

## References

- [1] E. Durou and P. Lee, "Deloitte's Predictions for the technology, media and telecommunications (TMT) sectors," 2017. [Online]. Available: <https://www2.deloitte.com/content/dam/Deloitte/xs/Documents/technology-media-telecommunications/predicitons2017/ME-Predictions-2017-IT-as-a-Service.pdf>. [Accessed 2018].
- [2] Y. Zhao, "Service Oriented Infrastructure Framework," in *IEEE Congress on Services - Part I*, Honolulu, HI, USA, 2008.
- [3] Columbus and Louis, "Roundup Of Cloud Computing," 2017. [Online]. Available: <https://www.forbes.com/sites/louiscolumbus/2017/04/29/roundup-of-cloud-computing-forecasts-2017/#6487c81631e8>. [Accessed 2018].
- [4] M. Avram, "Advantages and challenges of adopting cloud computing from an," in *The 7th International Conference Interdisciplinarity in Engineering*, 2013.
- [5] Y. Nosyk, "Migration of A Legacy Web Application To The Cloud," University of Applied Sciences, South-Eastern Finland, 2018.
- [6] Almonaies, A. Asil and J. R. Cordy, "Legacy System Evolution towards," School of Computing, Queens University, Kingston, Ontario, Canada, 2010.
- [7] M. Oliver, R. Florian and D. Schahram, "Domain-Specific Service Selection for Composite Services," in *IEEE Transactions on Software Engineering*, 2012.
- [8] A. Grace, J. Lewis, E. Morris, B. Dennis and B. Smith, "SMART: Analyzing the Reuse Potential of Legacy Components in a Service-Oriented Architecture Environment.," May 2007. [Online]. Available: [https://www.researchgate.net/publication/265739659\\_SMART\\_Analyzing\\_the\\_Reuse\\_Potential\\_of\\_Legacy\\_Components\\_in\\_a\\_Service-Oriented\\_Architecture\\_Environment](https://www.researchgate.net/publication/265739659_SMART_Analyzing_the_Reuse_Potential_of_Legacy_Components_in_a_Service-Oriented_Architecture_Environment). [Accessed June 2018].
- [9] S. Yalezo and M. Thinyane, "Architecting and Constructing an SOA Bridge for an MVC Platform," in *Fourth World Congress on Software Engineering*, Hong Kong, China, 2013.
- [10] C. Semith, A. Ilker, A. Oguztuzun and S. Tufekci, "A Mashup-Based Strategy for Migration to Service-Oriented Computing.," Middle East Technical University, 2007.
- [11] D. Dagger, A. O'Connor, S. Lawless, E. Walsh and V. P. Wade, "Service-Oriented E-Learning Platforms: From Monolithic Systems to Flexible Services," IEEE, 2007.

- [12] Z. Tari and J. Stokes, "Designing the reengineering service for the DOK federated database system," in *Proceedings 13th International Conference on Data Engineering*, Birmingham, UK, 1997.
- [13] R. Terra and A. Levcovitz, "Towards a Technique for Extracting Microservices from Monolithic Enterprise Systems," Universidade Federal de Minas Gerais (UFMG), Belo Horizonte, Brazil, 2016.
- [14] N. Kulkarni and V. Dwivedi, "The Role of Service Granularity in a Successful SOA Realization A Case Study," in *IEEE Congress on Services - Part I*, Honolulu, HI, USA, 2008.
- [15] M. Razavian and P. Lago, "Understanding SOA Migration Using a Conceptual Framework," 2010.
- [16] R. Maryam and L. Patricia, "Towards a Conceptual Framework for Legacy to SOA Migration," Department of Computer Science, VU University Amsterdam, Netherlands, 2009.
- [17] Almonaies, A. Asil and Cordy, "Legacy System Evolution towards Service-Oriented Architecture," School of Computing, Queens University, Kingston, Ontario, Canada.
- [18] S. Malik and D.-H. Kim, "A comparison of RESTful vs. SOAP web services in actuator networks," in *Ninth International Conference on Ubiquitous and Future Networks (ICUFN)*, Milan, Italy, 2017.
- [19] M. Gavin and G. Denis, "A comparison of soap and rest implementations of a service based interaction independence middleware framework," in *Winter Simulation Conference*, 2009.
- [20] K. S. Wagh and T. Ravindra, "A Comparative study of SOAP vs REST web services provisioning techniques for mobile host," *Journal of Information Engineering and Applications*, vol. 2, no. 5, 2012.
- [21] K. Sangsanit, W. Kurutach and S. Phoomvuthisarn, "REST web service composition: A survey of automation and techniques," in *International Conference on Information Networking (ICOIN)*, Chiang Mai, Thailand, 2018.
- [22] Y. Liu, Q. Wang, M. Zhuang and Y. Zhu, "Reengineering Legacy Systems with RESTful Web Service," in *32nd Annual IEEE International Computer Software and Applications Conference*, Turku, Finland, 2008.
- [23] B. J. Kaviya and G. Selvakumar, "International Journal of Advanced Research in," November 2015. [Online]. Available:

- [http://ijarcse.com/Before\\_August\\_2017/docs/papers/Volume\\_5/11\\_November2015/V5I11-0205.pdf](http://ijarcse.com/Before_August_2017/docs/papers/Volume_5/11_November2015/V5I11-0205.pdf). [Accessed 2018].
- [24] M. Shang-Pin, H. Chun-Ying, F. Yong-Yi and K. Jong-Yih, "Configurable RESTful Service Mashup: A Process-Data-," *Applied Mathematics & Information Sciences*, vol. 9, pp. 637-644, Nov 2014.
- [25] R. Chen, S. Li and Z. Li, "From Monolith to Microservices: A Dataflow-Driven Approach," in *24th Asia-Pacific Software Engineering Conference (APSEC)*, Nanjing, China, 2017.
- [26] B. Mayer and R. Weinreich, "An Approach to Extract the Architecture of Microservice-Based Software Systems," in *IEEE Symposium on Service-Oriented System Engineering (SOSE)*, Bamberg, Germany, 2018.
- [27] F. Wang and F. Fahmi, "Constructing a Service Software with Microservices," in *IEEE World Congress on Services (SERVICES)*, San Francisco, CA, USA, 2018.
- [28] W. A. Brown, "IBM services blog," IBM, 17 September 2017. [Online]. Available: <https://www.ibm.com/blogs/insights-on-business/gbs-strategy/can-microservices-next-enabler-innovation/>. [Accessed July 2018].
- [29] T. Huston, "SoapUI Pro," [Online]. Available: <https://smartbear.com/learn/api-design/what-are-microservices/>.
- [30] F.-J. Wang and F. Fahmi, "Constructing a Service Software with Microservices," in *IEEE World Congress on Services (SERVICES)*, San Francisco, CA, USA, 2018.
- [31] "using-microservices-for-legacy-system-modernization," 16 March 2017. [Online]. Available: <https://www.altexsoft.com/blog/engineering/using-microservices-for-legacy-system-modernization/>. [Accessed July 2018].
- [32] P. D. Francesco, P. Lago and I. Malavolta, "Research on Architecting Microservices: Trends, Focus, and Potential for Industrial Adoption," Universiteit Amsterdam, Netherlands, 2017.
- [33] A. Joseph, "A simple overview on SAP Netweaver Gateway," 24 January 2013. [Online]. Available: <https://blogs.sap.com/2013/01/24/a-simple-overview-on-sap-netweaver-gateway/>. [Accessed June 2018].
- [34] A. Kokkat, "Database Development with IBM Hybrid Data Architecture," 3 October 2017. [Online]. Available: <https://www.ibm.com/developerworks/community/blogs/c4dd2a99-4d89-45b3-9931-8aff9e22b80b?lang=en>. [Accessed August 2018].

- [35] T. Clemson, "Testing Strategies in a Microservice Architecture," 2014. [Online]. Available: <http://martinfowler.com/articles/microservice-testing/>. [Accessed August 2018].
- [36] M. Stine, "Migrating to cloud-native application architectures," 2015.
- [37] T. Mauro, "Adopting Microservices at Netflix: Lessons for Architectural Design," 2015. [Online]. Available: <https://www.nginx.com/blog/microservices-at-netflix-architectural-best-practices/>.. [Accessed June 2018].
- [38] A. Balalaie, Heydarnoori and Jamshidi, "Microservices Architecture Enables DevOps: Migration to a Cloud-Native Architecture," *IEEE Software*, vol. 33, no. 3, pp. 42-52, 2016.
- [39] S. Newman, "Demystifying Conway's Law, 2014.," 2014. [Online]. Available: <https://www.thoughtworks.com/insights/blog/demystifying-conways-law..>
- [40] P. Calcado, "Building Products at SoundCloud Part I: Dealing with the Monolith, 2014. building-products-at-soundcloud-part-1-dealing-with-the-monolith.," 2014. [Online]. Available: <https://developers.soundcloud.com/blog/>.
- [41] C. Munns, "DevOps at Amazon: Microservices, 2 Pizza Teams, and 50 Million Deploys a Year," 2015. [Online]. Available: <https://www.slideshare.net/TriNimbus/chris-munns-devops-amazon-microservices-2-pizza-teams-50-million-deploys-a-year..> [Accessed 2018].
- [42] W. L. Hürsch and C. V. Lopes, "Separation of concerns".
- [43] M. Fowler and K. Beck, "Refactoring: improving the design of existing code. Addison-Wesley Professional," 1999.
- [44] M. Richards, "Microservices Antipatterns and Pitfalls.," O'Reilly Media, Inc., 2016. [Online]. [Accessed 2018].
- [45] E. Evans, "Domain-driven design: tackling complexity in the heart of software.," *Addison-Wesley Professional*, 2014.
- [46] M. Fowler, "StranglerApplication," 2004. [Online]. Available: <https://www.martinfowler.com/bliki/StranglerApplication.html..>
- [47] RaviShankarOjha, "Ecommerce with Shopping cart system," 31 July 2014. [Online]. [Accessed June 2018].
- [48] Dennis, Enterprise Architecture Consultant and Microsoft vTSP., "Neuron ESB + Microservices + CQRS = Magic," 4 January 2017. [Online]. Available: <https://www.neuronesb.com/article/neuron-esb-microservices-cqrs-magic/>. [Accessed May 2018].

- [49] "God Class," Cunningham & Cunningham, Inc, 2013. [Online]. Available: <http://wiki.c2.com/?GodClass..>
- [50] Brown and Simon, "Modular Monolith," 2015. [Online]. Available: <http://www.codingthearchitecture.com/presentations/sa2015-modular-monoliths..>
- [51] G. T. Heineman and W. T. Councill, "Component-based software engineering.," *Addison-Westley*, p. 5.
- [52] H. H. Ngoc, "Single Page Web Application with Restful API and AngularJS," Helsinki Metropolia University of Applied Sciences, 2014.