

# How Risk Management leads to increased Profit Margins



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CASE STUDY

**“Flexible risk mitigation plans and liaison with the insured can help retain customers and develop new ones while maintaining a win-win scenario.”**

## **Key Parties Involved:**

1. Prospective Insurer – IGI Insurance Ltd.
2. Prospective Insured – Printing Company (Pvt.) Ltd.

*Note: This study is based on a real case however the actual name of insured company has not been mentioned to maintain confidentiality.*

## **Introduction:**

Despite aggressive induction of new marketing officers; sales of Printing Company (Pvt.) Ltd. have shown a very steady growth for the past three years. Printing Company's management is considering several options to identify and address the concerns in hopes of accelerating the currently steady revenues. It is believed that the slow growth correlates to an intense market competition and sensitiveness towards business continuity. Clients are very cautious about their supply chain management and are reluctant to give large orders to companies that lack the systems to ensure uninterrupted supplies.

One fine morning, while the general manager rests on his chair amidst several confusing ideas for restoring company growth; a Risk Engineer from IGI walks into his office. The risk engineer has been invited by the company's accounts department and he would assess the status of risk from fire insurance perspective. The plant manager asks the engineer several intriguing questions regarding the scope and benefit of this survey and the importance of risk management. One catchy response from the engineer is that risk management efforts can help improve business profitability for both the insured and insurer. This is a very striking point which immediately relates to the current problem faced by Printing Company (Pvt.) Ltd. The general manager responds that he is keen to know more about how risk management can help them enhance profits. The risk engineer requests to be allowed access to the production facility to examine the risk and commits to bring a proposal that would make the insured site safer as well as pave pathways for enhanced profits.

The general manager deposes his subordinate to coordinate the survey and share details as and when required. During the survey several critical observations are made:

Fire fighting equipment available on site is not well maintained. There were instances where fire extinguishers

were totally inoperative. The deputy plant manager informs that there are 60 fire extinguishers however the risk engineer observes that hardly half of them are in good shape. A major observation is the poor housekeeping standards at the premises. Also, understandably a significant inherent hazard is the flammable nature of chemicals used in the flexible printing process. To worsen the hazard, not much caution is taken at the chemical dispensing hall. Stock-keeping practices also need to be improved. As observed, there was a concentration of fire load at various locations due to keeping stocks of different nature haphazardly together. Deputy plant manager informs that some finished stocks would be dispatched to clients in the evening and stock-keeping would automatically get better. However, clearly this seems to be a daily routine where finished stocks are kept close to flammable chemical drums in the morning and only dispatched to the clients in the evening. A major fire risk exists for all the duration when combustibles and flammables are kept together until finished products are dispatched to the destination. Wiring standards are a serious concern too. There were instances of loose and exposed wiring which poses a serious threat in a work area that may have flammable vapors in it. Deputy plant manager insists that the company is just like any other typical printing industry in the market and the observations made are not a serious concern. Their company has been running safely for the past 5 years and such matters as observed during the survey are not going to bring any harm to the occupancy. On the other hand the risk engineer realizes how apparently small matters can bring huge losses to site safety.

With Printing Company's fire insurance renewal approaching in two months, IGI faces a critical question to answer. Can IGI dare to insure a business that apparently is a bad risk?

## **Background of the Case:**

Flexible Printing is an inherently high hazard industry. IGI being a Packages Group company is well aware of risks involved in flexible printing and has experienced fire losses in this business line in the past. After such losses, major safety improvements were brought about in the flexible printing departments of the relevant insured parties. State of the art fire suppression systems were installed at the machinery and a rigorous safety culture was developed. IGI knows there is no such system or safety culture at Printing Company.

On the other hand Printing Company management claims that the overall quantum of risk at Printing Company is not as huge as some of the market leaders

like Packages. Printing Company is comparatively a middle sized industry with lower production capacities and revenues. Correspondingly it cannot spend on safety to the same extent as Packages.

### **Additional Details:**

IGI risk engineer re-visited the site after two days and made a comprehensive presentation on the risk management efforts required at printing occupancies. Details of fire incidents at flexible printing occupancies throughout the world and specifically in Pakistan were shared with the Printing Company management in a very persuasive manner. It was highlighted how apparently petty matters like having an uncovered temporarily hanging bulb in the ink store can cause huge fire incidents. This was related to the fact that relatively small investments on risk management can prevent fire losses which can cost manifolds.

While clients are normally reluctant to accept risk management recommendations especially in terms of the need to invest on safety; IGI has been successful in making Printing Company realize the true potential of a risk survey and rightly portrayed this survey as a valuable service offered free of cost, which could otherwise be charged heavily by risk engineering firms. A topping on the cake is Printing Company's inquisitiveness about business profits through risk management. At the end of the meeting, the risk engineer hands over a risk survey report to the company's management.

The comprehensive risk survey report with its professional reporting standards has inspired the Printing Company's directors and they have been inclined to think how feasible an investment on safety and risk management is! In the next meeting that took place three days later, the risk engineer is accompanied by IGI's regional manager. While the Printing Company's management has questions regarding pay back of their investment on safety; the IGI regional manager clarifies that implementation of the risk management plan would be linked directly to insurance premium discounts. Also, the IGI risk engineer would always be available for technical feedback and support as a prestigious value-added service. After a series of meetings with IGI the directors are partly convinced that they can move forward with IGI and have asked their general manager to develop a risk improvement plan in light of the report and in liaison with IGI risk engineer.

However, it is essential to mention that despite this positive intent there is no on-ground action as of yet.

The ground realities are still the same i.e. a proposal to insure a poor risk. IGI finds itself in a fix. A decision has to be made. Cannot wait longer!

### **Solution:**

A risk survey report was handed over to the Printing Company's management in the first meeting that took place two days after the survey. Apart from general and technical information; IGI's risk survey report discusses the observations made during the survey, associated hazards and clearly recommends action points to improve the risk. From insurance point of view one critical aspect of the report is to mention a timeline for implementation of recommendations. IGI has been careful to draft a plan where the prospective insured is not financially burdened immediately and the investment is distributed over a span of 6 months to scatter the load in an acceptable manner. Such managerial controls which require rigorous physical efforts and no investment are proposed to be implemented immediately and complied within two weeks from the date of acceptance of risk mitigation plan. High investment recommendations have been given lenient timelines of up to 6 months.

As a substantial development, IGI risk engineer visits Printing Company for an official acceptance of the risk improvement plan. In a meeting with top management, all risk improvement recommendations are explained and significance of implementing them is highlighted. Emphasis is laid on how the initial stages of risk improvement plan would not financially burden Printing Company and high investment recommendations would come in later at around 4 months from the initiation of contract. The information is cascaded down to machinery operators and store-keepers to ensure that the plan is well communicated throughout Printing Company. An important aspect of the risk mitigation plan is to highlight that inability to follow the agreed improvement timeline would in turn mean that IGI bears no liability. IGI is only bound to compensate Printing Company for any losses if the risk mitigation plan is implemented in due course. IGI risk engineer would be authorized to visit the Printing Company premises to track the progress at any point of time. This would also allow for valuable advisory and technical discussion to have the right systems in place at the right time.

A brief description of recommendations given to Printing Company is shared as below:

1. Wiring Standards need to be improved. All loose and exposed wires should be conduited and secured with clips. Also, the main cables should pass

through cable trays which are at least 10 ft. away from any stocks or machinery. Since this recommendation may require some investment, it should be implemented within 1 month of acceptance of risk improvement plan.

2. Fire Suppression Systems should be installed at the flexible printing machinery. Inert gases should be used as suppression agent and the actuation of the system should be automatic i.e. linked with smoke detection in the machinery. This is a major investment and may be completed within a period of 6 months. Specifications of the system should be shared with IGI to verify the adequacy before installation.
3. Maintenance of fire extinguishers should be done in a more systematic and planned manner. A regular maintenance protocol must be developed. All under-maintained fire extinguishers should be pressurized on immediate basis.
4. Given the probability of fire initiation due to static charge; it is recommended to install a discharge station at the solvent dispensing store. All workers should wear static-free straps on their wrists and ankles and discharge their bodies' static charge at the discharge station before going to the solvent dispensing store. Discharge station may be installed within a month.
5. Risk segregation needs to be improved. All dispatch stocks should be maintained at a minimum distance of 50 ft. from flammable chemical store. Currently, the stocks are hardly 10 ft. from chemical drums. This is a managerial control and should be implemented immediately.
6. Housekeeping should be improved. Accumulated waste should be immediately removed and a waste removal schedule should be implemented. Action should be taken on immediate basis.
7. Electrical lighting practices should be improved. All lights should be provided in aisles instead of installing them above stocks. Also, the lights should be covered with shatter proof lenses to prevent contact with stocks kept underneath.

It is important to mention that the policy renewal approaches in two months. Apart from the recommendation regarding fire suppression system; all other recommendations can be complied before the existing policy expires. Ideally, most of the recommendations should have been implemented by the time IGI insures the Printing Company. Correspondingly the insured is bound to get some premium discounts to ensure a win-win scenario. IGI risk engineer would be available for one or two days in each month to

gauge the progress of risk mitigation plan.

### **The Implementation:**

IGI risk engineer visited Printing Company six times over a span of six months. Also, there was a regular follow-up over phone and email. Despite some hiccups Printing Company management was generally welcoming and cooperative. Designs of systems to be installed were shared with IGI to verify the adequacy before installation.

At the end of two months (due date for policy renewal), IGI found that almost all the managerial and non-investment recommendations had been implemented. Cable trays had been installed to hold main cables, loose wires had been conduited. A third party contractor was hired for continuous maintenance and refilling of fire extinguishers. Consequently all fire extinguishers were found adequately maintained, positioned and ready for use. Discharge station had been installed at the solvent dispensing store. All workers had been given due awareness on precautionary measures associated with static charge hazard. Risk segregation got significantly improved. A wall was constructed between chemical storage yard and dispatch area, also the intermediate segregation was increased to around 50 ft. Housekeeping SOP was established and records of daily waste removal were shared. Also, all conventional lights had been replaced with LEDs or covered with shatter proof lenses. All these factors gave IGI the confidence to insure Printing Company (Pvt.) Ltd.

Even after insuring, the rigorous follow-up surveys ensured that things were continuously maintained and heavy investment recommendations got implemented later. At the end of 6 months from the issuance of report, Printing Company installed a gaseous suppression system at its flexible printing machines. Although the system was manually operated at that point of time however it was committed that it would become fully automated in a further period of 2 months. Given the serious and positive intent of Printing Company and commitment towards fulfillment of recommendations, IGI happily granted this extension.

Following all the rigorous risk management efforts and close liaison with the insured; Printing Company today is a much safer occupancy than it was 3 years back. This is not only a contribution towards profitability of insurer and insured but also is significant in regards to human life safety.

Then



Poor Risk Segregation between flammable chemicals and dispatch stocks

Now



Partition wall between dispatch store and flammable chemical yard



Ink Mixing Department



Discharge Station at ink mixing department



Uncovered conventional light close to stocks



LEDs sufficiently apart from stocks



Waste Accumulation



Regular waste removal at waste yard



Combustible stocks below DB



No stocks below DB

## Then



Poor stock-keeping at Inks Store

## Now



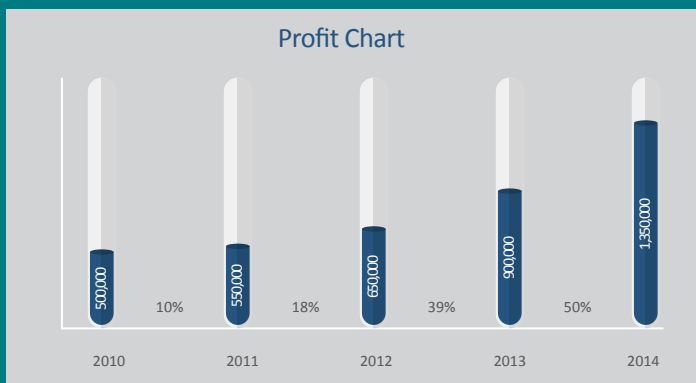
Well maintained ink store – defected materials stored at a separate location

## Reaping Mutual Benefits:

While IGI as an insurer enjoyed three years of loss free business with Printing Company due to implementation of risk improvement plan; there were several benefits which were also cherished by the insured.

Printing Company used the risk survey reports and progress charts very effectively. These progress reports were shared with prestigious customers of the company. Also site visits were invited to showcase the improvement in physical conditions. Multinational clients who were always very concerned about their business continuity and supply chain management; thoroughly appreciated Printing Company's efforts to mitigate risks and ensure continuous supplies. Consequently many customers enhanced the quantum of business with Printing Company and started giving bigger orders with confidence.

This risk management strategy was so successful that Printing Company's profits showed visible improvements ever since the implementation of plan. While the annual profit percentage was hovering around 10 – 18 % from 2010 to 2012; it sky rocketed to 39% in 2013 and 50% in 2014. The risk management plan was formulated by the end of 2012 and implementation started in early 2013, this was the period when profit margins started to rise.



## Learning Outcome:

Industries are pre-dominantly occupied with enhancing production capacities and sales. On the

other hand, safety is mostly an ignored aspect because it is thought that any investment in this regard would not reap immediate benefits. Businesses consider that safety measures would bring no production boosts or increase in sales. However this case study has busted this very common myth about the risk management and safety function. It has established that investment made on risk management and safety measures is directly proportional to business profits apart from saving the companies from damages to assets and human lives in extraordinary circumstances. Risk Management gives the businesses a much needed professional outlook and satisfies the clients regarding uninterrupted supplies. Hence, it can be used as a tool to attract new clientele and enhance the quantum of revenues earned.

The damage-control aspect of fire protection systems is effectively highlighted when the industry actually faces an unforeseen emergency situation. Vigilant safety systems may prevent severe damages and pay back more than the investment made on them. Understandably such unforeseen incidents are rare but industries need to be ever ready to cope with them or else damages caused would bring severe set-back to market impression and business continuity, not to undermine the burden borne by insurance companies.

As insurance risk managers, it is essential that risk management is used as an effective tool to highlight risks and control hazards. With industries focused on their production boosts, the insurance risk managers can highlight loop holes in safety measures on site and explain how these loop holes could engulf all the profits. Only if the insurance risk managers could draft a clear cut improvement plan, in a very systematic and understandable manner; risk mitigation would become simple and practical. From real experiences it is confirmed that merely preparing a report is not enough. Risk managers need to have a humble and convincing attitude where they can make the insured

realize the significance of implementing recommendations. Financial constraints at the insured's end should be catered for while drafting a workable plan. Insured's feedback is always essential at each step and promotes a healthy working relation. Instead of acting as a stern inspector, insurance risk managers should present themselves as valuable consultants keen to improve the risk for insurer as well as insured. Listening keenly and speaking wisely can help resolve a lot of problems. Not to under-estimate the significance of quality professional writing abilities.

An insurance risk manager needs to change bad risks into good risks for a win-win scenario! And the case discussed above is one citation of it.

### **Testimonials from Printing Company's General Manager:**

"IGI's risk management services have proven to be a blessing in disguise for us. Before we started working closely with IGI, we never realized the true potential of safety and risk management. This was always considered a burden on the company finances. However, IGI was very prudent to build a strong case, a case that distributed the investment and cost factor wisely enough to make it acceptable for us. Our directors were keen and aware to accept this risk management proposal. In turn, not only we made our premises a safer place to work but also rightly got premium discounts linked with implementation of recommendations. Above all, I feel so glad to acknowledge that risk management efforts have steered us to increased profitability. With a much safer and organized facility on display, we have attracted new clients. We have gained the confidence of customers who are very concerned about business continuity and reliability. Our profit margins have significantly increased ever since we started working on risk management. Not to undermine the efforts of our remarkable marketing team!"

General Manager  
Printing Company (Pvt.) Ltd.

