Lunch & Learn - Cyber & Digital Best Practices for Councils

May 2019

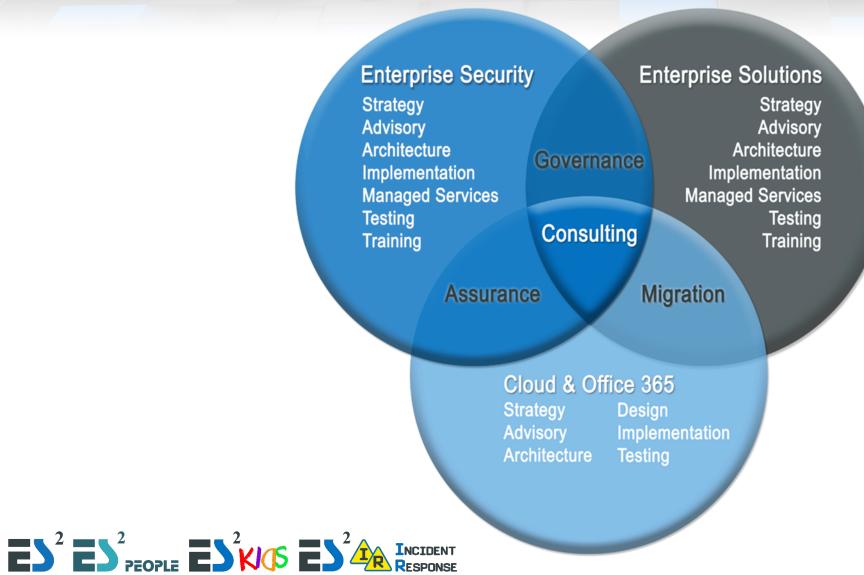


Agenda

- About ES2
- ES2 and Local Councils
- Cyber Security Best Practices for Councils
- Digital Teaming Best Practices for Councils



ES2 Capabilities



ES2 Offerings















Legislation

Mandatory Disclosure Breach

"Until such time as more substantial guidance and/or legislative measures are available, the interim privacy position for the Western Australian public sector is that agencies should ensure their actions are consistent with applicable Australian Privacy Principles, set out in Schedule 1 to the Privacy Act 1988 (Cth) with primary emphasis upon Principle 6 - "use or disclosure of personal information". "

GDPR

Applies to Councils if they have the personal details of EU citizens in their systems. Enforcement by the EU though will be very difficult to achieve.

ASD Essential 8

It is recommended that government Agencies and Councils aligns to the Australian government ASD standard.



So what's all the fuss about?

February 2017 – Statement from the Australian Privacy and Information Commissioner, Timothy Pilgrim.

Announced the passage of the Privacy Amendment (notifiable Data Breaches) Bill 2016 which establishes a mandatory data breach notification scheme in Australia.

This amendment will require government agencies and businesses covered by the Privacy Act to notify any individuals affected by a data breach that is likely to result in serious harm The OAIC will also need to be advised of these breaches and can determine if further action is required. The law also gives the OAIC the ability to direct an agency or business to notify individuals about a serious breach

In the meantime, agencies and business should continue to take **reasonable** steps to make sure personal information is held securely – including being equipped with a clear response plan in the event of a data breach.



Examples of PII

Personal Information

Information (or an opinion) about an identified individual, or an individual who is reasonably identifiable.

- Regardless of accuracy
- Regardless of the information being recorded in material form

PII

Name

Signature

Address

Telephone number

Date of birth

Commentary or opinion

Employment details

Medical records

Bank account details

TFN

Sensitive PII

- Racial or ethnic origin
- Political opinions
- Membership of political association
- Religious beliefs or affiliations
- Philosophical beliefs
- Membership of a professional or trade association
- Membership of a trade union
- Sexual orientation or practices
- Criminal records



3rd Party / Supply Chain

Many organisations entrust the PII they are responsible for to Third Party organisations:

- Outsourced IT providers
- Cloud Service Providers
- Marketing organisation

Your compliance with the Privacy Act must include these third parties.

- Do they mandate that they third party protect your information?
- Do they understand your Privacy Policy?
- Who is responsible for conducting an investigation into the breach?
- Who is responsible for reporting a data breach?



Top 5 Cyber Threats / Impacts

- 1) Email Account Takeover Financial Impact
- 3) Data Breach → Brand Damage
- 4) Malware Attack —— Downtime
- 5) DDoS —— Brand Damage / Downtime



Public Attitudes

OAIC Community Attitudes to Privacy 2013:

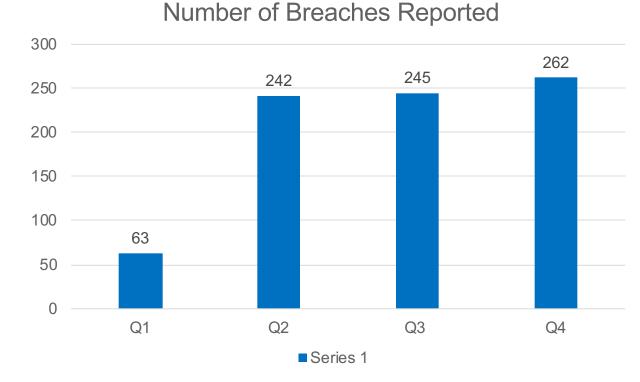
- ■48% of Australians believe that online services, including social media, now pose the greatest privacy risk
- ■96% expect to be informed if their information is lost
- ■95% expected to be informed about how their info is handled on a daily basis.



1 Year of NDB Legislation

OAIC have now produced four quarterly Notifiable Data Breach (NDB) reports providing

almost a full year of breach data.

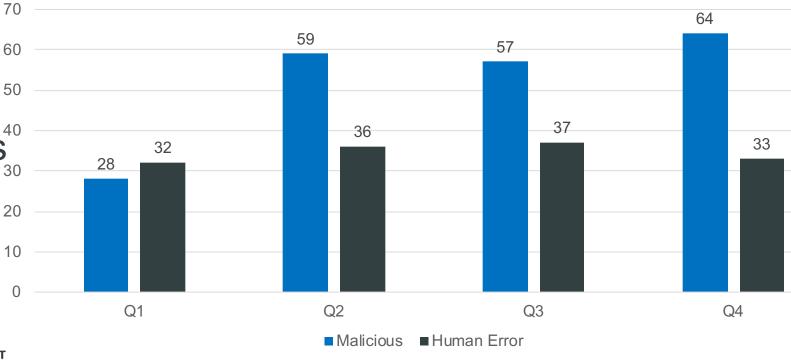




1 Year of NDB Legislation

Across all quarters Malicious attacks (M) and Human Error (E) make up the largest percentage of breach causes.

The highest percentage 50 attributed to system faults 30 is only 6%.



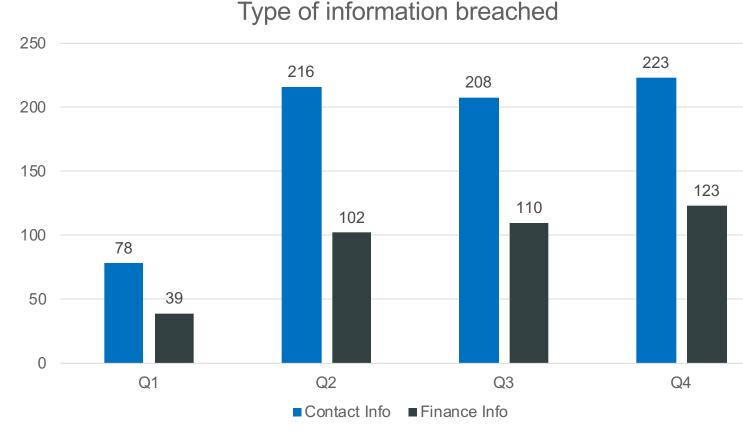
Cause



1 Year of NDB Legislation

The information that is most often breached is:

- Contact Information (C)
- Financial Information (F)





Usernames/Password
Hacked Accounts
Remote Access
Company Data
Privacy Data

THE CLEAR, DEEP & DARK WEB

4 % of WWW content Clear Web BBC Indexed by Search Engines Social media Deep Web 95 % of web content Not searchable by most engines Web mail, Forums, Online banking, video **Dark Web** 1 % of web content Not searchable by most engines Home to TOR, IRCs, BitTorrent, hacker forums, C2s, and more. 12P::::: Where attacks are planned, tools purchased, information traded, and malware is developed, tested, sold and updated.



ES2 Incident Response Services



1800 373 732 (1800 ES2 SEC)



24x7 Incident Response Hotline Open discussions to establish situation

Incident analysed

Logs and malware analysed

Remediation recommendations

Post-incident Reporting



Breach Response Plan

The actions to be taken if a breach is suspected, or discovered

Response Team Membership

Roles and responsibilities

Actions to take

- Confirm and categorise breach,
- contain and manage breach

Escalation Plan

Communications Plan

Root cause analysis, post breach review, develop remediation plan, lessons learned

DOCUMENT EVERYTHING

Note that entities have 30 days from the discovery of the breach to investigate and report if appropriate.

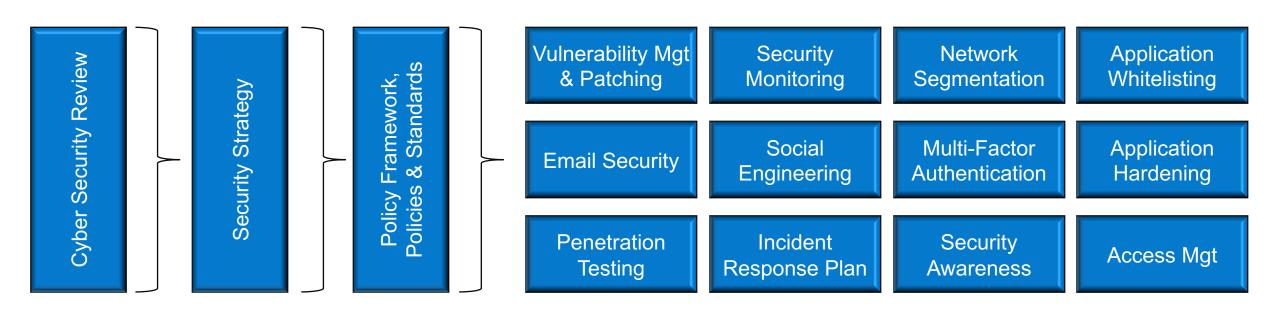


Lessons Learnt

- Maintaining a minimum of 90 days worth of resilient System and/or Data Backups will reduce the impact of a Cyber Attack.
- Implementing Multi-Factor Authentication to avoid Account takeovers and Impersonation attacks.
- Enable Centralised Logging and Alarms to prevent tampering and assist in investigations
- Restricting Outbound Internet Access from Privilege Users and Business Servers makes it harder for Threat Actors to exfiltrate data and download additional tools.
- Start monitoring the Dark Web for exposed Corporate Accounts and company data to provide faster response times.

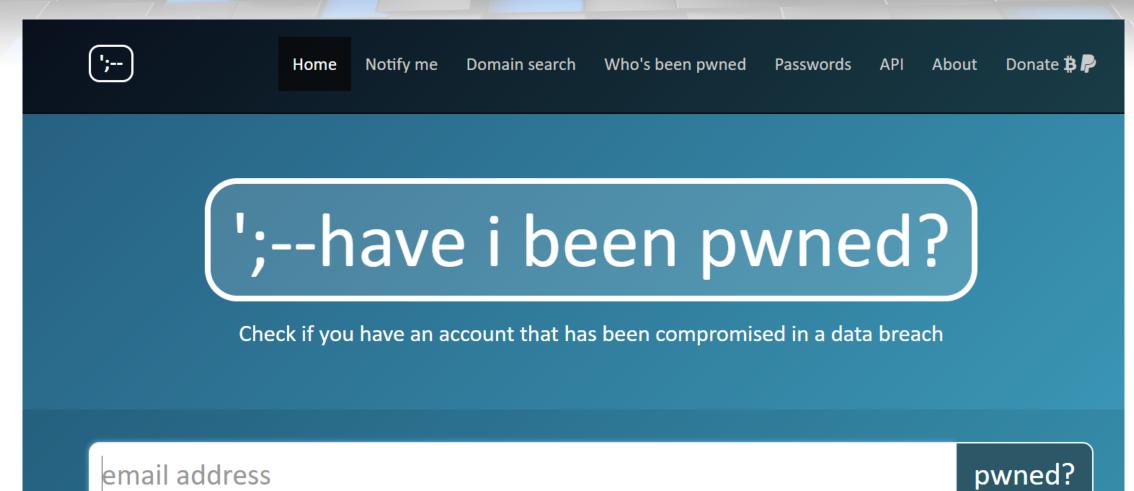


ES2 Recommended Roadmap





Have I Been Pwned



Trends impacting the way we work

Devices



3.3 billion

smartphones will be AI enabled by 2020, over 30% of those being used at work

People



82%

of the world's online population engages in social networking

Cloud



85%

of enterprise customers have a multi-cloud strategy



Office365







of Fortune 500 companies have purchased Office 365 in the last 12 months



\$4.4 Billion

Annual revenue run rate



fastest growing commercial product ever











Stakeholders

Internal External



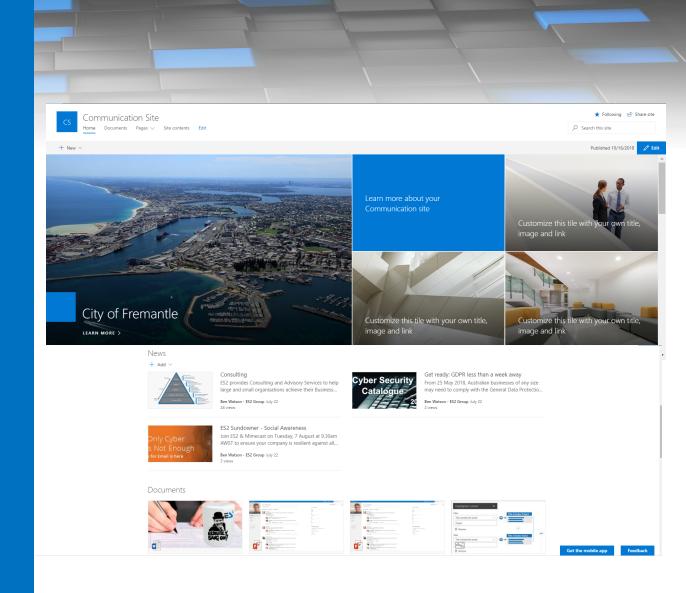






Share the vision





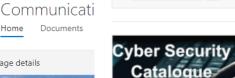


News

Consulting

ES2 provides Consulting and Advisory Services to help large and small organisations achieve their Business...

Ben Watson - ES2 Group July 22, 2018



Documents

+ New V Page details

Get ready: GDPR less than a week away

From 25 May 2018, Australian businesses of any size may need to comply with the General Data Protectio...

Ben Watson - ES2 Group July 22, 2018



ES2 Sundowner - Social Awareness

Join ES2 & Mimecast on Tuesday, 7 August at 9.30am AWST to ensure your company is resilient against all...

Ben Watson - ES2 Group July 22, 2018

Quick Links



Forecast

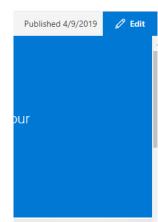
reports

Find the latest resource forecast

Power BI See your enterprise dashboards and

★ Following 🖻 Share site earch this site

Design





Documents



Communication Site Corp Test document

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See all



LEARN MORE >



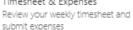




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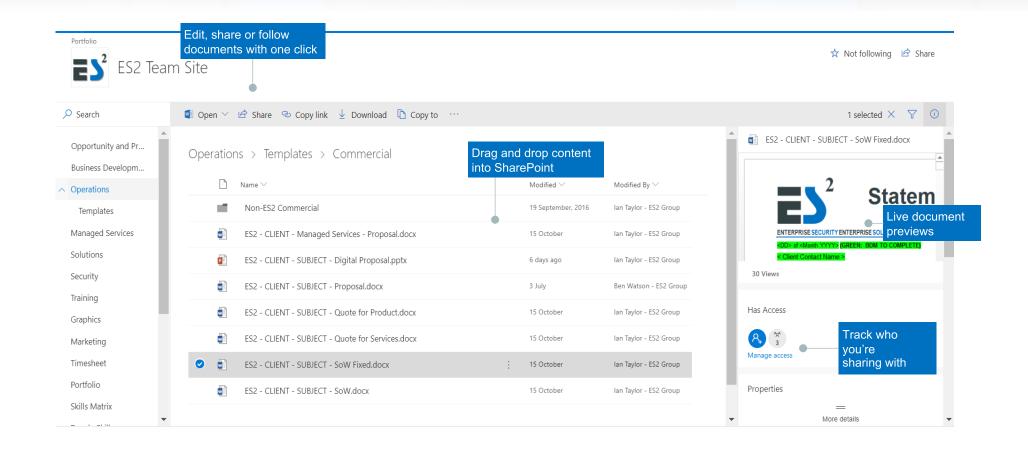






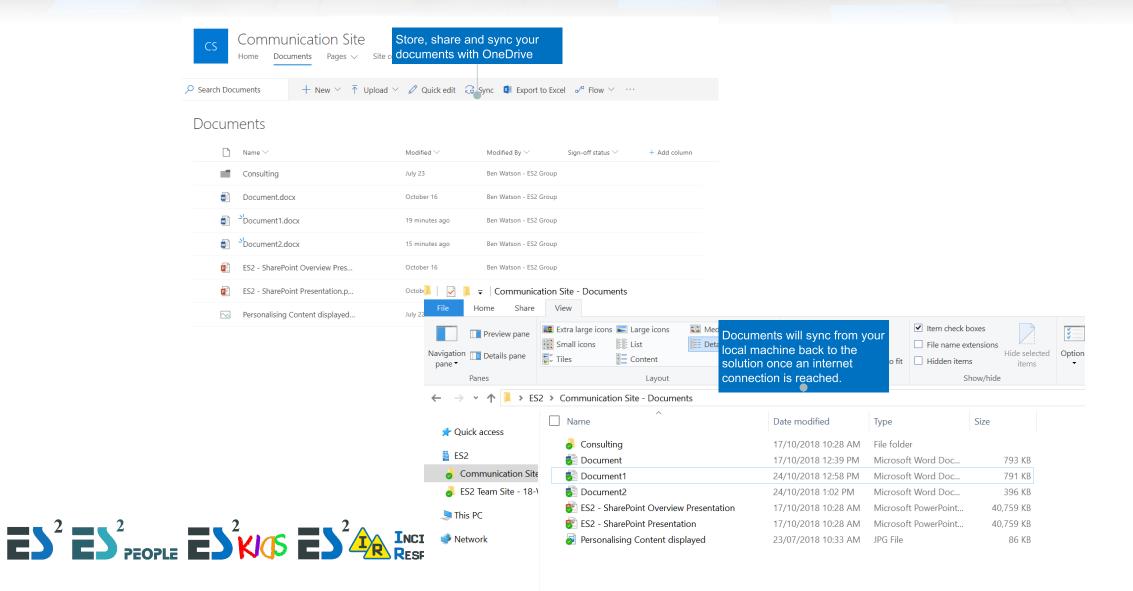
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Working with Documents

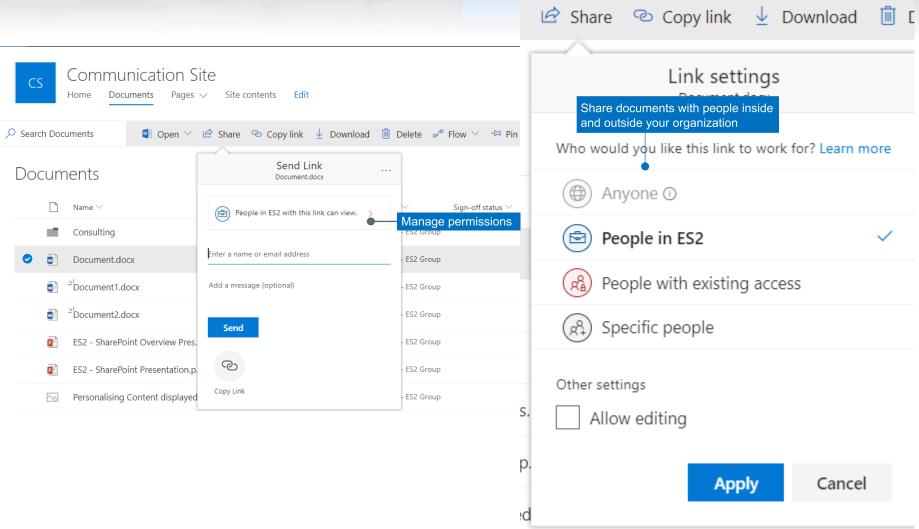




Store, sync and share

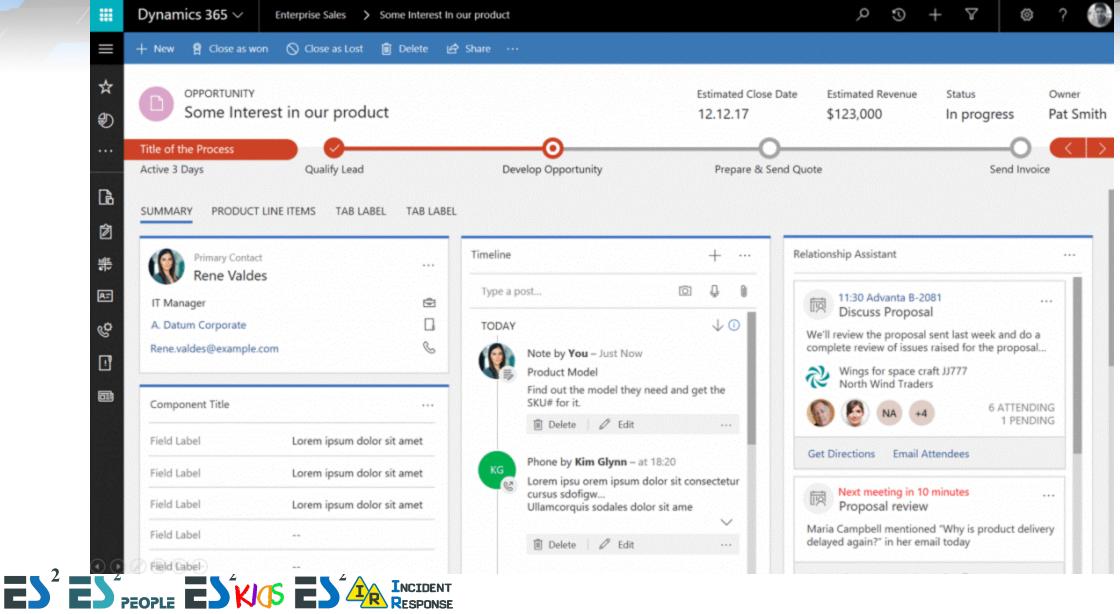


Work together securely

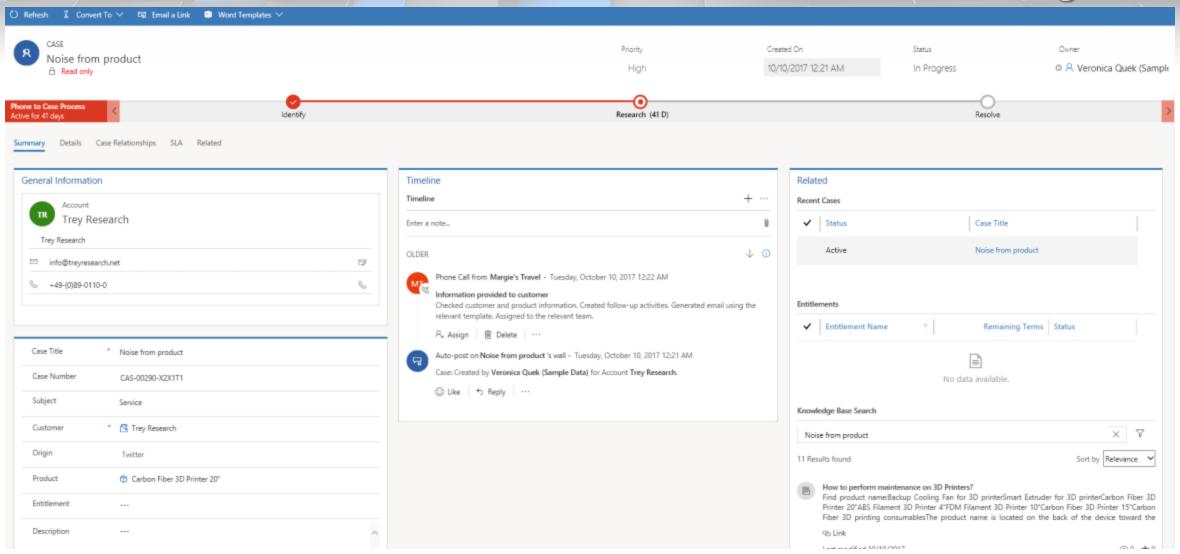




Customer Sales



Case Management



Dashboards

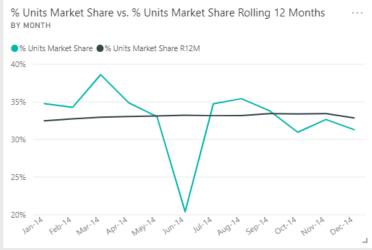
☐ Ask a question about your data

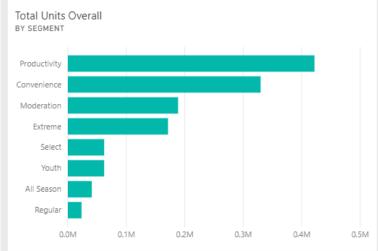
Total Volume IN 2014 50K Market Share LAST 12 MONTHS 32.86%

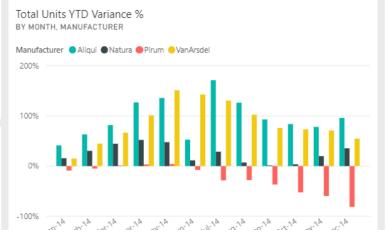
Our Total Volume IN 2014

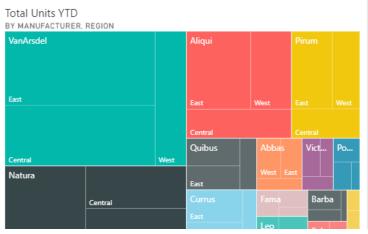
16K

Sentiment



















Ending thoughts



62% of smartphone users check their phone within 15 minutes of waking up.⁶ Offer your employees rich, dynamic mobile apps to get work done whenever and wherever necessary.

Intellectual property can constitute more than 80% of a company's value.⁷ Make sharing and collaboration inside and outside the organization easy and secure to protect your organization's valuable IP.





Meetings, phone calls, and emails eat up as much as 80% of employees' time.⁸ Provide a personalized homepage for every user so they can stay on top of the news, activities, and documents they need to get their work done.

By using social technologies, companies can raise knowledge workers' productivity by 20–25%. Offer your employees the ability to collaborate in real time with the apps they use every day to maximize productivity.



Any Questions

Kerri Mosley Kerri@es2.com.au 0475 429 721

