I think Kate’s doughnut is a work of genius and I wanted to recreate the idea in an editable form that can be generalized for all types of systems, for exampe an individual business or any other thing. I have written a program in FMS Logo, which is available for free here: <https://fmslogo.sourceforge.io/> The program I wrote is listed below with line numbers and notes to the right (you only need copy and enter the program instructions in the left column). You can change the radius of the CIRCLE commands (in FMSLogo use 125 units per inch). You can edit the colors using RGB codes as well as the divisions for the inner and outer rings by changing the number of repetitions on lines 19 and 29, the degrees as parts of 360o on lines 21 and 30 (This image has 5 divisions of 72 degrees, but you can use whatever you like). After running the FMS Logo program,I save the basic doughnut as a .bmp file, place it in a Word document and add the lables with the Insert -> Shapes menus. I am licensing the image under CC BY SA Larry Marquardt feel free to modify and use as you see fit, but please provide attribution.

Have fun, and I hope it’s useful.

|  |  |
| --- | --- |
| CIRCLE 300  SETFLOODCOLOR [255 128 0]  FILL  CIRCLE 225  SETFLOODCOLOR [255 0 0]  FILL  CIRCLE 215  SETFLOODCOLOR [0 204 0]  FILL  CIRCLE 140  SETFLOODCOLOR [255 0 0]  FILL  CIRCLE 130  SETFLOODCOLOR [0 128 255]  FILL  CIRCLE 55  SETFLOODCOLOR [255 255 255]  FILL  REPEAT 5 [  PU  RT REPCOUNT \* 72  FORWARD 55  SETPENSIZE [10 10]  SETPENCOLOR [255 255 255]  PD  FORWARD 75  PU  HOME]  REPEAT 5 [  PU  RT REPCOUNT \* 72  FORWARD 225  SETPENSIZE [10 10]  SETPENCOLOR [255 255 255]  PD  FORWARD 75  PU  HOME] | 1. Draw a circle filled with 2. Set flood color RGB code 3. Fill the circle with the color 4. Draw a circle filled with 5. Set flood color RGB code 6. Fill the circle with the color 7. Draw a circle filled with 8. Set flood color RGB code 9. Fill the circle with the color 10. Draw a circle filled with 11. Set flood color RGB code 12. Fill the circle with the color 13. Draw a circle filled with 14. Set flood color RGB code 15. Fill the circle with the color 16. Draw a circle filled with 17. Set flood color RGB code 18. Fill the circle with the color 19. Routine that repeats n times 20. Stop drawing 21. Count n and set to fraction of 360o (72) 22. Move forward (don’t change) 23. Set line width 24. Set line color 25. Start drawing 26. Move forward (don’t change) 27. Stop drawing 28. Center and repeat n times 29. Routine that repeats n times 30. Stop drawing 31. Count n and set to fraction of 360o (72) 32. Move forward (don’t change) 33. Set line width 34. Set line color 35. Start drawing 36. Move forward (don’t change) 37. Stop drawing 38. Center and repeat n times |

Chart, radar chart, sunburst chart

Description automatically generated

Independent systems (green area is the system per se).

Logo

Description automatically generated

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Systems (green area) outputs (outer orange) begin to interact and be affected by each other.

A picture containing chart

Description automatically generated

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Systems (green area) are fully interactive with external effects (outer orange) affecting each other’s inputs (blue). Cooperation or competition.

Chart, sunburst chart

Description automatically generated

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Systems (green area) competing for inputs affecting each other’s inputs (blue area).

Chart, sunburst chart

Description automatically generated

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Pair of systems (lighter shades) interacting to reproduce.

A picture containing balloon, transport, aircraft, accessory

Description automatically generated

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