

**Turma:** SPPGA0264 - INFORMÁTICA COMUNITÁRIA E TRANSFORMAÇÃO DIGITAL - Turma: 01 (2022.2)

**Carga Horária:** 60h

**Horário:** quintas-feiras, 14h-18h

**Ementa:**

Alfabetização, aceitação, adoção e uso de tecnologias de informação e comunicação. Tecnologias stand-alone, online, responsivas, interativas e colaborativas. Inclusão, igualdade, efetividade e transformação na sociedade digital. Digitização, digitalização e transformação digital. Tecnologias de informação e comunicação para acesso à informação, conscientização individual, formação de competências, empoderamento comunitário, melhoria organizacional e desenvolvimento regional. Impacto das políticas públicas, núcleo familiar e atitudes pessoais no desenvolvimento de limitações e competências digitais de indivíduos e grupos.

### **Encontro 1: introdução à disciplina**

Apresentação da disciplina, professor e alunos.

### **Encontros 2 e 3: abordagem sociotécnica e diamante de Leavitt**

Baxter, G., & Sommerville, I. (2011). Socio-technical systems: From design methods to systems engineering. **Interacting with Computers**, 23, 4-17.

Leavitt, H.J. (1965). Applied organizational change in industry: Structural, technological and humanistic approaches. In: March, J.G. (Ed.). **Handbook of organizations**, 1144-70. Chicago, IL, USA: Rand McNally.

Mumford, E. (2006). The story of socio-technical design: Reflections on its successes, failures and potential. **Information Systems Journal**, 16, 317-342.

Thakur, S. (2013). **A look at the components of Leavitt's diamond**. Disponível em: <https://www.brighthubpm.com/change-management/122495-a-look-at-the-components-of-leavitts-diamond/>

Trist, E., & Murray, H. (Eds.). (1993). **The social engagement of social science: A Tavistock anthology. Volume II: The socio-technical perspective**. Philadelphia, PA, USA: University of Pennsylvania Press.

Artigos do professor no tema:

Bellini, C.G.P., Pereira, R.C.F., & Becker, J.L. (2020). Emergent customer team performance and effectiveness: An ex-post-facto study on cognition and behavior in enterprise systems implementation. **Communications of the AIS**, 47, 550-582.

Bellini, C.G.P., Pereira, R.C.F., & Becker, J.L. (2016). Organizational structure and enterprise systems implementation: Theoretical measures and a benchmark for customer teams. **Information Technology & People**, 29(3), 527–555. [Emerald Literati Award]

Bellini, C.G.P., Pereira, R.C.F., & Becker, J.L. (2012). Customer team effectiveness through people traits in information systems development. **International Journal of Human Capital & Information Technology Professionals**, 3(3), 54–78.

De Moura, Jr., P.J., Bellini, C.G.P., & Pereira, R.C.F. (2015). Cognition, behavior and structure of customer teams in enterprise systems implementation: A comparative study. **Journal of Global Information Technology Management**, 18(4), 271–291.

#### **Encontros 4 e 5: design science**

Gregor, S., & Hevner, A. R. (2013). Positioning and presenting design science research for maximum impact. **MIS Quarterly**, 37(2), 337-355.

Edição especial da BAR no tema: <https://bar.anpad.org.br/index.php/bar/issue/view/59>

#### **Encontros 6 e 7: teoria sociocognitiva, autoeficácia com computadores**

Bandura, A. (1988). Organizational application of social cognitive theory. **Australian Journal of Management**, 13(2), 275-302.

Wood, R., & Bandura, A. (1989). Social cognitive theory of organizational management. **Academy of Management Review**, 14(3), 361-384.

Artigos do professor no tema:

Bellini, C.G.P., Isoni Filho, M.M., De Moura, Jr., P.J., & Pereira, R.C.F. (2016). Self-efficacy and anxiety of digital natives in face of compulsory computer-mediated tasks: A study about digital capabilities and limitations. **Computers in Human Behavior**, 59(1), 49-57.

Bellini, C.G.P., Palvia, P., Moreno, Jr., V.A., Jacks, T., & Graeml, A.R. (2019). Should I stay or should I go? A study of IT professionals during a national crisis. **Information Technology & People**, 32(6), 1472-1495.

Bellini, C.G.P., & Serpa, M.L. (2018). Mirror, mirror on the wall: An experiment on feedback and overconfidence in computer-mediated tasks. **Proceedings of the 24<sup>th</sup> Americas Conference on Information Systems**. New Orleans, LA, USA, August 16–18.

#### **Encontros 8, 9 e 10: uso, adoção, aceitação da tecnologia**

Burton-Jones, A., Stein, M., & Mishra, A. (2017). IS use. In: Ashley Bush, & Arun Rai (Eds.), **MIS Quarterly Research Curations**, <http://misq.org/research-curations>

Dwivedi, Y. K., Rana, N. P., Jeyaraj, A., Clement, M., & Williams, M. D. (2019). Re-examining the unified theory of acceptance and use of technology (UTAUT): Towards a revised theoretical model. **Information Systems Frontiers**, 21, 719-734.

Serenko, A., & Turel, O. (2019). A dual-attitude model of system use: The effect of explicit and implicit attitudes. **Information & Management**, 56(5), 657-668.

Venkatesh, V., Thong, J. Y. L., & Xu, X. (2016). Unified theory of acceptance and use of technology: A synthesis and the road ahead. **Journal of the AIS**, 17(5), 328-376.

Leituras complementares:

Al-Natour, S., & Benbasat, I. (2009). The adoption and use of IT artifacts: A new interaction-centric model for the study of user-artifact relationships. **Journal of the AIS**, 10(9), 661-685.

Bagozzi, R.P. (2007). The legacy of the technology acceptance model and a proposal for a paradigm shift. **Journal of the AIS**, 8(4), 244-254.

Benbasat, I., & Barki, H. (2007). Quo vadis, TAM? **Journal of the AIS**, 8(4), 211-218.

Davis, F. (1989). Perceived usefulness, perceived ease of use, and end user acceptance of information technology. **MIS Quarterly**, 13(3), 318-339.

Goodhue, D.L. (2007). Comment on Benbasat and Barki's "Quo Vadis TAM" article. **Journal of the AIS**, 8(4), 219-222.

Hirshheim, R. (2007). Introduction to the special issue on "Quo Vadis TAM – Issues and Reflections on Technology Acceptance Research". **Journal of the AIS**, 8(4), 203-205.

Lee, Y., Kozar, K.A., & Larsen, K.R.T. (2003). The technology acceptance model: Past, present, and future. **Communications of the AIS**, 752-780.

Silva, L. (2007). Post-positivist review of technology acceptance model. **Journal of the AIS**, 8(4), 255-266.

Straub Jr., D.W., & Burton-Jones, A. (2007). Veni, vidi, vici: Breaking the TAM logjam. **Journal of the AIS**, 8(4), 223-229.

Venkatesh, V., Morris, M.G., Davis, G.B., Davis, F.D. (2003). User acceptance of information technology: Toward a unified view. **MIS Quarterly**, 27(3), 425-478.

Venkatesh, V., Thong, J.Y.L., Chan, F.K.Y., Hu, P.J.-H., & Brown, S.A. (2011). Extending the two-stage information systems continuance model: Incorporating UTAUT predictors and the role of context. **Information Systems Journal**, 21(6), 527-555.

Venkatesh, V., Thong, J.Y.L., & Xu, X. (2012). Consumer acceptance and use of information technology: Extending the unified theory of acceptance and use of technology. **MIS Quarterly**, 36(1), 157-178.

Gurstein, M. (2003). Effective use: A community informatics strategy beyond the digital divide. *First Monday*, 8(12).

Bellini, C.G.P. (2018). The ABCs of effectiveness in the digital society. *Communications of the ACM*, 61(7), 84-91.

Mehta, N., N., Chauhan, S., & Kaur, I. (2021). Extending the story of IS success: A meta-analytic investigation of contingency factors at individual and organisational levels. *European Journal of Information Systems*, ahead-of-print.

### Encontros 13 e 14: inteligência e sabedoria artificial

IBM Project Debater:

Slonim, N., et al. (2021). An autonomous debating system. *Nature*, 591, 379-384.

<https://www.youtube.com/watch?v=m3u-1yttrVw>

[https://www.youtube.com/watch?v=3\\_yy0dnIc58](https://www.youtube.com/watch?v=3_yy0dnIc58)

Introdução:

Hao, K. (2020). Members are making deepfakes, and things are getting weird. *MIT Technology Review*. Disponível em <https://www.technologyreview.com/2020/08/28/1007746/ai-deepfakes-memes/> (acesso em 25/06/2022).

Johnson, K. (2022). LaMDA and the sentient AI trap. *Wired*, June 14. <https://www.wired.com/story/lamda-sentient-ai-bias-google-blake-lemoine/> (acesso em 28/06/2022).

Joy, B. (2000). Why the future doesn't need us. *Wired*, April 1. Disponível em <https://www.wired.com/2000/04/joy-2/> (acesso em 28/06/2022).

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Amershi, S., et al. (2019). Guidelines for human-AI interaction. *Proceedings of the ACM CHI Conference on Human Factors in Computing Systems*. Glasgow, Scotland, May 4-9.

Awad, E., DSouza, S., Bonnefon, J.-F., Shariff, A., & Rahwan, I. (2020). Crowdsourcing moral machines. *Communications of the ACM*, 63(3), 48-55.

Buiten, C. M. (2019). Towards intelligent regulation of artificial intelligence. *European Journal of Risk Regulation*, 10(1), 41–59.

Kim, T. W., & Mejia, S. (2019). From artificial intelligence to artificial wisdom: What Socrates teaches us. *Computer*, 52, 70-74. <https://doi.ieeecomputersociety.org/10.1109/MC.2019.2929723>

Engler, A. (2019). **Fighting deepfakes when detection fails**. Washington, DC: Brookings. Disponível em <https://www.brookings.edu/research/fighting-deepfakes-when-detection-fails> (acesso em 25/06/2022).

Fletcher, J. (2018). Deepfakes, artificial intelligence, and some kind of dystopia: The new faces of online post-fact performance. *Theatre Journal*, 70(4), 455-471.

Jeste, D., Graham, S., Nguyen, T., Depp, C., Lee, E., & Kim, H. (2020). Beyond artificial intelligence: Exploring artificial wisdom. *International Psychogeriatrics*, 32(8), 993-1001.

Jobin, A., Ienca, M., & Vayena, E. (2019). The global landscape of AI ethics guidelines. *Nature Machine Intelligence*, 1, 389-399.

Sevilla, D. C. (2013). The quest for artificial wisdom. *AI & Society*, 28, 199-207.

Tsai, C.-H. (2020). Artificial wisdom: A philosophical framework. *AI & Society*, 35, 937-944.

#### Encontro 15: indústria 4.0

China Daily. (2018). AI seen as driving force in industry 4.0. <http://www.chinadaily.com.cn/a/201804/27/WS5ae29547a3105cdcf651ae80.html>

Grossman, R. (2016, March 21). The industries that are being disrupted the most by digital. *Harvard Business Review*.

Nascimento, A. M., & Bellini, C. G. P. (2018). Artificial intelligence and industry 4.0: The next frontier in organizations. *Brazilian Administration Review*, 15(4).

Hermann, M., Pentek, T., & Otto, B. (2016). Design principles for industrie 4.0 scenarios. *Proceedings of the 49<sup>th</sup> HICSS*, IEEE, Koloa, HI.

Ghobakhloo, M. (2018). The future of manufacturing industry: A strategic roadmap toward Industry 4.0. *Journal of Manufacturing Technology Management*, 29(6), 910-936.

Kazancoglu, Y., Ozkan-Ozen, Y. (2018). Analyzing workforce 4.0 in the fourth industrial revolution and proposing a road map from operations management perspective with fuzzy DEMATEL. *Journal of Enterprise Information Management*, 31(6), 891-907.

Lee, J., Davari, H., Singh, J., & Pandhare, V. (2018). Industrial artificial intelligence for industry 4.0-based manufacturing systems. *Manufacturing Letters*, 18, 20-23.