

Toyota Boshoku Corporation BEC (2019)

WE Innovate X Zero\$exploit

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zero\$exploit
Cyber Security  trusted partner



EG|CERT



Overview of What Happened



In 2019, Toyota Boshoku (a major Toyota supplier) was tricked by a **Business Email Compromise attack**. Attackers impersonated a trusted business partner through spoofed emails and convinced an employee to transfer money to a fraudulent bank account.

The Attack — Step by Step

1. Reconnaissance

- Attackers researched Toyota's suppliers, financial workflows, and key staff involved in **accounts payable**.
- Likely gathered info from public sources (LinkedIn, press releases, procurement data).

2. Impersonation

- Using **spoofed domains** and email addresses that looked almost identical to a legitimate supplier.
- The emails were **highly convincing**, including correct formatting, signatures, and context-specific wording.

3. Social Engineering

- Posed as a **trusted overseas supplier/vendor**, claiming that due to "bank account changes," future payments should go to a **new bank account**.
- The emails stressed **urgency** and legitimacy, pushing finance staff to comply quickly.

4. Execution

- An employee at Toyota Boshoku approved and processed a **wire transfer** to the attacker-controlled account.
 - Funds were transferred abroad, routed through multiple banks to complicate recovery.
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The Impact

- **Direct Loss:** ~\$37 million USD stolen.
- **Operational Risk:** Raised alarms in Toyota's **entire supply chain**, as trust in vendor communications was shaken.
- **Reputation Damage:** Media coverage highlighted that even **world-class corporations** could be duped by BEC.

The Response

1. **Incident Reporting**
 - Toyota immediately reported the fraud to the **Japanese police and international law enforcement** (Interpol involvement suspected).
2. **Financial Controls**
 - Strengthened **payment verification workflows**:
 - Dual authorization required for all large transfers.
 - Out-of-band verification (phone calls to known vendor contacts).
3. **Training & Awareness**
 - Mandatory **employee retraining on phishing and BEC tactics**.
 - Specific focus on supply chain finance staff, teaching them to recognize **red flags** (e.g., sudden bank changes, urgent tone).
4. **Vendor Management**
 - Toyota began enforcing **tighter controls on supplier communications**, including
 - secure vendor portals and authentication requirements.

Key Lessons

- **Payment requests must always be verified through secondary channels.**
- **Multi-step approval for high-value transfers is essential.**
- **Continuous employee awareness training reduces risk.**
- **Suppliers and partners are part of the security chain.**
- **Incident reporting and response planning minimize impact.**