2001	1677	January	February	March	April	May	June	July	August	September	October	November	December
2002	2156	January	February	March	April	May	June	July	August	September	October	November	December
2003	1527	January	February	March	April	May	June	July	August	September	October	November	December
2004	2451	January	February	March	April	May	June	July	August	September	October	November	December
2005	4935	January	February	March	April	May	June	July	August	September	October	November	December
2006	6610	January	February	March	April	May	June	July	August	September	October	November	December
2007	6520	January	February	March	April	May	June	July	August	September	October	November	December
2008	5632	January	February	March	April	May	June	July	August	September	October	November	December
2009	5736	January	February	March	April	May	June	July	August	September	October	November	December
2010	4652	January	February	March	April	May	June	July	August	September	October	November	December
2011	4155	January	February	March	April	May	June	July	August	September	October	November	December
2012	5297	January	February	March	April	May	June	July	August	September	October	November	December
2013	5191	January	February	March	April	May	June	July	August	September	October	November	December
2014	7946	January	February	March	April	May	June	July	August	September	October	November	December
2015	6484	January	February	March	April	May	June	July	August	September	October	November	December
2016	6447	January	February	March	April	May	June	July	August	September	October	November	December
2017	14714	January	February	March	April	May	June	July	August	September	October	November	December
2018	16556	January	February	March	April	May	June	July	August	September	October	November	December
2019	12046	January	February	March	April	May	June	July	August	September	October		

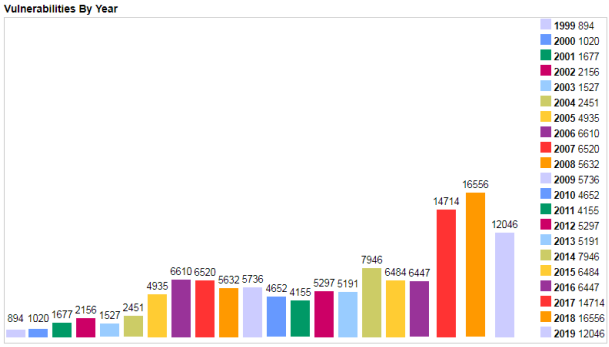

Figura 1 - Andamento delle vulnerabilità per anno [Fonte: https://www.cvedetails.com]

Nella Figura 1 è rappresentato il numero delle vulnerabilità nel periodo 1999-2019. Sull'asse delle ascisse sono riportati gli anni progressivamente dal 1999 al 2019, mentre nelle ordinate è indicata la numerosità delle vulnerabilità riscontrate per anno.

Tra le principali cause, si riscontra l'adozione di metodologie concentrate, soprattutto, sulla correzione di difetti funzionali e di attenzione alle performance delle logiche applicative, trascurando l'attuazione di pratiche di progettazione e programmazione che garantiscono la sicurezza del codice.

Da qui anche l'appello della comunità OWASP[6] che sottolinea la necessità di accrescere la consapevolezza sulla sicurezza delle applicazioni, poiché il SW non sicuro mette a repentaglio le infrastrutture anche più critiche (finanziarie, sanitarie e difensive).

E' necessario rispondere in modo efficace alle sfide sulla sicurezza delle applicazioni, dotandosi di soluzioni adeguate per:

- Migliorare la gestione del programma di sicurezza delle applicazioni. Le componenti chiavi di un programma di sicurezza devono includere:
  - Risk Management Integration,
  - Architect & Developer Guidance,
  - Process Improvement (SDLC),
  - Secure Development Activities,
  - Vulnerability Management Integration;
- Valutare il codice software e le applicazioni al fine di identificare le vulnerabilità;
- Automatizzare la correlazione dei risultati della verifica della sicurezza per applicazioni interattive, statiche e dinamiche.

4.2 Sviluppo applicazioni sicure

La sicurezza informatica è l'insieme delle tecniche che mirano a proteggere l'ambiente informatico che include: gli utenti, le reti, le applicazioni, i processi e i dati. Questa sicurezza "integrata" implica una visione della security a 360° il cui obiettivo principale è di ridurre i rischi, compreso la prevenzione e la mitigazione degli attacchi informatici.

[6] A free and open software security community (https://www.owasp.org)