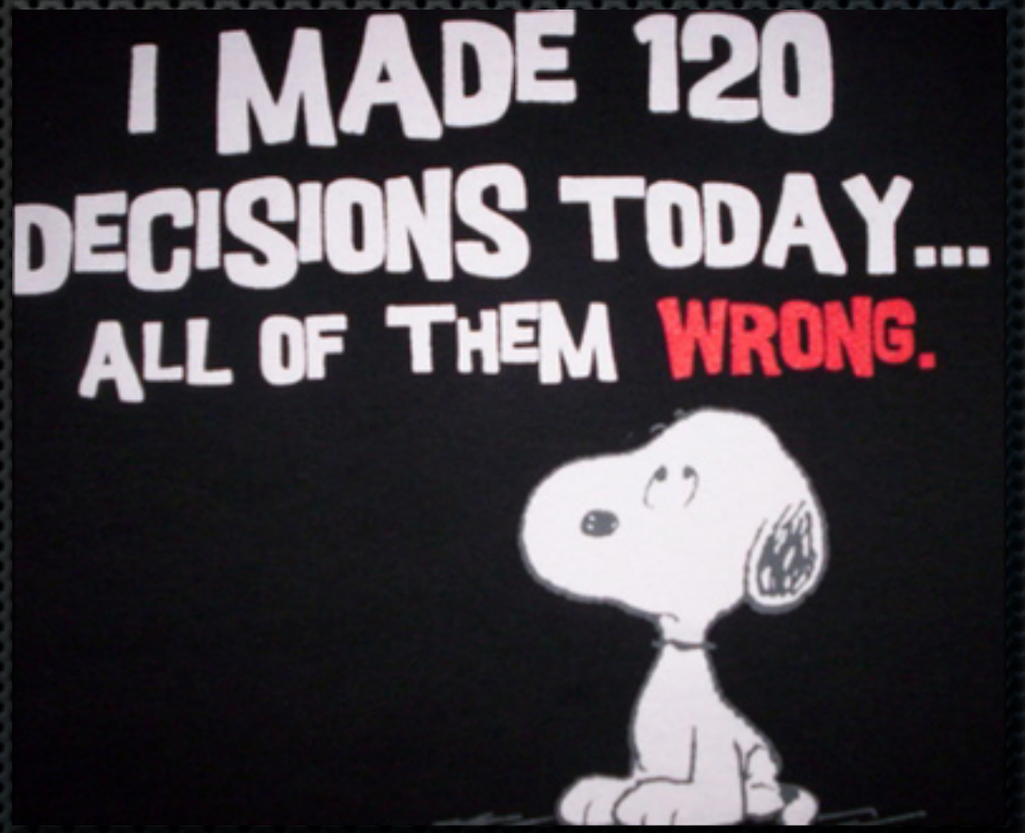
University Receivables and Heuristic Management Tools

A “new” method for solving problems

An Overview

Problems and Answers

- Are we confronted with more problems than can be solved in a single day?
- Answers must always be Quick, Correct, Available, Feasible?



Problems come in many sizes and varying complexity

- How do I evaluate and improve my fee structure?
- How do I improve the payment application process?
- How do I comply with IRS Reporting requirements?
- How do I lower staffing costs and improve service?
- How do I evaluate and improve my Payment Card Environment?
- How do I improve my Collection Queue management?

Heuristics

A method you can use when the problem seems too complex or difficult to solve.

Heuristics - Definition

An experience-based technique that helps with problem solving, learning and discovery. A heuristic method is particularly used to rapidly come to a solution that is hoped to be close to the best possible answer, or optimal solution. Heuristics are ‘rules of thumb’ educated guesses, intuitive judgments of simple common sense.

Nuts and Bolts

- What do you learn by observing this exercise?
- Is there a quicker way?
- Is there a more “correct” way?

Thinking "Heuristically"

Good thinkers do not necessarily think harder, longer, or more exactly; they simply have learned to think in directions that are more likely to be productive.

Heuristic Management Rule #1

Make it a habit to purposefully pause and notice things.

Heuristic Management Rule #2

Focus your energies on just a few topic areas that you genuinely care about and work on these purposefully for several weeks or months.

Heuristic Management Rule #3

Avoid being too narrow in the way you define your problem or topic area. Purposefully try broader definitions and see what insights you gain.

"How much more likely am I to encounter evidence that my theory is true rather than false?"

Heuristic Management Rule #4

Try to come up with original and useful ideas by making novel associations among what you may already know.

Heuristic Management Rule #5

When you need innovative ideas, remember:

* Attention,
* Escape,
* Movement.

"Avoid the Calf-Path..."

Heuristic Management Rule #6

Pause and carefully examine ideas that make you laugh the first time you hear them.

"Things that make no sense have more potential than things that do."

Heuristic Management Rule #7

Recognize that your streams of thought and patterns of judgment are not inherently right or wrong; they are just what you think now based primarily on patterns from your past.

"There is nothing so useless as doing efficiently that which should not be done at all."

Heuristic Management Rule #8

Make a deliberate effort to harvest, develop, and implement at least a few of the ideas you generate.

Heuristic Toolbox

- Techniques
- Patterns
- Finance
- Dynamics
- Behaviors

Fill YOUR Heuristic Toolbox

- Tuition Rates
- Exemptions
- Defaults/Collections
- Academic Dates
- Taxes/Financial Aid/ Payment Plans etc...

Understand the Problem

Example:

- Your Collection Office budget is declining (reduced revenue in late/collection fees) yet overall tuition assessment is up. You must develop and implement a plan to reduce delinquencies with out a budget increase.

Understand the Problem

- What is the unknown? What are the data points? What is the condition?
- Is it possible to satisfy the condition? Is the condition sufficient to determine the unknown? Or is it insufficient? Or redundant? Or contradictory?
- Draw a figure. Introduce suitable notation.
- Separate the various parts of the condition. Can you write them down?

Understand the Problem

- Want-Got-Gaps (I Want ---> Gap <--- I Got)
- Draw a figure. Introduce suitable notation.
- Separate the various parts of the condition. Can you write them down?

Devise a Plan

- Find the connection between the data and the unknown. You may be obliged to consider auxiliary problems if an immediate connection cannot be found. You should obtain eventually a plan of the solution.
- Have you seen it before? Or have you seen the same problem in a slightly different form?
- Do you know a related problem? Do you know a theorem that could be useful?

Devise a Plan

- Look at the unknown! And try to think of a familiar problem having the same or a similar unknown.
- Here is a problem related to yours and solved before. Could you use it? Could you use its result? Could you use its method? Should you introduce some auxiliary element in order to make its use possible?
- Could you restate the problem? Could you restate it still differently? Go back to definitions.

Devise a Plan

If you cannot solve the proposed problem try to solve first some related problem.

Could you imagine a more accessible related problem?
A more general problem?
A more special problem?
An analogous problem?
Could you solve a part of the problem?
Keep only a part of the condition, drop the other part; how far is the unknown then determined, how can it vary?
Could you derive something useful from the data?
Could you think of other data appropriate to determine the unknown?
Could you change the unknown or data, or both if necessary, so that the new unknown and the new data are nearer to each other?

Review the Plan

- Did you use all the data? Did you use the whole condition? Have you taken into account all essential notions involved in the problem?

Carrying Out The Plan

- Carrying out your plan of the solution, check each step.
- Can you see clearly that the step is correct?
- Can you prove that it is correct?

Looking Back - Examine The Solution

- Can you check the result? Can you check the argument?
- Can you derive the solution differently? Can you see it at a glance?
- Can you use the result, or the method, for some other problem?

A Word of Warning

- While proper use of heuristic tools can be very helpful, be warned that they can also lead to error.
- Escalation of Commitment (Sunk Cost Fallacy)

Solutionary

- As we've discussed, we must work to be "Solutionary" rather than "Revolutionary". These tools and methods can help you work through Solutions to your individual challenges.
- There is MUCH more to this topic, but hopefully you have seen enough to begin to apply Heuristics in your processes.

Heuristic Theorems

Many to work with....

- Anchoring and adjustment
- Availability heuristic
- Effort Heuristic
- Naïve diversification
- Escalation of commitment

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