy sweets while actually protecting our teeth, chewing gum sweetened with xylitol is now part of the daily dental care of millions. Rapala's floating lure is based on the simple insight that predator fish are drawn by the twitching movements of injured prey.

If you would like to find out more about Finnish innovation, Slush is a great place to start. It is a great example of Finnish innovation in itself. It took the typical startup path from an idea shared by a few friends to a key event on the latest developments in the startup sector.



ABLOY LOCK Emil Henriksson 1918

ADVANCES IN SOUND-ON-FILM TECHNOLOGY Eric Tigerstedt 1912–1924

SUOMI SUBMACHINE GUN Aimo Lahti 1922

WOOD GAS GENERATOR J. A. Hellfors 1928

RADIOSONDES V. Väisälä 1931

AIV FODDER A.I Virtanen 1932 (Nobel prize in 1945) DISH DRYING CABINET Maiju Gebhardt (developer) 1943

FLASH SMELTING FOR COPPER PRODUCTION Petri Bryk 1947

XYLITOL SWEETENER Suomen Sokeri 1974

DEVELOPMENT OF AND ENVIRONMENTAL PROTECTION TECHNOLOGY FOR PAPER MACHINES Matti Kankaanpää & Others Early 1960s

HEART RATE MONITOR Seppo Säynäjäkangas 1975 BIODEGRADABLE CASTS FOR BROKEN BONES Pertti Törmälä 1986

DEVELOPMENT OF MOBILE PHONE AND IT TECHNOLOGY Nokia research teams in the 1990s

INTERNET ENCRYPTION TECHNIQUES 1990s

CHOLESTEROL-LOWERING MARGARINE Raisio Group 1995

