tions such as Shanley's.

"Businesses like ours are not the exception, they are now the rule. In the west of Ireland, we

the ground floor will be leased for retail use, while the upper level of the store will be converted to apartments.

"People go to large shopping centres which have free parking, and these are full with tenants such as A-Wear, Miss

ment put a cap on the market share of multiples to protect local businesses.

Other landmark family

Bell Labs sets the standard

By Gavin Daly

Lawrence Cowsar has a favourite cartoon. It shows a boy standing in front of a road sign.

The sign is the recognisable hexagonal shape, but rather than Stop, the sign says Go. "You don't see many Go signs," Cowsar said, "but Ireland is like that." It is the story Cowsar tells to sum up his experiences since he came to Ireland a year ago as executive director of Bell Labs Ireland.

The research arm of Lucent Technologies, Bell Labs in the US has developed lasers, transistors and mobile phones, and generated 11 Nobel Prize winners. So when, in 2004, it announced plans to spend €43 million on an Irish operation, it was front page news.

Cowsar came to Ireland last year as a replacement for Dr Lou Manzione, a Bell Labs veteran who led the initial set-up of Bell Labs Ireland. Cowsar admits he was sceptical about setting up in Ireland, not because of any issues with Ireland, but because Bell Labs has such high standards.

Cowsar heads a team of 20 researchers at Bell Labs Ireland. About half of the researchers are Irish and the other half come from countries as diverse as the US, Turkey and Israel. "Innovation is a global sport and Ireland has the international talent," said Cowsar, who expects to hire ten more researchers in the next year, bringing his team to 30 people. To put that in context, he hired about one person a year during his 12 years with Bell Labs in the US.

Cowsar is also chief technical officer of the Centre for Telecommunications Value Chain Research (CTVR), a €26 million joint venture between Bell Labs Ireland and nine universities and institutes of technology. About 70 people work at the CTVR, but more than 100 employees of Bell Labs and Lucent have had involvement with the centre, Cowsar said.

The concept of having Bell Labs Ireland and the CTVR as sister organisations is "definitely unique", according to Cowsar, and Bell Labs wants to replicate it overseas.

"At the same time that we drafted a proposal to IDA Ireland, the universities drafted a proposal to Science Foundation Ireland," he said. "It really is a key part of why we came here." Cowsar wants to overcome the perception of research as being lab-based and abstract – rather, the Bell Labs Ireland researchers and their CTVR colleagues work on "problems of industrial relevance", he said. In the past year, they have filed 20 "disclosures of invention".

Many of those will become fully-blown patents for products that will be used by Lucent and other companies to save money. "Some things will be applied in a year or so, others are more fundamental and will take two, three or four years," said Cowsar.

The CTVR researchers study "everything that has an economic impact on the life cycle of goods", including the cost of raw materials, manufacturing and logistics. In some cases, Cowsar said, they were looking for the "bull-whip effect", where small changes at the start lead to big changes later. Xilinx, a US chip maker with significant Irish operations, opened a research lab in Dublin late last year, and works closely with Bell Labs Ireland. Cowsar welcomed the recent news that Georgia Tech, one of the foremost research universities in the US, is opening a base in Athlone.

He compared Ireland's progress with the "pretty dramatic" transformation of Lucent, which has 400 staff in Ireland. "We went through the boom and bust, and had to restructure the company.

"Ireland has had the same evolution, as it has had to become more innovation-oriented and find ways to extract value. In Ireland, we have had an opportunity to interact with suppliers, with companies, with government, with the academic community," said Cowsar.

Cowsar has ambitious targets – over the next year, he plans to work more closely with suppliers and Irish firms, and have at least one company started from CTVR research.

"We have a five-year fund and we view that as seed funding," he said. "We are here to stay."

Bell research

Lawrence Cowsar wants Irish companies to share the Bell Labs approach to research.

"We wanted to come to Ireland and engage with the indigenous sector," he said. "There are interesting technologies we will license to indigenous companies for joint development."

A Dublin firm, Ircona, has become the first company to license technology from Bell Labs Ireland.

It is working on so-called 'in-building' technology for mobile communications – helping to make sure calls are not dropped because a phone signal is weak indoors.

The technology extends phone coverage inside buildings, a potentially lucrative worldwide market.

Cowsar would not comment on the commercial terms of the agreement, but said that Bell Labs typically negotiated a royalty fee with its partners.

"Ircona worked hard on getting this deal," he said. Bell Labs Ireland has other licensing deals in the pipeline, according to Cowsar.