AGILE METRICS

EVIDENCE BASED MANAGEMENT

Evidence-Based Management (EBM) is a framework organisations can use to help them measure, manage, and increase the value they derive from their product delivery. EBM focuses on improving outcomes, reducing risks, and optimising investments. It is developed and sustained by Ken Schwaber and Scrum.org.

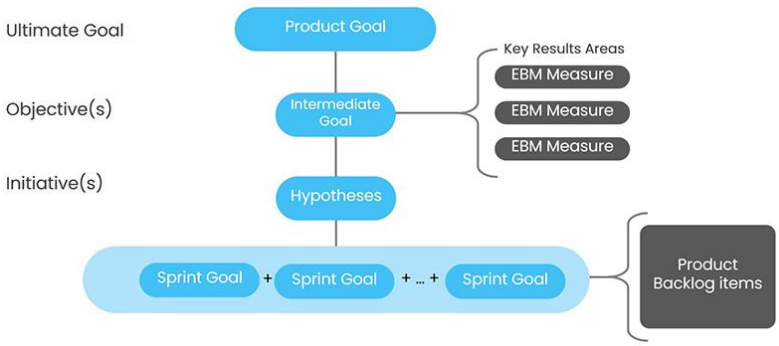
USING EBM

EBM is a framework that focuses executives and product managers on the outcomes and impacts of their initiatives by making value measurable and tangible.

While traditional metrics might give you insight into improvements of operational efficiency, the more important conversation is about improving your ability to create value for your customers and stakeholders.

Evidence-Based Management helps organisations put the right metrics in place to invest in the right places, make smarter decisions and reduce risk using an iterative and incremental approach. This empirical method alongside the agile principles and values enables successful steps of change for the organisation.

EBM looks at **4 Key Value Areas** that are compatible with enterprise KPIs and OKRs. All 4 areas contribute to an organisation's ability to deliver business value. These areas are: Current Value, Unrealised Value, Ability to Innovate and Time to Market.



EBM Cards are designed to support organisations to identify a range of metrics that help executives see early trends toward their goals, particularly in quarterly reviews for Product Managers and Product Owners at Sprint Review. A range of EBM Measures are recommended so that an holistic picture of progress is created – one that moves away from deliverable based milestones and one that truly represents value, impact and outcome.

CURRENT VALUE	CURRENT VALUE	CURRENT VALUE
Customer Usage Index	**Product Cost Ratio**	**Customer Satisfaction (NPS)**
Measurement of usage, by feature, to help infer the degree to which customers find the product useful and whether actual usage meets expectations on how long customers should be using a feature.	Total expenses and costs for the product being measured, including operational costs, compared to revenue.	Sentiment analysis to help gauge customer engagement and happiness with the product
CURRENT VALUE	**CURRENT VALUE**	**CURRENT VALUE**
Revenue per Employee	**Employee Satisfaction (eNPS)**	**"Stickiness"**
The ratio (gross revenue / number of employees) is a key competitive indicator within an industry.	Sentiment analysis to help gauge employee engagement, energy, morale and enthusiasm.	Stickiness helps you understand whether users value your product (i.e. whether they're returning or not) and is also an indicator of the growth rate of your business. $\text{Stickiness Ratio} = \frac{\text{Daily Active Users}}{\text{Monthly Active Users}}$
CURRENT VALUE	**CURRENT VALUE**	**CURRENT VALUE**
Knowledge Generation Volume	**Customer Retention**	**Failures and Quality Issues**
The relative percentage of time knowledge systems are used by the team to create new knowledge that supports an existing product or service to customers.	The percentage of customers that retain their service or product subscription month to month.	The percentage of repeat failures or quality issues that are identified month to month.

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CURRENT VALUE	CURRENT VALUE	CURRENT VALUE
Customer Service Satisfaction (CSS)	**Customer Health Score (CHS)**	**Customer Effort Score (CES)**
CSS is used to measure how satisfied your customers are with your after-sales service. Measuring CSS is through asking clients for feedback after every interaction they have. The data can be collected through forms, pop-ups, live chats, and online surveys.	CHS indicates if a customer is going to come back over time or not: Action Frequency (How much time do customers spend in the product and how often do they come back), Breadth of Usage (How many customers are using the product) and Depth of Usage (How many of the product's key features are being used).	Customer effort score is used to measure how much effort a customer needs to exert in order to get a problem solved. This metric is mainly used to help customers experience improvement by showing places where it's possible to make improvements and make things easier for customers.
CURRENT VALUE	**CURRENT VALUE**	**CURRENT VALUE**
Churn Rate	**Average Resolution Time**	**Repeat Purchase Ratio (RPR)**
Churn rate measures how many customers stop doing business with your company over time. To calculate the churn rate, divide the number of lost customers during that specific period of time by the number of customers at the beginning of that timeframe.	This metric tracks the time it takes to reach a final resolution to a customer service issue. To calculate the average resolution time, you can divide the total number of cases resolved during a period under analysis by the total number of times to resolution.	The percentage of customers that have returned to buy from your company again.
CURRENT VALUE	**CURRENT VALUE**	**CURRENT VALUE**
Revenue Churn Rate (RCR)	**Existing Customer Revenue Growth Rate**	**Monthly Recurring Revenue (MMR)**
Monthly Revenue Churn Rate = [(MRR at Start of Month - MRR at End of Month) - MRR in Upgrades during Month] / MRR at Start of Month	Measures the rate your business is generating revenue from customer success. $\text{Stickiness Ratio} = \frac{\text{MMR start of month} - \text{MMR at end of month}}{\text{MMR start of month}}$	The amount of predictable revenue you can expect to receive on a monthly basis. A quick way to calculate your MMR is to take your average monthly customer revenue and multiply it by the total number of users in a given month.

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UNREALISED VALUE	UNREALISED VALUE	UNREALISED VALUE
Product Cost Ratio	Completion Rate	Brand Perception
Total expenses and costs for the product being measured, including operational costs, compared to growing revenue.	Describes the effectiveness of a process and quality of data collected. It is a binary measure of task success (1) or completion failure (0), reported by dividing the number of users who successfully complete the task by the total number who attempted it.	Sentiment analysis to help gauge customer engagement and happiness.
UNREALISED VALUE	**UNREALISED VALUE**	**UNREALISED VALUE**
Customer Acquisition or Defection	Adherence to Customer Priorities	News Coverage
The ratio of customers defecting from the product to another.	The ratio of items teams work on that adheres to customer top priority characteristics	The ratio of market news and social media by competitors and their products compared to yours.
UNREALISED VALUE	**UNREALISED VALUE**	**UNREALISED VALUE**
Market Share	Customer Satisfaction Gap	Trials/Demos Requested
The relative percentage of the market controlled by the product.	The different between a customer's desired experience and their current experience.	The percentage increase of face-to-face customer engagement regarding potential new products

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ABILITY TO INNOVATE

Time Spent Context Switching

Number of interruptions per day per person, including meetings, items in progress (WIP), and interruptions to help people outside the team. Each interruption typically costs a person 20 minutes of lost productivity.

ABILITY TO INNOVATE

Installed Version Index

The number of versions of a product that are currently being supported. This reflects the effort the organisation spends supporting and maintaining older products.

ABILITY TO INNOVATE

Product Incident Trends

The number of times the team is interrupted to address a problem with a product.

The number and frequency of support incidents can help indicate the fragility or stability of the product.

ABILITY TO INNOVATE

Technical Debt

The extra work that arises when a "quick and dirty" solution is implemented that will need to be remedied later. It creates an undesirable impact on the delivery of value and an avoidable increase in waste and risk.

ABILITY TO INNOVATE

On-Product Index

The percentage of time teams spend working on product and value.

ABILITY TO INNOVATE

Innovation Ratio

The % of effort or cost spend on new products or capabilities divided by the number of products. This provides insight into the capacity of the organisation to deliver new products or capabilities.

$$\text{Product Innovation} = \frac{\text{Number of innovations}}{\text{Number of Products} * 100}$$

ABILITY TO INNOVATE

Regrettable Attrition

The negative impact that an employee has on the organization when they decide to leave of their own accord

$$\text{Regrettable Attrition} = \frac{\text{\# employees left}}{\text{Total \# of employees}}$$

ABILITY TO INNOVATE

Defect/Rework Trends

Measurement of change in defects since last measurement. A defect is anything that reduces the value of the product to a customer, user, or to the organisation itself. Defects are generally things that don't work as intended or work that returns and requires re-work to address.

ABILITY TO INNOVATE

Continuous Learning Culture

Strength of behaviours associated with directly supporting relentless improvement and fast learning cycles, e.g. through Retrospectives and Inspect & Adapt workshops.

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ABILITY TO INNOVATE

Lean-Agile Leadership

The strength of the behaviours that drive and sustain organizational change and operational excellence by empowering individuals and teams to reach their highest potential.

ABILITY TO INNOVATE

Agile Product Delivery

The strength of behaviours focussed on learning from critical feedback loops at the team, Agile Release Train, and portfolio, on product-management execution, customer outcomes.

ABILITY TO INNOVATE

Change Failure Rate

The percentage of released product changes that result in degraded service and require remediation (e.g. hotfix, rollback, patch).

ABILITY TO INNOVATE

Active Product (Code) Branches

The number of different versions (or variants) of a product or service. Provides insight into the potential impact of change and the resulting complexity of work.

ABILITY TO INNOVATE

Time Spent Merging Code Between Branches

The amount of time spent applying changes across different versions of a product or service. Provides insight into the potential impact of change and the resulting complexity of work.

ABILITY TO INNOVATE

Average Margin from Innovation

The average profitability or financial gain that an organisation achieves as a result of its innovative activities. It measures the difference between the cost of innovation and the revenue generated from the innovative products, services, or processes.

ABILITY TO INNOVATE

Rate of New Product/Service Launches

The frequency at which new products or services are introduced to the market is a measure of an organization's ability to convert innovative ideas into commercial offerings. A higher rate of successful launches indicates effective innovation execution.

ABILITY TO INNOVATE

Number of Patents

The number of patents granted to an organisation reflects its ability to create new inventions and protect intellectual property. A higher number of patents suggests a strong innovative capacity and a focus on developing novel solutions.

ABILITY TO INNOVATE

Innovation Readiness and Infrastructure

The adaptability for and infrastructure for innovation including the availability of necessary finances, technology, people, and the organisation's overall readiness to embrace and adapt to change.

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TIME TO MARKET	TIME TO MARKET	TIME TO MARKET
Flow Disruption	Flow Velocity (Throughput)	Flow Time (Lead Time)
Proportion of work items by type in the Value Stream, e.g., Stories vs Enablers vs Maintenance.	Number of completed work items for the value stream over a period of time, typically a 3-month period (6 Sprints).	Time elapsed from idea through to delivery and in the hands of its customers.
TIME TO MARKET	**TIME TO MARKET**	**TIME TO MARKET**
Flow Load (WIP)	Flow Efficiency	Flow Predictability
Number of work items current in-progress, either active or waiting typically measured using a Cumulative Flow Diagram (CFD).	Ratio of the total time spent in value-added work activities divided by the total flow time. Flow efficiency measures how much of the overall flow time is spent in value-added work activities vs. waiting between steps.	How consistently the Value Stream is able to meet its commitments.
TIME TO MARKET	**TIME TO MARKET**	**TIME TO MARKET**
Mean Time To Repair (MTR)	Time to Learn	Release Frequency
The average amount of time it takes from when an error or problem is detected and when it is fixed. This helps reveal the efficiency of an organisation to fix an error.	The total time needed to sketch an idea or improvement, develop it, deliver it to customers, and learn from how the product is then used.	The number of releases per time period. E.g. continuously, daily, weekly, monthly, quarterly, etc. This helps reflect the time needed to satisfy the customer with new and competitive products.

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TIME TO MARKET	TIME TO MARKET	TIME TO MARKET
Batch Size Reduction	Reduced Unevenness (Mura)	Burden on the Work System (Muri)
Proportion of work items by type in the Value Stream, e.g., Stories vs Enablers vs Maintenance.	Number of completed work items for the value stream over a period of time, typically a 3-month period (6 Sprints).	Time elapsed from idea through to delivery and in the hands of its customers.
TIME TO MARKET	**TIME TO MARKET**	**TIME TO MARKET**
Over-Production	Over-Processing	Time to Learn
Number of work items current in-progress, either active or waiting typically measured using a Cumulative Flow Diagram (CFD).	Ratio of the total time spent in value-added work activities divided by the total flow time. Flow efficiency measures how much of the overall flow time is spent in value-added work activities vs. waiting between steps.	The total time needed to sketch an idea or improvement, build it, deliver it to users, and learn from their usage.
TIME TO MARKET	**TIME TO MARKET**	**TIME TO MARKET**
Team & Technical Agility	Agile Product Delivery	Lean-Agile Leadership
The strength of behaviours focussed on applying effective agile principles and practices, specifically self-management and self-organisation.	The strength of behaviours focussed on fast feedback loops across the organisation: team, Agile Release Train, and portfolio.	The strength of the behaviours that drive and sustain reductions in decision-latency through decentralised decision making.

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ABOUT AGILE IQ®

Agile IQ® is created by Zen Ex Machina (ZXM).

Agile IQ® revolutionises SAFe® approach to business agility by harnessing the power of AI and machine learning, empowering business leaders to navigate their transformation journey with unparalleled insights. With a rich database built on over a decade of data from successful business transformations, the AI platform provides executives and agile leaders with the tools to optimise their approach, offering valuable product benchmarking and strategic guidance along the way.

For additional information, go to zenexmachina.com and agileiq.com