

A TECH BREAKTHROUGH

While the world works at protecting creative work from being copied and altered without permission through anti-piracy laws and licencing, Bangalore-based Trinity Future-In has come out with a unique solution, writes **Arun Katiyar**.

SOMEONE copied your technical drawing? The photograph you took turned up in a presentation without your permission? Photojournalist Chandu Mhatre has been down that alley several times. "I'd love to track down the person who has copied my photographs without my permission," says Mumbai-based Mhatre, "But what's the point? It is very difficult to get legal recourse as the law takes its own time. And that time is not worth wasting." Mhatre who is also visiting faculty at the Industrial Design Centre (IDC) at the Indian Institute of Technology (IIT),

Mumbai, has good news coming his way: a Bangalore-based technology company has developed software that can protect his creative work.

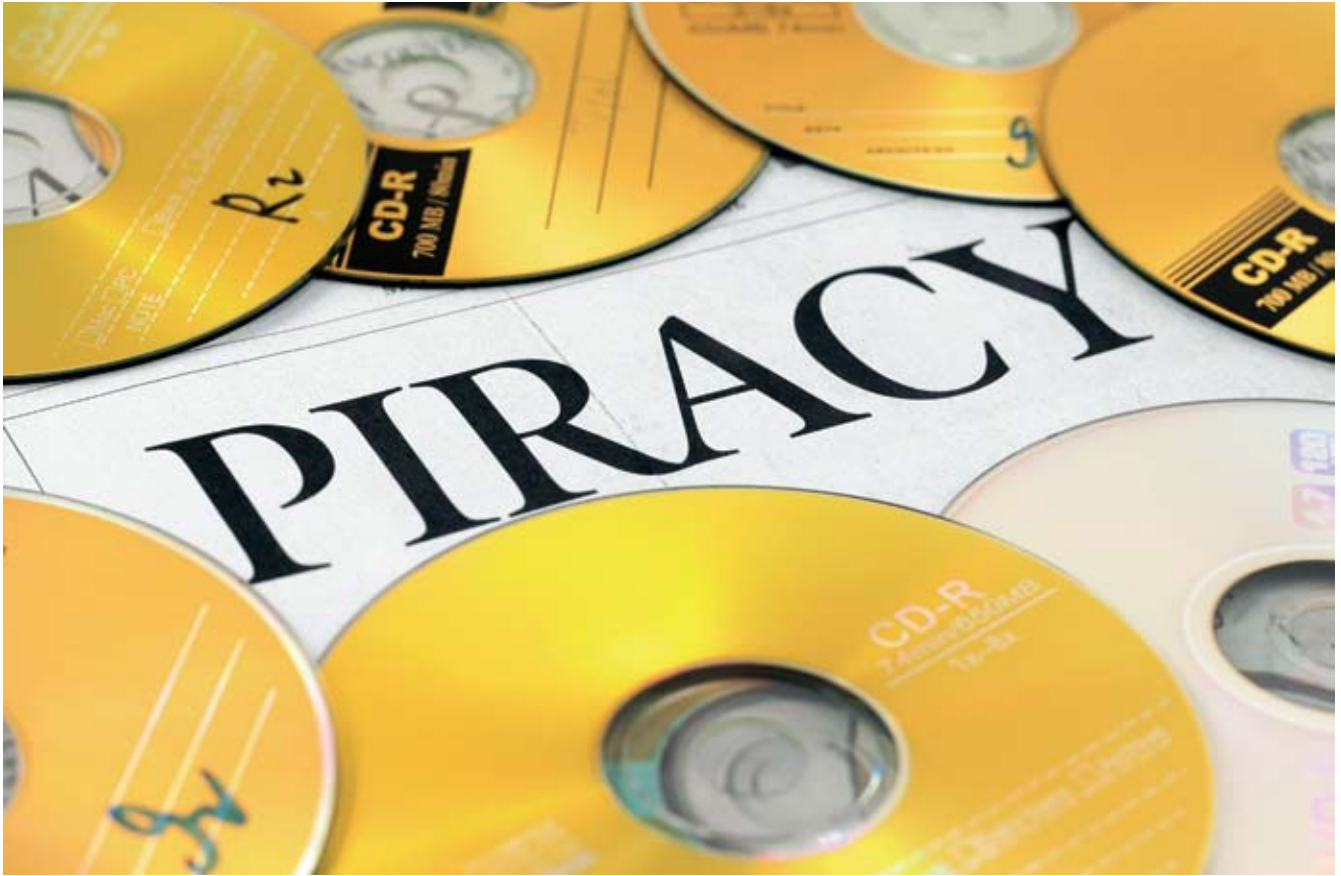
Trinity Future-In, which has as its mentors a group of eminent technocrats, is in the business of developing new technologies to enhance security, copyright protection and product ownership for industries dealing with information technology, telecommunications, computer and online security, and for audio and video products and the digital entertainment industry.

The software that it has developed

can help prevent architectural drawings from being copied, music files from being illegally downloaded, movie scripts from being distributed and even financial spreadsheets and legal documents from being copied, shared or printed without authorisation. Fundamentally, any kind of Intellectual Property (IP) that you wish to share in a digital format can be protected.

Imagine at least one seemingly innocuous business application of the software: educational courseware. Several education institutes provide their course material to students on a CD. The





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content on the CD comes protected via a password. But once the password is shared, so can the course material. Not only can it be shared, but competition can copy it. Worse, teachers and professors use the same content, without paying a franchisee fee or royalty to the original owner, to take private coaching classes. IP theft undoubtedly has a huge impact on revenues, business growth and can blunt the competitive edge of a business.

The way most businesses approach the problem of protecting IP is by using logins and passwords or using serial pair schemes (an alpha numeric code that can unlock files and folders) to keep digital data protected. It is like using a digital lock. But like any locking system, once the key is known, the data is public.

Expectedly, international trade data suggests that upto \$200 billion of internationally traded products could have been counterfeit or pirated in 2005. According to The Economic Impact of Counterfeiting and Piracy study published by the

Organisation for Economic Co-operation and Development in 2007, if non-tangible pirated digital products distributed via the Internet were added, "The total magnitude of counterfeiting and piracy worldwide could well be several hundred billion dollars more."

According to an International Data Corporation (IDC) report titled Worldwide Information Protection and Control (IPC), 2007-2011 Forecast and Analysis: Securing World's New Currency, the market for data protection products in 2009 will be worth \$2.05 billion.

It's easy to see why it is a good time for Trinity Future-In, the 15-person company – which began operations in a garage – that has recently taken three of its IP-protection products to market, to be in business: by 2011, says the IDC report, the data protection market would be worth \$3.22 billion.

Trinity's suite of digital data protection products address the B2C (business-to-consumer) retail market, researchers, law firms, designers, service and education

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IMPRESSIVE LINE-UP OF MENTORS

The Bangalore-based tech start-up has an impressive line-up of advisors and mentors who are guiding it and helping it emerge as a major player in the anti-piracy business.

Achamma Joseph, for instance, a core committee member of the 'Global Women Forum' of The Indus Entrepreneurs (TiE), is a pioneer in product development with over two decades of experience in software product development. She created 'HARVEST IT', which received the Best Business Solution award globally from Microsoft for two consecutive years.

Ghanshyam Dass, another mentor, is managing director of NASDAQ, Asia Pacific Zone, based in Bangalore. His knowledge and expertise has helped other young

entrepreneurs and inventors in the past.

Sridhar Ramanathan, founder and president of California-based Pacifica Group Management Consultancy, Inc, is a veteran of enterprise technology companies. He has worked in senior positions in Hewlett-Packard and is an adjunct professor of marketing at Golden Gate University. He has lent the marketing edge to Trinity Future-In.

Another key mentor is Vinay Deshpande, who in a span of over three decades held overall responsibility

for development of over 60 hardware and software products.

He is the chairman and ceo of Encore Software Ltd.

Xerxes Desai, a former top Tata Group executive, has also brought his vast experience in planning and strategising.



companies, game developers, software developers, multimedia presentations, corporate presentations, tutorials, the healthcare sector, defence companies, universities, database management companies and training institutes.

Trinity has applied for 13 patents, of which four are in the US. The first patent filed in India has already been granted and the company is now wrapping up work on a product that is aimed at protecting the most vulnerable content – that on the web.

The company is going one step further with creating protection for web content where text, images and video worth millions are copied routinely.

Says Shriram Adukoorie, whose Bangalore-based web and mobile local search company Ask Laila creates information on events, commercial outlets and public places: "Our investments in content are fairly high – we make actual phone calls to verify the accuracy of the content before we publish it in terms of event details, address and phone numbers. But

competitors send automated spiders over the net to trawl our content and copy it to their sites. We'd like to prevent this using a content protection software – because that will protect our investment and our business."

Trinity is banking on the fact that creative and other businesses generating original IP will be more interested in protecting their work than seeking punishment for those breaking IPR laws. It's but logical for these businesses to address the root cause of the problem than to combat with content pirates and counterfeit artists.

Not surprisingly, a 2007 global survey on counterfeiting and piracy by The Business Alliance to Stop Counterfeiting and Piracy (BASCAP) revealed that industry efforts have mainly focussed on initiatives to develop technologies to combat infringement – and, smartly, Trinity wants to be part of that effort.

Its products challenge the very precepts on which current digital data protection is based. Most security measures available

today focus on the lock-and-key concept. If any of the passwords of serial numbers are compromised – and it is often easy to develop a crack for any password – the content on the digital media can be copied.

Today, there are other powerful protection tools available, like Kingston's Data Traveller Black Box. But the data remains protected as long as it is within the box. The moment it comes out of the Kingston box, it can get replicated, altered and abused.

"We are different," says David Lobo, chairman, Trinity, shaking the simple USB drive that forms the shell for his products. "We don't let the data come out of the box." Therefore, the data can neither be forwarded or transmitted electronically as the files become invisible or inactive, nor can it be printed. In fact, you can't even take a screen shot of the content as the Trinity software disables the Print Screen function on computers, ensuring that the digital data remains secure inside the security device.



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This means you can send your architectural drawings, creative layouts, poems, software source codes, music and video files, just about any digital content, including full-fledged evaluation copies of software and games, to a client using the Trinity pen drive. The content you send can only be viewed on a monitor. It cannot be forwarded as email, copied to a hard drive or printed. Some Trinity products are capable of creating a log of any attempt to break into the content or tamper with the protection. The log shows computer make and serial number along with the date and time of the attempt.

Tests conducted on some Trinity products by the Standardisation Testing and Quality Certification (STQC) division of the Union Ministry of Communication & Information Technology, Government of India, show that the products deliver against their promise. The test cases employed and the results obtained conform to the claims made by Trinity Future-In with respect to protection of

stored information, says the STQC report. "You can't imagine a unique and strong solution to the problem of digital data protection could emerge from a humble garage in Bangalore, could you?" asks Lobo.

Ask Laila, which has recently received US\$10 million in funding from Matrix Partners, Lightspeed Venture Partners and SVB India Capital Partners, wouldn't mind spending a part of its funds to keep its business secure.

The neat part is that the Trinity products reflect the geography they were created in: they are not expensive. "Our products are reasonably priced compared to the competition and the security levels offered – a negligible cost to keeping your IP protected," says 27-year-old Sathish B.V, an expert in information security and one of the inventors of the products. As a company, it indeed is piracy that determines Trinity's future. But it is strong data protection and inexpensive product costs that determine its competitive edge. 🌈