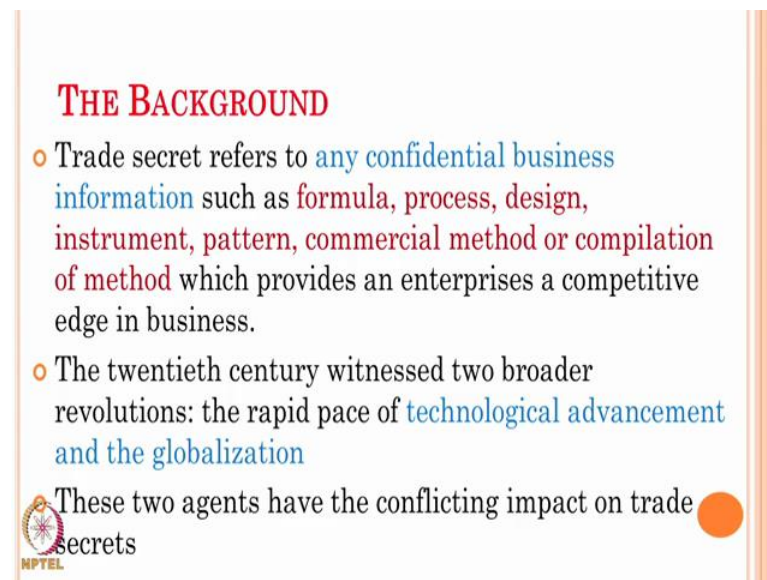


Economics of IPR
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Module – 02
Lecture – 04
Economics of Trade Secrets

As a part of the series of lectures on Economics of various types of Intellectual Property Rights, this particular lecture is on the economics involved in trade secrets.



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THE BACKGROUND

- Trade secret refers to any confidential business information such as formula, process, design, instrument, pattern, commercial method or compilation of method which provides an enterprises a competitive edge in business.
- The twentieth century witnessed two broader revolutions: the rapid pace of technological advancement and the globalization

These two agents have the conflicting impact on trade secrets

So, if we have to basically see the general meaning of the trade secrets it refers to any confidential business information it may be a formula, it may be process, it may a design, it may be a pattern, it may be instrument, commercial method or compilation of methods and such formula process design, commercial method, patterns, instruments, compilation of methods and providing an enterprises a competitive edge in business.

So, the 20th century a witness two border revolutions: one of the major revolutions which we have seen today within the form of technological advancement and the second is the globalization of economic activity globalization of production, globalization of consumption. We are finding that to more faster a speed of consumption, production and going on due to the technological advancement and a fast set of information technology

in a built services around the way and we cannot say that we leave in a traditional set of technological tools and the old ways of production and consumption.

So, these two agents have the conflicting impact on trade secrets because there is a cut truth competition in the world today a firm who is really in the leading position they want to sustain their leadership in the market and trade secrets helps them to continue their leadership, but there are other firms also and they are also ready to somehow pirate those secrets from that business identity and they also wish to jump into the market or to acquire the market and to share the market in a much bigger way.

So in fact, we are finding that there are two different types of firms one who wish to protect trade secrets and another firm is also busy to really pirate the secrecy of certain firms and they want to really lead the market grab, the opportunity available in the market as a traditional supplier.

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So, what are the legal requirements to have the trade secrets? The foremost requirement to be a trade secret is that information must be undisclosed compare to patent and compare to copyright and compare to trade mark.

In all this three cases we have to have, we have to disclosed intellectual property in patent also we have to first disclosed information before the patent office will award the patent you have to have the proper disclosure of the information what you have done,

how you have done. In copyright also only after the disclosing the martial auditing material or the music or may the art you are having the copyright on that. In trade mark also without putting the mark, without resting the trade mark without disclosing the trade mark you cannot have legal right to protect trade particular trademark. But compare to all this three types of intellectual property this particular intellectual property which is trade secret is different from others because here you do not have to disclose any information, but you have to undisclosed information.

Information must not be disclosed. So, because it has a commercial value and trademarks are not really those secrets which has no commercial value finally, trade secrets are important only for the commercial purpose, commercial value is in built in those trade secrets. So, the owners of the trade secrets necessarily have taken reasonable caution to remain it secret. So, if form is really wish to keep trade secrets they are not to suppose to really leak or really share or really have a very less precautions to retain that information with them.

So, these are the requirements and these requirements have legally natured because the moment your information's are shared you cannot say that this was our trade secrets. So, the prime important points of such trade secrets are to have undisclosed information.

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So, there are issues in trade secrets one of the important point is the nondisclosure Agreement, Non-compete Agreements, Infringement and Enforcement.

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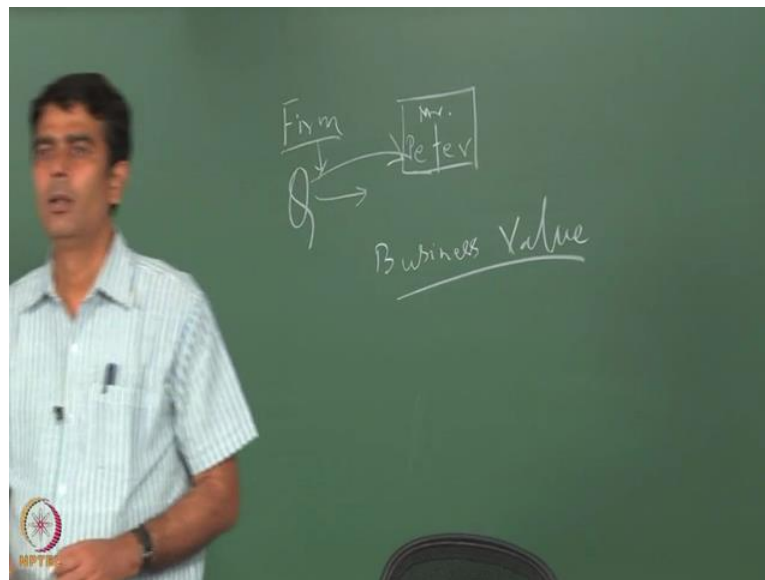
NONDISCLOSURE AGREEMENTS

- In order to protect the trade secrets and other confidential information, companies go through **non-disclosure or confidentiality agreements**
- While entering into an agreement with confidentiality terms, two major issues require to be considered
 - (a) **Consideration of the value of the disclosed information**
 - (b) **The duration of the non-disclosure and restricted use of the trade secret that one must be willing to be considered**



So, the first point which is the Non-Disclosure Agreement, in order to protect the trade secrets and other confidential information company go through non-disclosure or confidentiality agreements with the person who holds the trade secrets of that particular enterprise.

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The diagram on the chalkboard illustrates the relationship between a firm, an individual, and business value. It shows 'Firm' with two arrows: one pointing to a box labeled 'Mr. Peter' and another pointing to 'Business Value'.

So, suppose a firm is trying to suppose a firm is the firm name is U and if the firm is trying to retain information trade secret for the business propose this particular form will try to share that trade secrets with one of the employee. So, these particular employees

suppose this particular employee features are appointed to keep that secrecy the firm Q the firm Q pay for Peter to keep that un-disclosed information with him.

So, it is the responsibility of it is not fully responsibility of the Peter, but it is also the responsibility of this particular firm to maintain the secrecy. So, it is based on the mutual understanding between the Q and the Peter the firm Q and the person Peter. Mister Peter is responsible to keep the information secret. So, there are two major issues required to be considered here first is the consideration of the value of the disclosed information and the duration of non disclosure and the strict use of trade secrets that one must be willing to be that one must be willing to be considered.

So, because as we have mentioned that there is a business value business value involving trade secrets. So, the value of that business should not be disclosed that information should not be disclosed and it should not be disclosed ever because non-disclosure in trade secrets are in linked with the future of the product or the future of the firm the moment secrets are disclosed the future of the firm in the current market scenario or in that market scenario will be really down.

So, the restricted use of trade secrets that one must be willing to be considered in those non-disclosure agreements which it is one of the important points to understand.

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NON-COMPETE AGREEMENTS

- Under the **non-compete agreement** one party (i.e., the employee) consents not to engage in or initiate a related business similar to previous one or compete with the other party which is typically the employer.
- The agreement has **dual-benefits**: on the one side it controls the employees from leaving the job, and on the other side protects the confidential information from disclosure, i.e., safeguards the trade secrets.
- This prevents employees from revealing the classified business information or trade secrets to the competitors.



The second point is non-compete agreements under the non-compete agreements one party for example, one party is Mister Peter and another party is Mister Q the firm. So, the party which is employee and Q which is the employer they are having this agreement the employee is giving the consent that it is not going too engaged or to initiate a related business a similar business or they are not going to compete with the other party which is typically the employer.

First is not to disclose the information the second is not to compete with the employer. So, this is the second important agreement which is related to the trade secrets. So, the agreements has dual benefits on one side it controls the employees from living the job and on the other side protects the confidential information from the disclosure and the safeguards the trade secrets. So, this prevents employer employee from revealing the classified business information or trade secrets to the competitors.

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INFRINGEMENT

- Through 'reverse engineering' (authorized method of duplicating a technology that commences with an existing product and works in the reverse direction) or 'employees' poaching' (processes that involve hiring from the rival firms), corporations frequently try to explore rival firms' trade secrets
- Companies also resort to potentially illegal methods to discover competitors trade secrets including 'industrial espionage' (theft of trade secrets through hidden and illegal practice of spying competitors to achieve a commercial advantage)

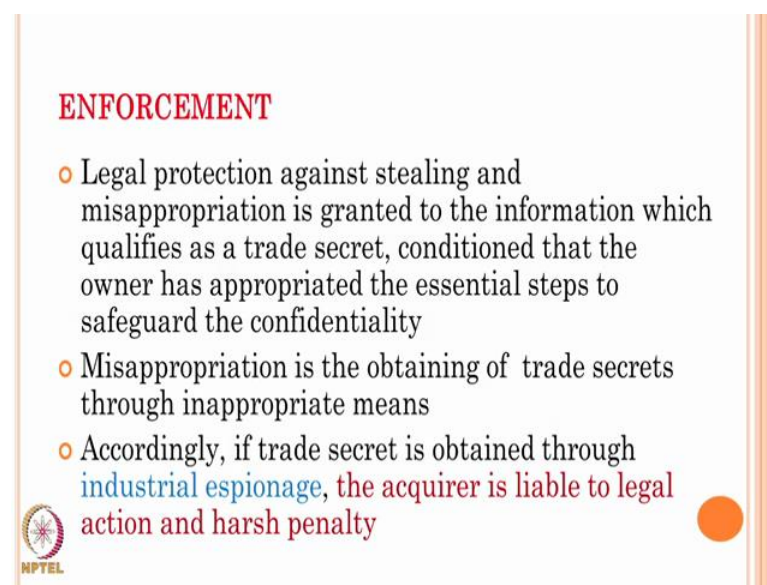
NPTEL

So, but we see that like other intellectual property rights such as patent or trademark and copyright even if these intellectual property are not really disclosed even if these properties are disclosed and the trade secrets are not disclosed through reverse engineering' which is one of the authorized method of duplicating a technology that commences with an existing product and work in the reverse direction or 'employee poaching' which is the process that involve hiring from the rival firms, corporations frequently try to explore rival firms trade secrets.

So, trade secrets are again facing attacks by the rival firms trade secrets of a firm is facing the attacks by the rival firm through two different ways - one of the way is the reverse engineering trying to explore all possibility to find out how the product was developed and through the 'employee poaching' the process that involve hiring from the rival firms. The company is also resort to potentially illegal methods to discover competitor's trade secrets including 'industrial espionage' theft of trade secrets through hidden and illegal practice of spying competitors to achieve a commercial advantage.


So, three different way 'reverse engineering', 'employees poaching' and 'industrial espionage' these are three different way to get secret information's out from the firm and these are the ways of infringing the one of the intellectual property which firms are keeping secrets for their benefits in the market

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ENFORCEMENT

- Legal protection against stealing and misappropriation is granted to the information which qualifies as a trade secret, conditioned that the owner has appropriated the essential steps to safeguard the confidentiality
- Misappropriation is the obtaining of trade secrets through inappropriate means
- Accordingly, if trade secret is obtained through industrial espionage, the acquirer is liable to legal action and harsh penalty



So, Legal protection against stealing and misappropriation is granted to the information which qualify as a trade secrets, conditioned that the owner has appropriated the essential steps to safeguard the confidentiality.

So, more you are having the safeguards, precautions, you able to have the confidential or the secret information secure with the firms. So, Misappropriation is the obtaining of trade secrets with inappropriate means now as we have seen in three different methods that the firms, other firms or the rival firms are trying to get certain way out to get the information from the firms which are really having a big name in the market and big

market share. Accordingly, if trade secret is obtained through industrial espionage, the acquirer is liable to legal action and harsh penalty.


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So, what are basically the Advantage of Protecting the Trade secrets first thing is for trade secrets like trade mark or like patent there is (Refer Time: 15:08) any cost involving in registration like in trademark we have to have a cost involving registration or in patent we have to have a cost involving getting the patent granted. It is not limited right that is constant by time period, like in patent we have a limited time period for getting the for getting the rights in case of trade secrets here again firms are having unlimited time to really get the benefit out of maintaining the trade secrets because trade secrets the moment you are protecting the trade secrets you have instant benefit or the moment the trade secrets are being pirated.

The other firms are having instant benefits. So, the registration with the government is not required in case of trade secrecy because trade secret because not the disclosure or of the confidentiality is needed and neither you have to have very required information registered with the government. But apart from no registration cost and no fixed time period involved there are competitive advantage from the protecting of the trade secrets.

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PROBLEMS IN PROTECTION

- Reverse engineering poses threat to the protection of trade secrets when the secret is embodied in a product
- Trade secret protection is not awarded if it is publicly revealed
- Protection of trade secret is subject to inappropriate attainment and use or disclosure of the secret information
- Trade secret protection is weaker than the patents protection

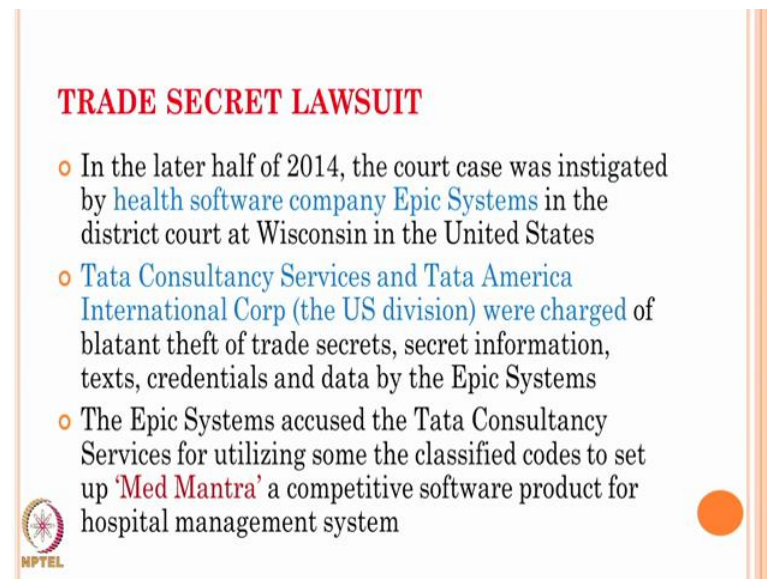
But, there are certain problems associated with the protection of the trade secrets. One of the problem is reverse engineering which is pose a threat to the protection of trade secrets when the secret is embodied in a product we have seen that the forms are ready to really have the reverse engineering process adopted. And also, Trade secret protection is not awarded if it is publicly revealed if a person is, if the person who is really having the trade secrets. If they are publicly reveling those information to the to the party then trade secret protection is not awarded not really having any value not really having protection at all the moment, it is out the public is knowing the facts or the other firms are knowing the fact that what type of formula or steps where maintained by the other firms.

So, it is the trade secret is subject to inappropriate attainment and use or disclosure of the secret information if the disclosure is ready to disclose the secret information by any inappropriate means trade secret protection is not so easy to have. So, Trade secret protection is weaker than the patent protection or the trade mark protection, because here you do not have to disclose any information you have to basically maintain the undisclosed information with you and that is the most challenging and really very hard task for a firms to believe a person who is really keeping that trade secrets in a locker for many firms those secret are kept in a bank and the in safe locker.

The person who is really keeping that trade secrets are not allowed to really fly with other workers, other employee of those firms they are being kept the task from the entire


circle and like patent it is not like in case of patent if somebody is really coming out with a similar product patent owner has the right to challenge them. Here in case of trade secrets the moment trade secrets are out by any means you have a sudden fall in your market size you have a complete incentive instant incentive, because firms are really ready to capture the market which you are really having it.

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TRADE SECRET LAWSUIT

- In the later half of 2014, the court case was instigated by health software company Epic Systems in the district court at Wisconsin in the United States
- Tata Consultancy Services and Tata America International Corp (the US division) were charged of blatant theft of trade secrets, secret information, texts, credentials and data by the Epic Systems
- The Epic Systems accused the Tata Consultancy Services for utilizing some the classified codes to set up 'Med Mantra' a competitive software product for hospital management system



In a recent case, in the latter half of 2014, the court case was instigated by health software company Epic Systems in the district court at Wisconsin in the United States. The Tata Consultancy service and Tata America International Corporation were charged of blatant theft of trade secrets, secret information's, texts, credentials and data by the Epic System. The Epic System accused Tata Consultancy Services for utilizing some the classified codes to set up 'Med Mantra' a competitive software product for hospital management system.

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SHIFT IN THE CASE

- Nevertheless, the lawsuit was more concentrated on how a Tata Consultancy Services worker illegitimately accessed the 'User Web', the internal records database of the Epic Systems
- And less about whether the Med Mantra was created with inputs from Epic Systems or not



Nevertheless, the lawsuit was more concentrated on how a Tata Consultancy services Worker illegitimately accessed the 'User Web', the internal records database of the Epic System. And less about whether the Med Mantra was created with inputs from Epic Systems or not.

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THE VERDICT


- TCS was found guilty of the infringement of trade secret by the United States grand jury
- Two fines were imposed on the TCS company and its American arm
- A total of \$ 940 million of fine was imposed to the TCS of which \$240 million was to be paid to the Epic Systems in damages and an additional \$700 million for penalizing damages



The Tata Consultancy Service was found guilty of the infringement of trade secrets by the United States grand jury. Two fines were imposed on the TCS Company and it is American arms. A total of 940 million dollar of fine was imposed to the Tata


Consultancy Service for which 240 million was to be paid to the Epic Systems in damages and an additional 700 million dollar for penalizing damages.

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TCS CLAIMS

- Tata Consultancy Services denied the infringement of IP and said that it will go for an appeal
- The jury's verdict on responsibility and damages was unanticipated by the TCS, but it also said that it respects the legal process
- TCS' next course of action will be to forcefully challenge the jury's verdict into the higher courts through appeal




Now, the Tata Consultancy Service is claiming that TCS is denying the infringement of IP and said that it will go for an appeal. The jury verdict on responsibility and damages was unanticipated by the Tata Consultancy, but it also said that it respects the legal process. The Tata Consultancy Service next course of action will be to forcefully challenge jury's verdict into the higher courts through appeal.

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CONCLUSION

- Trade secrets protection is **more weaker** than any other IP protection as the **entire secrecy is in the hand of one person**
- **Non-disclosure Agreements and Non-compete Agreements** are the **potential ways to protect** trade secrets
- However, infringement persist through **illegal industrial espionage**
- Trade secrets have become more valuable in the globalised era



So, Trade secrets protection is weaker than any other intellectual property protection as the entire secrecy is in the hand of one person or may be in the hand of two people. Non-disclosure agreements and non-compete agreements are the potential ways to protect the trade secrets, these are two major possible agreements which basically restrict the shift of the information with the person who is holding the trade secrets. However, infringement persists through illegal industrial espionage as we have seen that there are ways to infringe the trade secrets and as we see today that the global business is growing Multi-National Corporation business is going very fast and world is shrinking it is distance due to the help of information technology and other electronic tools.

So, what we find here that trade secrets became more important today compare to past because the moment trade secrets are being disclosed by the person who holds this type of secret information the other firms enjoy the benefit of a market without working on a very different set of experiments and a very different set of exercise which is needed to really acquire a trade secrets for the benefit and for the growth of a firm.

One is already having a very ready-made set of formula or a very ready-made set of secrets very ready-made set of solutions to grab the business if somebody is really a really infringing the trade secrets of a firm.

So, I think the entire discussion must gave you some differences from the past discuss on which we have on the economics of patents copyright and trademark because in other intellectual property rights we have seen that disclosure is the first ends is the first step to acquire the intellectual property while in case of trade secrets that un-disclosed information is the key to maintain the trade secrets. May be one more lecture is on economics of Industrial Design I will help you to again understand the entire economics of intellectual property rights.

Thank you.