# **Deloitte.**



Deal breaker: Cyber risk in life sciences M&A

## Contents

Introduction	01
Impact of cyber crime on M&A	04
Mitigating cyber risk	10
Conclusion	17

# Introduction

It's the scenario that can keep senior business executives up at night: that terrifying moment they receive the call informing them that the corporate network of their newly acquired organisation has been breached – valuable information assets are now in unknown hands, and the entire reason for making this billion dollar acquisition could already have disappeared.

These breaches can come in all shapes and sizes, spanning carelessness (e.g. lost laptops), negligence (e.g. wilful non-compliance), through to malicious (e.g. hacking incidents). Intellectual property (IP) can constitute more than 80 percent of a company's value<sup>1</sup>, and for smaller organisations this can be close to 100 percent. As more and more IP becomes digital, there is an increasing concern and emphasis on cyber protection to help keep that valuable IP secure.

This report will outline some key implications of data being lost or compromised within the context of life sciences mergers and acquisitions (M&A). The report will also outline some potential approaches and actions that may be taken to secure and protect the data before and during the M&A process.

## Life Sciences M&A: A perfect storm for cyber crime

Life sciences is among the most threatened industries and needs to step up to this growing challenge. This is an industry built on innovation that has all the characteristics to make it highly attractive for cyber attackers: high revenues, extensive spend on R&D and operations, highly sensitive intellectual property, trade secrets, and an almost total reliance on the underpinning technology to run the business. In fact, a UK Government report, having analysed 26 industries, identified life sciences as the main target of IP theft <sup>2</sup>.

Add to this that life sciences is also one of the most active industries in M&A – a unique time when the most sensitive information assets on both sides of a transaction may be more exposed – and you have the perfect storm for cyber-crime. This has not gone un-noticed by investors – in a 2016 global survey, almost three quarters of investors rated the health care/life sciences industry to be at a high or very high risk of cyber security threats, and ranked it as the fourth most "at risk" industry in terms of valuation impacts arising from cyber security issues <sup>3</sup>.



When considering cyber risk in the context of M&A, it's worth noting that while headline grabbing "mega deals" continue to take place across the life sciences industry, the smaller deals – those less than \$500 million – still make up the largest share of deal volumes globally [Figure 1]. It is not uncommon for the larger players to serially acquire smaller companies as part of their strategic growth plans, and the broader ongoing consolidation within the industry.



Companies in the Pharma sector that have been attacked between 7 and 15 times<sup>4</sup>



## Figure 1. Proportion of M&A deals in life sciences and health care above and below \$500 million USD (2012-2016)

Source: SDC Platinum, Thompson One, 2017 <sup>5</sup>



#### Think small, win big

While there may be a perception that smaller companies are less likely to be attacked by cyber criminals, Symantec's 2015 Internet Security Threat Report found that a majority of targeted cyberattacks were on small and medium-sized businesses<sup>6</sup>. The risk for buyers is underlined when you consider that often, a smaller M&A transaction is an IP deal for a pre-revenue company – therefore the entirety of the value of the acquisition target is their IP rather than revenue streams, cash flows, customer relationships etc.

The reasons these smaller companies are such attractive targets for cyber-crime are quite clear: they often have simpler IT environments and a higher tolerance for risk when compared to large organisations. Despite facing the same cyber threats as bigger counterparts, it's not uncommon to see minimal in-house IT security expertise and infrastructure, under-developed data security governance, policies, and procedures, and small (nondedicated) IT functions and IT support teams.

Ultimately, these smaller organisations are having to make tough choices on where to spend their money – and protecting data has not been a business priority when compared to investing in R&D, manufacturing, supply chains, or sales and marketing capabilities.

When you take these factors into account, it's not surprising that cyber criminals find it attractive to use these smaller acquired companies as a gateway to hack into the larger acquirer's corporate network during the M&A lifecycle.

Often, the acquisition of smaller companies represents the largest cyber security risk to serial acquirers within life sciences. Ironically, on these smaller deals, IT teams often struggle to secure funding and focus in order to conduct cyber due diligence upfront.

Conversely, the 'mega-deals' tend to take care of themselves in this regard – the organisations involved in these deals tend to be larger, with more risk-averse and sophisticated IT security capabilities. Once the deal is communicated internally, there tends to be much more focus and attention across the enterprise – allowing most areas, including cyber security, to get the additional focus it needs. That said, "The taller you are, the harder you fall", and these industry mega deals, while having access to greater funding and more mature security capabilities, don't necessarily dedicate enough resource to protect their crown jewels.



## Impact of cyber-crime on M&A

There are a number of consequences that cyber and data breaches will have on an organisation, with subsequent implications on M&A and the potential destruction of post-deal benefits [Figure 2]. These include: impacted deal valuations, loss of IP, lost revenues, operational disruption, regulatory fines, cost of remediation, product launch delays, reputational damage and loss of customer trust, to name but a few.

#### **Company valuation**

The first obvious question to ask is whether a data breach could impact the price a buyer pays for a target company. In short, the answer is "yes", backed up by both the perceptions within the dealmaker community and the share price performance of companies that have suffered material data breaches.

A 2017 survey of 440 global dealmakers concluded that half of respondents believed data breaches at M&A target companies could reduce bidder valuations between five and 20 per cent. The same survey showed that almost a quarter of dealmakers expected an increase in the number of deals that would fail to complete due to data breaches or cyber security issues (only nine percent believed that fewer deals would fail)<sup>7</sup>.

In addition, a Ponemon Institute study analysed the stock price of 113 publicly traded companies that experienced a material data breach – tracking the index value for 30 days before, and 90 days after the announcement of the data breach. The study found a correlation between the data breach and stock price, customer churn, lost revenue, and the 'security posture'<sup>t</sup> of those organisations. A key takeaway of the study was that on average there was fall of five percent in the stock price upon disclosure of the data breach (note that Health & Pharmaceuticals was the second largest sector represented within the sample)<sup>8</sup>.

In theory, the impact on valuations may also work in the other direction, and actually increase the potential price. For example, if a company can demonstrate its ability to protect key information it could be worth more than its competitors. A 2016 survey of over 200 buy-side investors and sell-side analysts across the globe concurred, with 50 per cent saying they may increase their valuation of companies that work with cybersecurity firms to mitigate risks<sup>3</sup>. The Ponemon Institute study brings some additional weight to that argument – indicating that organisations with a stronger security posture were able to recover share price faster and reduce the impact of customer churn after a data breach was announced<sup>8</sup>.

However the above concerns are not, as yet, translating into a focus on information security during the early stages of a transaction. It is still not common to see a due diligence that includes this alongside the more traditional areas of commercial, financial, tax, legal, safety, etc. Arguably, from a diligence perspective, once you are happy with the efficacy of the science and the legal protection around the IP, the next focus should be the security of the data. Given the industry's increasing reliance on digital and analytics, and the increasing prevalence of cyber risk, it would not be surprising to see IT due diligence (including information security) move up the priority list of diligence areas, potentially even ahead of financial and tax diligence in the coming few years.



Figure 2. Summary of some of the key impacts outlined within this report

\* Ponemon Institute proprietary methodology that defines the effectiveness and efficiency of an organisation to achieve its security mission through its investment in security related people, process and technology.

#### The real cost of a data breach

The Ponemon Institute's 2016 Cost of Data Breach study found that the average consolidated total cost of a data breach was in excess of \$4 million dollars, with the average global cost of a data breach per lost or stolen record being \$158 (heavily regulated industries were substantially above that figure – the cost for life sciences was \$195 per record) <sup>9</sup>.

A majority of that cost will come from well-known factors associated with data breaches such as expensive litigation, managing public relations, technical investigations, and customer breach notifications. There are, however, a number of lesser known, far-reaching, and intangible factors meaning the real cost of a breach could be even higher than estimated.

There are at least fourteen 'above and below the surface' cyberattack impact factors that should be considered when preparing for, and assessing the impact of, cyber incidents [Figure 3].

A subset of these factors are particularly pertinent for M&A deals, including the loss of intellectual property, impact of operational disruption, and regulatory compliance.



### Loss of intellectual property

Loss of IP is typically an intangible cost associated with loss of exclusive control over proprietary and confidential information, which can lead to loss of competitive advantage, loss of revenue, and lasting and potentially irreparable financial damage. Types of IP include, but are not limited to patents, designs, copyrights, trademarks, and trade secrets.

#### **Clinical trials**

Within life sciences, clinical trial data remains one of the most critical types of IP, and is often closely related to the major value drivers of M&A activity.

This data lies at the heart of the process of bringing a drug to market, which is now estimated to cost almost \$1.6 billion<sup>10</sup>. Given the importance of this type of information (and the heavy investment into digitising clinical trial data in eTMF repositories), it's worth considering the implications of this data being stolen or compromised as a result of a cyber-attack and having to repeat clinical studies. Based on a high level analysis conducted by Deloitte, the impact can come in two main forms [Figure 4]:



Proportion of cyber-crime in Life Sciences attributed to IP theft<sup>11</sup>

- 1. One-off costs for repeating a clinical trial (around 15-33 per cent of the overall impact).
- 2. Lost future revenues due to the delay to market (around 66-85 per cent of the overall impact).

When you consider that a 'small' acquisition within life sciences is often considered to be under \$500 million, a hugely significant proportion of the value of the original deal itself could disappear if clinical trial data of the target company was lost before or during the transaction – likely causing detrimental impact to deal value, and potential termination of the transaction.

One other major ramification of this would be the loss of confidential patient data relating to the clinical trials, which would be even more concerning to a senior executive. When IP is stolen, this can be somewhat contained and managed through a legal process without necessarily always being apparent to the public. A patient data hack is likely to be front page news and cause an unquantifiable damage to a corporate brand.

### Figure 3. Fourteen cyber-attack impact factors





Assumptions

### Figure 4. Impact of repeating a clinical study

High level assumptions to estimate the financial impact of repeating a clinical trial:

## Key assumptions used to determine the financial impact of losing the clinical data of an asset

- Extent of data loss: Only ongoing studies lose data, others should have submitted their data, so it will exist elsewhere
- **Cost of repeated trial:** considers purely trial costs, not the fully loaded cost of getting an asset through a phase; assumes the average cost of trial is identical to the average cost of repeating the trial
- **Delay to sales:** along with cost of repeating the trial itself we have assumed a similar delay by the period, and the impact of this has been included (Figure 5)
- Therapeutic area: not therapeutic area (TA) specific
- **Cycle times for trials:** assumes the durations in years for a trial, and uses these trial cycle times rather than assuming the total phase needs to be repeated (Figure 6)
- Success rates: assumes 87% avg. industry commercial success rate for assets that get to approval (Figure 7)
- **Risk-adjustment:** cash inflows and future phase costs are both risk-weighted by industry average, TA agnostic success rate for trials in a given phase of development
- Working cost of capital: industry average of ~8%, not company specific; used as discount factor (Source: Bloomberg)

#### Figure 5. Sales curve, risk-adjusted



Source: Deloitte proprietary research

#### Figure 6

Average, rounded cycle time by S	Study (years)	)	
Phase I	1		
Phase II	2		
Phase III	2		
Source: Parexel Sourcebook			

#### Figure 7

Phase	Success rates
PhI-PhII	52%
PhII-PhIII	29%
PhIII-Approval	76%

Source: Deloitte

#### **Operational disruption**

There can be a significant amount of operational disruption resulting from a data breach. This can be both short and long term in nature, and result in costs associated with rebuilding operational capabilities. Examples include the need to repair equipment and facilities, build temporary infrastructure, divert resources from one part of the business to another, or increase current resources to support alternative business operations; it could also include losses associated with inability to deliver goods or services<sup>12</sup>.

Two factors influencing the overall cost are the time to identify a breach, and then the time taken to contain the breach. A Ponemon Institute study sampled 383 companies across 12 countries and estimated that it took an average of 201 days to identify a breach (the highest was 569 days), and an average of 70 days to contain the breach (the highest was 126 days). These average numbers were even higher when the root cause was malicious attack. The analysis also showed that if identification took longer than 100 days, the cost was, on average, \$4.38 million<sup>9</sup>.

It's likely that in many cases, the time taken to identify and subsequently contain the breach is correlated with that organisation's cyber security capability. Given there is a higher likelihood of smaller organisations having under-developed data security expertise, governance, and procedures, this significantly increases the risk for larger serial acquirers when buying smaller companies. Identification and containment of the breach would take longer, increasing the overall operational disruption and cost – ultimately borne by the buyer during and after the M&A lifecycle. Conversely, a breach in larger organisations, although more unlikely, can be hugely complex and expensive to trace and remediate.

#### **Regulatory compliance**

As highlighted in Deloitte's research "The challenge of compliance in life sciences: moving from cost to value"<sup>13</sup>, it is difficult to quantify the exact cost of becoming compliant with relevant regulations, due to the cost being dependent on a number of factors. However, it is fair to assume that this can be an expensive exercise to undertake in many circumstances when you consider the potential need to redesign business processes, the operational costs of managing any changes to working practices, and the requirement to bring in external resources (e.g. lawyers, compliance experts). What is clear is that regulators continue to threaten to use significant fines as the stick to drive compliance. The introduction of a new EU General Data Protection Regulation (GDPR) will come into force in May 2018, at which point the maximum penalties for non-compliance will increase to four per cent of annual global turnover or €20 million.

This regulation will also require companies operating in Europe to report data breaches to the relevant Data Protection Authority within 72 hours – likely making them more public, and disclosed much sooner, than they are today. In the US, the Health Information Technology for Economic and Clinical Health (HITECH) Act, and the corresponding Health Insurance Portability and Accountability (HIPAA) Act can also result in fines being imposed on US pharmaceutical and health services providers. These are imposed based on the level of negligence (from 'unknowing' through to 'wilful neglect'), and can reach \$1.5 million in the most severe of civil cases whilst criminal cases have seen fines exceed this, in some instances reaching tens of millions of dollars. It's easy to see that the cost of being non-compliant in the most severe cases could rapidly outstrip the cost of ensuring compliance at the start.

Exposure to such compliance risk could seriously erode the anticipated deal business case – not only through significant fines but also due to unforeseen costs required to remediate the issues.

### Carve-out or integration execution

Finally – and importantly – it's worth remembering that a carve-out or integration won't be successfully executed without the safe and secure transfer of data from seller to buyer, taking place at various stages throughout the M&A lifecycle. Due diligence typically has the seller sharing sensitive data with the potential buyer so that the buyer can be comfortable enough to proceed with the deal. In addition, Day 1, Market Authorisation approvals, and Transitional Service Agreement (TSA) exits can't typically be concluded without the transfer of relevant data [Figure 8]. Data breaches at these points could impact business and operational continuity, and potentially jeopardise the realisation of deal value.

Exposure of sensitive data for	potential buyers, including:	
Commercial Financial	HR Safety	
Tax Legal	Operational Regulatory	
1		
nce Transaction Execution	Integration/Divestiture Planning Execution	ture
/larket Authorisation approvals, i	including:	
Trade secrets		
	Exposure of sensitive data for Commercial Financial Tax Legal Aarket Authorisation approvals, Trade secrets	Exposure of sensitive data for potential buyers, including: Commercial HR Financial Safety Tax Operational Legal Regulatory O nce Transaction Integration/Divestiture Integration/Divesti Execution Planning Integration/Divestiture Execution Market Authorisation approvals, including: Trade secrets

### Figure 8. Typical points in the M&A lifecycle that are dependent on data transfer



## Mitigating cyber risk

While cyber risk can't be fully eliminated, it can be better understood and managed. This section outlines actions that buyers and sellers can take before and during the M&A lifecycle.

#### **Before M&A**

For a seller, the priority has to be focused on achieving the best possible price for the business. Given some of the potential implications on transaction values outlined earlier, a sensible course of action to consider would be to assess and, where necessary, improve its security capability in advance of the M&A process. The key is to focus efforts on identifying and protecting the most critical information assets, which can be achieved by embedding good cyber behaviours while improving capabilities to detect and respond to breaches in a way that minimises business impact [Figure 9].

An effective approach should be *Secure.Vigilant.Resilient*.™ underpinned by effective Governance<sup>14</sup>:

#### Figure 9. Secure.Vigilant.Resilient.™ approach to cyber security

Being **SECURE** means continually maintaining foundational security capabilities and data management, to protect against threats and comply with industry cyber security standards and regulations.



Being RESILIENT means recognising that no cyber defence can be 100 percent effective. Developing the ability to respond to inevitable cyber-attacks and incidents, allowing for the return to normal operations as quickly as possible. Being **VIGILANT** means establishing capabilities for detecting cyber violations and weaknesses, and monitoring for and anticipating emerging threats and bad behaviours.

Underpinned by effective **STRATEGY & GOVERNANCE** means providing senior support, oversight, risk management and key decisions on cyber security, maintaining an improvement programme and embedding a cyber risk culture throughout the organisation.

The framework in Figure 10 outlines some key components to consider when assessing the ability to manage cyber risk. Although not all components are required, it's important to determine the right combination for a potential cyber risk mitigation programme – enabling a risk based approach to be taken that protects the most critical assets while controlling security costs and promoting productive work environments<sup>14</sup>:

#### Figure 10. Secure.Vigilant.Resilient.™ framework



#### The due diligence phase

The due diligence phase is the most confidential stage of the M&A process. There is a closed, but diverse, group of stakeholders involved on both sides of the deal, large quantities of sensitive data being exchanged between multiple parties, and intense pressure to get the transaction completed quickly. In some cases this may be in the context of a competitive bidding process with multiple organisations having access to the data. This combination can greatly increase the risk of confidential information getting into the wrong hands.

During this period the seller is naturally focused on sharing information that underpins the potential value of the transaction, while managing the amount of information it shares with a buyer, particularly in recognition of a scenario where the deal is not completed. While doing this, it is crucial to minimise risk through enhanced data security related governance, procedures, and monitoring so that any potential suspect actions can be spotted and addressed quickly. Attention should also be given to privileged access management to ensure data flows are limited to the correct people.

The buyer is focused on due diligence of the target during this phase, covering a number of areas of the business including commercial, finance, legal, and medical safety.

There is a strong argument to add information security to these areas so that potential vulnerabilities can be identified along with an estimate of the likely investment required to remediate any gaps. This would allow the buyer to understand the target's preparedness for, and/or responsiveness to data breaches. It would also lower the risk of eventual deal value being eroded by cyber security issues, and increase the confidence of compliance with data protection regulations. Figure 11 outlines a potential approach that could be taken while performing cyber due diligence, with the Secure, Vigilant, Resilient approach outlined earlier used as a high level framework to focus the diligence effort.

#### **Deal negotiations**

The deal negotiation and day 1 integration planning phase can also be used to mitigate major data security risks, and the impact to deal value. Where weaknesses are identified in due diligence then it should be possible to negotiate a reduced purchase price, build in contractual indemnities, and have teams lined up at day 1 to conduct security assessments so that technical frailties can be mitigated as quickly as possible.



#### Figure 11. Approach to cyber-security due diligence



exposures and mitigation actions

#### **After deal Closing**

The period immediately after the deal has closed is often the most pivotal in ultimately achieving the intended business case of the transaction, as it is here that the vast majority of separation and integration activities start, and plans for longer term projects to achieve the desired end state are mobilised. The risks here can vary with the transition potentially even introducing major security vulnerabilities for cyber criminals to exploit. There are a number of areas that should be considered to minimise the risk of data breach during the transition process. Some of those areas are outlined here:

#### **Change Management**

In addition to the prevalent risk of external cyber-attacks, a consideration that can't be under-estimated is the risk of data breaches stemming from disgruntled employees (such as walking off with IP on a USB stick). Given the high degree of uncertainty and change that naturally comes with M&A – and the likelihood of pending headcount synergies – it's not uncommon to witness employee disengagement and a perception of 'not belonging' due to this uncertain future.

It may not take much for an employee in the 'denial or resistance' phases within the change curve [Figure 12] to consider taking inappropriate, unethical, or illegal actions leading to serious data breaches. The risk is increased by the fact that not only would some of these employees have easy access to IP through the normal course of business, it's entirely possible that these employees are given an important role in the process of transferring data from seller to buyer.

Therefore, it is important to ensure there is enough investment in the change management approach to mitigate the risk of an individual taking such action. The approach should be sensitive, empathetic, and transparent (as far as possible) to help improve levels of buy-in and feelings of belonging. Culture is another key lever that should be pulled to reinforce key messages around ethics, compliance, and desired employee behaviours.

#### Figure 12. Employee experience of change in M&A



#### Additional IT security assessments

Driven by the buyer, and supported by the seller during the transitional period, it's important to spend time doing detailed security assessments and testing the IT security environment of the newly acquired business to identify and mitigate the major risks. Assigning risk ratings will help to prioritise and sequence the efforts, and IT security, IT engineers and IT architects will play a key role during this phase. Again, the Secure, Vigilant, Resilient approach outlined earlier could be used as a framework, adopting a risk-based approach to ensure the most significant risks are mitigated.

#### **Network connections**

It's not uncommon for both the buyer and seller networks to have some level of connectivity between them during the transition phase. Although this can potentially lead to vulnerabilities in both corporate networks, there are some options that would minimise the risks.

The simplest and most cost-effective option would be for both organisations to extend their network to a virtual private network (VPN) over the internet, using appropriate firewall rules to only allow required and approved communications between the organisations. This however can sometimes lead to performance issues and make it difficult to effectively run operational processes over the connection.

Another option may be to deploy dedicated connectivity (e.g. MPLS) between buyer and seller – this could provide a more stable and reliable level of connection, usually incurring a monthly charge (our estimate would be approximately \$7-10k per month).

Other options would be considered on a case by case basis.

#### Secure email

With email being by far the dominant mechanism for exchange of regular and ongoing electronic information, this is a key area to secure during the transitional phase of a deal. There are various ways of exchanging emails securely, with the most widely used method being email encryption (i.e. using email encryption tools, external signed digital certificates, etc.). For a relatively small organisation of 2,500 users, our estimate is that this could cost in the region of \$100–140k to set-up, and approximately \$7-12k per month for service.

Assuming both organisations have internal certificates capability, another option could be to apply internal certificates to be only used across both organisations. This could incur a small implementation fee but can avoid recurring costs. Other options would be considered on a case by case basis.

#### Secure electronic data transfer

It's certain that some electronic data will need to be transferred during the transition, whether that be structured data held in systems/databases, or unstructured data held electronically (e.g. file-shares or team sites). Given the risk of data breach is high at the point of data transfer, it's important to consider how this data should be transferred.

The approach to scope, plan and execute the transfer of each data type can vary depending on a number of factors including: content, volumes, structure, criticality, and confidentiality of data. As a result, each instance of data requiring transfer should be assessed to determine the best transfer approach. Two common approaches are Secure File Transfer (SFT) Portals (more suitable for low volume, non-confidential data) and encrypted hard drive shipping via courier (more suitable for high data volumes) [Figure 13]. Additional security measures can be taken, such as issuing passwords separately via text or email, and sending data indexes separately.

The cost of setting up SFT Portals will be based on various factors, including the type of data (e.g. PII or SPII), legal and regulatory requirements, service provider, volume of data and information security principles agreed between the buyer and seller. In our experience, the estimates can typically range between \$2500 to \$15000 per month. Our estimated cost for each data transfer via encrypted hard drive is approximately \$1500 – \$2500, including the cost of the encrypted drive (which can be re-used for subsequent transfers), and resource cost e.g. for performing data ingestion and load, project management, and courier services.

There are also some secure transfer mechanisms used for transferring data classified as commercially sensitive or PII/SPII data.

#### Physical data transfer

In most M&A programmes, it's likely that physical data will also need to be transferred during the transition. Physical records include archived and non-archived paper – documents in drawers, desks, cabinets, documents stored at external archive sites, etc.

To mitigate the risk of the paper documents containing IP getting in the wrong hands, it's important to invest the time in a discovery and collection exercise to determine the extent and locations of physical data to be transferred. Following that, where there is sensitive data this can be scanned, digitised and redacted using proven archiving and forensic technologies. Non work in progress (WIP) documentation should be archived, before boxing and transporting the remaining WIP paper records to their intended destinations, via recorded and secure transportation.

#### Figure 13. Electronic data transfers





## Conclusion

The prevalence of smaller M&A transactions within the life sciences industry creates a significant data breach risk for serial acquirers, primarily driven by the relative immaturity of security controls in place within smaller target organisations.

The impact of these risks can be far-reaching and include material impact on the value of the transaction or result in significant erosion of the business case. Loss of critical IP, regulatory fines, and operational disruption can also lead to the loss of hundreds of millions of dollars.

Given these potential implications, it would be prudent for senior executives to consider allocating a portion of due diligence budgets to the technology function for the purposes of cyber due diligence.

Recognising the other priorities during due diligence, this doesn't need to be a hugely significant proportion – perhaps two to five per cent of the due diligence budget depending on complexity and risk profile – but enough to give some peace of mind and confidence around IP security when progressing ahead with the deal.

The rapidly increasing adoption of cloud, digital and analytics by businesses in their quest for competitive advantage means cyber will never be a one-time investment. When acquiring another organisation, executives need to be prepared to expect remediation activity in every deal and build this into their valuation models.

Ultimately, the value of the business in smaller life sciences M&A transactions is the IP. The primary focus when going into these deals will always be around gaining true confidence in the science, followed by ensuring the IP is legally protected. As those two items get checked off, there is a genuine case for the next priority being to understand how vulnerable you are to losing that IP through cyber-crime, or someone simply walking out the door with it.

By taking the appropriate steps and giving this the attention it needs during the M&A process, organisations can manage the cyber risk effectively. Equally, if this isn't given the right level of attention, it may just be a matter of time before senior executives get that dreaded phone call!



## References

- 1. Deloitte Review (Issue 19, 2016) The hidden costs of an IP breach
- 2. http://www.allenovery.com/SiteCollectionDocuments/Cybersecurity%20in%20life%20sciences%20paper%202016.pdf
- 3. https://www.brunswickgroup.com/media/2365/2016-brunswick-data-valuation-survey.pdf
- Crown Records Management via https://www.securingindustry.com/pharmaceuticals/survey-reveals-data-breaches-hitting-pharmaindustry/s40/a2500/#.WZq0IT6GPX5
- 5. SDC Platinum, Thompson One, 2017. The total number of deals include transactions with disclosed values only
- Symantec, 2015 Internet Security Threat Report, 6 (Apr. 2015), available at https://www.symantec.com/content/en/us/enterprise/other\_ resources/21347933\_GA\_RPT-internet-security-threat-report-volume-20-2015.pdf
- 7. Intralinks, M&A in 2017: Data Breaches, Overrated Political Influence and Bigger Deals (February 2017) https://blogs.intralinks. com/2017/02/ma-2017-data-breaches-overrated-political-influence-bigger-deals/#
- 8. https://www.centrify.com/media/4737054/ponemon\_data\_breach\_impact\_study.pdf
- 9. Ponemon Institute 2016 Cost of Data Breach Study: Global Analysis "http://www.ponemon.org/news-2/71"
- Deloitte Centre for Health Solutions (December 2016) Balancing the R&D Equation: Measuring the Return from Pharmaceutical Innovation (2016) https://www2.deloitte.com/uk/en/pages/life-sciences-and-healthcare/articles/measuring-return-from-pharmaceuticalinnovation.html
- UK Cabinet office "The Cost of cybercrime" https://www.gov.uk/government/publications/the-cost-of-cyber-crime-joint-governmentand-industry-report (2011)
- 12. Deloitte (2016) Beneath the surface of a cyberattack: a deeper look at business impacts
- 13. Deloitte Centre for Health Solutions (2015) The challenge of compliance in life sciences: Moving from cost to value https://www2.deloitte.com/uk/en/pages/life-sciences-and-healthcare/articles/lshc-challenge-of-compliance.html
- 14. Deloitte Cyber How we can help: The importance of being Secure, Vigilant and Resilient, 2016

## Contacts

## **Richard Baderman**

Partner Deloitte LLP Head of Life Sciences M&A Consulting Services ⓑ +44 (0) 7899 067119 ፼ rbaderman@deloitte.co.uk

## Peter Gooch

Partner Deloitte LLP Life Sciences Cyber Risk Services (§) +44 (0) 7803 003849 (@) pgooch@deloitte.co.uk

#### **Nadeem Mohammed**

Senior Manager Deloitte LLP Life Sciences IT M&A (§) +44 (0)7880 262971 (@) nademohammed@deloitte.co.uk

## **Colin Terry**

Partner

Deloitte LLP Life Sciences R&D (S) +44 (0) 7824 362733 (a) colterry@deloitte.co.uk

## Notes

# Deloitte.

This publication has been written in general terms and we recommend that you obtain professional advice before acting or refraining from action on any of the contents of this publication. Deloitte LLP accepts no liability for any loss occasioned to any person acting or refraining from action as a result of any material in this publication.

Deloitte LLP is a limited liability partnership registered in England and Wales with registered number OC303675 and its registered office at 2 New Street Square, London EC4A 3BZ, United Kingdom.

Deloitte LLP is the United Kingdom affiliate of Deloitte NWE LLP, a member firm of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee ("DTTL"). DTTL and each of its member firms are legally separate and independent entities. DTTL and Deloitte NWE LLP do not provide services to clients. Please see www.deloitte.com/about to learn more about our global network of member firms.

© 2018 Deloitte LLP. All rights reserved.

Designed and produced by The Creative Studio at Deloitte, London. J13745