# THE ENTERPRISE GAMING COOKBOOK

Learn how game studios in our Ecosystem are using **Bluemix** to build the world's most advanced serious games

We break down the web services needed to develop a variety of experiences that IBM's Fortune 500 clients are requesting NOW

See what is possible with Bluemix and start cooking!





## **CORE INGREDIENTS**

Flexible, scalable tools/features for enhancing the value of data collected from cloud-based games transforming the future of decision making

Predictive Analytics Monetization/ Gameplay Analytics	Embeddable Reporting User Behavior Analytics	Advanced Mobile Access Device Usage Analytics	Big Insights for HadoopCustom MMO/player evolution pathways
DashDB Near time player progressions	Machine Translation Globalize on the Fly	Speech to Text & Text to Speech Mine gamer language	Cloud Integration Integrate with systems behind firewalls
Cloudant Game state NoSQL database	Internet of Things Connected Devices	<b>DataWorks</b> Transforms raw data into relevant info	Secure Gateway Managing access across devices

## ENTERPRISE GAMING GOURMET RECIPES

Mobile Skills Experiences

Integration with Live Data

Personalized Learning Pathways

Take your game to forefront of innovation with IBM's Bluemix and our recipes for the industries most progressive Enterprise Game solutions

Powered by Watson

Defense & Intel War Games

Finance

Advanced Games for Health

Strategic Planning & Resource Management

## MOBILE SKILLS EXPERIENCES

Mobile games that can teach hard/soft skills, roles, strategy, mindset, or complexity



## Advanced Mobile Access

Device Usage Ties in mobile analytics with realtime game data and usage. Ensures communications with your back end systems are secure. Let your app users to log in with custom accounts or existing social accounts



Cloudant

Game State: Cloudant NoSQL DB provides access to a fully managed NoSQL JSON data layer that's always on. This service is compatible with CouchDB, and accessible through a simple to use HTTP interface for mobile and web applications



Node.js

Runtime: Develop, deploy, and scale server-side JavaScript® apps with ease. The IBM SDK for Node.js™ provides enhanced performance, security, and serviceability.



## Mobile Quality Assurance

Quality Assurance: Capture tester and live user experience to continuously build and deliver high quality mobile apps.



## Mobile Application Security

Security: Manage application access and implement a basic application security framework for the Mobile Cloud services

## **GAMES INTEGRATED WITH LIVE DATA**

Games powered by live data streams that enable the player to contextualize and visualize Big Data and its hidden insights in order to optimize processes & behaviors



## **Internet of Things**

Connected Devices: This lets your apps communicate with and consume data collected by your connected devices, sensors, and gateways. Apps can then use our real-time & REST APIs to communicate with your devices.



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DataWorks

Data Cleaner: DataWorks™ data refinery transforms raw data into relevant information. DataWorks leverages a high performance and scalable engine to discover, profile, enrich, mask and deliver data to applications.



## **Geospatial Analytics**

Location-Based: Expand the boundaries of your application. Leverage real-time geospatial analytics to track when devices enter or leave defined regions.



### **Cloud Integration**

Firewalls: Bluemix Cloud Integration enables users to integrate cloud services with enterprise systems of record. Bluemix Cloud Integration exposes the backend systems of record as ReST APIs to be used by applications

## PERSONALIZED LEARNING PATHWAYS

Games that respond to a player's in game preferences and behaviors as well as their social profiles in order to direct them to the most intriguing / value added resources



### **Personality Analytics**

Watson Al: Personality Insights derives insights from transactional and social media data to identify psychological traits which determine purchase decisions, intent and behavioral traits; utilized to improve conversion rates.



### Message Resonance

Customization for Target Personality: Analyzes draft content and scores how well it is likely to be received by a specific target audience. This analysis is based on content that's been written by the target audience itself such as fans of a specific sports team or new parents.

## **Big Insights for Hadoop**

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In-Game Data Mining: Mine data for completed quests/learning to optimize gameplay & to understand player behaviors in order to create custom evolutionary journeys. Examines what a player's gameplay choices and preferences to understand their personality and behaviors.

### Embeddable Reporting

Behavior Analytics: How well are players adapting to the new skill(s) being taught in the game? Connect those who have successfully completed the gameplay to those that are exhibiting the new user behaviors



Analyze & Optimize Best Pathways: Cognitive Insights are contextually relevant and personalized observations or predictions, presented with a recommendation, with the purpose of invoking user action.

## GAMES POWERED BY WATSON

Games that respond based on REAL historical data and research, transforming your gameplay into an advanced strategic planning tool





Watson Q&A

Watson Al: Interprets & answers questions directly based on primary data sources that have been selected and gathered into a corpus. Service returns responses with confidence levels and links to supporting evidence.



Data Management: Cloudant NoSQL DB provides access to a fully managed NoSQL JSON data layer that's always on. This service is compatible with CouchDB, and accessible through a simple to use HTTP interface for mobile and web applications



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Accessing Remote DataFeeds: DataWorks™ data refinery transforms raw data into relevant information. DataWorks leverages a highl performance and scalable engine to discover, profile, enrich, mask and deliver data to applications.



**Trade-Off Analytics** 

Watson Al: Tradeoff Analytics helps people make better choices while taking into account multiple, often conflicting, goals that matter when making that choice. The service can be used to help make complex decisions like what mortgage to take,.



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## **DEFENSE & INTEL WAR GAMES**

Games that hone in on strategy resiliency in the face of ever-changing adversarial tactics, enabling the analysts to build intuition from playing both red/blue & offense/defense



In-Game Data Mining: Mine data for completed auests/learning to optimize gameplay & to understand player behaviors in order to highlight optimal strategies. Examines the adversary's gameplay to understand most resilient response

Game State: Cloudant NoSQL DB provides access to a fully managed NoSQL JSON data layer that's always on. This service is compatible with CouchDB, and accessible through a simple to use HTTP interface for mobile and web applications

Analyze & Optimize Best Pathways: Cognitive Insights are contextually relevant and personalized observations or predictions, presented with a recommendation, with the purpose of invoking user action.

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Location-Based: Inject live geospatial data into the gameplay environment. Define geographic regions and control monitoring of regions using the geospatial application programming interface.

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research and back-testing

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## **Big Insights for Hadoop**

In-Game Data Mining: Mine data for completed quests/learning to optimize gameplay & to understand player behaviors in order to create custom evolutionary journeys. Examines what a player's gameplay choices and preferences to understand their personality and behaviors.



Social Mining: Provides sentiment for multiple languages, based on deep natural language processing algorithm. Real-time processing of Twitter data streams is fully supported; configurable through a rich set of query parameters and keywords



Speech to Text

Watson AI: Converts the human voice into the written word, enabling enhanced record keeping and data mining of live market moving events. Also enables users to mine video libraries based on inquiry via a confidence score



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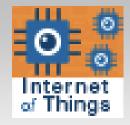


Cognitive Commerce

Watson Al: Navigate through multi structured data including text, images and video to generate actionable insights from "Dark Data" – data that is not machine readable, not easily accessible, or not leveraged

## **ADVANCED GAMES FOR HEALTH**

Games that can capture a patient's personal metrics and integrates them into their EMR to provide health practitioners with ongoing streams of real time patient data



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## **Big Insights for Hadoop**

Personalization: Mine data for completed quests/learning to optimize gameplay & to understand player behaviors in order to create custom evolutionary journeys. Examines what a player's gameplay choices and preferences to understand their personality and behaviors.



Dash DB

Player Progressions: Mines near-time data to make determinations on when to introduce events (quests, promotions, item counts). Also can be used to monitor player behaviors and target "griefer" or , disenfranchised employees.



### **Cloud Integration**

Firewalls: Bluemix Cloud Integration enables users to integrate cloud services with enterprise systems of record. Bluemix Cloud Integration exposes the backend systems of record as ReST APIs to be used by applications

## **STRATEGIC PLANNING & RESOURCE MANAGEMENT**

Games that contextualize the complexity of systems and their resources, from supply chain to sustainability, to policy, highlighting key decision trade-offs & consequences





**DataWorks** 

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And since you have done all this great cooking... Let us introduce you to:

## THE RESTAURANT

Due to our exclusive partnership, all enterprise customers of Apple will download their enterprise apps from IBM's Cloud Marketplace.

Explore what this distribution channel can do for your enterprise sales

# LET'S GET COOKING!

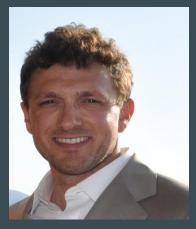
Come join our Enterprise Gaming Ecosystem! Register for Bluemix here: <u>https://ibm.biz/BdEk95</u>



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