Atomic Habits Notes

The first three laws of behavior change—make it obvious, make it attractive, and make it easy—increase the odds that a behavior will be performed this time. The fourth law of behavior change make it satisfying—increases the odds that a behavior will be repeated next time. It completes the habit loop.

The Fundamentals: Why Tiny Changes Make a Big Difference

Chapter 3: How to Build Better Habits in 4 Simple Steps

Definition of Habits

- Habits: Automatic behaviors that solve recurring problems in our environment

- Quote: "Habits are, simply, reliable solutions to recurring problems in our environment."

- Purpose: Save mental energy by automating responses to common situations

The Habit Loop: 4-Part Pattern

1. Cue: Trigger for your brain, tied to a reward

2. Craving: Transformation of the trigger into desire

3. Response: Performing the habitual action

4. Reward: Positive feeling that reinforces the habit

Phases of the Habit Loop

- Problem Phase: Cue and Craving

- Solution Phase: Response and Reward

The Four Laws of Behavior Change

For creating good habits:

1. Make it obvious (Cue)

2. Make it attractive (Craving)

3. Make it easy (Response)

4. Make it satisfying (Reward)

For breaking bad habits (Inversion):

1. Make it invisible (Cue)

2. Make it unattractive (Craving)

3. Make it difficult (Response)

4. Make it unsatisfying (Reward)

Key Concepts for Habit Formation

- All behavior aims to solve problems (obtain benefits or relieve pain)

- Habits become automatic through repetition

- Environment plays a crucial role in shaping habits

- Habits can be consciously designed to achieve desired outcomes

Examples of Habit Loops

1. Checking text messages:

   - Cue: Phone buzzes

   - Craving: Desire to read the message

   - Response: Grab phone and read text

   - Reward: Satisfaction of curiosity

2. Nail-biting due to stress:

   - Cue: Feeling overwhelmed while answering emails

   - Craving: Desire to feel in control

   - Response: Bite nails

   - Reward: Temporary stress relief

Implementation Strategies

- Identify existing habits and their cues

- Analyze failed habit attempts in light of the Four Laws

- Shape your environment to support desired habits

- Consider the "rider and elephant" analogy:

  - Rational mind (rider) vs. Emotional mind (elephant)

  - Use environment (path) to guide both towards desired behavior

RAG-Specific Notes

- Habit formation is a key aspect of personal development and goal achievement

- The Four Laws provide a framework for designing effective habit interventions

- Understanding the habit loop can help in creating personalized habit strategies

- Environment design is a powerful tool for influencing habit formation

- Habits can be leveraged to automate positive behaviors and reduce decision fatigue

First Law: Make It Obvious

Chapter 4: The Main Who Didn't Look Right

The Power of Unconscious Pattern Recognition in Habit Formation

Key Concepts:

1. Unconscious pattern recognition

2. Brain as a prediction machine

3. Automatic habit formation

4. Importance of awareness in habit change

Unconscious Pattern Recognition

- Example: Paramedic recognizing heart attack symptoms without conscious analysis

- Brain continuously analyzes surroundings and catalogs information

- Repeated experiences lead to automatic recognition of important cues

Brain as a Prediction Machine

- Encodes lessons learned through experience

- Develops ability to notice relevant cues without conscious thought

- Applies to both physical processes (e.g., hunger) and learned behaviors

Automatic Habit Formation

- Habits can form and trigger without conscious awareness of cues

- Examples:

  - Retail clerk accidentally cutting a customer's credit card

  - Former preschool teacher asking adults if they washed their hands

  - Ex-lifeguard yelling "Walk!" to running adults

Importance of Awareness in Habit Change

- Many habit cues become invisible due to familiarity

- Awareness is crucial for behavior change

- Pointing-and-Calling system:

    - Used in Japanese railway system

    - Reduces errors by up to 85% and accidents by 30%

    - Raises awareness from nonconscious to conscious level

Habits Scorecard

- Tool for increasing personal habit awareness

- Process:

    1. List daily habits

    2. Evaluate each habit as positive, negative, or neutral

    3. Use this awareness to identify areas for change

Strategies for Increasing Habit Awareness

1. Pointing-and-Calling in daily life

    - Verbalize actions and their consequences

    - Example: "I'm about to eat this cookie, but I don't need it. Eating it will cause me to gain weight and hurt my health."

2. Verbalizing tasks and intentions

    - Increases likelihood of follow-through

    - Example: "Tomorrow, I need to go to the post office after lunch."

RAG-Specific Notes

- Unconscious pattern recognition plays a crucial role in habit formation

- Awareness is the foundation of habit change

- Verbalization techniques can significantly enhance habit awareness

- The Habits Scorecard is a practical tool for identifying and evaluating personal habits

- Understanding the automatic nature of habits is key to developing effective change strategies

Chapter 5: The Best Way to Start a New Habit

Effective Strategies for Initiating New Habits

Key Concepts:

1. Implementation Intentions

2. Habit Stacking

3. The Diderot Effect

4. Cue Selection

Implementation Intentions

- Definition: A plan that specifies when and where to act on a goal

- Formula: "I will [BEHAVIOR] at [TIME] in [LOCATION]"

- Benefits:

  - Eliminates decision-making at the moment of action

  - Increases likelihood of following through

- Examples:

  - "I will meditate for one minute at 7 a.m. in my kitchen."

  - "I will study Spanish for twenty minutes at 6 p.m. in my bedroom."

- Tip: Start on meaningful dates (e.g., first day of week/month/year) for increased motivation

Habit Stacking

- Definition: Pairing a new habit with an existing habit

- Formula: "After [CURRENT HABIT], I will [NEW HABIT]"
- Benefits:
    - Leverages existing behavioral patterns
    - Provides a clear cue for the new habit
- Example: "After I pour my cup of coffee each morning, I will meditate for one minute."

The Diderot Effect

- Definition: The tendency for one purchase to lead to additional related purchases
- Relevance to habits: Demonstrates how behaviors can trigger chain reactions
- Application: Use this principle to create positive habit chains

Cue Selection for Habit Stacking

- Choose cues that:
    - Occur at the same frequency as the desired new habit
    - Happen at a time when you're likely to be successful
    - Don't conflict with other activities
- Consider the context and environment where the habit will be performed

RAG-Specific Notes

- Implementation intentions and habit stacking are powerful tools for habit formation
- The specificity of these methods helps in creating clear, actionable plans
- Understanding the Diderot Effect can aid in designing comprehensive habit systems
- Careful cue selection is crucial for successful habit implementation
- These strategies can be used to design personalized habit plans in a habit-tracking application

Additional Tips

- Be specific about time, location, and behavior

- Start with small, manageable habits

- Use visual cues or reminders if needed

- Regularly review and adjust your habit plans

Chapter 6: Motivation Is Overrated; Environment Often Matters More

Key Concepts:

1. Environment as behavior shaper

2. Context-dependent habits

3. Visual cues and behavior

4. Designing environments for success

5. Context as cue

Environment as Behavior Shaper

- Lewin's Equation: B = f (P,E) (Behavior is a function of the Person in their Environment)

- External changes often more impactful than internal ones

- Example: Suggestion Impulse Buying in retail environments

Context-Dependent Habits

- Habits are strongly influenced by environmental conditions

- Examples:

  - Whispering in church

  - Cautious behavior on dark streets

- Importance of considering context in habit formation

Visual Cues and Behavior

- Vision as the dominant human sense (10 million out of 11 million sensory receptors)

- Visual cues as powerful catalysts for behavior

- Small visual changes can lead to significant behavioral shifts

Designing Environments for Success

- Make cues for good habits obvious and visible

- Examples:

  - Placing guitar in living room to encourage practice

  - Keeping water bottles in common areas to increase water intake

  - Positioning pill bottles near bathroom sink for medication adherence

- Reduce visibility of cues for bad habits

Context as Cue

- Habits become associated with entire contexts, not just single triggers

- Examples:

  - Drinking more in social situations

  - Work habits tied to office environment

- Thinking of environment as relationships, not just objects

- Stable, predictable environments foster habit formation

RAG-Specific Notes

- Environmental design is crucial for effective habit formation and maintenance

- Visual cues can be leveraged in habit-tracking apps (e.g., prominent reminders, visual progress trackers)

- Consider incorporating environmental assessment tools in habit planning

- Emphasize the importance of context when setting up new habits

- Encourage users to create dedicated spaces for specific habits

Strategies for Environmental Design

1. Identify and eliminate cues for bad habits

2. Create obvious visual cues for desired habits

3. Establish stable, predictable environments for key habits

4. Use context-specific reminders and triggers

5. Regularly assess and adjust environmental cues

Additional Insights

- Small environmental changes can lead to significant behavioral shifts over time

- New environments can facilitate easier habit formation

- Consider the full context when designing habit interventions

- Leverage the power of visual cues in habit formation strategies

Chapter 7: The Secret to Self-Control

Key Concepts:

1. Encoded habits and environmental cues

2. Autocatalytic nature of bad habits

3. Cue-induced wanting

4. Persistence of habits in the brain

5. Environment modification as a strategy

Encoded Habits and Environmental Cues

- Once encoded, habits are triggered by environmental cues

- Caution needed when using behavior change techniques

- Examples:

- Weight-loss presentations can lead to stress and overeating

- Graphic anti-smoking images can increase anxiety and smoking

Autocatalytic Nature of Bad Habits

- Bad habits reinforce themselves

- Examples:

  - Eating junk food leads to feeling bad, which leads to more junk food

  - Anxiety about health leads to smoking, which worsens health and increases anxiety

Cue-Induced Wanting

- External triggers cause compulsive cravings

- Even subliminal cues can stimulate desire (e.g., 33ms cocaine image exposure)

- Constant process, often unconscious

Persistence of Habits in the Brain

- Habits are nearly impossible to remove entirely from the brain

- Resisting temptation is an ineffective long-term strategy

- We become a product of our environment over time

Environment Modification as a Strategy

- Most reliable approach: cut bad habits off at the source

- Reduce exposure to habit cues

- Examples:

  - Leave phone in another room to increase productivity

  - Unfollow social media accounts that trigger negative emotions

  - Move TV out of bedroom to reduce watching time

- Inversion of 1st Law of Behavior Change: Make it invisible

RAG-Specific Notes

- Focus on environmental design in habit-breaking strategies

- Incorporate cue identification and management tools in habit-tracking apps

- Emphasize the importance of modifying surroundings for long-term habit change

- Develop features that help users identify and track environmental triggers

Strategies for Self-Control

1. Identify and remove cues for bad habits

2. Create physical distance from temptations

3. Modify environment to support good habits

4. Focus on changing surroundings rather than willpower

5. Make cues for good habits obvious, cues for bad habits invisible

Additional Insights

- Self-control is more about managing environment than willpower

- Simple environmental changes can have significant impacts on habits

- Long-term habit change requires consistent environmental support

- Recognize the power of subtle cues in triggering habits

The Second Law: Make it Attractive

Chapter 8: How to Make a Habit Irresistible

Key Concepts:

1. Dopamine-driven feedback loop

2. Anticipation and reward

3. Wanting vs. Liking

4. Temptation bundling

5. Premack's Principle

Dopamine-Driven Feedback Loop

- Dopamine is crucial for motivation, learning, and habit formation

- Habits associated with higher dopamine levels are more addictive

- Examples: drugs, junk food, video games, social media

Anticipation and Reward

- Dopamine released during both experience and anticipation of pleasure

- Anticipation often triggers more dopamine than the reward itself

- Anticipation of reward motivates action

Wanting vs. Liking

- "Wanting" (anticipation) and "Liking" (experience) activate same brain systems

- Anticipation can be more pleasurable than attainment

- Examples:

  - Thinking about Christmas vs. opening gifts

  - Planning a vacation vs. being on vacation

Temptation Bundling

- Pairing a needed habit with a wanted activity

- Makes habits more attractive

- Examples:

  - Only watch TV shows at the gym

  - Only get a pedicure while processing emails

Premack's Principle

- "More probable behaviors will reinforce less probable behaviors"
- Conditioning less desirable actions by pairing with more desirable ones

Habit Stacking + Temptation Bundling Formula

1. After [CURRENT HABIT], I will [HABIT I NEED].
2. After [HABIT I NEED], I will [HABIT I WANT].

Example:

1. After getting morning coffee, say one thing I'm grateful for.
2. After expressing gratitude, read the news.

RAG-Specific Notes

- Incorporate temptation bundling in habit design features
- Use anticipation-building elements in habit-tracking apps
- Design reward systems that leverage dopamine-driven motivation
- Implement features for users to create and track bundled habits

Strategies for Making Habits Irresistible

1. Identify personal high-dopamine activities
2. Bundle necessary habits with enjoyable activities
3. Create anticipation for habit performance
4. Use habit stacking with temptation bundling
5. Engineer habits to be supernormal stimuli when possible

Additional Insights

- The power of anticipation in habit formation
- Importance of making habits attractive for long-term adherence
- Potential of using existing desires to reinforce new habits
- Role of dopamine in habit formation and maintenance

Chapter 9: The Role of Family and Friends in Shaping Your Habits

Key Concepts:

1. Social norms and habit imitation

2. Three groups we imitate

3. The power of belonging

4. Conformity and social pressure

5. Status and habit attraction

Social Norms and Habit Imitation

- Early habits are imitated, not chosen

- Cultural scripts influence behavior

- Invisible rules guide daily actions

- Unconscious adherence to societal norms

Three Groups We Imitate

1. The close (family and friends)

2. The many (the tribe or larger community)

3. The powerful (those with status and prestige)

The Power of Belonging

- Shared identity reinforces personal identity

- Group membership sustains motivation

- Examples:

  - Book clubs for readers

  - Bands for musicians

  - Cycling groups for athletes

Conformity and Social Pressure

- Tendency to look to the group for behavioral cues

- Internal pressure to comply with group norms

- Examples:

    - Checking reviews before purchases

    - Adapting to less effective methods to fit in (chimpanzee study)

Status and Habit Attraction

- Pursuit of power, prestige, and status drives habit adoption

- Imitation of successful people's habits

- Attraction to behaviors that earn respect and admiration

- Avoidance of status-lowering behaviors

RAG-Specific Notes

- Incorporate social features in habit-tracking apps

- Design features that leverage group dynamics for habit formation

- Include options for users to connect with like-minded individuals

- Implement status or achievement systems to motivate users

Strategies for Leveraging Social Influence

1. Join cultures where desired behavior is the norm

2. Find groups with shared interests or identities

3. Seek environments that reinforce positive habits

4. Use social accountability for habit maintenance

5. Identify and emulate habits of admired individuals

Additional Insights

- The importance of post-goal group membership for habit sustainability

- The balance between individual desires and group norms

- The role of social proof in habit adoption

- The impact of cultural context on habit attractiveness

Chapter 10: How to Find and Fix the Causes of Your Bad Habits

Key Concepts:

1. Surface-level cravings vs. underlying motives

2. Habits as solutions to ancient desires

3. Predictive nature of behavior

4. Role of emotions in decision-making

5. Reframing habits for attractiveness

Surface-Level Cravings vs. Underlying Motives

- Specific cravings are manifestations of deeper motives

- Underlying motives include:

    - Conserving energy

    - Obtaining food and water

    - Finding love and reproducing

    - Connecting and bonding

    - Winning social acceptance

    - Reducing uncertainty

    - Achieving status and prestige

Habits as Solutions to Ancient Desires

- Modern habits address age-old human needs

- Different habits can address the same underlying motive

- Habits are learned solutions, not necessarily optimal ones

Predictive Nature of Behavior

- Brain constantly absorbs information and predicts outcomes

- Habits form based on associations and predictions

- Life is predictive, not just reactive

- Behavior depends on interpretation of events, not just objective reality

Role of Emotions in Decision-Making

- Feelings and emotions transform cues into actionable signals

- Cravings are the sense that something is missing

- Desire is the gap between current and desired states

- Emotions crucial for decision-making and motivation

Reframing Habits for Attractiveness

- Shift mindset from "have to" to "get to"

- Find positive aspects in seemingly negative situations

- Associate habits with positive feelings

- Create motivation rituals by pairing difficult habits with enjoyable activities

RAG-Specific Notes

- Incorporate features that help users identify underlying motives

- Design tools for reframing habits positively

- Implement systems for users to track emotional associations with habits

- Develop features that encourage creation of motivation rituals

Strategies for Habit Attraction

1. Identify deeper motives behind surface-level cravings

2. Reframe negative habits to highlight benefits of avoiding them

3. Practice mindset shifts to view habits as opportunities

4. Create positive associations with challenging habits

5. Use motivation rituals to build momentum for difficult tasks

Additional Insights

- The power of prediction in habit formation

- Importance of emotional context in habit attraction

- Potential for reprogramming habitual responses through reframing

- Role of language and perspective in habit perception

Third Law: Make It Easy

Chapter 11: Walk Slowly, but Never Backward

Key Concepts:

1. Motion vs. Action

2. Repetition over Perfection

3. Habit Formation Process

4. Neuroplasticity in Habit Development

5. Focus on Practice, Not Planning

Motion vs. Action

- Motion: Planning, strategizing, learning (doesn't produce results)

- Action: Behavior that delivers an outcome

- Examples:

  - Motion: Outlining article ideas; Action: Writing an article

  - Motion: Researching diet plans; Action: Eating a healthy meal

Repetition over Perfection

- Start with repetition, not perfection, to master a habit

- Focus on practicing the habit, not mapping out every detail

- "Get your reps in" - first takeaway of the 3rd Law

Habit Formation Process

- Definition: Process by which behavior becomes progressively automatic through repetition

- Emphasis on repetition rather than time spent forming the habit

Neuroplasticity in Habit Development

- Brain structure changes with habit repetition

- Examples of physical brain changes:

  - Larger cerebellum in musicians

  - Increased gray matter in mathematicians' inferior parietal lobule

  - Larger hippocampus in London taxi drivers

Focus on Practice, Not Planning

- Avoid getting bogged down in finding the "optimal" plan

- "The best is the enemy of the good" - Voltaire

- Overcome fear of failure by focusing on action

RAG-Specific Notes

- Design features that emphasize action over planning

- Implement tracking systems for repetitions rather than time spent

- Incorporate reminders that encourage users to "get their reps in"

- Develop progress visualizations based on number of repetitions

Strategies for Making Habits Easier

1. Prioritize taking action over excessive planning

2. Focus on repetition and practice

3. Start small and build consistency

4. Track the number of repetitions, not just time

5. Celebrate small actions to build momentum

Additional Insights

- The role of repetition in changing brain structure

- Importance of overcoming the fear of failure

- Value of imperfect action over perfect inaction

- Long-term effects of consistent habit practice on skill development

Chapter 12: The Law of Least Effort

- A habit is pretty much an obstacle to getting what you really want, you don't want to do the habit itself, you want the outcome

- This is why it is crucial to make your habits so easy that you'll do them even when you don't feel like it.

- The idea is to make it as easy as possible in the moment to do things that payoff in the long run.

- The greater the friction, the less likely the habit. **This is the literal cheat code to leaving your Bad Habits,** just make it very hard to do.

- While studying or in general leave your phone upstairs and keep your watch on for notifications

- Prime your environment to make future actions easier.

Chapter 13: How to stop Procrastinating with the 2 minute rule

- Don't start two big, always start small

- Even if you know that something is going to require a lot of energy and by saying 2 minute you are trying to fool yourself, it's okay to do that act only for 2 minutes

- Now if you keep doing it eventually it will grow itself but showing up to it is important everyday

- The point is not to do one thing. The point is to master the habit of showing up. The truth is, a habit must be established before it can be improved.

- Those 2 minutes are casting a vote to improve yourself and to your new identity

- REMEMBER: You can't improve a habit which doesn't exist

Chapter 14: How to Make Good Habits Inevitable and Bad Habits Impossible

- Sometimes success is less about making good habits easy and more about making bad habits hard.

- Breaking this habit is only going to bring you success

- This is called a commitment device

  - A commitment device is a choice you make in the present that controls your
    actions in the future. It is a way to lock in future behavior, bind you to good habits, and restrict you from bad ones.

- I think I need to create time blocks for all good habits I want to implement so there is at least a psychological alarm in my head, for example right now, making time for coding project

- Technology can go both ways, if used correctly, it is really powerful to help you develop good habits but at the same time it creates a level of convenience that enables you to act on your
  smallest whims and desires

- By utilizing commitment devices, strategic onetime decisions, and technology, you can create an environment of inevitability—a space where good habits are not just an outcome you hope for but an outcome that is virtually guaranteed.

The Fourth Law: Make It Satisfying

Chapter 15: The Cardinal Rule of Behavior Change

- The problem isn't knowledge, it's consistency

- Pleasure teaches your brain that a behavior is worth remembering and repeating

- Whatever you do, make sure you are making it attractive and satisfying

- Like a soap which has a good smell and foams easily is satisfying to wash your hands, which means good hygiene

- What is rewarded is repeated. What is punished is avoided.

- The consequences of bad habits are delayed while the rewards are immediate.

- With good habits it's the opposite

- The best way to do this is to add a little bit of immediate pleasure to the habits that pay off in the long-run and a little bit of immediate pain to ones that don't.

- Incentives can start a habit. Identity sustains a habit

  - While rewards can get you to start a new behavior, it's the way you view yourself that helps you maintain that behavior over time.

Chapter 16 - How to stick with good habits everyday

- Making progress is satisfying, and visual measures—like moving paper clips or hairpins or marbles—provide clear evidence of your progress.

  - This way each day you know how much progress you are making

- So keep a habit tracker to help you stay consistent

  - "Don't break the chain" is a powerful mantra.

- Don't break the chain of coding and you will become a successful AI engineer

- Don't break the chain of going to gym and eating good and you will have a nice body

- Don't break the chain of missing your prayers and you will become a better Muslim

- Habit tracking provides visual proof of your hard work—a subtle reminder of how far you've come.

- The empty square you see each morning can motivate you to gets started because you don't want to lose your progress by breaking the streak.

- You are not perfect, so always try to avoid the second lapse

Chapter 17 - How can accountability partner can change everything

- 4th Law: Make it immediately unsatisfying

- Just like we would want to experience something which has a satisfying ending, we don't want to experience something which has unsatisfying ending

- The more immediate and more costly a mistake is, the faster you will learn from it.

- This can be a good strategy for Fajr

- A way to add an immediate cost to any bad habit: *create a habit contract*

- Knowing that someone else is watching you can be a powerful motivator.

- What habit contract can I make for missing Fajr? Maybe setting aside $5 for masjid donation and if that doesn't work out, the day i miss it, no gym!

Advanced Tactics: How to Go from Being Merely Good to Being Truly Great

Chapter 18 - The Truth About Talent (When Genes Matter and When They Don't)

- The secret to maximizing your odds of success is to choose the right field of competition.

- Habits are easier to perform, and more satisfying to stick with, when they align with your natural inclinations and abilities.

- The people at the top of any competitive field are not only well trained, they are also well suited to the task.

- Your personality is the set of the "Big 5" characteristics that is consistent from situation to situation.

    1. Openness to experience: from curious and inventive on one end to cautious and consistent on the other.

    2. Conscientiousness: organized and efficient to easygoing and spontaneous.

    3. Extroversion: outgoing and energetic to solitary and reserved (you likely know them as extroverts vs. introverts).

    4. Agreeableness: friendly and compassionate to challenging and detached.

    5. Neuroticism: anxious and sensitive to confident, calm, and stable.

- In the beginning of a new activity, there should be a period of exploration.

- After that shift your focus to the best solution you've found—but keep experimenting occasionally.

- Specialization is a powerful way to overcome the "accident" of bad genetics.

    - The more you master a specific skill, the harder it becomes for others to compete
      with you.

- Genes do not eliminate the need for hard work. They clarify it. They tell us what to work hard on.

Chapter 19 - The Goldilocks Rule: How to Stay Motivated in Life and Work

- The way to maintain motivation and achieve peak levels of desire is to work on tasks of "just manageable difficulty."

    - Because even though a human brain loves a challenge, it has to be in his/her optimal zone of difficulty

    - This is a prime example of *Goldilocks Rule*

- The Goldilocks Rule states that humans experience peak motivation when working on tasks that are right on the edge of their current abilities. Not too

hard. Not too easy. Just right.

- It has to be on the edge of getting out of your optimal reach

- The key to mastering a habit is progressive overload just like in the gym.

- But when you are starting out, keep it easy so you don't lose motivation and then gradually increase it

- These little improvements and new challenges keep you engaged. And if you hit the Goldilocks Zone just right, you can achieve a flow state.

- And if you hit the goldilocks rule just right you can achieve the flow state:

  - A flow state is the experience of being "in the zone" and fully immersed in an activity.

- Everyone loses motivation but the main difference between a successful person and someone who gives up is that they still find a way to show up despite the feelings of boredom

- The BIGGEST threat is not failure, it's boredom

- No habit will stay interesting forever. At some point, everyone faces the same challenge on the journey of self improvement: you have to fall in love with boredom.

- REMEMBER: You have to fall in love with boredom.

- Professionals stick to the schedule; amateurs let life get in the way.

Chapter 20 – The Downside of Creating Good Habits

- The benefits of habits come at a cost. At first, each repetition develops fluency, speed, and skill. But then, as a habit becomes automatic, you become less sensitive to feedback. You fall into mindless repetition. It becomes easier to let mistakes slide. When you can do it "good enough" on autopilot, you stop thinking about how to do it better

- But the upside is once developed, it can be done on autopilot

- You can't repeat the same things blindly and expect to become exceptional.

- **Habits + Deliberate Practice = Mastery**

- You need to stay conscious of your performance over time, so you can refine and improve

- The solution? Establish a system for reflection and review

- Once again it is about improving by 1% each time, Career Best Effort (CBE)

- Sustaining an effort is the most important thing for any enterprise. The way to be successful is to learn how to do things right, then do them the same way every time.

- Improvement is not just about learning habits, it's also about fine-tuning them.

- In the review part, ask yourself questions, what did you do correct, what did you do wrong?

- Periodic reflection and review is like viewing yourself in the mirror from a conversational distance. You can see the important changes you should make without losing sight of the bigger picture. You want to view the entire mountain range, not obsess over each peak and valley

- DON'T JUST SIT DOWN AND KEEP DOING YOUR HABITS, TAKE OUT TIME AND REVIEW THEM OVER A PERIOD, SET PERIODS.

- Be open to changes, don't just let one habit define you and think you are always right

- Don't tie your identity to one thing:

  - Meaning you are not just a good AI Engineer, you are an expert at problem solving and you can take on any challenge because what happens once you become an AI Engineer, is that it?

- Everything is impermanent. Life is constantly changing, so you need to periodically check in to see if your old habits and beliefs are still serving you.

- **A lack of self-awareness is poison. Reflection and review is the antidote.**

Conclusion: The Secret to Results That Lasts

- Can one tiny change transform your life? It's unlikely you would say so. But what if you made another? And another? And another? At some point, you will

have to admit that your life was
transformed by one small change.

- The holy grail of habit change is not a single 1 percent improvement, but a thousand of them. It's a bunch of atomic habits stacking up, each one a fundamental unit of the overall system.

- This is a continuous process. There is no finish line. There is no permanent solution.

- Whenever you're looking to improve, you can rotate through the Four Laws of Behavior Change until you find the next bottleneck.

  - Make it obvious. Make it attractive. Make it easy. Make it satisfying.

  - Round and round. Always looking for the next way to get 1 percent better.

- The secret to getting results that last is to never stop making improvements